
**MUNICIPAL FUNDING MECHANISM AND DEVELOPMENT
PROCESS**

A CASE STUDY OF TEHRAN

BY

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DECLARATION

I, Katayoun Karampour, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

Signature

ABSTRACT

In the late 1980s, Tehran municipality became financially independent from central government. As a result, the municipality utilised innovative tools to finance the city, such as granting excess construction density to developers, which enabled them to construct taller buildings in exchange for a fee. This financing tool has generated a significant amount of money for the municipality and boosted the housing construction sector but it was the first step towards relaxing planning regulations and giving power to developers to pursue their agendas. The aim of this research is to investigate the impacts of municipal fiscal decentralisation on the development process and planning system of Tehran.

The general orientation of this research is qualitative strategy. Primary data was collected by conducting 47 semi-structured interviews with housing developers and planners within both the public and private sectors in Tehran. In order to understand the interest and strategies of housing developers, interviews were conducted with developers working as individual developers or as construction companies. To collect data on various aspects of planning and financing the city, interviews were carried out with key informants who are, or used to be, members or officers of relevant departments in the government or other institutions.

By careful analysis of the collected data on the behind the scenes of development and planning process in Tehran, this study argues that the financial dependence of Tehran Municipality on incomes generated from construction density charges, payable by housing construction developers, has resulted in the occurrence of a certain type of market-led growth in specific areas of the city. Although attempts have been made to harness this market-led growth by introducing a new plan for the city this has led to massive alterations and interventions intended to secure the benefit of developers and the municipality's income. Without providing an alternative source of income for the Tehran Municipality it is unlikely to have much success in planning for Tehran.

IMPACT STATEMENT

By using empirical evidence from Tehran, this thesis has looked at how the excess construction density charge, which is a revenue-raising tool used by the Tehran Municipality, has influenced the urban planning system of Tehran through its effects on the development process and its impact on the development of the city. Findings of this research inform the institutions currently involved in the planning policy and practice of Tehran. More specifically, the findings of this research could impact the performance and strategies of the following organisations:

- Deputy of Urban Development and Architecture of Ministry of Roads and Urban Development
- Urban Planning and Architecture High Council
- Islamic City Council of Tehran
- Architecture and Urbanism Department of Tehran Municipality
- Tehran Urban Planning and Research Centre of Tehran Municipality

It is intended to translate the analysis and findings of this research to Farsi in order to disseminate those finding in Iran. Dissemination will be done through publishing in Iranian academic journals as well as sending a summary of the findings and recommendations to the mentioned institutions. It is also intended to publish the findings of this thesis in English in international journals which address urban planning and development process.

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ABBREVIATIONS USED IN THIS THESIS

	Full name
UPAHC	Urban Planning and Architecture High Council
ICCT	Islamic City Council of Tehran
MRUD	Ministry of Roads and Urban Development
TUPRC	Tehran Urban Planning and Research Centre
CN5	Commission No. 5
SCI	Statistical Centre of Iran
CBI	Central Bank of Iran
IPI	Islamic Parliament of Iran
DUDA	Deputy of Urban Development and Architecture
MoI	Ministry of Interior
MoE	Ministry of Energy
DoE	Department of Environment
CN100	Commission No. 100
TCPA	Tehran City Planning Agency
AUD	Architecture and Urbanism Department
TCP	Tehran Comprehensive Plan
TSS(C)P	Tehran Structural-Strategic (Comprehensive) Plan
DP	District Plan
AAP	Area Action Plans
TP	Thematic Plans

CHAPTER 1 – INTRODUCTION

- Research context
- Research questions and hypotheses
- The structure of the thesis
- Protocols

1-1 RESEARCH CONTEXT

Since the late 1970s and the 1980s, for reasons such as increasing inflation rates and unemployment, many states around the world have turned towards neoliberal policies (Harvey, 2005). Neoliberalism, which is about deregulation, liberalisation and state retrenchment (Brenner & Theodore, 2008), has pushed local governments towards ‘entrepreneurial governance’ and the decentralisation of central government (Harvey, 1989). As a result, local governments have been put under pressure to find ways to fund their expenditures through private capital. This process of neoliberalisation and the pressure on local governments, reinforced after the Wall Street crash of 2008, has resulted in even stricter austerity measures (Peck, 2012).

Central governments are reducing their financial assistance to local governments in the name of fiscal decentralisation. Fiscal decentralisation is presented as passing budgetary authority from a central government to local governments through devolving the power to make taxing and spending decisions (Bahl, 2008). As a result, many local governments are under pressure to reduce their budget deficit. For example, in the US context, because of austerity budgeting measures, the expenditures of local governments have to be reduced by 12.7% per year (GAO, 2012 cited in Peck, 2012, p. 627). Or, in the context of Britain, since 2010 a fiscal squeeze put local authorities under pressure to reduce the budget deficit from 10% to 4% of GDP and it is forecast that the budget deficit should be almost eliminated by 2020 (*The Economist*, 2017). To achieve this goal, government has reduced its spending and is planning to make the finance of local governments more independent. As *The Economist* (2017) reports, Whitehall ‘plans by 2020 to phase out the main grant by which it supports local authorities, thus leaving them more reliant on financing themselves out of council tax and business rates’.

As a result, many municipalities and local governments are looking for new methods to generate funding. Impact fees, transferable development rights and development charges in some states of the USA and Canada, selling additional construction bonds in Brazil, valorisation taxes in Colombia and developer contributions (planning gains) in Britain are examples of alternative ways that

city municipalities have recently employed to finance their costs or deliver local services. In other words, to implement public planning policies, municipalities are increasingly relying on the financial resources of property developers and investors (Heurkens & Hobma, 2014).

There have been a number of studies devoted to the analysis of the different techniques to charge developers in order to fund the expenses of municipalities and to deliver local services (e.g. Bahl & Linn, 1992; Bird & Slack, 2007; Ingram & Hong, 2010; Slack, 2009). Also there have been studies carried out on the impact of these charges on the property market (e.g. Huffman, Nelson, Smith, & Stegman, 1988; Ihlanfeldt & Shaughnessy, 2004; Singell & Lillydahl, 1990; Skaburskis & Qadeer, 1992). However, there have been few studies conducted (Jou, Lund Hansen, & Wu, 2012; Needham, 2000; Slack, 2002) on the implications that these municipal revenue-raising regimes have on planning objectives and their potential impact on the future development of the city.

Following the critique of Robinson (Robinson, 2002, 2003, 2006) and Roy (2009) of the focus of urban theories on US and European cities which limits the scope of urban theory, this research has chosen Tehran as its focus. To address the dichotomy between First World cities which are seen as models to generate theory and policy, and Third World cities which are perceived as followers and imitators of those First World cities, Robinson (2006) proposes the concept of 'ordinary cities'. Based on this concept cities 'are all dynamic and diverse, ..., [and are] arenas for social and economic life' (Robinson, 2006, p. 1). In a similar way to Robinson, Roy (2009, p. 820) argues for 'new geographies' of urban theory. She says achieving that 'requires "dislocating" the EuroAmerican centre of theoretical production; for it is not enough simply to study the cities of the global South as interesting, anomalous, different, and esoteric empirical cases (Roy, 2009, p. 820).'

Despite the recent resurgence of interest in studying 'ordinary cities' in comparative studies, Goodfellow (2018) found that the number of studies which are explicitly looking at cities outside the global North is very limited. He mentions that 'of the 30 articles included in a 2014 Virtual Issue of the *International Journal of Urban and Regional Research* on comparative

urbanism, few explicitly compare specific cities and only three involve direct comparisons where one or more of the cities is outside the global North' (Goodfellow, 2018, p. 200). Roy (2009, p. 820) also says that, even in the cases where cities of the global South are visible in urban theory, they 'are usually assembled under the sign of underdevelopment, that last and compulsory chapter on "Third World Urbanization" in the urban studies textbook'.

To address the deficiency of empirical studies on the implications of the reliance of local governments to private capital on urban planning objectives (Tasan-Kok & Baeten, 2012) and also to follow the post-colonial approach of urban study (Goodfellow, 2018; Robinson, 2002, 2003, 2006; Roy, 2009) this study uses empirical evidence from Tehran to explore the implications of the reliance of the Tehran Municipality on private capital for the urban planning system of Tehran. Since 1968 when the Urban Development and Redevelopment Act was approved, Iran has been searching for tools and strategies (e.g. value capture tax) to push municipalities towards self-sufficiency. It has been more than three decades since the Tehran Municipality received any money from central government and it is now financially independent. Hence, studying the case of Tehran could shed some light on the consequences of relying on private capital to provide public services.

According to Article 52 of the Budget Bill of 1983 (IPI [Islamic Parliament of Iran], 1983a), Iran's Government had started to phase out its financial assistance to the municipalities of the country. As a result, they began to look for innovative ways and tools to generate income in order to manage cities (Azizi, 2005). Changing the land-use, selling land, increasing property taxes and privatising some services and sectors of municipalities are some of the ways used by the Tehran Municipality to generate income (Izadi, 2008, p. 86). However, the major source of revenue became the fees obtained from developers to allow them to increase the construction density (Floor Area Ratio) of the buildings they were constructing.

Since the 1990s, the Tehran Municipality has been granting developers permission to increase the construction density (Floor Area Ratio) by allowing them to build taller constructions than the permitted height suggested in

Tehran's official plans. Granting extra construction density in exchange for a fee¹ was initially proposed to finance part of the municipal operating and capital budget in order to assist the municipality in becoming financially self-reliant. By using empirical evidence from Tehran, this thesis studies how the excess construction density charge tool, as an example of a revenue-raising tool of municipalities, has influenced the urban planning system of Tehran through its effects on the development process and its impact on the future pattern of the city. This has resulted in the modification of official plans and the revision of them to accommodate the financial needs of the municipality.

1-2 RESEARCH QUESTIONS AND HYPOTHESES

This research investigates the impacts of the fiscal decentralisation programme on the development process and the planning system of Tehran by studying the implications of the excess construction density charge tool on the Government's urban planning agendas and the development pattern of the city of Tehran. In particular, this research addresses:

1. How the construction density charge in Tehran has affected the decisions of housing developers
2. How, as a result of using the construction density charge tool, the decisions of housing developers have shaped the city of Tehran
3. How, in turn, this market-led growth has affected the way in which the city is planned.

In the first instance, development decisions refer to all the elements contributing to the decision of the developers on the location, type and density of the housing developments they construct. In the second, the research is concerned with the impact of the developers' decisions on the way the city is evolving. The last focuses on how market-led growth has affected the planning system of Tehran by altering the urban plans in preparation, revision and implementation phases.

¹ Known as 'excess construction density charge' or 'construction density bonus' or more informally known as 'selling density' or 'selling the excess construction density'.

The principal hypothesis of this research is that the development of the city is not controlled by official plans but by responding to spontaneous growth, which is partially the result of the application of the density bonus tool. Although Tehran has a Structural-Strategic (Comprehensive) Plan and District Plans for each region, this research argues that the city has grown and been managed spontaneously rather than in a planned way.

This analysis creates three propositions. Firstly, the construction density bonus has created a market that did not previously exist, or was not of a considerable size. By adopting the policy, the tendency to build taller than that permitted in official plans increased the economic benefits for developers. The construction industry became very profitable and attracted many people from other professions to invest and work in the sector. Prime locations became under more pressure for construction. As a result, the spatial development of the city was handed over to the vagaries of housing developers' interests.

Secondly, the decisions of developers have affected the spatial order of the city; market trends have shaped the city of Tehran to a great extent. In many parts of the city, the spatial development has been shaped by the developers' ability to, and interest in, buying the right to build more densely in the areas that they thought would be more profitable. The financial dependency of the Tehran Municipality on the construction sector boosted the power of developers to construct what benefitted them financially. Thirdly, this market-led growth has affected the way the city is planned. The plans are not driving the growth; instead these have been adjusted to meet the requirements of spontaneous, market-led growth.

Although the excess construction density charge tool has assisted Tehran in obtaining the financial independence of the municipality from central government and helped it to achieve some degree of autonomy, this has made the municipality become dependent on the construction sector, and its agents such as developers. As the contribution of fees gained from the excess construction density charge to Tehran's municipal budget is high, this budget is very sensitive to the amount of construction density sold and is therefore not stable.

1-3 THE STRUCTURE OF THE THESIS

This thesis is comprised of eight chapters. The first is the introductory chapter in which the context of the research and an overall view of the problem and of relevant research questions is described. The main hypothesis is followed by an overview of the structure of the rest of the thesis. In addition, at the end of this chapter, conventions that are used to translate interviews and other materials from Farsi to English and convert dates from the solar calendar to the Gregorian will be clarified.

Chapters 2 and 3 provide the theoretical background of the research. Chapter 2 is devoted to reviewing the relevant literature to provide a better understanding of how local governments, in the era of neoliberalism and decentralisation, fund their own expenditures and why these funding tools would affect the development process and urban planning. In this review the process of neoliberalisation and the changing role of governments in the last quarter of the twentieth century are discussed. The thesis then focuses on the ways in which local governments fund their expenditure as a result of the decentralisation process. In the third part of the review, discussions around the development process and its conceptual models and urban planning in the market economy are explored. Chapter 2 concludes that planning practices are moving towards symbiotic planning which means that for financial and implementing reasons urban planning and the market need to work together. This kind of planning and the financial need of local authorities has had implications for urban planning. In some cases to secure income, urban plans have faced changes to meet market needs and more flexible and negotiable approaches are in demand.

Chapter 3 addresses the research methodology in detail. It starts by providing the theoretical framework of the research which is based on the institutional model of the development process. Based on this model, the research aims to investigate the dynamics between structures and agencies. Then, based on this framework, the overall design of the research is explained. The research design section includes the formulation of research questions, their related sub-questions and the strategy to approach these questions. The data collection strategies and techniques that are used to generate primary and secondary

data are then presented. The data collection section is followed by an elaboration of the factors such as the power hierarchy in interviews that have influenced the data collection process. At the end of this chapter, the strategy that is used to analyse data to answer the research questions is presented. This section explains that relying on theoretical proposition strategy, an explanation-building technique is used to analyse data.

Chapters 4 and 5 connect the two theoretical chapters (Chapters 2 and 3) to the empirical and analytical Chapters of 6 and 7. While Chapter 4 focuses on providing necessary information about Tehran in general by using secondary evidence, Chapter 5 goes into more specific details of a few selected regions of Tehran. Chapter 4, firstly, briefly presents the formation of the city which shows that in a short period of time Tehran has grown from an insignificant village to a metropolitan city. This chapter then discusses the spatial structure of the city which is divided and polarised between rich and poor. Following that, the sectoral and fragmented governance system of the city is presented, then the urban planning system and the evolution from comprehensive plans to strategic and structural plans are considered. Next, the municipal organisation and its budgeting issues are explored showing how a planning tool has become a source of funding. Finally, Chapter 4 overviews the housing construction industry which is mostly in the hands of small private construction firms and individual developers.

Chapter 5 presents necessary details about the 22 regions of Tehran and will explain why the research focuses on Regions 1, 2, 3, 4 and 5 to explore the answers of research questions. This chapter begins by discussing how the city is divided into regions and continues by describing and comparing the characteristics of the 22 regions. In this section, by looking at construction permits, population growth, the housing price and Commission No. 5's decisions regarding the 22 regions it concludes that specific areas of the city are greatly affected by the subject of this thesis. Then it takes a closer look at Regions 1, 2, 3, 4 and 5 of Tehran to provide some necessary context before moving to empirical and analytical chapters.

Chapters 6 and 7 contain an analysis of empirical data collected during fieldwork. Chapter 6 first focuses on the Tehran Municipality's financing mechanism and its dependence on the excess construction density charge. This section discusses that the Tehran Municipality is under pressure to accommodate the economic interests of developers which has resulted in an increase in the bargaining power of developers. This chapter then explores housing developers' characteristics and decisions on how they choose where, when and what to construct. At the end, this chapter highlights how the financial agendas of the Tehran Municipality are matched with housing developers' agendas.

Chapter 7 focuses on the implications that the Tehran Municipality's financial dependence on developers have had on the urban planning system of Tehran. Firstly, this chapter discusses the process of the preparation of Tehran and its regions' plans. This section delineates how the plan has changed throughout preparation, approval and implementation phases. Then, this chapter discusses the fact that Tehran's development is not happening based on plans as they are under pressure to accommodate the financial needs of the Tehran Municipality. The chapter will finish by discussing the spatial manifestations of the dynamic that exists between Tehran Municipality's financial needs, the developers' interests and those of the planning system of Tehran.

Finally, Chapter 8 presents the conclusions drawn from the research. It begins by discussing the main conclusions drawn from the thesis which show how a change in structure (in this case a change in the municipality's financing system) would result in a change in agencies' performance (in this case decisions of housing developers) and how this has implications for the planning system. Then, initial research questions and hypotheses are reconsidered. After that, it presents findings that were not originally within the scope of the thesis but were added during the research process. The last section of the chapter contains suggestions for further research in the field and possibilities for future studies on the subject.

1-4 PROTOCOLS

Before proceeding to the main body of the thesis, two main protocols that are used in the preparation of this document should be clarified. The first is concerned with the way interviews, technical words and institutions' names are translated from Farsi to English and the second addresses the convention used to convert dates from Iran's official calendar to the Gregorian calendar.

1-4-1 TRANSLATIONS

As it will be explained in Chapter 3, the main source of primary data for this research is generated from interviews with relevant public and private sources in Tehran. All the interviews carried out are in Farsi. After transcribing all of the interviews, the parts of the interviews which are used as direct speech are translated from Farsi to English. Instead of using a verbatim translation, the sense and meaning of the interviewees have been conveyed keeping the original tone of the discussions and retaining the use of certain words.

In the translation of technical terms and jargon from Farsi to English an appropriate literal equivalence in English has been used. If possible, efforts are made to mention the approximate UK equivalent term in the footnotes to help the reader to relate to the term. For example, the term 'construction permit' is the literal translation of 'Parvaneh Sakht' in Farsi and its approximate equivalent in the UK is planning permission. This is mentioned in the footnote when the term is used for the first time. However, some terms used in the Iranian urban planning and construction industry do not have an equivalent in the UK system. When this is the case, the term is explained at length to, hopefully, clarify its meaning.

Translating the names of institutions and organisations was more straightforward as, in most cases, the English translation of the name of the institution was available on the official website of that institution. However, in cases where the English name was not available, literal translations were used and the Farsi name is mentioned in the footnote. For example, the title Agreements Commission is used for the commission that exists in the

municipality called 'comesion-e tavafoghat' which makes agreements with the potential developers.

1-4-2 DATE CONVERSION

The official calendar in Iran is the Solar Hijri calendar which begins on about the 21st March of each Gregorian year. To convert the Solar Hijri year into the equivalent Gregorian year, 621 or 622 years should be added. In this research, in order to be accurate, an online converter² promoted by the Iran Chamber Society is used to convert dates from the Solar Hijri calendar to the Gregorian calendar.

² The link to the year conversion tool is:
http://www.iranchamber.com/calendar/converter/iranian_calendar_converter.php

CHAPTER 2 – A REVIEW OF LITERATURE

- Introduction
- The Neoliberalism and decentralisation process
- Funding municipal expenditure
- Urban planning, market forces and the development process
- Conclusions

2-1 INTRODUCTION

This chapter presents a review of the literature which provides the theoretical basis for the research. According to the proposed research questions set out in the previous chapter, which are concerned with the effect of the municipality's funding mechanism on the development process and planning system of Tehran, this chapter tries to provide a better understanding of how local governments, in the era of neoliberalisation, fund their own expenditures and how these funding tools affect the development process and urban planning system.

Firstly, the process of neoliberalisation which has resulted in a change in the role of central governments during the 1970s and 1980s is discussed in this review. Then, the decentralisation (administrative, political and fiscal) process as an important part of neoliberalisation is delineated with more emphasis on fiscal decentralisation, to better understand the rationalities behind them and their benefits and costs. Designing the process of decentralisation is also elaborated in this section.

In the second part of the review, the focus is on the ways in which local governments/municipalities fund their operating and capital expenditures as a result of the decentralisation process and retrenchment of public finance. This part also investigates why local governments are looking for alternative ways of funding and have a tendency to rely more on the private sector to generate income. At the end of this section, is a discussion of why funding mechanisms should or should not affect planning objectives.

The third section elaborates on the development process, its conceptual models and agents, and then looks at the changing role of urban planning and urban planners on the development process in the market economy. It shows that planning is shifting towards a symbiotic relationship with the market as it relies on private capital to provide infrastructure and services. However, as discussed in the last part of this section, reliance on money from the private sector has had some implications for the planning system.

2-2 THE NEOLIBERALISM AND DECENTRALISATION PROCESS

2-2-1 NEOLIBERAL TURN

After experimenting with the idea of the formation of a neoliberal state in Chile in the early 1970s, Britain, under Thatcher's government, and the US, under Reagan, turned to neoliberalism in the 1980s (Harvey, 2005). The reason behind this was to harness burgeoning unemployment and inflation which had begun at the end of the 1960s. It was believed that Keynesian policies which were prominent in the 1930s in response to the Great Depression were no longer working (Harvey, 2005). As a result neoliberal policies were adopted as 'a strategic political response to the sustained global recession of the preceding decade' (Brenner and Theodore, 2008, p. 2). Austerity budgeting measures which took place after the Wall Street crash of 2008 in the US and later in other countries such as Britain, continued and reinforced neoliberal policies to transfer risks, responsibilities, debts and deficits to the local state 'with renewed systematic intensity' (Peck, 2012, p. 626).

Generally speaking, neoliberal doctrine is opposed to state interventionist theories (Harvey, 2005) and is about governmental downsizing in order to reinvigorate 'private enterprise, free markets and individual liberty' (Peck, 2012, p. 629). As Brenner and Theodore (2008, pp. 2, 3) say 'states throughout the older industrialised world began ... to dismantle the basic institutional components of the post-war settlement and to mobilise a range of policies intended to extend market discipline, competition, and commodification throughout all sectors of society'. Harvey (2005, p. 19) notes that neoliberalism emerged as a utopian project 'to realize a theoretical design for the reorganization of international capitalism or as a political project to re-establish the conditions for capital accumulation and to restore the power of economic elites'.

Although, in theory, a neoliberal state has a specific character, in practice, states with neoliberal agendas have taken various routes which are not entirely in line with the theory of the neoliberal state. In theory the neoliberal state

should guarantee individual freedoms by favouring ‘strong individual private property rights, the rule of law, and the institutions of freely functioning markets and free trade’ (Harvey, 2005, p. 64). Also, the privatisation of state assets should happen through deregulation and the private sphere should take over sectors run by the state. In a neoliberal state, each individual is accountable for his/her own action and wellbeing and this extends into the realms of welfare, education, healthcare, and even pensions. Moreover, the free mobility of capital between sectors, regions, and countries should be ensured and the state should reduce barriers to the movement of capital (Harvey, 2005, pp. 64–67).

However, in practice it is hard to describe the general character of the neoliberal state as ‘systematic divergences from the template of neoliberal theory’ and the dynamics of neoliberalisation have evolved in a different manner from place to place as well as over time (Harvey, 2005, p. 70). In different countries neoliberalism took different paths and created ‘extraordinary variations’ of neoliberal initiatives which are contextually specific because of the inherited regulatory landscapes of each country (Brenner & Theodore, 2008, p. 6). For example, some developmental states who are interventionist in nature adopted those neoliberal policies which enabled them to be part of free trade and open markets (Harvey, 2005, p. 72).

Iran had adopted some of the neoliberal policies in the late 1980s. Despite the initial aim of Iran’s government after the revolution to address ‘the decadence of unbridled market individualism’, it had not abandoned its market-based practices (Harvey, 2005, p. 85). In the aftermath of the Iran-Iraq war, Iran was under economic pressure which resulted in a restructuring of the economy. Rafsanjani, president at the time, ‘pushed for changes to labour, banking, and property laws to attract foreign investment’. He and his allies argued that ‘deregulation, privatisation, and cuts in subsidies and public services’ were necessary to achieve economic growth (Pourzal, 2008, p. 20).

2-2-2 THE DECENTRALISATION PROGRAMME

In most of the countries which adopted neoliberal policies, the role of central government evolved from the centralised state that was in place after the

Second World War to the more decentralised state of today. This changing pattern of the state in the late twentieth and early twenty-first centuries is understood as shifting from government to governance or from rowing to steering (Osborne and Gaebler, 1992, p. 25). Decentralisation is seen as an important part of the reform package to shift towards local governance. Decentralisation, which encompasses administrative, political and fiscal decentralisation, is understood as a process of devolving power and responsibilities from central government to local government(s).

Although decentralisation is understood as transferring central government's power to local government or, in other words, broadening the role of local government, the truthfulness of the central government's intention in handing over real power to local government is under question (*The Economist*, 2017). In this respect, Foucault's (1991) concept of governmentality has been used to re-address concerns of government in the 'conduct of conduct' through 'controlling at a distance'. This means that central government, through the creation of governance structures, seeks to control 'through broader systems or networks' (Rydin, 2007, p. 611) rather than direct control. By creating 'locales, entities and persons able to operate a regulated autonomy' (Rose & Miller, 1992, p. 173) the aim of control at a distance would be achieved. This implies that governance is not about handing over power to local government but using it as a network to control at a distance.

Dividing decentralisation into administrative, political and fiscal decentralisations would be problematic as they are overlapping concepts, however, an attempt is made here to define them separately. Administrative decentralisation attempts to redistribute 'authority, responsibility and financial resources for providing public services among different levels of government' (World Bank, n.d.-a). It is about the 'transfer of responsibility for the planning, financing and management of certain public functions from central government and its agencies to field units of government agencies, subordinate units or levels of government, semi-autonomous public authorities or corporations, or area-wide, regional or functional authorities' (World Bank, n.d.-a).

Political decentralisation is about giving more power to citizens or their elected representatives in public decision making in order to give them more influence in the formulation and implementation of policies. It is widely assumed that decisions made ‘with greater participation will be better informed and more relevant to diverse interests in society than those made only by national political authorities’ (World Bank, n.d.-b). By selecting representatives from local electoral jurisdictions, citizens will be better able to know their political representatives and this, in turn, will allow elected officials to be more aware of the demands and requirements of their constituents.

Fiscal decentralisation is the passing of budgetary authority from a central government to local governments by devolving the power to make taxing and spending decisions (Bahl, 2008). Although the justification of fiscal decentralisation varies from country to country depending on the problems faced by that country (Bahl, 2008), improving the public sector’s efficiency, reducing budgeting issues, and promoting economic growth are the main motivations for countries to implement decentralisation programmes (Bahl and Linn, 1992; Musgrave and Musgrave, 1984; Oates, 1972).

2-2-3 THE BENEFITS AND COSTS OF FISCAL DECENTRALISATION

Economic efficiency is the first benefit assumed from fiscal decentralisation. This is based on the assumption that local governments are better positioned than national government to deliver public services because of their information advantage, so they can respond to people’s preferences to make decisions about their budget (Bahl, 2008; Davoodi and Zou, 1998). Martinez-Vazquez and McNab (2003) assert that fiscal decentralisation indirectly influences economic development as it affects technical efficiency, income inequality and corruption, all of which can, in turn, affect economic efficiency.

In addition to economic justifications, in some cases governments move towards decentralisation because centralisation does not work there. For example, in large countries such as Brazil or China, fiscal management from the centre can be costly, or in a country with different ethnic groups or many

religions, centralisation may not bring about the desirable public service outcomes for its people (Bahl, 2008). Moreover, centralisation, by its very nature, implies a uniformity that creates resentment and this resentment means that various regions cannot choose a package of services that fits their requirements (ibid).

To capture the benefits of fiscal decentralisation, Bahl (2008) believes that there are five conditions that must be met. The first two conditions relate to the accountability of the process. The first one is the accountability of local legislatures to the local people and the second is the accountability of chief officers to local legislatures. The third condition concerns the powers of sub-national governments to determine some independent taxing regimes. The fourth condition addresses the ability of local government to take some responsibility for the provision of services. The last condition is the adequate discretion of local government to make decisions about expenditure.

In developing countries and transition economies, capturing the benefits of decentralisation can be flawed. Davoodi and Zou (1998) indicate that in developing countries including Iran, contrary to developed countries, the relationship between decentralisation and economic growth is negative. They explain that these negative effects of decentralisation on economic growth may be because of:

1. The spending composition of local government, e.g. inappropriate allocation of funds between current expenditures and capital spending
2. Incorrect revenue assignment among different levels of government, e.g. local government using a funding tool to raise revenue that should have been used by central government
3. Constraints to raise revenue and make decisions about the expenditures, and
4. A lack of responsiveness of local governments to people, e.g. they are not able to reflect the needs and preferences of the local population.

Fiscal decentralisation is an opportunity for developing countries to improve service delivery, get closer to citizens, involve them in the decision-making process, and to increase economic gains. However, a lack of economic stability

and institutional capacity of developing economies, in addition to difficulties in implementation, make it hard for them to capture these benefits of fiscal decentralisation.

2-2-4 THE DESIGN OF FISCAL DECENTRALISATION

Sequencing and the design of fiscal decentralisation play a key role in the success and failure of the decentralisation process. Evaluation can be made of the effectiveness of a fiscal decentralisation programme according to the procedures in place to achieve decentralisation. Bahl and Martinez-Vazquez (2006) propose a normative pattern to sequence decentralisation, which is applicable to many countries. This design looks very straightforward but problems arise in the application of it in the real world.

According to the model, the first step towards a decentralisation process is the deconcentration of service delivery from national government to local governments. Transferring personnel and facilities for service delivery to local governments before the start of the programme can facilitate decentralisation and make it more feasible when the process begins. Holding a national debate about decentralisation is the next step. To have a sustainable process, it is necessary to get some degree of consensus before the initiation of the process. This debate can be held in the context of a national election, or led by an appointed national commission. The third step is the design of the fiscal decentralisation programme. At this stage, a White Paper outlines the Government's plan for accomplishing the goals of the decentralisation programme. This White Paper will be the basis for writing the decentralisation law.

According to this road map, the fourth step is to pass the decentralisation law. This law gives legal standing to the implementation of the fiscal decentralisation programme. This document must include key features of the programme but should not include details because it cannot predict all the realities of administration that will arise. Developing the details of the implementation regulations is the fifth step. The implementation regulations must clearly indicate the details of the programme, such as details of the transfer of

employees and a timetable for implementation. Implementation is the sixth step. At this stage a sub-national government starts to work with its decentralised institutions and begins its new fiscal responsibilities.

The last, but on-going, step of this programme is step seven. Central government should have a monitoring system from the first day of implementation. In the initial years, monitoring should be about addressing unforeseen implementation problems but in later years it can focus on the impacts of the system. However, as it will be shown in the succeeding chapters, the fiscal decentralisation of municipalities in Iran has happened without a plan and a defined order. The next part of the literature review will look at the funding system of municipalities as a result of the fiscal decentralisation programme and the gaining of fiscal autonomy.

2-3 FUNDING MUNICIPAL EXPENDITURE

Municipalities, as a form of local government, need to find ways to finance their operating and capital expenditures to meet the services demanded by their residents. Nowadays there is more pressure on municipalities as a result of the decrease in central government financial assistance associated with the retrenchment of public finance (Brenner & Theodore, 2008). In order to address fiscal needs, municipalities increasingly rely upon local sources of revenue, user fees, and other instruments of private finance (Brenner & Theodore, 2008, p. 22). Although municipal finance is about raising revenue and expenditure decisions (Slack, 2009), the focus of this study is on ways of generating income for municipalities.

2-3-1 OPERATING AND CAPITAL BUDGETS

Although the responsibilities of municipalities differ between countries, they generally have two types of budget to plan their revenues and expenditures: an operating or current budget and a capital budget. The current municipal budget consists of revenues and expenditures for the upcoming year. This budget deals with day-to-day costs and income to deliver municipal services. Examples of operating costs are salaries and wages, repairs and maintenance, and the purchase of short-life equipment. The sources of revenue to address these

expenditures can be a range of taxes such as property taxes, income taxes and payroll taxes, user fees and intergovernmental transfers (Slack, 2009).

The capital budget is the municipality's capital expenditure and anticipated sources of revenue for long-term plans. These plans will be carried out in more than one year. Examples of capital expenditure are infrastructure building such as roads, water and sewer lines, and public transport provision. Financing for capital expenditure includes reserves from the current budget, intergovernmental transfers, public-private partnerships, borrowing, development exactions and value capture levies (Slack, 2009).

To finance operating and capital expenditures, municipalities use different funding tools which can be divided into two categories: classic tools, which have been in use for a long time in most countries and include property taxes, user fees and intergovernmental transfers; and new, alternative ways of financing that try to mobilise private capital to the municipal budget such as development charges, value capture taxes and relaxing regulation taxes. The following sections will look at these two categories in more detail.

2-3-2 CLASSIC FINANCING TOOLS

Intergovernmental transfers, property taxes and user fees are classic tools mainly used to fund operating expenditures of municipalities. Table 2-1 shows the contribution of each source to raise funds for the current costs of four cities. The table shows that the combination and share of each funding source varies from city to city depending on the legal, economic and political conditions of each country.

	Cape Town 2007–08	Toronto 2007	Madrid 2003	Mumbai 2007–08
Property taxes	25.4%	41.5%	12%	19%
Other taxes			19%	46%
User fees	40.09%	21.8%	16%	23%
Intergovernmental transfers	25.2%	20.9%	39%	4%
Other	8.5%	15.8%	14%	8%
Total	100%	100%	100%	100%

Table 2-1: Sources of municipal operating revenues for selected cities. Source: (Slack, 2009, p. 22)

2-3-2-1 INTERGOVERNMENTAL TRANSFERS

The finance of local governments (including municipalities) is, to some degree, dependant on transfers from central government. These transfers can be conditional upon specific purposes, or unconditional. The general purpose of intergovernmental transfer is to meet the fiscal gap of the municipality, equalising between municipalities with differences in resources and spill-over of services over the boundaries of the municipality (Slack, 2009).

The main challenge of intergovernmental transfers for municipalities is the potential effect of the grant on the local decision-making process as, in most cases, the transfer is conditional upon the spend happening where the senior government want it to (Slack, 2009). Moreover, governmental grants can affect local revenue-raising decisions and can distort the pricing system of services and encourage an increase in demand (Oates, 2008). These transfers may also reduce accountability, since it is not clear which level of government is responsible in the case of complaints (Slack, 2009).

2-3-2-2 PROPERTY TAXES

Slack (2009) considers six types of tax at the local level to generate revenue for municipalities. These taxes are: property taxes, personal income taxes, corporate income taxes, payroll taxes, general consumption taxes, and excise taxes. With the exception of property taxes, other types of tax make little contribution to funding plans, so this study will only look at property taxes.

Property taxation is an important tool to raise income at local level in almost all countries (Slack, 2009) and is seen as a mainstay of municipal revenue in both developed and developing countries (Smoke, 2008). Property taxation is a stable and predictable source of funds but will not grow in the same way that income and sales taxes do as a result of economic growth (Slack, 2009). This tax can be levied on residential, commercial and industrial properties but with different assessment and rate ratios (Slack, 2009). Levying taxes on properties is costly and difficult to administer since it includes the following steps: property identification to assemble a list of properties; assessment of the property

according to its area and value; determining the property tax rate; sending out bills; and tax collection (Slack, 2009).

Smoke (2008) identifies four shortcomings associated with the design and administration of property tax in developing countries. The first problem is the presence of taxation bands for certain types of properties for political reasons, such as higher rates for business properties than residential properties. This can lead to the relocation of businesses or the transfer of the tax burden to residents who pay higher prices and who were supposed to be protected. The second issue is the complexity of the valuation procedure. The third relates to tax collection difficulties and the fourth is the problem of obtaining the information required for the administration of property tax.

2-3-2-3 USER FEES

Another way to finance public services is the imposition of user fees for services. A user fee is 'a charge per unit of output' (Slack, 2009, p. 33) and can be levied on households for the provision of services such as rubbish collection and street sweeping. Nowadays, reliance of municipalities on this tool is greater and cities seek to attach fees to the services they deliver (Pagano, 2010).

User fees can promote efficiency in two ways. Firstly, they provide information for the public sector about the willingness of users to pay for the service. Secondly, citizens value the services supplied by the public sector at this marginal cost, which can reduce over-consumption of that service. For example, user fees for water will encourage water conservation (Bird and Tsiopoulos, 1997). However, these fees can raise the problem of equity since 'low-income families cannot afford to pay user fees and will either not use the services or will have to reduce their consumption of other services' (Slack, 2009, p. 35).

2-3-3 ALTERNATIVE FINANCING TOOLS

Revenues from the above mentioned sources (intergovernmental transfers, taxes and user fees) are unlikely to be sufficient to cover the expenditure of municipalities. As a result, municipalities search for other ways to access private capital (Slack, 2009). Various means of charging new developments and

their developers have been utilised to generate income for municipalities. Charges can be set through negotiation (Section 106 agreement in England), regulation (Canada, US) or even bidding (Brazil). These compensations have formed new relationships between developers and planning authorities (Healey, Purdue and Ennis, 1996).

Although there are many ways to levy new developments in different countries, they can be divided into three categories: development charges, value capture tools, and relaxing regulation fees.

2-3-3-1 DEVELOPMENT CHARGES

Many municipalities and local governments levy charges on developers to provide facilities that the additional development necessitates, or in some cases the developer has to provide those services directly, depending on the planning laws of that country (Healey et al., 1996; Needham, 2000; Slack, 2002, 2009). Development charges can be used to cover the costs of infrastructure such as roads, as well as public services such as schools, but it is not permitted to spend them on costs that are not directly related to the additional development (Walls, 2010).

The main rationale for extracting such gain from developers, which are known as development charges, planning obligation (Section 106 agreement), Community Infrastructure Levy (CIL), impact fees, lot levies and development exactions, is 'growth should pay for itself and not be a burden on existing taxpayers' (Slack, 2002, p. 15). Healey, Purdue and Ennis (1996, pp. 149–150) consider three rationales for developers' contributions in the British context: first 'to facilitate the implementation of development'; second 'to mitigate the impact of the development'; and third to return the benefits to the community.

In some countries, such as Canada, these charges are structured according to rules (Slack, 2002) and in some others, such as Britain, some of these charges are negotiable between developers and planning authorities (charges related to Section 106 agreement) and some are fixed (e.g. CIL). Based on section 106 of the English 1990 Town and Country Planning Act local planning authorities, in order to grant planning permission, negotiate with developers to provide

affordable housing and make financial contributions to local services such as education and open space. This is to ensure 'that part of the additional development value created by granting planning permission goes to mitigate negative outcomes and positively to benefit local communities' (Burgess, Monk and Whitehead, 2011).

Slack (2009) in the context of Canada suggests eight steps for the calculation of development charges. The first step is an estimation of growth by anticipating population growth rate, the housing stock composition, and occupancy rates (number of persons per unit) for different types of housing, and employment forecasts for non-residential developments. The second step is the determination of the services that will be covered by the charge, including water, sewers, roads, transit, recreational facilities, police, fire, public works, libraries, parks, and waste management.

The third step involves the estimation of the ratio of the total capital costs to service growth over a period of 10 years. These forecasts need to be detailed and it is better if they are identified by specific areas of the municipality and by specific projects. The municipality should use these forecasts to determine what proportion of the estimated total capital cost is growth related. In step four, service standards should be determined. Municipalities need to establish realistic service standards and they need to show that they are not trying to fund levels of service that are in excess of what they are currently providing. Step five is to estimate net capital costs by service and deduct future grants, subsidies, and fees from total capital costs.

In step six, costs should be apportioned to residential and non-residential properties. The percentage of costs attributed to different land uses depends on the services required and the type of development. Step seven is the decision as to whether the charges should be area-wide or uniform. The last step is to determine what proportion of costs to recover through charges. The municipality can decide to recover less than 100 percent of the eligible growth-related capital costs. It can also decide to exempt some parts of the municipality from the charge (e.g. the downtown core) or some property types (e.g. industrial

properties) to encourage certain kinds of development or developments in particular locations.

2-3-3-2 VALUE CAPTURE TAXES

Value capture taxes are another type of public-financing tool which capture some or all of the value that public investment, such as public transportation, highway exchange, sewer facilities or parks, generate for private landowners. These taxes are known by different names in different countries such as land value increment taxes, tax increment financing, betterment taxes, special assessments, and valorisation taxes.

Value capture internalises the positive externalities of public investments by capturing the unearned value of increased adjacent land values generated as a result of public investment in the area. In terms of equity, this taxation addresses the public concern about unfair windfalls to owners of property when values go up as a result of a major infrastructure investment that is paid from general city revenues. Politically, it is useful for the city to capture a share of the positive externalities of financed investment (Slack, 2009). The most common value capture mechanism is through real property tax, with no special features other than regular assessment of market value before and after public investment in an area. The value of any given property is correlated by its proximity to various amenities and infrastructures.

Tax Increment Financing (TIF) is a financing mechanism used by local governments, mainly in the US, to revitalise blighted inner urban areas. Revitalisation in TIF-designated areas can have a positive impact on the quality of urban life and growth in property that can be earmarked for future tax revenue. Another type of value capture practice, known as valorisation in some Latin American jurisdictions, allocates the cost of public service or infrastructure to property owners in proportion to the benefits conferred by the works (Bird, 2001). This charge is a lump sum levy and generally collected from beneficiary properties before construction work begins (Slack, 2009).

2-3-3-3 RELAXING REGULATION TAXES

Some municipalities relax planning restrictions in a designated area and give developers the right to build beyond the limits of density or land use for a fee. Conditional zoning in the US is an example of this. Conditional zoning allows increased flexibility and permits municipalities to accept a particular land use application which might be disallowed under regulations. Mostly this tool has been used to permit the building of a school or community centre (Brown and Shilling, 1981).

Density bonus is another way to levy charges on developers. In this scheme, developers are permitted to exceed the density limits of planning documents in return for meeting conditions such as preserving an historic building or paying extra charges to the municipality (Slack, 2009).

An additional construction potential is a Brazilian scheme, Urban Operation, whereby a developer can build beyond the regulations in designated zones by purchasing certificates of additional construction potential bonds (CEPACs) issued by the city hall in the Sao Paulo Stock Market Exchange. Urban Operation is an intervention tool in an area of the city that needs improvement (Sandroni, 2010).

Although in most countries relaxing regulation taxes is used to provide public goods and services, some commentators criticise this as it is contrary to public policy (Brown and Shilling, 1981).

2-3-4 FINANCING TOOLS AFFECTING URBAN PLANNING

Studies show that revenue-raising tools that municipalities and local governments use to generate income could positively or negatively affect the development process and the delivery of urban planning objectives. Slake (2002) asserts that 'in some cases, municipal financing tools work in tandem with planning tools, but in other cases the two have opposite effects' (Slack, 2002, p. 1). Below, two examples will be presented in which taxation could distort the planning objective.

By using a hypothetical case study, Downing (1973) shows how user fees could lead to the residential development of fringe land. This hypothetical city has three categories of density that decrease from the centre outwards. The cost of sewerage increases as density increases. If the charge for this service is assessed based on average cost, those in the central area will be charged more than marginal costs and those in suburban areas will pay less. This can lead to residential development of fringe land. To avoid an undesirable development pattern, the fee charged should be equal to the marginal costs of the service (Downing, 1973, p. 637).

Slake (2002) believes that the property tax in Canadian cities has a reverse effect on planning objectives as the property tax encourages urban sprawl while the planning objective is to curb sprawl. This is because, in Canada, the property tax levied is calculated on the assessed value of the property, which means that any improvement in the property, including an increase in density, will raise the market value of that property and will result in increased tax. As a result, developments with higher densities have to pay higher property tax which has discouraged increases in density and led to an expansion of the city (Slack, 2002).

Needham (2000) argues that, by calculating the price elasticity of supply and demand, one could estimate the effect of tax on urban planning. He says that if the taxing mechanisms are used to raise income for the public purse and do not have planning purposes, then the intention should be that the tax has little effect on prices to the final user or on the amount of development. In other words, the 'volume effect' of the charge should be small. In terms of price elasticities, it means that in taxing land of sort M, the price elasticity of supply and demand of land of sort M should be low (Needham, 2000).

However, if the taxation is used as a planning tool, then it must change the price of the taxed land and the amount of the taxed land which is used. In these circumstances 'The bigger the "volume effect" of the tax, the more efficient is the tax as an instrument for planning' (Needham, 2000, p. 249). In other words, in this case the price elasticity of supply and demand of land sort M should be high.

2-4 URBAN PLANNING, MARKET FORCES AND THE DEVELOPMENT PROCESS

In the era of public finance retrenchment when private capital plays a crucial role, understanding the role of urban planning in market process to achieve public planning agendas is important (Heurkens, Adams, & Hobma, 2015). This section first focuses on the development process to study what the development process is, why it is important to study it, what are the models to analyse it and who are the main agents involved in this process. Then it examines how urban planning, by using various tools, tries to intervene or facilitate this process.

2-4-1 THE DEVELOPMENT PROCESS

Guy and Henneberry (2002, p. 5) describe the development process as ‘a complex process which entails the orchestration of finance, materials, labour and expertise by many actors within a wider social, economic and political environment’. Healey (1992a, p. 36) believes that the development process is ‘the transformation of the physical form, bundle of rights, and material and symbolic value of land and buildings from one state to another, through the effort of agents with interests and purposes in acquiring and using resources, operating rules and applying and developing ideas and values’.

Adams (Adams, 1994; Adams & Tiesdell, 2013) compares the land and property development process to any other production processes in which complex organisational systems are required to put together the necessary inputs at the correct time in order to produce the final product, such as in car assembly. The finished product of the development process is the built environment. Although people may equate the development process with the construction process, earlier preparation to start the construction plays a crucial role, as in car assembly (Adams, 1994, p. 38).

Urban planning, as Adams (1994, p. 44) says, in order to be able to intervene effectively, has to be based on an understanding of what happens behind the scenes of the development process. Therefore, to be able to produce effective plans, it is essential to consider the contribution of actors, the significance of

events in the process and the complexity of relationships that make the development happen.

Although in the 1980s academic interest in the interaction between development processes and state agencies grew (Healey, 1991), it was not until the 1990s that discussions on the development process and its conceptual models received a considerable amount of attention. Many academics, such as Gore and Nicholson (1991), Healey (1990, 1991, 1992a), Healey and Barrett (1990), Madanipour (1996), and Ball (1998) have paid attention to models of the development process. In the following sections, firstly the development process models will be reviewed and then, strategies of two categories of development agents, landowners and developers will be briefly discussed.

2-4-1-1 DEVELOPMENT PROCESS MODELS

To analyse and understand what is involved in the development process, numerous conceptual models of the development process have been proposed. Gore and Nicholson (1991, p. 728) state that different models of the development process offer different levels of understanding and could be used for a purpose. They (1991) identify four categories of conceptual models for the development process. These approaches are 'sequential or descriptive approaches', 'behavioural or decision-making approaches', 'production-based approaches', and 'structure of provision'.

Healey (1991) also identifies four models of the development process, including 'equilibrium models', 'event-sequence models', 'agency models' and 'structural models'. Healey (1991) says, although each of these models make a contribution in analysis of the development process, none adequately address all the possible forms and dynamics which the development process may take. Later Healey (1992a) proposes a model based on the gap addressed in the development process models identified in Healey and Barrett's (1990) research. This model is called the 'structure-agency institutional models' of the development process. Here a brief summary of some of the models identified by Healey (1991, 1992a) and Gore and Nicholson (1991) are described.

‘Equilibrium models’ are derived from neoclassical economics. These models assume that ‘the development process is driven by the demand for new property’ (Healey, 1991, p. 221). Focusing only on quantities of supply and demand resulted in the failure of these models to address diverse forms of demand, the non-economic interests of those involved in development, the uncertainty in assessing future gain, the distortions produced by the valuation and appraisal methods to evaluate risks and rewards, and the complexity of the development process (Healey, 1991).

‘Event-sequence models’ (Healey, 1991) or ‘sequential descriptive approaches’ (Gore & Nicholson, 1991) focus on stages through which the development process happens. The development process can be divided into various events. For example, Cadman and Topping (1995) recognise four events in the development process: ‘evaluation’, ‘preparation’, ‘implementation’ and ‘disposal’. Other researchers in the field propose different ways of dividing the development process (Goodchild and Munton, 1985). Although these models are useful to illustrate the complexity and potential blockages in a development project, they do not pay attention to the role of actors in the development process. In this respect, Healey (1991, p. 224) says ‘without some specification of actors and interests, they provide little help in explaining why a development process takes the form that it does in a particular case’.

‘Agency models’ (Healey, 1991) or ‘behavioural decision-making approaches’ (Gore & Nicholson, 1991) ‘focus on actors in the development process, the roles they play and the interests which guide their strategies’ (Healey, 1991, p. 224). Although agency models can be seen as a step forward compared to event-sequence models as they consider agents as well as events (Gore & Nicholson, 1991), they ‘fail to address the driving forces of the process, which act as its structural imperatives’ (Madanipour, 1996, p. 127).

‘Structure models’ (Healey, 1991) or ‘production-based approaches’ (Gore & Nicholson, 1991) are grounded in the urban political economy and are concerned with ‘the way markets are structured through the power relations of capital, labour and landowner’ in a capitalist economy (Healey, 1991, p. 232). While these models address the importance of the broader socio-economic and

cultural dimensions affecting the development process, ‘they barely penetrate into the detail of the events of the development process and the nexus of agency relationships which might surround each’ (Healey, 1991, p. 235).

To address the inadequacy of the aforementioned development models and to address all the possible forms and dynamics that the development process may make, Healey (1992a) proposes ‘structure-agency institutional models’ of the development process. Healey (1990, p. 4) in her earlier work notices that the analysis of the development process ‘requires an approach to the relations between structure, in terms of what drives the development process and produces distinctive patterns in particular periods, and agency, in terms of the way individual agents develop and pursue their strategies’. Then, based on the interrelation between agency and structure proposed by Giddens (1984), she proposes her model (1992a).

This model is in four levels:

1. A description of events
2. An identification of roles and power relations
3. An assessment of the strategies and interests shaped by resources, rules and ideas, and
4. The relation between these resources, rules and ideas and the wider society.

The first three levels of analysis are empiricist and the last level moves towards theorisation of the social relation (Healey, 1992a).

Gore and Nicholson (1991) also propose a similar approach which is ‘structures of provision’. They assert that ‘the production and consumption (that is, provision) of buildings are not only the physical process of creating and transferring such artifacts to their occupiers, but are also a social process dominated by the economic interests involved’ (Gore & Nicholson, 1991, p. 725). Hence, they suggest that it is important to understand both the structures within which the provision of building happens and the social agencies engaged in the process of provision. In their view ‘a series of interconnected social relations’ exists ‘between the agents and institutions involved, the legal

framework regulating such activity, and the financial arrangements that allow it to proceed' (Gore & Nicholson, 1991, p. 726).

Institutional approaches (both 'structure-agency institutional models' and 'structures of provision') provide a conceptual tool for understanding the interplay between structures and agents. However, it should be noted that summarising all aspects of a development process (structures and agents) in a single model is conceptually and operationally difficult (Ball, 1998; Hooper, 1992). To overcome this difficulty, in studying a particular development process, it is not necessary to study all aspects of the structure-agency dynamics, but rather focus on those interplays which are necessary to provide the context for the analysis (Gore & Nicholson, 1991, p. 728).

Based on the structure-agency model and other theoretical underpinnings, Madanipour (1996) suggests a practical model of the development process. According to this model, 'in a development process, there are "development agencies" who operate through certain "development factors" within interrelated social and spatial "contexts"' (Madanipour, 1996, p. 136). Physical and social contexts, which include resources, rules and ideas, are the two main parts of this process. When these two contexts overlap, development agencies will become involved to produce the built environment (Madanipour, 1996). Figure 2-1 illustrates the component parts of the development process identified in this model.

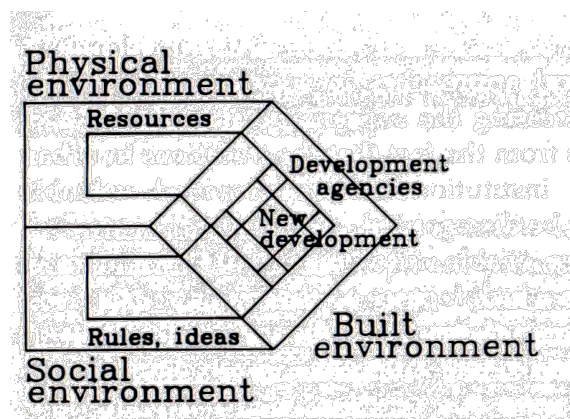


Figure 2-1: A model of the development process (Madanipour, 1996, p. 136)

According to institutional models of the development process, there is a dialectic between structure and agency: structure (e.g. the decision environment) influences agency, however, ‘agency is not hopelessly determined by structure’ but ‘over time agents change structure’ (Tiesdell & Allmendinger, 2005, p. 57). In this regard, Gore and Nicholson (1991, p. 726) assert that ‘both conflict and collaboration between agents may lead to the imposition of new legal controls or to the provision of new forms of finance, and so on’. This implies that agency might affect structure.

2-4-1-2 DEVELOPMENT AGENTS: DEVELOPERS AND LANDOWNERS

In studying the urban development process, which is mostly dominated by the private sector, it is necessary to have sufficient knowledge about the nature of the actors involved in the production of the built environment in any specific context. For planners it is important to know to what extent they can influence the activities of these actors to achieve the objectives of urban planning, as sometimes the powers and resources of landowners and developers may be greater than those of the planning authority (Adams, 1994, p. 7).

Although various types of agents, with different expertise, contribute in the development process, only the characteristics and strategies of landowners and developers will be briefly explored here in the context of England. In subsequent chapters, these roles will be explored in the context of Tehran.

LANDOWNERS

Landowners are necessary actors in the development process as they bring forward the land for development. However, landowners do not respond to the development potential of their land uniformly as their motives and circumstances are diverse (Goodchild and Munton, 1985). There are three basic decisions that landowners make (or fail to make): financial decisions, which deal with if and when to develop their land; operational decisions which are concerned with how to relate to other actors; and management decisions which are about managing the land before development. To reach these financial, operational and management decisions, landowners interact with contextual factors (e.g. land prices and taxation policy), site characteristics (e.g.

size and location) and owner characteristics (e.g. attitude to risk) (Adams, 1994; Goodchild and Munton, 1985).

As landowners wish to maximise their financial gain, they might seek to influence planning policy in such a way as to enhance the contextual factors of their lands (Adams, 1994, p. 92). In the British context, they might challenge and transform the structural framework to pursue their strategies (Adams, 1994).

DEVELOPERS

Developers play a key role in the development process as they assemble the inputs to production, organise the production process and market the product (Healey, 1991, p. 224). They are at the nexus of all actors involved in the development process and 'play a crucial role in interpreting the requirements of occupiers and investors and translating them into built form' (Henneberry and Rowley, 2002, p. 99). Since the 1980s, the role of the public sector in the production of buildings in Britain has reduced and the private sector has become the predominant supplier (Henneberry and Rowley, 2002).

In Britain, the development industry is mostly in the hands of larger companies who have access to finance capital and have been in business for a long period of time. The activities of small- and medium-size development companies have been in decline because of their financial dependence on banks, which restrict the availability of credit for these companies (Adams, 1994, p. 107). As Wellings (2001) reports, the production of new homes is increasingly dominated by a small number of very large companies. He says that this trend is continuing as, in 1990, 32 companies each started more than 500 units and together claimed 41% of the market share and in 2000, there were 43 companies of this size whose combined market share was 71%.

The main goal of private sector developers is 'to accumulate profit by producing buildings whose realised value is greater than the cost of development' (Henneberry, 1999, p. 1446). In order to achieve this goal, developers monitor the trends of the property market to assess the development profitability, normally by using a residual valuation technique (Henneberry, 1999). The

residual valuation 'will estimate the maximum purchase price of a site by deducting the expected total costs of the development, including an allowance to cover risk and profit, from the expected price that the completed development could be sold for in the market' (Morley, 1988, p. 3).

Despite the valuation carried out prior to initiation of the development process, developers deal with uncertainty in their calculations, especially over the final value of the completed building (Henneberry, 1999). Here is where the planning system with a restrictive nature, as in Britain, could protect developers by preventing overproduction of residential buildings (Adams, 1994, p. 131). In fact, Adams (1994) contends that, in the British context, developers and planners share common interests as 'local authorities look to the private sector to help implement urban plans, while the planning system offers the developers and investors that element of certainty which could never be provided by the free market alone' (Adams, 1994, p. 130). As a result, developers are keen to participate in the planning system and urban plans tend to incorporate market criteria to protect developers (Adams, 1994).

2-4-2 URBAN PLANNING IN A MARKET ECONOMY

Urban planning is a state intervention in the development process which can be justified only if evidence shows that such intervention could generate a better urban environment than leaving the matter to the market (Adams, 1994, 2008). In the era of neo-liberalisation, government retrenchments and decentralisation policies achieving public planning goals through privately-led developments are noteworthy. Thus, understanding state-market relations and the role of planning tools in the creation and maintenance of this relationship is important (Heurkens et al., 2015).

The aims and roles of urban planning have changed through time. Nowadays, the role of urban planning is mostly to influence the process of change and the development of cities, as opposed to override this process or regulating this process, instead of controlling it (Healey et al., 1988). Blacksell et al. (1987, p. 1) state that 'in the market economy, the function of town planning is to regulate rather than control the timing, form and location of development in order to

promote the efficient allocation of resources, minimize externalities and ensure the conservation of valued environments'. Before focusing on the dynamics of state-market relationships and the implications of neo-liberalisation on the planning system, the changing role of urban planning in Britain is briefly discussed below.

2-4-2-1 THE EVOLVING ROLE OF URBAN PLANNING

In the first five decades of the twentieth century, it was believed that the reconstruction of existing settlements and the creation of new ones by producing comprehensive plans (or civic designs) could provide amenity and safety for residents. In this view, planners were master-builders and civic designers whose profession originated in architecture, engineering and surveying (Adams, 1994, p. 3). This method could only address the physical aspects of the built environment rather than social and economic aspects, which could result in a poor physical environment. Ineffectiveness of these plans resulted in the abandoning of this approach in the 1960s (Adams, 1994).

In the 1960s, corporate planning became popular in order to prevent the uncoordinated action of the bureaucratic system. In this period, urban planning dealt with the management and delivery of public services, such as education and housing. In this context, planners were master allocators of the resources (Adams, 1994). This was the time when urban planning became a tool to control the market and address its economic and social externalities. In the 1970s, rational planning, which was a scientific method to address urban challenges, became the prevailing course of action. Rational planning was highly dependent on the availability of information, which was both expensive and difficult to collect. In this system, planners had to come up with various alternatives and evaluate the consequences of each in order to choose the best course of action. Structure plans of the 1970s were products of this era (Adams, 1994).

The 1980s were concurrent with the new right-wing thinking favoured by the Thatcher Government. The scope of urban planning was affected during this ideological shift. Economic efficiency became the paramount responsibility of urban planning (Adams, 1994). The dominant direction of urban planning during this decade was to facilitate market-led development of the private sector

regeneration schemes (Brindley, Rydin, and Stoker, 1996). In the 1990s, concerns for environmental sustainability and a deep recession in property development moved urban planning away from mostly facilitating market-led development. Healey (1992b, p. 412) says that by 1990 ‘the emphasis once again shifted back to balancing market considerations within a concern for environmental quality and community development’.

To some degree, the 1990s approach of balancing market considerations with the agenda of sustainable development has continued into the 2000s. Spatial planning, which focuses on ‘multi-sectoral and multi-scalar coordination and integration of development’ (Allmendinger and Haughton, 2013, p. 16) was the major planning practice of this decade. However, the economic recession and public sector austerity in 2007 led the planning system to move from spatial planning towards localism. This transition happened in the 2010s as part of the Localism and Devolution agenda of the elected coalition government. By proposing ‘open source’ thinking, emphasis shifted from the interventionist approach of spatial planning to a more pro-market localism which was fragmented, locally determined and incentive driven (Allmendinger and Haughton, 2013). Neighbourhood plans are the products of this era.

Throughout the history of urban planning in Britain, as presented above, the relationship between planning and market has been changing from controlling the market in the 1960s to supporting the market in the 1980s. Although in the 1990s and part of the 2000s the state again became a proactive player in the planning field to protect sustainability agendas, as Allmendinger and Haughton (2013) assert, protecting the market for economic growth was still the major objective of state intervention. However, once again in the 2010s, by adopting localism, the state’s intervention in urban planning has once more been reduced. In Chapter 4 of this thesis, the evolution of urban planning in Iran will be discussed.

2-4-2-2 SYMBIOTIC URBAN PLANNING

Understanding the relationship between state and market in the planning process has been the subject of discussions of governance. The discussion used to be around whether the state should ignore the market in the process of

planning (pro-planning approach) or that market-led growth was the only way forward (anti-planning approach). However, in the 1990s scholars started to acknowledge the interactions of market and state regulations rather than their opposition. In this regard, Healey (1992a, p. 420) says ‘instead of simplistic oppositions between planning and the market which tended to structure debate in the 1980s, it is now more productive to explore the interactions between planning regulation and market conditions’.

The pro-planning approach is known as the Pigovian paradigm after Pigou's book *Economics of Welfare* published in 1920. This approach is conceived as an interventionist paradigm, since it perceives a positive role for the government regulation of the land market. However, opponents of this paradigm constantly ‘cast doubts about the cost of such regulation’ (Lai, 1994, p. 92). The pro-planning approach argues that if the conditions are not those required for optimal allocative efficiency and, as a result, there are market failures, then it is the responsibility of the state to correct those failures in such a way that the allocative efficiency will be better than the market itself can achieve under its imperfect conditions. Thus, state intervention is rationalised because of the existence of market failure as a result of the existence of externalities (positive and negative), inadequacy of the market in the provision of public goods, imperfect information, and monopolies (Samuelson and Nordhaus, 2010).

In urban planning, advocates of state intervention believe that market imperfections can be corrected by land use planning and various social goals can be achieved. Needham (2006) justifies urban planning using arguments from law (rights in land) in addition to economics. In terms of law, he states that different people may have different interests in a piece of land. Those interests may be protected or not protected by law. Unprotected interests, such as keeping a national park as open countryside, should be protected by the state. Regarding the economic benefits of planning, he asserts that land use ambitions, such as the protection of an ecological resource or demolition of a factory, could be achievable only through state intervention as it may not have the economic justification for the market to do it (Needham, 2006).

Critics of state intervention, mainly Coase (1960), challenge state intervention because of the transaction costs including the search, bargaining and enforcement costs, imposed by this intervention (Lai, 1994). Another criticism of state planning is the information deficiency of these plans because they require centralised information and this information is always partial or defective (Webster and Lai, 2003). Coase (1960) states that urban planning can be an example where regulation has made matters worse because of the transaction costs of this intervention. He says that although the state's plan is simply assigning, reassigning and attenuating the rights of landowners, we have to be careful about the cost of such intervention and see whether it is greater or smaller than the alternative of leaving the matter entirely to the market (Lai, 1994, pp. 89–92).

To tackle externalities, this approach suggests evaluating the monetary effects of intervention. An example can clarify this thinking: if, as a result of pollution, fish are killed, the question to be asked is 'is the value of the fish lost greater or less than the value of the product which the contamination of the stream makes possible' (Coase, 1960). However, later Coase (1988) changes his stance and expresses that, in the case that the negative externalities may harm many people, it will be difficult to reach a satisfactory solution through the market and it might be preferable to impose special regulations (Coase, 1988; Lai, 1994).

Moving beyond the dichotomy of planning versus market, Tiesdell and Allmendinger (2005) propose the concept of market-aware forms of planning which focuses on the interrelationships between state and market. Market-aware planning is aware of 'motivations of the various actors (e.g. individuals, firms and governmental bodies) in the land and property development process' (Tiesdell & Allmendinger, 2005, p. 57). More recently, Adams and Tiesdell (2010) have put forward the idea of planners as market actors, whose activities help to construct the market. They suggest that the relationship between planning and the market are symbiotic rather than dichotomous.

Based on this approach the final outcomes are the result of 'decisions that are made and actions taken' by various actors (Tiesdell & Allmendinger, 2005, p. 57) and it is 'problematic to ascribe outcomes either to planning or to market' (Adams &

Tiesdell, 2013, p. 65). Because ‘market actors seek to anticipate and influence what planners might do (and planners do likewise of other market actors)’ (Adams & Tiesdell, 2013, p. 65).

Intended/characteristic market affect	Typical sub-types	Typical example
Shaping (e.g. shaping the decision environment or context)	<ul style="list-style-type: none"> • Development plans (e.g. public infrastructure investment plans) • Regulatory plans (e.g. statutory plans/ policies/strategies) • Indicative plans (e.g. non-statutory plans/ policies/strategies and advice) 	<ul style="list-style-type: none"> • Transport infrastructure investment plans • National planning policy and development plans • Establishing spatial vision for area
Regulation (e.g. defining the parameters of the decision environment)	<ul style="list-style-type: none"> • State (or third party) regulation • Contractual (or bi-lateral) regulation 	<ul style="list-style-type: none"> • Planning/development controls • Restrictive covenants attached to land transfers
Stimulation (e.g. restructuring the contours of the decision environment)	<ul style="list-style-type: none"> • Indirect/fiscal measures • Direct state action 	<ul style="list-style-type: none"> • Subsidies (tax breaks) to encourage more of desired activities (e.g. derelict land reclamation grants) and/or taxes to discourage certain activities (e.g. tax on greenfield development) • Compulsory acquisition of land • Joint ventures
Capacity building (e.g. developing actors’ ability to identify and/or develop more effective/desirable strategies)	<ul style="list-style-type: none"> • Actor-network relationships • Social capital • Cultural perspectives 	<ul style="list-style-type: none"> • Arenas for interaction/networking • Partnerships/partnering arrangements • Thinking ‘outside the box’

Table 2-2: Planning tool types. Source: (Tiesdell and Allmendinger, 2005, p. 64)

Based on the nature of the interaction that planning tools have with market, Tiesdell and Allmendinger (2005, pp. 63–69) offer a classification of planning tools in England. They divide planning tools into: market-shaping tools, market-regulation tools, market-stimulation tools, and capacity-building tools. The following table (Table 2-2) summarises their categorisation.

Market-shaping tools are the tools that influence land and property markets by shaping the context within which transactions take place. In land and property markets, plans, by providing information, can be seen as a principal directive

market-shaping tool. They have three informative functions for influencing the market. Firstly, they provide general coordinating information which may reduce uncertainty. Secondly, they indicate government intentions regarding its future development plans. Thirdly, they provide information about regulatory policies (Tiesdell and Allmendinger, 2005, pp. 63–66).

Market regulation tools seek to regulate and control market actions and transactions. Whereas plans affect decisions by providing information, regulations affect decisions by restricting the set of choices available. In land and property markets, 'market regulation planning tools generally operate by the state taking certain rights in land and making subsequent exercise of those rights subject to express permission' (Tiesdell and Allmendinger, 2005, p. 67).

Market stimulation tools seek to enable markets to work better. They 'do not limit choices but simply change the contours of that opportunity space making some strategies more (or less) advantageous to market actors' (Tiesdell and Allmendinger, 2005, p. 68). Subsidies that encourage more of a desired activity or taxes discouraging an undesired activity are examples of these kinds of tools.

Capacity-building tools try to build the abilities and capacity (e.g. skills, knowledge, networks, rules of operation, working practices, etc.) of market actors in order to facilitate the operation of the other planning tools. These planning tools include 'the more diffuse – though nonetheless real – phenomena of building relations, trust and/or more commonly social capital among the range of development actors' (Tiesdell and Allmendinger, 2005, p. 68).

Tiesdell and Allmendinger (2005) believe that these tools can be combined to achieve the desired policy objectives. For example, 'If regulatory tools have a major role in affecting an increase in the supply of land for development but only a minor impact on expanding demand, another planning tool (for example, a market stimulation tool such as financial inducements) may need to be used in combination with the regulatory tool' (Tiesdell and Allmendinger, 2005, p. 73). Heurkens et al. (2015) by looking at two regeneration projects in the UK (Bristol and Liverpool), show that planners performed a crucial role in shaping, regulating and stimulating the private sector's decisions. In these two cases,

planners used a combination of planning instruments in order to have impact in the final production. Heurkens et al. (2015) call this ‘plan-shaped markets’.

2-4-2-3 NEOLIBERAL PLANNING IMPLICATIONS

Despite the existence of various and distinctive planning cultures in different countries and regions (Friedmann, 2005), globalisation and neoliberalisation policies have affected urban planning systems around the world since the late 1970s (Tasan-Kok, 2012). These policies have resulted in ‘major changes in the institutional structure, processes, influence, and scope of planning’ (Friedmann, 2005, p. 184). Evidences show that cities with different political and socio-economic backgrounds are moving towards neoliberal planning (Friedmann, 2005; Sanyal, 2005; Tasan-Kok & Baeten, 2012). Some of the results of neoliberalisation in urban planning are discussed in this section.

As Harvey (1989, p. 4) discusses, ‘a reorientation in attitudes to urban governance’ has been happening since the 1970s. He argues that the ‘managerial approach’ which was prevailing in the 1960s has given way to ‘entrepreneurial forms of actions’ (Harvey, 1989, p. 4). He sees public-private partnership (collaboration of businesses and corporations with state actors) as the centrepiece of the entrepreneurial shift of government. Although he avoids generalisation, he (Harvey, 2005, pp. 76–77) asserts that in many cases businesses and corporations who collaborate with state actors have ‘a strong role in writing legislation, determining public policies and setting regulatory frameworks’ which are mainly advantageous to themselves.

Also Tasan-Kok (2012, p. 2) discusses that the reorientation in urban planning has resulted in the replacement of ‘rigid and regulatory land-use planning process’ with ‘a more flexible and negotiable strategic planning process’ which supports market-friendly policies in land and property development. She shows how planning authorities would alter the zoning plan in a neoliberal city to support the dynamics of property-led urban development which, for example, would result in the construction of a new large-scale commercial property in the city centre. She argues that ‘the local government allows a change in the zoning plan, convinced that a large commercial facility in the centre would enhance the city’s competitive advantage. The expected outcome of the land transaction

includes a new image for the city, besides rent (and tax) revenue for the local government’ (Tasan-Kok, 2012, p. 12).

Similarly, Jou et al. (2012, p. 167) by investigating in four case studies in Taipei observe that ‘land use codes could be “flexibly” changed to legalise some commercial property development in meeting the “market need”’. They argue that the financial deficit of Taiwan’s government in the mid-1990s resulted in the need of central government and Taipei municipality to rely on private capital in the provision of public infrastructure. In order to legalise the involvement of private capital in public-private partnership some laws were issued by the central state. In case studies that Jou et al. (2012, p. 154) studied they found out that in the decision-making process ‘the assumption that private capital is more sensitive to “market needs” and changes than government was’, resulted in ‘flexibly’ changing land use plans to accommodate investors and developers needs. They conclude that ‘for private capital, what keeps them continuously cooperating and negotiating with Taipei municipal government is that they can accumulate their own economic capital ... by transferring the public land ... into private profit’ (Jou et al., 2012, p. 167).

2-5 CONCLUSIONS

In this chapter literature has been reviewed according to the proposed research questions. In this section the main points of the literature will be drawn together to identify to what extent the review can improve understanding of the research questions.

After the Introduction section, the second part reviewed the changing role of governments and discussed how the cities of developed and developing countries are moving towards neoliberal states with decentralisation agendas. A neoliberal state, in theory, is opposed to state interventionist theories and seeks to guarantee individual freedoms, the privatisation of state’s assets and the facilitation of movement of capital. However, in practice, different countries took different paths based on the context and inherited regulatory landscapes of each country. Decentralisation and moving towards governance is an important component of shifting towards a neoliberal state.

In general decentralisation (including administrative, political and fiscal decentralisation) is framed as transfer of power from central government to local government. However, in reality it is suspected that real power has been transferred to the local government.

Although it is conceived that decentralisation can lead to economic efficiency and more desirable public service outcomes, in developing countries it is hard to conclude that this is the case. The failure of fiscal decentralisation in developing countries can be because of:

- inappropriate funding and spending compositions
- incorrect revenue assignment between different levels of government
- constraints on raising revenue and making decisions about expenditure
- lack of responsiveness of local governments to people.

Previous studies suggest that preparing a road map for the initiation of the process of fiscal decentralisation can increase the effectiveness of the process. Monitoring of this road map can help to address implementation problems and the impacts on the system. Fiscal decentralisation is a process and its implementation could take time.

The third part of this chapter focused on the ways in which municipalities fund their operating and capital expenditures. Classic ways including intergovernmental transfers, property taxes and user fees were discussed. Recent trends of financing municipal expenditure were then reviewed. These alternative tools can be divided into development charges, value capture taxes and relaxing regulation taxes. Figure 2-3 summarises these funding trends.

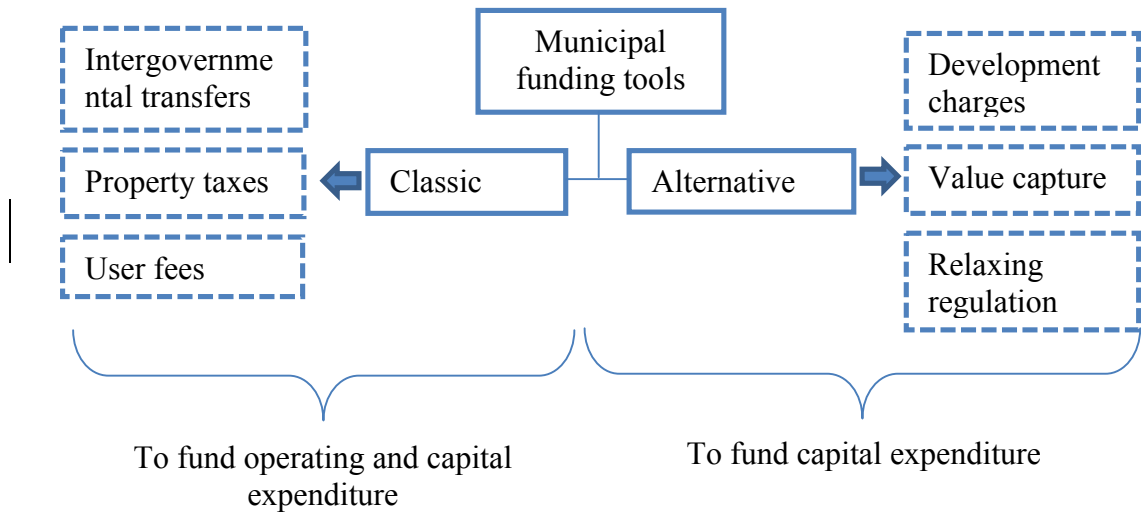


Figure 2-2: Municipal funding tools

Despite the fact that fiscal decentralisation has happened/is happening in the majority of local governments and new financing strategies are in use to mobilise private capital to fund expenditure, local governments still somehow rely on transfers they receive from central government. Besides central government's transfers, property tax is a stable and predictable source of funds for many municipalities. However, funds raised from governmental transfers and property taxes have been insufficient. Municipalities and local governments use alternative tools to access private capital. Various mechanisms and forms are in use in different countries.

No matter what tools municipalities use to raise revenue, these tools could affect the development process and the delivery of urban planning objectives. If the taxing mechanisms are used to raise income for the public purse and do not have planning purposes then the volume effect of the charge should be small and, contrarywise, if the taxation is used as a planning tool, then the volume effect of the tax should be large.

The last section of this chapter looked at the development process, its models and the role of the urban planning system in this process. The development process is a process through which the physical form, bundle of rights and material and symbolic value of land and buildings transforms from one state to another. Development agents, by using resources, operating rules and applying and developing ideas and values, make this transformation happen. Therefore

to understand why a certain development pattern takes place in a location, we need to look at the available resources, operating rules and strategies of the development agents.

Five models of the development process: equilibrium models; event sequence models (sequential or descriptive approaches); agency models (behavioural or decision-making approaches); structural models (production-based approaches); and structure agency institutional models (structures of provision) were discussed. Although each of the development models makes a contribution in an analysis of the development process, it is only the structure agency institutional models (structures of provision) of the development process which adequately address all the possible forms and dynamics which the development process may take. A structure agency institutional model of the development process is an approach to the relations between structure, in terms of what drives the development process and produces distinctive patterns in particular periods, and agency, in terms of the way individual agents develop and pursue their strategies.

Based on the structure agency institutional model, the powers and resources of landowners and developers should be studied in order to understand their strategies. The implementation of plans in a market economy depends on the decisions of these agents as their powers and resources may be greater than those of the planning authority. To reduce risk, landowners and developers need planners as the planning system and urban plans tend to incorporate market criteria to protect developers. This is why consideration should be given to planners as market actors.

Besides the importance of the development agents' role in the development process, structures through which these agents carry out development should also be considered. The urban planning system is one of the major structures which shape and influence the development process. Depending on the stance of states towards the market, the urban planning system of a country could be in support of market mechanisms or could be interventionist and try to control every aspect of development. However, in general, planning systems are moving towards symbiotic approaches to work with the market, as both planning

authorities and the market need each other to achieve their agendas. The following table summarises the arguments between the planning system and market control.

Approach	Founder	Argument	Evidence to support argument	Criticism by opponents
Pro-planning	Pigou, 1920	State should intervene in the market to correct its failures	Existence of market failure/protection of public interest	Transaction costs of state regulation
Anti-planning	Coase, 1960	Market solutions are superior/against intervention	Transaction costs of state intervention	Unable to tackle externalities and provision of public goods
Planning with market	Healey, Webster, Lai, Needham	State should intervene where the transaction costs of using the market are greater than using rules	Public domain problems	Larger role for markets and individual transactions, but also does not accept market interactions as the best form of allocating all resources

Table 2-3: Classification of approaches towards the market in urban planning

The history of the urban planning system in Britain is an example in which the relationship between the planning system and the market has been changed from controlling the market in the 1960s to supporting the market in the 1980s and finally to planning with the market. Now, in Britain urban planning to intervene or support the market mechanism uses various tools which could have differing effects on the development process. These tools are classified into: market shaping tools, market regulation tools, market stimulation tools and capacity building tools. These tools are characterised by the way they tend to affect the decision of market actors and it is important to be aware of their effects.

The move towards symbiotic planning (planning with the market) and the financial need of local authorities to provide for cities has had implications for urban planning. Authorities' decisions in some cases are affected and shaped by the interest of businesses and corporations as they have a role in the

decision-making process. Moreover, to secure income and increase competitiveness, zoning plans have faced changes to meet market need and more flexible and negotiable approaches are in demand.

In summary, the literature shows that the development process would be affected by any change in the structure in which the development is happening. Imposition of a new taxing system or introduction of an urban policy could affect the structure. Development agents would address these changes happening in the structure by adjusting their strategies and decisions. Simultaneously, the implementation of urban plans depends on the way that development agents (in this study developers) respond to the urban plan.

CHAPTER 3 – RESEARCH METHODOLOGY

- Introduction
- Conceptual basis
- Research design
- Data collection
- Data analysis strategy
- Conclusions

3-1 INTRODUCTION

This chapter develops the design and form of the investigation which leads the researcher to find answers to the questions posed by this thesis. Derived from Chapter 2, the conceptual basis of the research is presented and, then, this chapter focuses on research questions, the hypothesis and the strategy of the research. Data collection strategies and the researcher's reflection on the politics of data collection are presented. To conclude the strategy method of analysis of the data is discussed.

3-2 CONCEPTUAL BASIS

Drawing on Giddens' structuration theory (Giddens, 1984b), which explores the relationship between both the structure and the agents, a structure-agency institutional model of development process is proposed to explore the dynamics between the two in the process of space production. In this model, structure is what drives the development process and produces distinctive patterns in particular periods. The term agency is understood to mean individual agents, involved at different stages of the development process, pursuing their strategies.

In the institutional model of the development process, the relationship between structure and agency is a key to the understanding of spatial change. Although agents' activities are framed by the broader social, economic and political structures, based on this model these activities shape the structures too. There is a dynamic relationship between structures and agents. As Gottdeiner (1994, p. 200) argues 'the production of space is captured best as the complex articulation between structures and agency, which is always in motion'.

Based on the institutional model and its related arguments, any change in rules in the social environment, e.g. a new taxing system or the introduction of an urban policy, would be considered as a change to the structure in which the development agents work. As a result, development agents would address these changes by adjusting their strategies and decisions; at the same time, the

way they respond to those changes would shape those structures either intentionally or unintentionally.

By using evidence from Tehran, this thesis investigates the dynamics between structural changes and the development agents' decisions and activities. The following diagram (Figure 3-1) shows the conceptual framework of this research. As shown in the diagram, change in the municipality financing system affected the development agents' activities and, subsequently, the response of the development agents to this structural change has affected the structure. All of these interrelated dynamics between agents and structure have manifested spatial changes in some parts of the city.

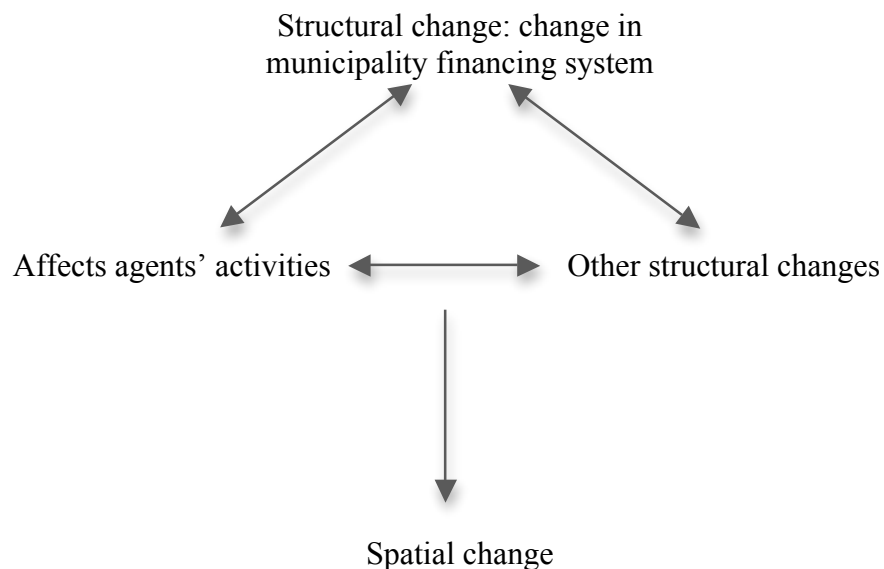


Figure 3-1: Conceptual framework of the research

Based on the concept of 'duality of structure' proposed by Giddens (Giddens, 1984b), two levels of analysis form this thesis. Firstly, the analysis of development agents involved in the production of a particular space and, secondly, the structural properties within which those agents operate. Moving on from conceptual arguments, the rest of the chapter elaborates on the practical dimensions used to carry out the research.

3-3 RESEARCH DESIGN

Research design is the logic that guides the kind of data to be collected and analysed, based on the initial research questions (Bryman, 2012; Yin, 2009).

Yin (2009, p. 26) explains that a research design is ‘a logical plan for getting from here to there, where “here” may be defined as the initial set of questions to be answered, and “there” is some set of conclusions (answers) about these questions. Between here and there may be found a number of major steps, including the collection and analysis of relevant data’. The following sections present the plan of this research and how it progressed from research questions to final conclusions.

3-3-1 RESEARCH QUESTIONS

The aim of this research is to investigate the possible impacts of the municipal fiscal decentralisation on the development process and the planning system in the context of Tehran. In particular, as mentioned in Chapter 1, three research questions are considered in this study:

1. How the construction density charge in Tehran has affected the decisions of housing developers/investors? This research question investigates whether this tool has affected the location, type and density of housing developments built by developers.
2. How, as a result of using the construction density charge tool, decisions (tendencies) of housing developers have shaped the city of Tehran. This research question studies the spatial change of the city as a result of the market-led development based on developers’ activities.
3. The last research question deals with the planning implications of developers’ decisions and the market-led growth of the city. This research question looks at how, in turn, this market-led growth has affected the way the city is planned (during the preparation, revisions and implementation of plans).

The following table (Table 3-1) shows the main questions and sub-questions of the research.

Research questions	Breaking down research questions
How the construction density charge in Tehran has affected the decisions of housing developers	<ul style="list-style-type: none"> • Who are the developers and what is/are their goal(s)? • How they understand extra construction density charge? • What are the ways to get extra construction density? • What are the decisions of developers: where, what, how and for whom to build? • Has extra construction density affected their decisions?
How, as a result of using the construction density charge tool, decisions (tendencies) of housing developers have shaped the city of Tehran	<ul style="list-style-type: none"> • What is the development pattern of Tehran? Is it market-led growth? • Which are the regions under more demand to exceed construction density limits? • What is the role of developers in this pattern? • What is the role of regulations in this pattern?
How, in turn, this market-led growth has affected the way the city is planned	<ul style="list-style-type: none"> • What is the planning and governing system of Tehran? • What is urban planning procedure? • Are developers' tendencies being acknowledged in planning decisions? Can they influence the plans during preparation and implementation phases?

Table 3-1: Research questions and sub-questions

3-3-2 HYPOTHESES

The main proposition of this research is that the city is not managed by official plans but by responding to spontaneous growth, which is partially the result of the application of the excess construction density charge. Although Tehran has a Structural-Strategic (Comprehensive) Plan and District Plans for each region, this research argues that the city has grown and been managed spontaneously rather than in a planned way.

This proposition consists of three parts. Firstly, construction density bonus has created a market that did not exist, or was not of a considerable size. By adopting the policy, the tendency to build taller than the height permitted in the official plans increased the economic benefits for developers. The construction industry became very profitable and attracted many people from other

professions to invest and work in this sector. Prime locations came under more pressure for construction and, as a result, spatial development of the city was handed over to the vagaries of housing developers' interest.

Secondly, the decisions of developers affected the spatial order of the city. To a great extent market trends have shaped the city of Tehran. In many parts of the city, the spatial development of the city has been shaped by the developers' ability to, and interest in, buying the right to build more densely in the areas where they thought it would be more profitable. Financial dependency of Tehran municipality on the construction sector boosted the power of developers to construct what benefitted them economically. Thirdly, this market-led growth has affected the way the city is planned. The plans are not driving the growth. They have been adjusted to meet the requirements of the market and the growth has been spontaneous rather than planned.

In addition, the density bonus strategy to finance the municipality's expenditures has changed the logical relationship between plans and developers. Instead of plans affecting the decisions of the developers, the developers' agendas direct the plans. These propositions will be revisited at the end of this thesis in Chapter 8.

3-3-3 STRATEGY OF RESEARCH

According to the nature of proposed research questions which are concerned about a contemporary phenomenon (Bryman, 2012) and have an explanatory nature (Yin, 2009), case study design is considered in the research for this thesis.

The single case study of this research is Tehran, a city in which the granting excess construction density has been utilised extensively. Tehran is comprised of 22 regions. Ideally, to be able to examine the research's propositions, all the 22 regions would be looked at to examine how the tool has affected the spatial development of the city. However, considering the time frame of this research, the focus of this research will be on Regions 1, 2, 3, 4 and 5 which have been under more pressure to develop high-rise residential buildings which exceed construction density limits. The reason behind this selection is explained below.

The information from the Statistical Centre of Iran shows that demand for construction is not the same in different regions of the city. There are three indicators in these statistics which are useful to determine which areas of the city have higher demand for construction. These three indicators are: the number of granted construction permissions in each region; the amount of gross floor area granted to be built in each region; and the number of residential units permitted to be built in each region.

Based on four years' statistical data, the highest number of permissions granted belonged to Regions 2, 4, 5, 8, 14 and 15 (SCI [Statistical Centre of Iran], 2011, 2012, 2013, 2014). These are the regions most under construction, but the question is whether these constructions are exceeding construction density limits. The amount of gross floor area granted and the number of residential units to be built in each region reflect the demand for construction of additional housing units. Developers want to increase the amount of floor areas by constructing taller buildings.

The largest gross floor area permitted to be built in these four years belonged to Regions 1, 2, 4, 5, 22 and 3 and the highest number of residential units granted was for Regions 1, 2, 4, 5, and 21 (SCI [Statistical Centre of Iran], 2011, 2012, 2013, 2014). Although Regions 8, 14 and 15 had a high amount of permissions granted, they are mostly not for tall buildings, so they are not the concern of this research. Regions 21 and 22 are out of the scope of this research as it was not until the 2000s that they became official regions of the Tehran Municipality and much of these regions have only recently been released for development. The map below (Figure 3-2) shows in which of the 22 regions of Tehran the amount of construction permits, the floor area permitted to be built, and the residential units permitted are higher in comparison to the remaining regions.

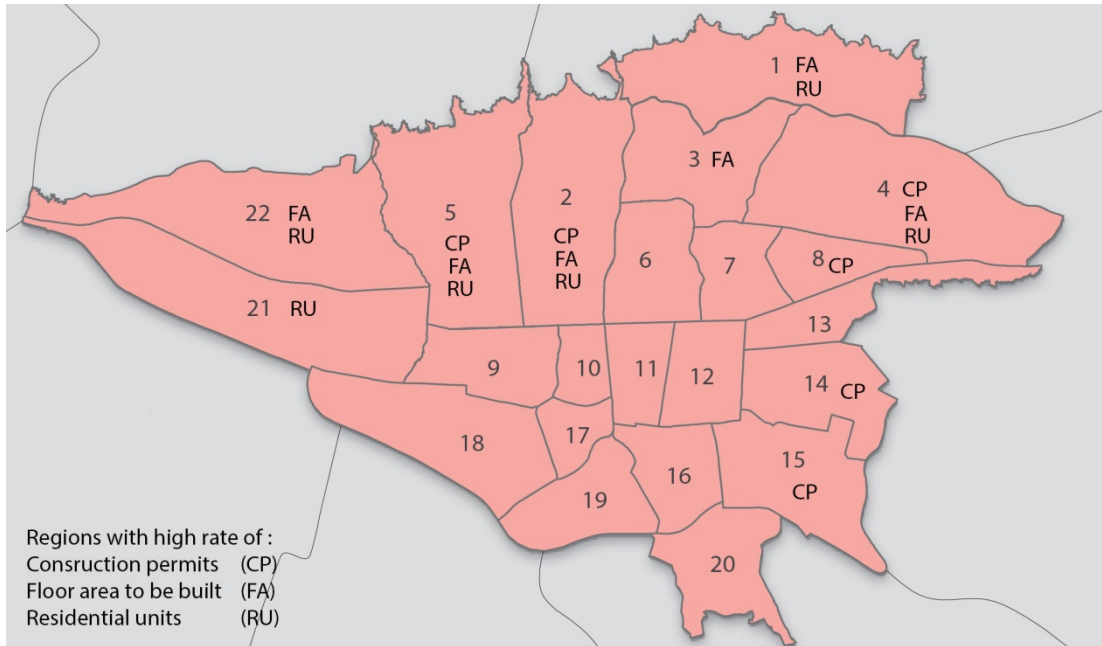


Figure 3-2: Regions of Tehran with high number of construction permits, floor areas and residential units

The research for this thesis will examine three research questions in five municipality regions where the construction of buildings exceeding construction density limits are most prevalent. These five regions are not case studies of this research where specificities of what happens in them would be analysed and compared. However, they are the localities in which to carry out interviews. In Chapter 5, the characteristics of these five regions will be explored in depth.

3-4 DATA COLLECTION

The general orientation of this research is qualitative strategy in which data collection and analysis are based on words rather than quantification (Bryman, 2012). The nature of the questions for this research, which investigate behind the scenes of the planning and development process, requires an in-depth view of involved agents. However, this research tries to use secondary quantitative data, mostly statistics and official urban plans, to confirm and understand the results of the qualitative data.

3-4-1 DATA SOURCES

Two levels of data were gathered for this research; contextual data to portray how the city is being governed and developed and more specific data to answer

the research questions. Sources of information for these two types of data are primary and secondary sources, which will be discussed in detail below.

3-4-1-1 PRIMARY DATA COLLECTION

Conducting semi-structured interviews with relevant agents generated the research's primary data. Rather than structured interviews, this research employs semi-structured interviews in order to be able to have greater latitude, explore beyond the answers of the interviewee and enter into a dialogue with him/her (May, 2011). However, a set of questions was prepared before interviews to help the researcher to stay focused³.

Although attempts were made to discuss different aspects of all three research questions with most of the contributors, the interviews focused on the specific speciality and experience of each interviewee. As a result, most of the findings for the first research question, which is how construction density charge has affected the decisions of housing developers, are generated from interviewing housing developers. Data for the second and third research questions, which are respectively how tendencies of housing developers have shaped the city and how market-led growth has affected the way in which the city is planned, are mostly generated by interviewing planners, city council members and municipality employees.

There are two extremes in the spectrum of developers working in Tehran; at one end there are the large construction companies and at the other are the individual developers. To be active in the construction industry in Iran it is not necessary to be registered as a development company. Ordinary people, as opposed to legally-qualified professionals, without a registered business can work as developers. However, to be able to be involved in larger projects it is sometimes necessary to be a registered construction (development) firm. In later chapters, more details of how the construction industry works in Tehran will be presented. In order to obtain answers to the first question, opinions, strategies and tendencies of both individual and registered developers have been investigated in this research.

³ Refer to Appendix 1 for examples of interview guidelines

Before conducting the interviews, it was planned that the research should select a specific number of individual developers and large companies in each of the five mentioned regions. However, during data collection it became obvious that a more flexible approach would be needed. For example, it was intended to interview four individual developers in each region, but, as some of the developers have been working in different regions, by interviewing one person information about different regions could be gathered. Moreover, there was no intention to interview any developer active outside of these five regions but later it became necessary to identify the aspirations of those working in less expensive areas.

A snowballing strategy was used to contact potential developers who would agree to participate in the research. It was found that interviewees who were not introduced by someone that they knew were reluctant to collaborate. In total 15 developers were interviewed; the following table (Table 3-2) shows the details of interviewed developers. To be in line with the UCL Code of Ethics, all the interviewed people remain anonymous⁴. Each developer is allocated a code starting with letter D for developer.

Code	Individual developer	Large development company	Regions worked in	Date of interview
D1	✓		1, 2	24/05/2014
D2	✓		1, 3, Eslamshahr	14/06/2014
D3	✓		1	10/06/2014
D4	✓		3	11/09/2014
D5	✓	✓	1, 2, 3, 5, 22	11/09/2014
D6	✓		1, 3, 4, 8	14/09/2014
D7	✓		5	02/02/2015 18/07/2016
D8		✓	1, 3, 4	30/01/2015
D9		✓	2, 5	02/02/2015
D10	✓		1, 2, 3, Karaj	15/04/2015
D11	✓		8, 13, 14	15/04/2015
D12	✓	✓	4	17/04/2015
D13	✓		3, 4, 5	29/04/2015
D14	✓	✓	1, 2, 3	29/04/2015
D15		✓	1	29/04/2015

Table 3-2: List of interviewed developers

⁴ For the list of interviewees' names refer to Appendix 2. To keep the respondents anonymous, names are ordered randomly in Appendix 2

As shown in Table 3-2, 15 developers were interviewed. Nine of them have experience of only working as an individual developer (or small construction company), three of them have experience of only working in a large construction development company and three of them have experienced both working as an individual developer (or small construction company) and as part of a large development company. As most of the production of housing in Tehran is carried out by individual developers, the number of interviewees who are individual developers are more than those in large-scale registered companies.

In order to investigate the second and third research questions, planners and decision makers were interviewed. There are two types of planners in Tehran; planners working at the municipality (public sector) and planners practicing at architecture and planning consultant companies (private sector). In Iran, planners in the private sector prepare the plans ordered by the municipality or the government and the municipal planners supervise and/or implement those plans. It was necessary to include the viewpoints of both groups. In each region there was an undertaking to interview at least one municipal planner and one planner from the consultant company which prepared that region's plan.

To generate data about various aspects of planning and financing for the city it is necessary to know what the planning and decision-making system is at macro level. Interviews were carried out with key informants who are or used to be members or employees of relevant departments of the Urban Planning and Architecture High Council⁵ (UPAHC), Islamic City Council of Tehran (ICCT); Ministry of Roads and Urban Development (MRUD); Tehran Municipality (TM); Tehran Urban Planning and Research Centre (TUPRC); Commission No. 5⁶ (CN5); and ParsBoom Consulting Engineers (synthesiser company and producer of Tehran's plan).

⁵ In Farsi: Shoray-e Aali-ye Shahrsazi va Meamari

⁶ In Farsi: Comesion-e Madeh Panj

The following table shows the details of the interviewed planners. The interviewed planners are anonymous and each planner is allocated a code starting with the letter P for planner.

Code	Institution	Provided information	Date of interview(s)
P1	University of Tehran	Academic knowledge on Tehran's planning system	21/09/2014
P2	UPAHC, MRUD	Decision-making process, dynamics between government and municipality	11/06/2014 04/09/2014 12/09/2015
P3	CN5	How the commission works	18/04/2015 12/09/2015
P4	Consultant Company	Regulating high-rise constructions	16/04/2015
P5	MRUD	Dynamics between government and municipality	23/09/2014
P6	TM	Introduction of structure and strategic plans	23/09/2015
P7	TM	Funding municipality	12/09/2015
P8	TM	Funding municipality, preparing plans	20/09/2015
P9	Consultant Company	Producer of Region 2 District Plan	14/09/2015
P10	Consultant Company	Producer of Region 3 District Plan	22/09/2015
P11	ICCT	Dynamics between city council and municipality	14/09/2015
P12	Region 4 Municipality	Plan implementation at local level	13/09/2015
P13	TM	Plan preparation, municipal funding	19/09/2015
P14	TM	Funding municipality, preparing plans	12/09/2015
P15	Region 1 Municipality	Plan implementation at local level	12/09/2015
P16	CN5	Dynamics between commission and municipality	19/09/2015
P17	TM	Municipality funding, preparing plans	23/09/2015
P18	Region 4 Municipality	Plan implementation at local level	13/09/2015
P19	Consultant Company	Preparing plans	21/09/2015
P20	Consultant Company	Producer of Region 1 District Plan	14/09/2015
P21	ICCT	Dynamics between city council and municipality	24/09/2015
P22	Consultant Company	Plan production and implementation	15/09/2015
P23	Region 2 Municipality	Plan implementation at local level	15/09/2015
P24	Consultant Company	Producer of Region 5 District Plan	17/09/2015
P25	TM	Municipality funding, preparing plans	22/09/2015
P26	Consultant Company	Preparing plans	20/06/2015
P27	Region 2 Municipality	Plan implementation at local level	15/09/2015
P28	TUPRC	Dynamics between government, municipality and city council	16/09/2015

P29	Consultant Company	Producer of Region 4 District Plan	12/09/2015
P30	Consultant Company	Producer of Region 4 District Plan	12/09/2015
P31	Centre for Urban Studies and Architecture of Iran	Plan implementation	28/12/2016
P32	TM	Plan preparation, Commission No. 5	29/12/2016

Table 3-3: List of interviewed planners

By establishing contact with two specific planners, the researcher was able to gain access to a broad range of interviewees: P2 holds a high position in the government (at the time of interview) and introduced the researcher to key interviewees in TM and ICCT. P3 has personal and professional connections with many of the planners working in consultant companies and introduced the researcher to the relevant consultant companies. In section 3-4-2 of this chapter, the implications of this way of contacting interviews will be elaborated.

Most of the interviewees consented to record the whole interview. However, a few asked to stop the recording and keep some information off the record. A few other interviewees, mostly those working at region (local) municipalities, did not give permission for the researcher to record the interview. In those circumstances, notes were taken at the time of interview.

Before moving on to discussing secondary data collection methods, it should be mentioned that the first few interviews with developer (D1) and planners (P1, first interview with P2 and first interview with P3) were unstructured interviews in order to understand: the development process; the developers' roles in the development process and the excess construction density charge in Tehran; how and where to find secondary data (statics, plans...); and who were the gatekeepers to contact.

3-4-1-2 SECONDARY DATA COLLECTION

Published and unpublished materials prepared by various institutions and organisations have provided the secondary data of this research. Statistics, regulations and directives, maps and plans, reports, books and articles are the main materials used to form and answer the research questions. In the following paragraphs, the main sources of secondary data for this research will be described.

Statistics provided by the Statistical Centre of Iran (SCI), Central Bank of Iran (CBI) and MRUD are used to gain a better understanding of housing development activity, population distribution and the property market in 22 regions of Tehran over the relevant time period. The following table (Table 3-4) summarises the data gathered from these institutions' websites. However, generating data from the website of these institutions is not always straightforward; at the time of data collection for this research access to the census of the SCI was banned from outside Iran⁷ which made the data collection complicated.

Data	Source	Un/published
Private Sector's Construction Activities in Iranian Cities	CBI	Published
Population and Housing Census	SCI	Published
Information of Construction Permits granted by municipalities	SCI	Published
Average purchase price of a housing unit per square metre in 22 regions of Tehran	MRUD	Published
Average purchase price per square metre of land in 22 regions of Tehran	MRUD	Published

Table 3-4: Sources of statistics data

Another source of information for this research were official bills and directives. Official bills and directives have influenced the way in which urban development happens. As a result, understanding the context and content of them is necessary. Most of them are prepared and approved by the Islamic Parliament of Iran (IPI), UPAHC, ICCT and CN5. Most of these laws and directives are accessible through the official website of Iran's Parliament which is called the Islamic Parliament Research Centre of The Islamic Republic of Iran⁸. However, there are books published by these organisations, or their affiliates, that elaborate on the laws or categorise them based on themes relevant to this thesis.

⁷ The website used to be accessible from outside Iran but the access was reduced after cyber attacks from Saudi Arabian hackers (BBC, 2016)

⁸ Islamic Parliament Research Centre of The Islamic Republic of Iran website: <http://rc.majlis.ir/fa>

Besides the sources mentioned above, studying development plans of Tehran and its regions provided the researcher with an in-depth knowledge of the planning process and its development throughout the period of the research. Most of the information regarding the development plans were provided by consultant companies who were/are involved with the preparation of those plans. Private archives of some interviewees also facilitated the process of collecting the planning documents.

Published books, articles and reports alongside unpublished PhD theses, reports and meeting minutes of Iran's Parliament sessions are used to prepare the context for presenting this research. In respect of this, newspaper archives are studied to follow the historical development of the events related to the selling of construction density and related issues.

3-4-2 THE POLITICS OF DATA COLLECTION

Before discussing the data analysis strategy of this research, it is worth reflecting on the experience of data collection in Tehran and the implications of this experience. In the following paragraphs, experience of the power hierarchy and the impact of micro geographies in the process of data collection will be discussed. Then, implications of these on methodology and analysis will be considered.

3-4-2-1 POWER HIERARCHY

Based on critical methodological literature, Elwood and Martin (2000) argue that interviews, like any other social interactions, have inherent power dynamics forming a particular relationship between the researcher and the interview participants. By looking at the work of a number of feminist ethnographers on the discussion of power relations, Elwood and Martin (2000, p.651) conclude that 'race, class, family status, ethnicity, and other social identities are important sources of differential power that shape relationships between researchers and participants, even if they share similar national or local identities'.

Power struggle, as a methodological challenge, has affected the data collection process of this research. Being a young woman carrying out research in a male-

dominated environment and a PhD student of a British university who wants to research on a sensitive, internal, potentially political topic in Iran sometimes put the researcher in a challenging position. At the time of negotiating to get the consent of interviewees to conduct an interview and during the course of the interviews, power struggles were identified.

For example, some potential interviewees, mostly working at the municipality, refrained from participating in the research, often without explaining why. However, one of the potential interviewees explicitly refused to participate in the interview merely because the researcher is an overseas student. As some of these people were key to this research, gradually a strategy was established to contact former employees who used to work in the same role or close to that role, to supply the missing information. Another strategy which was used to turn around the power struggle between the interviewee and the researcher was to ask a mutual contact to introduce the researcher to the potential interviewee prior to the interview. This greatly facilitated the process of interview as another dimension was added to the power relation and helped to balance the dynamic.

However, power relations are not only a methodological challenge but are themselves key data which often gets overlooked (Moore, 2015, p. 391). In this regard, Briggs (2003) says that power relations that emerge in interviews are embedded in the data they produce. As a result, it is important to address them in data analysis. Chapters 6 and 7 reflect on the impact of these power relations on the analysis of the data for this thesis. For example, after a few interviews it became quite clear that employees of regions' municipalities were very concerned about what information they disclosed. As a result, they would divert the conversation onto a subject which they were willing to share. This helped the researcher to understand what areas of tension need to be considered while discussing planning and urban development trajectories.

Another concept, which is related to the discussion of power, is Goffman's (1959) impression management of the interviewees. In a research interview, as in any other social interaction, both interviewee and interviewer, consciously or sub-consciously, would attempt to influence the perception of the other with various tactics. As Moore (2015) reflects in her research on the New Urbanism

in Canada, interviewees throughout the interview attempted to establish a position with her on New Urbanism and how their work aligns or distances itself from this label.

In Tehran's interviews, impression management of the interviewees on how they take position against or align with the construction density charge or the alteration of plans to accommodate the financial needs of Tehran Municipality unpacks interesting facts. For example, people working in the system of the municipality will not say anything against the system. However, consultants (e.g. working for private urban planning companies) or ex-employees of the municipality are keen to disclose information. It has been necessary to be careful when the municipality's employee's views are interpreted to answer the research question.

3-4-2-2 MICRO GEOGRAPHIES

Elwood and Martin (2000) in their paper discuss the micro-geographies of the interview site. For them the interview site itself embodies multiple scales of meaning, which can offer new insights for the researcher in order to understand and interpret interview material and highlight particular ethical considerations that researchers need to address. They say 'Although the interview site may not be part of the primary avenue of inquiry in the research, observing dynamics in that place, and paying attention to what the participant says about the place, may generate useful research material' (Elwood & Martin, 2000, p. 656).

Elwood and Martin (2000) give an example of a piece of research done by McDowell (1998) in which McDowell examines the ways that her interviews with bank employees were influenced by the location of the interviews at the workplaces of the interviewees. She suggests that some participants had concerns about confidentiality in the shared interview space.

In the Tehran interviews, the same concern was observed when interviewing someone sharing his/her office with others. For example, interviewee P14 who was working in a shared office at the Tehran Municipality tried to speak quietly, as he did not want to be overheard by his colleagues. On several occasions during the interview he mentioned that it was difficult for him to talk freely there.

He offered the interviewer an opportunity to continue the discussion out of the office space, which was rejected due to ethical considerations and cultural norms.

As will be presented in Chapters 6 and 7, reflecting on the micro-geographies of some of the interviewees provides insights for the researcher to better understand the place dynamics.

3-5 DATA ANALYSIS STRATEGY

Yin (2009, p. 130) underlines the importance of having a general analytic strategy for research in order to ‘treat the evidence fairly, produce compelling analytic conclusions, and rule out alternative interpretations’. Four general strategies for data analysis are proposed by Yin (2009): relying on theoretical propositions, developing a case description, using both qualitative and quantitative data and examining rival explanations. This research relies on theoretical propositions. Therefore, research questions and the hypothesis of this study will guide the analysis of collected data.

Developing a case description and using both qualitative and quantitative data strategies are not used as this research is neither concerned with describing the case study nor focuses on quantitative data. However, examining rival explanations strategy is used at some points of the research to test different interpretations and to enhance the credibility of the research findings.

Relying on theoretical propositions, an explanation-building technique is used to analyse the data and to build an explanation as to how the construction density charge has affected the planning system and spatial development of Tehran. Elements of explanations stem from research questions and the theoretical framework of the research. The following themes are prepared, preliminarily to order and analyse the data:

- Housing developers and their strategies:
 - Understanding housing development process
 - Who are the housing developers?
 - What are their goals and objectives?

- What are their strategies to achieve their goals?
- What are the decisions of developers: where, when, what and for whom to build?
- Developers and excess construction density charge
 - What is their approach towards the excess construction density charge?
 - What are the ways that they could get the extra construction density?
 - What is the role of extra construction density on their decisions?
- Developers and urban planning system
 - What is the developers' understanding of formal plans and regulations?
 - How much do they think they can play with those plans and regulations to achieve their goals?
- Urban governance of Tehran
 - Urban planning system
 - What is the system?
 - How are plans prepared, approved and implemented?
 - Who are involved in the decision-making process?
 - Does the interest of the municipality or a group of developers affect the preparation and implementation of the plan?
 - Urban planning and excess construction density charge
 - What is the role of construction density in the plans?
 - How flexible is the amount of construction density in the plans?
 - What are the conflicts?
 - Municipality's system
 - What is the municipality's budget?
 - How is the municipality dependent on excess construction density charge?

- Development pattern of Tehran
 - How do the power of developers and the financial need of the municipality affect the pattern of growth?
 - Market-led development
 - Why is there a concentration of high-rise buildings in certain areas?
 - What is the reason behind transformation of inner city gardens?

After ordering the content of interview data in the tables, based on the themes above, all the data relating to each specific theme was compiled in a separate document and an appropriate narrative for that theme was found. Each theme or couple of themes form a section in which both data (parts of interviews' content) and analysis of data are presented.

As all the collected data was in Farsi; the first stage of data analysis (organising data in tables) was done in Farsi and only later those quotations that are used directly in the thesis translated into English by the researcher.

3-6 CONCLUSIONS

This chapter of the thesis is dedicated to the research design and methodologies of the research. In this chapter, the conceptual basis of the research is presented. Based on an institutional model of the development process deriving from a structuration theory, this research seeks to have a better understanding of the dynamics between agents and the structure in urban development of Tehran. In particular the research explores the following three research considerations:

- How the construction density charge in Tehran has affected the decisions of housing developers
- How, as a result of using the construction density charge tool, decisions (tendencies) of housing developers have shaped the city of Tehran

- How, in turn, this market-led growth has affected the way in which the city is planned.

As presented in section 3-3-2, this research proposes that by using construction density charge, Tehran Municipality's budget became dependent on the fee received from developers and this boosted the power of developers to construct what they preferred rather than what plans suggested. As a result, developers' decisions on what to build and where to build have shaped the spatial organisation of the city, market-led development has undermined the planning documents and the city is not managed by official plans but by responding to spontaneous growth. This hypothesis will be revisited and consolidated in Chapter 8 of this thesis.

Based on proposed research questions, the strategy of the research is case study design. Tehran is the case study of this research and it focuses on, and collects data from, the chosen five regions where density bonus policy is extensively used. In this chapter, it is explained that the main source of primary data for this research was semi-structured interviews with housing developers, urban planners, city council members and municipality employees (or ex-employees). In total, 47 interviewees were questioned for this research; however, some are interviewed on more than one occasion.

In addition to the primary data, there is secondary data which helps the researcher to understand the context of the research. Statistics, regulations and directives, maps and plans, reports and books and articles are the main secondary sources of information for this research.

During the data collection phase, the researcher experienced power struggles which affected the data collection and had implications for data analysis. Also, in some cases, characteristics of the interview site affected the quality of interviews and had implications for data analysis which will be discussed in Chapters 6 and 7.

To analyse the collected data, this research relies on theoretical propositions which means that the research questions and the hypothesis of this research guides the analysis of the data. Relying on theoretical propositions, explanation-

building techniques are used to analyse the data and to build an explanation on how construction density charge has affected the planning system and spatial development of Tehran. Elements of explanations are arrived at from the research questions and the theoretical framework of the research.

CHAPTER 4 – URBAN PLANNING AND THE DEVELOPMENT OF TEHRAN

- Introduction
- Portrait of Tehran
- The governance of Tehran
- Plans for Tehran
- The Tehran Municipality budget and construction density charge
- The housing construction industry
- Conclusions

4-1 INTRODUCTION

This chapter and the following chapter provide contextual information about Tehran and its regions. It briefly investigates: the background of Tehran and its transformation to a metropolis; its governance system; the institutions involved in governance; the plans proposed for Tehran; the importance of the construction density charge in municipal financing, and how that affects the housing construction industry. Most of the information used in this chapter was obtained from secondary sources, mainly published books and articles.

4-2 PORTRAIT OF TEHRAN

4-2-1 THE FORMATION OF A METROPOLIS

Tehran used to be a village until the time that Shah Tahmasp of the Safavid dynasty ordered walls to be built around the village and some major buildings to be constructed in 1554 AD (961 Lunar Hijri Calendar) in the village (TMICTO & Tehran University, 2011, p. 34). Why Shah Tahmasp paid particular attention to this village is not clear. However, the attention of the Shi'i king could be because of the religious orientation of Tehran's residents who were also Shia Muslim (TMICTO & Tehran University, 2011, p. 34). Shah Tahmasp's successors continued to add major buildings and infrastructures inside Tehran.

It was in the reign of Karim Khan of the Zand dynasty (between 1751 and 1779) that Tehran was first considered as a possible capital city of Iran but it was not until 1785, when Agha Mohammad Khan Qajar, the founder of the Qajar dynasty, chose Tehran as his capital and it has remained the capital of Iran since then. Successors of Agha Mohammad Khan Qajar continued to build palaces, religious buildings and schools. The city has developed gradually since the rule of Naser al-Din Shah Qajar who ordered the walls around the city to be pulled down and for it to expand outwards (TMICTO & Tehran University, 2011).

While the Westernisation and modernisation of Tehran began in Naser al-Din Shah's time, it reached its zenith during the ruling of Reza Shah, the founder of the Pahlavi dynasty. Reza Shah was determined to modernise the city by expanding it, creating straight roads through the fabric of the city without any

consideration of the social, economic and physical consequences. Clark (1981, pp. 282–283) describes this act as ‘simple and brutal’. During Reza Shah’s reign (1925–1941) the country was in transition from a feudal system to one with a central government and from a traditional to a more secular society (TMICTO & Tehran University, 2011, p. 35).

In the reign of Mohammad Reza Pahlavi, successor of Reza Shah and the last king of Iran, Tehran expanded considerably. The increase in oil revenues affected the development of the city, especially during the 1970s when oil revenues rose from \$1.2 billion in 1970 to \$20.9 billion in 1977 (Clark, 1981, p. 281). The following map (Figure 4-1) shows the expansion of the city throughout its history.

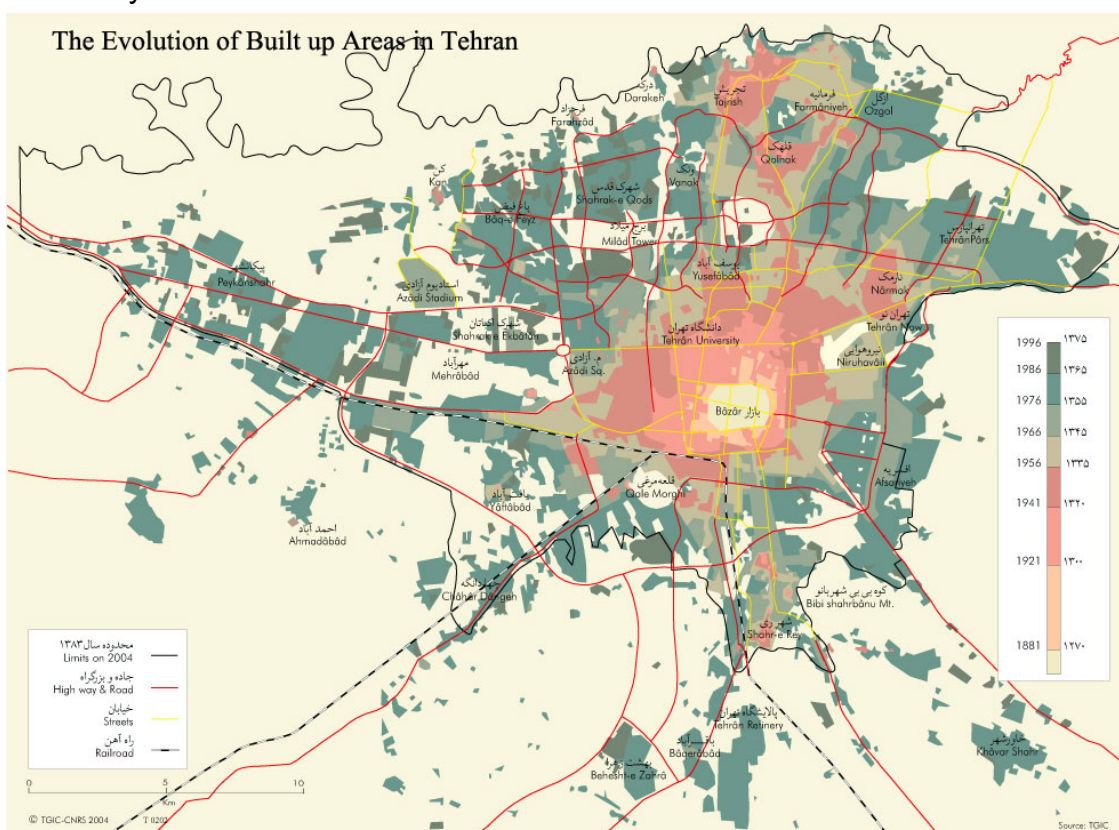


Figure 4-1: Evolution of built-up areas in Tehran. Source: (TGIC-CNRS, 2004)

4-2-2 SPATIAL STRUCTURE

Tehran is situated between the Alborz Mountains and the desert, on the southern slopes of the mountain range. The northern part of the city is approximately 640 m higher than the southern part (Madanipour, 1999, pp. 59).

This height difference between the north and the south has created the city's unique landscape (Hamidi, 1998).

Tehran's population, based on the 2006 census, is 7,803,883 inhabitants (Markaz-e Amar Iran, 2006, p.21) who are concentrated in an area⁹ of more than 600 km². Tehran is a densely-built city which accommodates 146 people per hectare (Bertaud, 2003, p. 8). This population is not distributed evenly throughout the city; southern parts have a higher population density while northern parts have a lower one. However, this density distribution may change in the future as southern parts are losing and northern parts are gaining population (Bertaud, 2003, p. 9-10).

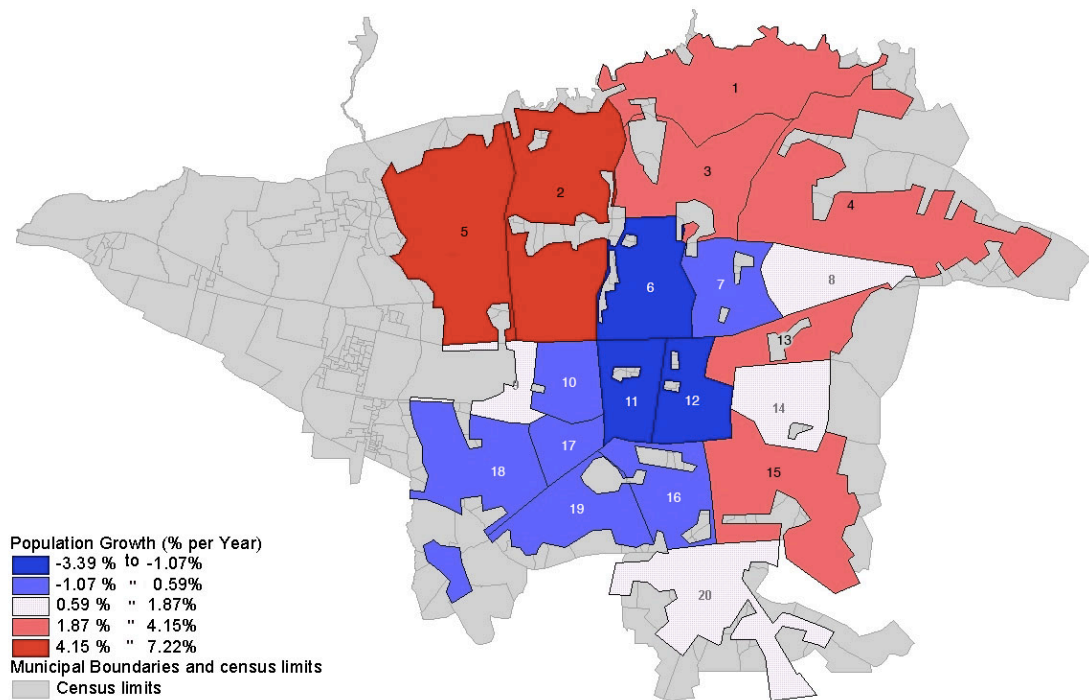


Figure 4-2: Tehran – Population growth per year per district between 1986 and 1996. Source: (Bertaud, 2003, p. 29)

Historically, Tehran's Grand Bazaar, which is located in Region 12, used to be the central business district (CBD) of the city before the extensive transformation which occurred during the last century. At the moment, employment and commerce are dispersed across Tehran and it lacks a dominant CBD. Based on Bertaud's (2003) research of origin-destination

⁹ For a long time, Tehran's boundary was not fixed and there was a dispute over its area. Now the boundaries are set at 614 km².

matrices for vehicles travelling to work and on shopping trips, Regions 6 and 12 of Tehran are the closest thing to a CBD. However, these two regions attract 'only 27% of all shopping trips and 30% of all job commuting trips' (Bertaud, 2003, p. 11).

Lack of a dominant CBD in Tehran, which could cause the development of a polycentric city, could partly be as a result of Tehran's first Comprehensive Plan in the 1960s which suggests polycentric growth of the city and the development of what is described by Garreau (1992) as edge cities. This mode of regional urbanisation, in contrast with what has been happening in North American cities such as Los Angeles, (Soja, 2011) did not happen spontaneously as a result of people's choices and density convergence. Tehran was planned to become a regional city encompassing a number of edge cities.

Tehran suffers from a striking north-south spatial and social division. The north is mostly populated by wealthy people and the south by the poor. As mentioned before, the north is less populated and less densely-built than the south. Floor space consumption (Figure 4-3), land prices, households' income and expenditures (Figure 4-4), rate of literacy, rate of employment, size and height of buildings all follow the north-south pattern and are higher in the north than in the south (Bertaud, 2003; Madanipour, 1999, 1998; TMICTO & Tehran University, 2011).

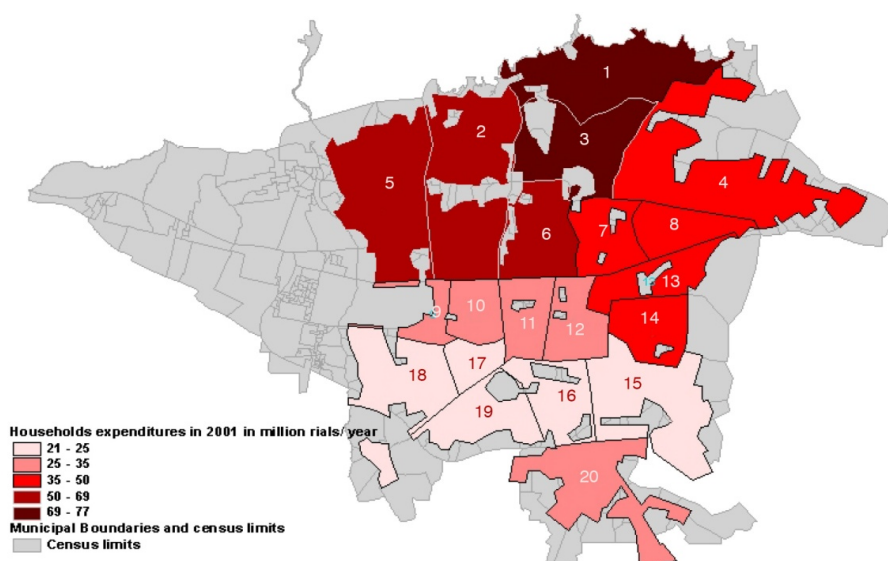


Figure 4-3: Tehran – Household expenditures 2001. Source: (Bertaud, 2003, p. 33)

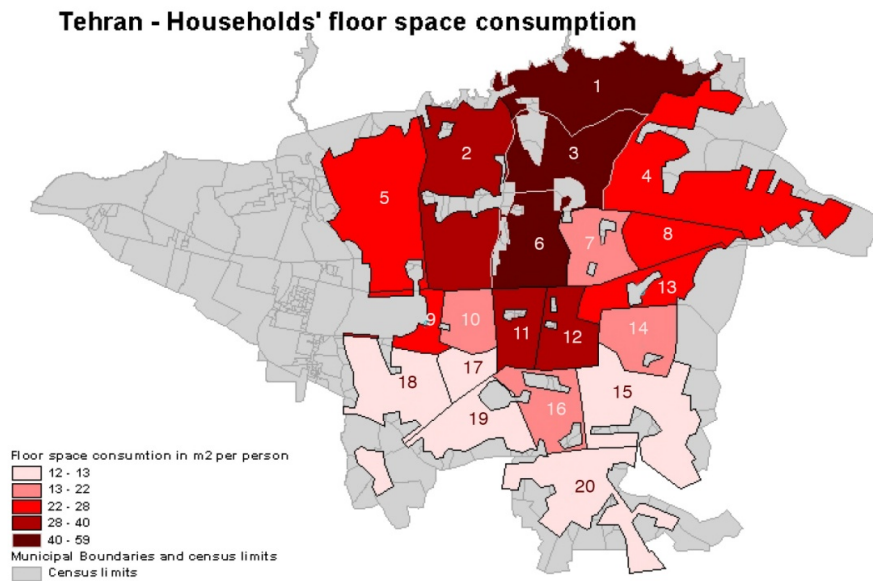


Figure 4-4: Tehran – Households' floor space consumption. Source: (Bertaud, 2003, p. 33)

The reasons behind the creation and then continuation of this north–south physical and social division are varied. Madanipour (1999, p. 59) believes that the foundation of this north–south dichotomy goes back to the first major transformation of Tehran in the 1860s when the city was expanded and upper-class neighbourhoods were developed in the north of the traditional city. Moreover, the height differentiation resulted in a more moderate and appealing climate in the north for the better off and a harsher climate in the south for the poor (Madanipour, 1999, p. 59).

Besides historical and geographical reasons for the north–south division, Madanipour (1999, pp. 185-186) asserts that the mechanism of land pricing has sustained this social and spatial stratification between the north and the south by institutionalising the supremacy of the north which has consistently been reflected in land price differences. However, lack of attention to the plan for social integration between north and south has contributed to the continuation of this socio-physical segregation.

During the time that Karbaschi was the Mayor in the 1990s, attempts were made to break down this division by introducing various projects, such as cultural facilities and sport centres for less affluent Tehranis (Ehsani, 1999). The construction of Bahman Cultural Complex in south Tehran is an example of one

of these projects. Bahman Cultural Complex was built in 1992 on the former site of a slaughterhouse in one of the poorest neighbourhoods of the city. Immediately, this complex became a very popular place (Ehsani, 1999, p.25). As Ehsani (1999, p.25) says, ‘for the first time there was something attractive to visit in south Tehran, reversing the city’s usual northward flow of movement’. Despite these attempts the north–south division of the city is still striking.

4-3 THE GOVERNANCE OF TEHRAN

Tehran has a fragmented system of city government. Although it is recognised that the Tehran Municipality, in conjunction with the Islamic City Council of Tehran (ICCT), run the city (Madanipour, 2011, p. 74), various other governmental or public institutions and private organisations have considerable power and roles in the city’s management. Many services that one would imagine would be controlled under one management system, such as the provision of water and electricity or the supply of housing, are not under the control of the municipality (Salehi, 2003, p. 67).

In the following sections: firstly governmental organisations involved in the governance of the city will be identified; then, Tehran municipality roles and responsibilities will be overviewed. ICCT, which is a local institution, will be inspected; and finally, the Integrated Urban Management Act that is under preparation for presentation in parliament, will be briefly discussed.

4-3-1 GOVERNMENTAL INSTITUTIONS

Different Ministries and organisations are involved in governing Tehran besides the Tehran Municipality. Table 4-1 illustrates most of the organisations with direct responsibilities for the urban management of Tehran. The Deputy of Urban Development and Architecture (DUDA) of the Ministry of Roads and Urban Development (MRUD) has the major share in Tehran’s government, after the Tehran Municipality and ICCT. This Deputy supervises the preparation and implementation of city-wide plans for all Iranian cities, including Tehran.

Government Ministries/Organisations	Deputies or affiliated companies	Responsibilities
MRUD	Deputy of Urban Development and Architecture	Supervising the preparation and implementation of development plans
	Deputy of Housing and Building	Responsible for housing quality and construction codes
	Urban Development and Revitalisation Organisation	Responsible for revitalising the dilapidated and inefficient fabrics of the city
	Enforcement Agency for Government and Public Buildings and Facilities	Deals with the construction of governmental and public buildings
	New Towns Development Company	Planning and supervising the establishment of new towns outside of the city's boundaries
	National Land and Housing Organisation	Providing, managing and utilising land and housing
Ministry of Interior (MoI)	Deputy of Development Coordination (Technical Bureau)	Overseeing the implementation of plans
	Cooperation Organisation of Tehran's Municipalities	Supporting and providing required services for municipalities
Ministry of Energy (MoE)	Tehran Regional Electric Company	Distributing electricity
	Tehran Regional Water Authority	Providing drinking water, water for agriculture, industry and service use
	Tehran Wastewater Company	Dealing with sewage and water treatment
Housing Foundation of the Islamic Revolution		Provision of housing for underprivileged and low-income communities through cooperation
Endowment and Charity Organisation		Responsible for management of endowments (e.g. shrines, mosques)
Department of Environment (DoE)	Tehran Office	Combating environmental pollution and conserving ecosystems
Management and Planning Organisation of Iran	Management and Planning Organisation of Tehran	Regional planning for Tehran province

Table 4-1: Organisations with responsibility for the urban management of Tehran

Apart from all these governmental institutions, there is a High Council that has the ultimate authority on urban planning decisions. The name of this council is the Urban Planning and Architecture High Council (UPAHC). The secretariat of this council is located at the DUDA. Members of this council are ministers (or their representatives) of different ministries including the MRUD, heads of a few departments such as the Department of Environment, and a representative from the Islamic Parliament of Iran (IPI). The main responsibilities of this Council are to prepare planning regulations, supervise the preparation and implementation of comprehensive and detailed plans and to communicate with all the relevant institutions (IPI, 1973).

The responsibilities of the UPAHC are at national level. For a more local focus on planning and architectural issues, based on the fifth article of the Establishment of Iran's Urban Planning and Architecture High Council Act and its later amendment, a commission was established in Tehran¹⁰, which is called Commission No. 5 (CN5), to review and approve detailed plans of the city and their changes. This Commission consists of representatives of the MRUD, the MoI, the MoE, the DoE, the Mayor of Tehran (or his representative) and the Head of ICCT (IPI, 1986).

Only in Tehran the secretariat of CN5 is at the Tehran Municipality and the Mayor of Tehran is the head of this commission. At this commission, the Tehran Municipality has the position and power to influence or amend plans as long as the changes are not contrary to the comprehensive plan approved by the UPAHC. Decisions of this commission have been very controversial in recent years. When Tehran did not have an approved plan (or an updated plan) the decisions of this commission were the basis for what development occurred. The excessive granting of permission for construction density beyond limits and changes of land use have been happening with the approval of this commission (Moeini, 2006) which will be discussed further in the next chapter.

¹⁰ The other Iranian cities have a local Commission No. 5 but their arrangement is different from Tehran.

4-3-2 THE TEHRAN MUNICIPALITY

The establishment of modern municipalities in Iran goes back to an act approved in 1907, which is known as the Baladiyeh (Municipality) Act (Madanipour, 1998, p. 65). Since this act the IPI has approved various acts and amendments for the establishing and organisation of the municipalities. However, the 1955 Act and its later amendments are the basis of current municipal practice in Iran.

According to the Municipality Act, cities are run by municipalities under the supervision of ICCT whose members are elected by the people. A municipality is a public organisation with responsibility to deliver services to its residents. ICCT members elect the Mayor and the Mayor in Tehran appoints the Mayors for the 22 regions of the city. These 22 Mayors should report directly to the Mayor of Tehran.

From the beginning of the establishment of municipalities in Iran, it was perceived that they should be autonomous institutions. However, the history of Tehran shows a continuous conflict between their aspirations to be autonomous and the pressure to be attached to the Government (Madanipour, 1998). Studying acts and laws passed by the IPI from 1907 until the present day clearly shows the occasions when the Government wanted to reduce the independence of the municipalities.

For example, the 1930 Municipal Act overruled the 1907 Act which gave the elected council members the authority to appoint the Mayor. This Municipal Act made municipalities entirely dependent on the Mol and gave the Ministry the right to appoint a Mayor. This act was approved in the reign of Reza Shah who put a lot of effort into creating a strong central government (Madanipour, 1998, p. 66). Section 4-5-1 describes how, after the Islamic revolution of Iran in 1979, the aspirations for having an independent municipality resulted in the proposal of controversial funding methods.

According to Article 55 of the Municipality Act passed by IPI in 1955, municipalities have wide-ranging responsibilities, from building cemeteries and mortuaries to proposing trade unions' legislation (Mansour, 2012). However, in

Tehran and other cities, some of these responsibilities have been transferred to other organisations. For example, based on the Urban Development and Redevelopment Act which was passed in 1968, it was the municipalities' responsibility to prepare plans for the cities. However, a later act, Renaming the Ministry of Development and Housing Act, was approved in 1974, transferring this responsibility to the MRUD (Salehi, 2003, p. 67).

Currently the chief responsibilities of Tehran Municipality, which are the concern of this research, are implementing plans and directives approved by the UPAHC and ICCT, preparing detailed plans for regions, granting construction permits to the applicants, impeding illegal constructions in Commission No. 100¹¹ (CN100) and constructing new, and maintaining existing, roads, parks and public spaces.

4-3-3 ISLAMIC CITY COUNCIL OF TEHRAN

City (or village) councils in Iran are local governments. The formation of local councils, whose members are democratically elected by the people, was clearly mentioned in the Baladiyah Act of 1907. Despite the central role of these councils in the management of the city, mentioned in the Baladiyah Act of 1907, the first city council of Tehran was formed 23 years later in 1930 (Madanipour, 1998, p. 66). Before the Islamic revolution in Iran, city councils were operating intermittently and were sometimes under the control of central government (Madanipour, 2011, p. 75).

After the formation of the Islamic Republic of Iran, although Article 7 of the Iranian Constitution clearly envisages these local councils should be created and be part of the decision-making and administrative organs of the Government, local councils were not formed for a further 20 years. It was in 1999 that people were given the chance to elect their local council members which had been promised in the campaign of the reformist president, Khatami ('Iran prepares for first-ever local elections,' 1999).

The first ICCT was dissolved in 2002 due to internal squabbling. This Council had appointed Morteza Alviri as the Mayor of Tehran in 1999. However, the relationship between the Mayor and the ICCT was very tense. The main

¹¹ In Farsi: Comesion-e madeh 100. This commission deals with construction violations

difference of opinion was over the municipal budget and the selling of permission for extra construction density to developers which was criticised by the ICCT members and resulted in criticism of the Mayor. Finally, the Mayor resigned from office. However, the Council had the same dispute with the next Mayor, Malekmadani. In addition to the tension between the Mayor and the ICCT, members of the ICCT had contrasting political views which became the Council's Achilles' heel and resulted in the dissolution of the Council in 2002 (Alekbaf, 2014). However, a second City Council was formed in 2003 and is still presiding.

The city (or village) Councils, in their local government role, are given wide-ranging powers in the management of cities (and villages). Among the major responsibilities of a ICCT in its four-year term are: electing the Mayor for four years; approving the plans for the city; approving the local legislation proposed by the Mayor; approving the annual budget of the municipality and the budget appendices; and overseeing the performance of the municipality (Alekbaf, 2014). However, Tehran's City Council is still struggling to use all of its legal powers to oversee the performance of the municipality.

4-3-4 THE INTEGRATED URBAN MANAGEMENT ACT¹²

The Tehran Urban Research and Planning Centre (TUPRC) of Tehran Municipality is drafting a Bill which proposes an integrated urban management system for Tehran and the other metropolises of Iran. This bill is being prepared in response to the current practice of implementing outdated and improper municipal laws. The aim of this bill is to address existing ambiguities over: what is Government's and what is municipality's responsibility in the management of cities; the importance of devolution of power to local governments; and ways to involve residents so that they take responsibility and participate in the urban decision-making process (TUPRC, 2013).

At the time of preparing this thesis, the draft version of the Bill is prepared and has been sent to the MoI to be sent to the IPI for approval. This Bill has more than 300 articles and elaborates on all aspects of the urban management

¹² In Farsi: Ghanoon-e Jamea Modiriyat Shahri

system. Based on the draft now available, if Parliament passes this bill, residents will be able to vote to choose the Mayor of the city, and the municipality and the city council will gain a considerable amount of power in the management system of the city (TUPRC, 2013).

4-4 PLANS FOR TEHRAN

In understanding the planning tradition of Tehran, it is important to uncover the culture of planning in the city. In this section, a review of the planning attempts for the city will be presented which shows the planning system of Tehran has been evolving from a physical and pragmatic kind of intervention to more complicated and multi-layered plans. However, the system is still top-down and authoritative despite moving towards decentralisation (Tajbakhsh, 2005, p. 67).

4-4-1 BEFORE THE MODERN PLANNING SYSTEM

Before the existence of formal planning systems, Tehran, like other cities, went through many processes of organic, and also imposed, transformations to accommodate growth. Most of these major changes in Tehran happened under the direct order of kings. The first major transformation for Tehran happened in 1868 when the king (Nasser al-Din Shah) ordered the old city walls to be demolished, the city expanded and new walls and gates to be built (Madanipour, 1998, pp. 31-32). This newly-built fortification was in an octagonal shape designed by a French General, Bohler, who was a military teacher in Tehran at that time. In the design of this fortification he was inspired by the shape of Paris's old fortifications (Madanipour, 1998, p. 199).

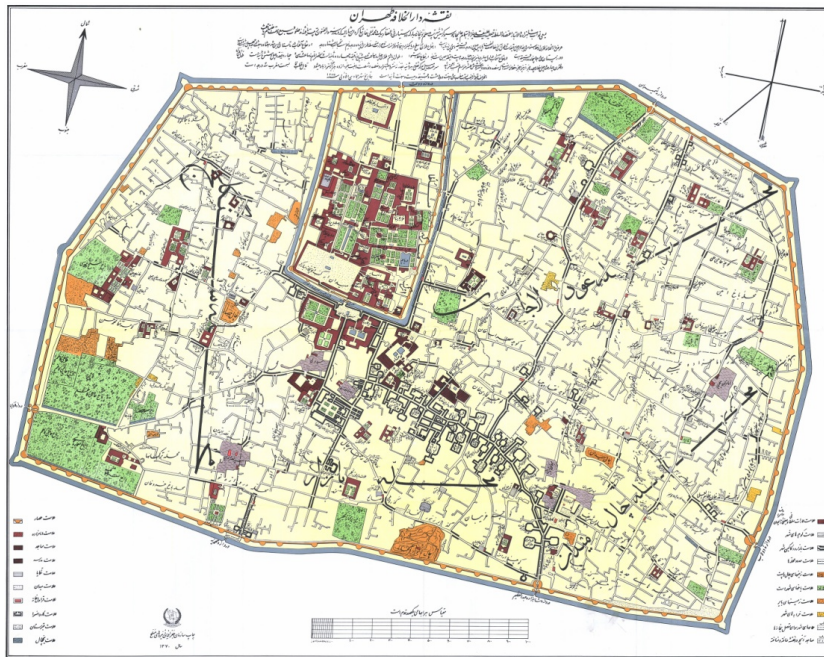


Figure 4-5: Tehran's map before Nasser al-Din Shah's transformation



Figure 4-6: Tehran's map after Nasser al-Din Shah's transformation

The second massive transformation of the city happened in the reign of Reza Shah in the 1930s. The previously-built walls were demolished, the moats were filled in and the city was greatly expanded. This time the city saw a massive destruction of old neighbourhoods and the creation of long, wide streets (Madanipour, 1998, pp. 37-38). At this time, many old neighbourhoods in the central areas were demolished to accommodate the administrative function of the new era and new neighbourhoods were created in the northern and western parts of the city (Hamidi, 1998).

Madanipour (2010) describes the process of transformation at this period as follows:

'The move was radical and brutal, aiming to integrate the urban space and unify the national space, so that the power of the central government could be consolidated. In Tehran, the old walls and gates were pulled down and a transport network of more than 200 kilometres was superimposed on the urban fabric. The city was "radically re-planned and re-built" in a way that was described as "quite ruthless". This process of modernization lay the foundations for the rapid urban growth that followed.' (Madanipour, 2010, p. 487)



Figure 4-7: Tehran's expansion at three stages, Black: before Nasser al-Din Shah's expansion. Dark grey: after Nasser al-Din Shah's expansion, Light grey: Reza Shah's expansion. Source: (Hamidi, 1998, p. 45)

Concurrent with these massive transformations during Reza Shah's reign, a legal basis for these alterations started to emerge. The following section presents what is believed to be the first formal urban planning law in Iran.

4-4-2 PAVING THE WAY: THE ROAD WIDENING ACT AND OTHER ACTS

The Road Widening Act which was passed by the parliament in 1933 is known as the first urban planning law in Iran (Farivar Sadri, 2014, p. 30; Madanipour, 1998, p. 203). This Act, and its subsequent amendments in 1941 and 1966, were concerned with the construction and widening of roads, alleys and squares to facilitate the movement of traffic in the city. The Municipality had the responsibility for preparing maps of the streets which were planned to be widened or built. The accuracy of these maps and plans needed to be approved for implementation by the MoI. The Municipality could then purchase the land from the owners and implement the plan (IPI, 1933, 1941).

In the early stages, the Municipality's plans were merely site specific without having a holistic view and without considering the implication of their interventions on the rest of the city. However, experts working at the Planning Bureau¹³ of the MoI who had to make decisions about the plans started to acknowledge the need to have a whole plan for the network of streets. The presence of foreign experts as advisors in the MoI in the 1960s familiarised these Iranian experts with the importance of holistic urban planning. One of the most influential of these foreign advisors who were working at the Planning Bureau was Fridrich Pfeil¹⁴, a German planner who tried to introduce a regional planning system for Iranian cities but died before succeeding (Farivar Sadri, 2014).

The preparation of plans for street networks was the first step towards planning for cities in Iran. The next two critical steps were the 1967 Municipality Act Amendments and the ratification of the Urban Development and

¹³ In Farsi: Omoor-e Tarhrizi

¹⁴ Fridrich Pfeil used to work at Kox engineering consultancy. He first went to Iran to prepare a comprehensive plan for Esfahan. He then became advisor to the Interior Minister (Farivar Sadri, 2014, pp. 39, 40)

Redevelopment Act in 1968. These two Acts provided the necessary legal basis for the preparation of comprehensive plans for Tehran and other cities.

The 1967 Municipality Act Amendments considers the preparation of comprehensive plans for cities and the formation of the UPAHC to study and approve these plans. Later, in 1973, an Act with the title of The Establishment of Urban Planning and Architecture High Council Act elaborates on the responsibilities of this institution whose decisions on planning and architecture were at the highest level.

The 1968 Urban Development and Redevelopment Act clarifies the responsibilities of municipalities and introduces property tax as a financing tool for them. The first article of this Act explicitly puts the municipalities in charge of preparing plans and comprehensive maps in order to develop, renovate and adapt cities and their streets, parks and public infrastructure (Mansour, 2012, p. 335). The rest of the articles of the Urban Development and Redevelopment Act mostly elaborate on financing mechanisms and property taxation to generate income for the municipality to implement its development plans (Mansour, 2012). These financing tools were supposed to be sufficient to be effective but failed.

Approval of these Acts provided the basis for preparing urban planning documents for the big cities of Iran, including Tehran. The following sections summarise the efforts towards preparing official plans for Tehran. These plans are the Tehran Comprehensive Plan, ATEC Comprehensive Plan and the latest plan for Tehran which is the Tehran Structural-Strategic (Comprehensive) Plan.

4-4-3 THE TEHRAN COMPREHENSIVE PLAN

The Tehran Comprehensive Plan (TCP) was the first planning document for Tehran. An American-Iranian consortium, Victor Gruen-Farmanfarmaian under the direction of Fereydoun Ghaffari, was hired to prepare this plan in 1964. The UPAHC approved the TCP in 1968 and passed it to the Tehran Municipality for implementation (Farivar Sadri, 2014). The TCP identified Tehran's problems and envisioned a 25-year planning horizon for its development. The identified issues were: the high density of the city centre; the expansion of commercial

activities along the main roads; air and water pollution; inefficient infrastructure; unemployment; and, rural-urban migration (Madanipour, 1998, p. 207).

To address these issues, the TCP proposed: to reduce the density and congestion of the city centre through a polycentric linear expansion of the city towards the west; limited expansion towards the east; a controlled, and very limited, expansion towards the north; and the introduction of an express transportation system to connect the centres (Ghaffari, 2006). This polycentric linear development was designed at three levels. The first was at the neighbourhood level, with the population of 5,000 having a primary school, a local park and shops. The second was at the level of the community with 20,000 to 30,000 people, with a high school, a large park and a commercial centre. A regional level, with a population of between 300,000 and 500,000 was the third, with access to higher education and universities, government offices and high-density developments like CBDs (Ghaffari, 2006).

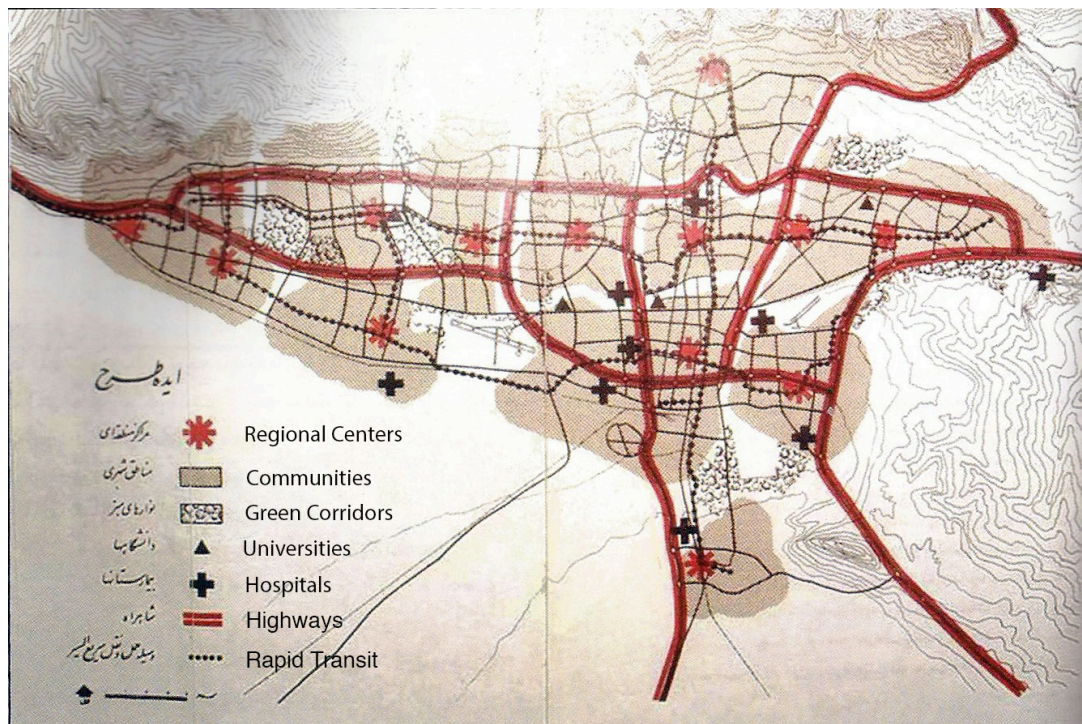


Figure 4-8: Concept plan of Tehran Comprehensive Plan. Source: (Farmanfarmaeian, 2006, p. 21)

The idea of envisioning a polycentric urban development for Tehran was influenced by the British New Town movement. At that time, Victor Gruen was an advocate of these developments and proposed a linear version of the social

cities of Ebenezer Howard in which a central city is surrounded by 10 outer districts, each with its own centre. However, the plan did not address the social justice aspect of Ebenezer Howard's garden city and was merely a physical plan (Madanipour, 1998, p. 208).

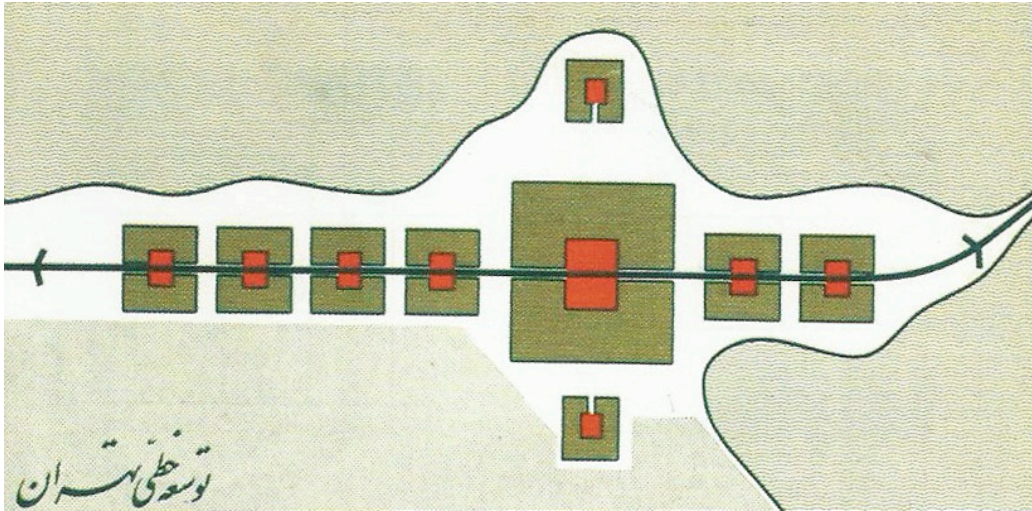


Figure 4-9 Proposed linear development in Tehran Comprehensive Plan. Source: (Farmanfarmaeian, 2006, p. 23)

Most of the TCP objectives have not been implemented. Farmanfarmaeian, one of the partners of the consortium, (2006, p. 25) believes TCP was a realistic one but could not achieve its goals because of the old cumbersome ownership regulations of Iran. The only parts of the plan that were implemented were the proposals related to creating a system of highways for Tehran. Also, some of the building codes, which are still in practice, are the legacy of TCP. Locating the building on the northern 60% of the land is one of those codes. This code has considerably affected Tehran's townscape (Farivar Sadri, 2014, p. 153).

Eventually, the whole plan was abandoned because of the 1979 Islamic revolution and the subsequent war between Iran and Iraq.

4-4-4 ATEC COMPREHENSIVE PLAN

For more than a decade after the Islamic Revolution in 1979, Tehran did not follow any official plan and was managed based on some common practices which had been mostly inherited from the TCP. Constructing buildings with two floors built above piloti which should be located on a maximum 60% of the north side of land (Moeini & Zarrin, 2006, p. 30) was one of these common practices.

In 1984, preparing a new plan for Tehran was put on the agenda by the Ministry of Housing and Urban Development of the time (now the MRUD). In 1987, ATEC engineering consultants was appointed by government (MRUD) to prepare this plan. In 1991 the plan was passed by UPAHC for implementation (ATEC Consultants, 1992). Although the plan's title was Plan for Organising Tehran¹⁵, it is known as ATEC plan.

The plan's prospect was for 1996 when Tehran would reach its final capacity in regards to a population estimated at over 6,750,000 and an area of more than 720 square kilometres (ATEC Consultants, 1992). However, at the time of the plan being approved by the UPAHC, these figures had slightly changed. This plan, like its predecessor the TCP, had two main strategies, one to pursue the polycentric development of Tehran but in a different arrangement to encourage decentralisation and the other, to limit the population growth of the capital.

The plan considered five districts (centres) for Tehran, one in the centre which already existed and the other four around this central area. The highway system of the TCP was amended to connect these centres. A twin city of Karaj was considered to solve the population intensity and traffic problems of the city centre. More radically, in the long term it was planned to construct five new towns around Tehran to move people and services out of Tehran and into these towns (ATEC Consultants, 1992).

In order to address the size of the population, the ATEC plan proposed educational and medical programmes to limit the rate of population growth in the capital. At that time, the Iran–Iraq war was over and it was proposed to encourage migrants of war-affected areas to return to their cities. This plan also considered the necessity of public transport in Tehran and the importance of the improvement of other public infrastructures. The plan also looked at moving industrial and military buildings out of the city (Farivar Sadri, 2014).

¹⁵ In Farsi: Tarh-e Samandehi-ye Tehran

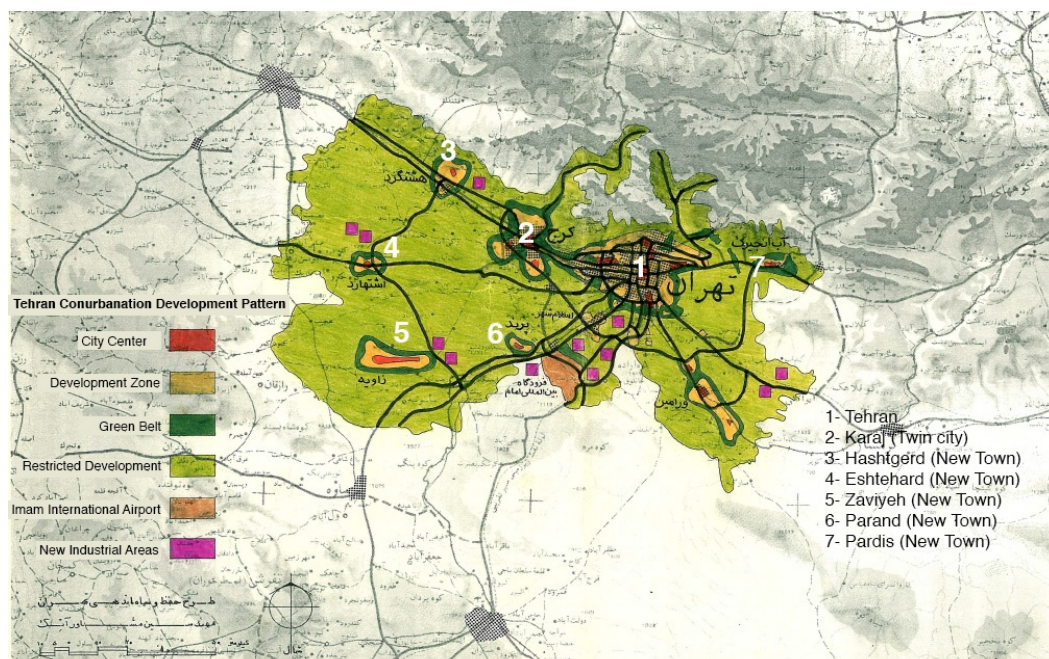


Figure 4-10: Tehran Conurbation Development Plan. Source: (ATEC Consultants, 1992)

Although this plan was approved by the UPAHC, it remained only on paper. The Tehran Municipality neither collaborated with the consultant company to prepare the plan nor did it take it seriously after its approval (Farivar Sadri, 2014, p. 155). Here, Tehran's Mayor's political and institutional power to ignore the plan was considerable.

4-4-5 TEHRAN 80 PLAN

Without paying attention to the ATEC plan, the Tehran Municipality, under the supervision Karbaschi, prepared a strategic plan for the city, known as Tehran 80, for the period of 1996– 2001. This plan introduced a set of strategies for the city and proposed policies in order to achieve those strategies. Instead of being concerned about land-use planning, Tehran 80 plan outlined six following goals for the city: 'a clean city, ease of movement in the city, the creation of parks and green spaces, the development of new cultural and sports facilities, reform of the municipal organization, and planning for the improvement of urban space, including preparation of comprehensive and detailed plans for land use and conservation' (Madanipour, 2006, p. 436).

Based on this plan the Tehran Municipality increased the amount of green spaces and cultural centres in the south, expanded the motorway network of the

city to reduce traffic and encouraged new development by relaxing construction density (FAR) regulations (Madanipour, 2006). It was during this period that the Tehran Municipality became financially independent. To fund the municipality's expenditures, Tehran's Mayor planned to redirect the liquid capital into the construction sector by bending the planning rules in exchange for steep fees (Ehsani, 1999, p. 23).

4-4-6 TEHRAN STRUCTURAL-STRATEGIC (COMPREHENSIVE) PLAN

During the 1990s the city was growing and changing fast, based on the municipality's discretion and without any effective scrutiny over its performance. Concerned experts in the field of urban planning established a professional group¹⁶ and were discussing the matter for years. In 2002, they made a proposal to the Tehran Municipality's Deputy Director of Planning and Architecture¹⁷ to prepare a new plan for the city (Farivar Sadri, 2014).

Tehran Municipality accepted the experts' proposal to prepare a new plan. To avoid the repetition of previous physical and rigid plans, the municipality amended the existing treaties to make contracts with consultant companies. It was decided to allocate one consultant company to carry out the analysis and planning for each region of the city instead of only one consultant company for the whole city (Farivar Sadri, 2014). First, 21 consultant companies were appointed but later another one was added for Region 22 which had been annexed to Tehran later. Furthermore, a synthesiser consultant company, ParsBoom Consulting Engineers, was appointed to facilitate the collaboration between these 22 companies.

For the first time in the urban planning of Tehran, collaboration between Tehran Municipality, Government and consultant companies was created. This collaboration was crucial in order to be able to prepare and implement the plan. The failure of previous plans proved that Government planning for the city would not work without involving the Tehran Municipality as it was the main institution delivering the plan. To facilitate this collaboration a joint institution,

¹⁶ Tehran's Expert Group (in Farsi: Gorouh-e Takhasosi-ye Moshtarak-e Shar-e Tehran)

¹⁷ At that time, Dr. Hamid Majedi, a UCL alumnus was in charge of that office

the Tehran City Planning Agency (TCPA)¹⁸, was created. This institution transferred its responsibility to the Tehran Municipality Urban Research & Planning Centre in 2010 (Saidnia, 2012).

It was agreed to prepare a Structural–Strategic Plan at city level instead of using the traditional comprehensive planning approach. At local level, District Plans (DP) and, at a more micro level, Area Action Plans and Thematic Plans (AAP and TP) replaced previous detailed plans (land use plans) (Majedi, 2012). The title of Structural–Strategic was chosen for this plan to emphasise that identifying economic, social and physical development structures would provide the basis for effective strategies to achieve them (Majedi, 2012, p. 18). However, in the end, the word comprehensive was added to the title because of legal issues.

Tehran Structural–Strategic Plan is an assemblage of three various planning systems of comprehensive planning, structure plans and strategic planning. Saidnia (2012) states that there are contradictions between these three methods of planning which make it impossible to combine them. However, Majedi (2012) argues that combining these approaches is the best way to address Tehran's urban issues.

The UPAHC approved the Tehran Structural–Strategic (Comprehensive) Plan (TSS(C)P) in 2007. Although the TSS(C)P and local level plans (DP, AAP and TP) were produced concurrently (Saidnia, 2012, p. 19) it took five years for the District Plans of 22 regions to be approved and get into the implementation phase. This research will focus on the reasons and consequences of this delay in Chapters 6 and 7.

TSS(C)P proposes seven visions, nine goals (objectives) and 17 strategies to achieve the proposed goals (Tables 4-2 and 4-3) for a timeframe of 2007–2026. This plan proposes a maximum population of 8.7 million people for the city, which rose to approximately 10.5 million inhabitants by the direct order of the President of the time, Ahmadinejad. The size of the city limits and its protected

¹⁸ In Farsi: Nahad barnamehrizi-ye shahr-e Tehran

buffer zone are set at 614 km² and 5918 km² respectively in this document (*TSS(C)P*, 2007).

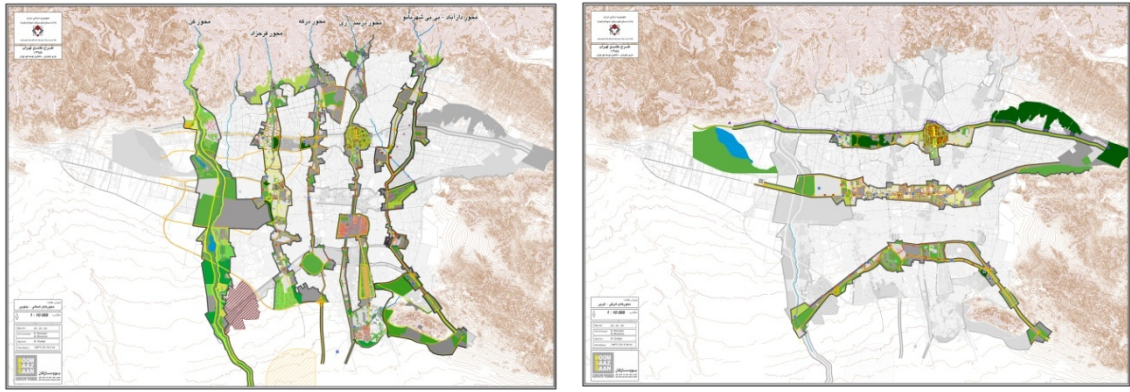
Visions
<ul style="list-style-type: none"> • an authentic Islamic-Iranian city • a smart and global city • a green, lively and vibrant city with diverse public spaces • a resilient city in responding to challenges and disasters • a sustainable city in which to live, work and have leisure • a moving city with appropriate public infrastructures to reduce inequality • a metropolis with both global and national functions, with an advanced economy, the centre of culture, research and political affairs and one of three important and major cities of south-west Asia

Table 4-2: Visions for Tehran. Source: (*TSS(C)P*, 2007)

Goals
<ul style="list-style-type: none"> • Increase Tehran's international, national and regional roles • Define a buffer zone for the city and fix Tehran's boundary • Fix residential zones and their density, expand public spaces and services • Increase economic growth by maintaining the current activity zones and create new job opportunities • Conserve the environment and protect the city against natural disasters • Improve the connectivity and transportation system of the city by expanding the infrastructure of public transport • Improve quality of the urban environment and its spatial organisation • Regularise the urban landscape with attention to Iranian-Islamic architecture and urbanism • Improve the environmental quality, conserve natural and cultural heritage and expand public spaces of Tehran by implementing Area Action Plans and Thematic Plans

Table 4-3: Goals for Tehran. Source: (*TSS(C)P*, 2007)

The plan suggests a structural network for Tehran based on its historic, natural, movement system and functional structures. These structures are five north-south axes and three east-west axes. Spatial organisation of the city, similar to previous plans, focuses on the decentralisation of the city and promotes a polycentric development at different levels. Zoning of functions is another component of this plan to segregate incompatible uses. Four zones were set out for the city: residential (R); business, administrative, service and industrial (S); mixed used (M); and green and open areas (G) (*TSS(C)P*, 2007).



Figures 4-11 and 4-12: Maps of five north-south axes and three east-west axes of the city. Source: (TSS(C)P, 2007)

The construction regulations section of the plan discusses details of the construction density limits, access issues, the amount of open space required for each building and other technical issues of each of these four zones. The plan also elaborates on the conditions to be met in order to implement the plan and proposes a delivery plan (TSS(C)P, 2007).

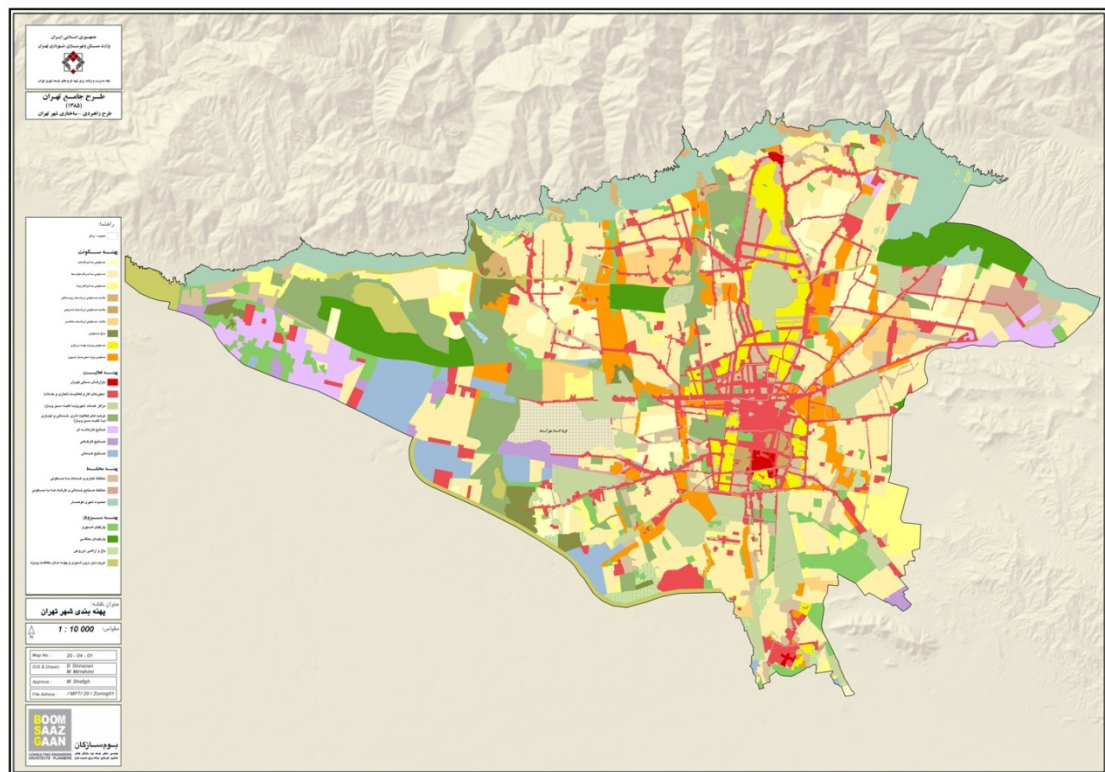


Figure 4-13 1:10,000 map of the Tehran Structural-Strategic (Comprehensive) Plan. Source: (TSS(C)P, 2007)

District Plans of 22 regions were approved in 2012. The general part of this plan, the Regulations for Integrated Detail Plan of Tehran, elaborates more on

zoning rules and provides more details on other topics covered in the TSS(C)P. More details of the process of preparation of these plans will be presented in Chapters 7. AAP and TP are defined in the TSS(C)P to address both site-specific and thematic issues. In total 10 AAPs and 18 TPs were proposed to be implemented by various municipal and governmental organisations.

4-5 THE TEHRAN MUNICIPALITY BUDGET AND CONSTRUCTION DENSITY CHARGE

4-5-1 FINANCIAL INDEPENDENCE OF MUNICIPALITIES

The importance of the independence of municipalities was emphasised in the first municipal laws in Iran. It was perceived that the independence of municipalities would only happen if they had financial independence. One of the important Acts which elaborates on municipal financing tools is the Urban Development and Redevelopment Act, approved in 1968.

The Urban Development and Redevelopment Act describes all necessary details about how municipalities can collect land and property taxes to finance their expenditures and become financially self-sufficient. It also introduces a compulsory purchase right for municipalities to acquire wide areas of the city to develop profitable projects. Value capture tax is another suggestion of this Act which enables municipalities to recover from private landlords some of the value generated by the municipal intervention in an area. However, the Urban Development and Redevelopment Act was not successful in making municipalities self-sufficient. Farivar Sadri (2014, pp. 87-89) relates the failure of the Urban Development and Redevelopment Act to the low rate of land and property taxes considered by this act, compared to the market value of these lands and properties, the lack of initial fund provision to start the profitable projects and the lengthy process to plan and organise these financing tools.

The other attempt towards enabling municipalities to become financially self-sufficient was the formation of a municipality fund by Parliament approving the Municipal Mutual Fund Act in 1975. This fund was established as a financial institution in partnership with municipalities and the Government. The implementation of development plans could be financed by loans that the

municipality received from this financial institution. It was perceived that, in order to pay back the loan, municipalities would implement profitable projects (Farivar Sadri, 2014, p. 92). However, after the Islamic Revolution, the Government did not support this fund and finally, in 1983, Parliament approved the dissolution of this institution (IPI, 1983b).

It was in Section 52 of the Budget Bill of 1983 that Parliament approved that Iran's Government should prepare a three-year plan to start to phase out its financial assistance to municipalities (IPI, 1983a). However, there is no evidence for the preparation of such a plan. Finally in Iran's First 5-year Development Plan (1990-1995) it was approved that, by the end of the time span of this plan, municipalities should be self-sufficient and financially independent from the government (IPI, 1990)

Although the legislative body, the parliament, in the Budget Bill of 1983 and Iran's First Economic, Social and Cultural Development Plan, makes the Government in general, and the Mol in particular, responsible for the preparation of plans for municipalities to become financially independent, the plan was never prepared. At this stage, municipalities were under pressure to become financially self-sufficient as the Government was cutting their budgets.

As a result, municipalities in general, and Tehran Municipality in particular, started to look for innovative tools and ways to generate income to manage their cities (Azizi, 2005). Changing land-use of buildings for a fee, selling municipal lands, increasing property taxes and privatising some services and sectors of municipalities were some of the ways in which Tehran Municipality generated income (Izadi, 2008, p. 86). However, from 1990, the major generator of revenue became the fees obtained from developers to allow them to increase the construction density of their buildings (Azizi, 2002). This financing tool was called 'selling density' for a long time but now it is called the excess construction density charge.

By adopting these new approaches to generate revenue, the Tehran Municipality's budget grew very fast, from IR41.2bn in 1987 to IR400bn in 1992 and IR700bn in 1993 (Madanipour, 1998, p. 78). This financial growth in the

Tehran Municipality brought accusations of embezzlement for the Mayor, Karbaschi¹⁹, who was controversially put on trial (Madanipour, 2011, p. 88).

4-5-2 THE TRANSFORMATION OF A PLANNING TOOL TO A FINANCING TOOL

Construction density (FAR) has been used as a planning tool in the Iranian cities to control population growth of neighbourhoods. However, by relaxing construction density limits in exchange for a fee, this tool was transformed to a financing tool. As a result, the concept of optimum population considered by the plans to provide public infrastructure becomes irrelevant.

For the first time, construction density was recognised as a planning tool to control the city's population in the TCP, Tehran's first plan. This plan proposed a maximum population of 5.5 million for Tehran in an area of 715 km² during a 25-year time span. To achieve this goal, TCP proposed different construction density limits throughout the city, ranging from low to high density. However, a piece of research carried out by the Tehran Municipality shows that, even if Tehran was built based on the TCP construction density regulations, its population would become 12 million in the 1990s (Tehran Municipality, 1991).

After the Islamic revolution in 1979, the TCP proposals including construction density limits were altered by both the municipality and the Government. Regarding construction density, a single construction density of 120% of all land was set for the whole city. By combining this rule with another rule which limited ground coverage to a maximum of 60% on the north side, one could build a two-storey building on a maximum 60% of land area.

Later, in 1984, in order to encourage construction and redevelopment in the southern part of the city, known as the deteriorated neighbourhoods, the city was divided into two construction density zones. Construction densities of a maximum of 120% and 180% were considered for areas located on the north side of Enghelab Street²⁰ and the south side of this street respectively.

¹⁹ Gholamhossein Karbaschi was Mayor of Tehran from 1989 until 1998.

²⁰ Enghelab Street (and its western extension which is Azadi Street) goes through centre of the city and divides the city into north and south.

However, some areas of the city were excluded from this rule (Tehran Municipality, 1991).

In 1991, the UPAHC passed the Increasing Density and High-Rise Building Act which allowed a maximum of 25% increase in the population and construction density of cities with over 200,000 people (UPAHC, 1991). Based on a previous Act approved by the UPAHC in 1987, municipalities were permitted to capture the value added to properties because of the increase in their construction density (UPAHC, 1987). These two Acts provided the legal basis for the Tehran Municipality to charge applicants who wanted to build property at a construction density higher than 120%.

The financial needs of the Tehran Municipality encouraged this institution to grant permits beyond the construction density limits without any plan. By law, CN5 should decide about the applications asking for excess construction density. Apart from some controversial decisions of CN5 regarding increasing construction density, it bestowed decision-making power on the Tehran Municipality and the region's municipalities for a long time. As a result, Agreements Commissions²¹ were formed in the region's municipalities to reach agreements with the applicants.

Agreements Commissions in regional municipalities could decide about the level of construction density and land-use of applications without any urban design framework. During the 1990s and 2000s, many applicants could get a construction permit to build high-rise buildings. This practice caused the transformation of the urban landscape very quickly (Madanipour, 2011, p. 86) and raised public opposition as not enough infrastructure was available as a result of the imposed construction density and increased population (Madanipour, 1998, p. 79).

4-5-3 ATTEMPTS TO REGULATE SELLING CONSTRUCTION DENSITY

In the late 1990s, the physical and social consequences of the arbitrary granting of construction density was emerging and the consequences of this received a

²¹ In Farsi: Comesion-e Tavafohat

lot of attention from the public. At this point, both CN5 and the UPAHC tried to intervene in the process and rein in the effects of construction density bonus by introducing directives. In the following sections, firstly CN5's directives for buildings up to five floors and then the UPAHC directive for buildings more than six floors will be briefly discussed.

4-5-3-1 COMMISSION NO. 5 DIRECTIVES

CN5 first introduced Directive 269 and then amended this directive by approving Directive 329.

DIRECTIVE 269

In September 1997, CN5 prepared the following table to be used by regions' municipalities while granting construction permissions to applicants based on the Increasing Density and High-Rise Building Act of the UPAHC, which was approved in 1991.

Metre M ²	Width of passageway<12	Width of passageway>12 and <20	Width of passageway>20
Area of land <300	One storey	Two storeys	Two storeys
300<Area of land<600	Two storeys	Three storeys	Three storeys
Area of land>600	Three storeys	Three storeys	Four storeys

Table 4-4: Limits of increasing construction density based on passageways' width and lands' area in Directive 269

This table shows the maximum number of storeys that could be added to the original 120% (two storeys) construction density, based on the area of a land and the width of the street where the land is located. This means the maximum height of a building could be six storeys. However, in certain circumstances, such as in the case that the land area is very large or is located in a certain area, if the developer wished to build a taller building he/she could ask for permission from CN5 to get the permit.

Besides the area of land and the width of street, the other necessary condition to get extra construction density was provision of parking for all the units, in piloti or underneath the building. However, in some regions where it was not possible to provide parking for all the units, at least 80% of parking lots should

be provided and the developer should pay a fee to the municipality for the 20% of the parking that he/she could not provide. In return, the municipality were to build parking elsewhere with the received money, an event which hardly ever happened.

DIRECTIVE 329

The title of this directive which was approved in February 2001 is 'Temporary regulations for construction of up to 5-storey buildings in Tehran until the Preparation of region's detailed plans'. This directive modifies some parts of directive 269.

Based on this directive, permitting excess construction density in streets with a width of less than 6 m was prohibited, the maximum extra floors which could be added is three storeys rather than four storeys, all the necessary parking should be provided in regions 1 to 8 and at least 80% of parking should be provided in regions 9 to 21, and in five-storey buildings the minimum units' area should be 120m² in regions 1 to 8 and at least 60m² in regions 9 to 21.

4-5-3-2 THE URBAN PLANNING AND ARCHITECTURE HIGH COUNCIL REGULATION

REGULATIONS FOR CONSTRUCTING BUILDINGS WITH SIX STOREYS OR MORE

In 1999, the UPAHC passed this Act in order to regulate the way tall buildings (with six or more storeys) were constructed without any regulation during that decade. However, some of the suggestions of this Act, like the optimum shape of the buildings, which was a pyramid, later became controversial.

This Act set some general rules for building high-rise buildings such as the minimum width of a passage which should be at least 12m wide, the minimum space between blocks should be half of the height of the buildings and the building should not cut the access of winter sunlight to other buildings. This Act had a 1:25000 map in Appendix to show appropriate and inappropriate locations for high-rise constructions, based on various criteria. A more accurate

location map was ordered which was to be prepared by the regions' municipalities within three months. This did not happen.

4-5-4 DISPUTE OVER CONSTRUCTION DENSITY

After Karbaschi, who was Tehran's Mayor for nine years, Alviri became the Mayor and was in office for two years and eight months before resigning. Alviri continued Karbaschi's route with regard to granting construction density bonus. This resulted in conflict between the Mayor and the newly-established First ICCT. This conflict concluded with the resignation of Alviri. Tehran's First city council, appointed a new Mayor for Tehran, to replace Alviri, in 2002.

The new appointed Mayor, Malekmadani, was not an advocate of the way the municipality was providing for the city. A few weeks after he became Mayor, he announced that, in Regions 1 to 7, selling construction density should be stopped. While Malekmadani in his interview with the press (Khabaronline, 2016a) asserts that ICCT and the UPAHC were consulted about this decision before the announcement, these two institutions deny this consultation (Iranian Official Journal, 2002b).

It is not clear what really happened during this period and whether the Mayor had any hidden agenda or was really concerned about the city. Two contrasting theories exist on this matter which needs researching in depth. Reactions to this decision were quite bold. The Members of Parliament voted for an official inquiry into the reasons for this decision, as it had resulted in a dramatic rise of the price of housing in Tehran (Iranian Official Journal, 2002a).

The inquiry committee, in its report (Iranian Official Journal, 2002b), concluded that the Mayor's decision was illegal as the ICCT was the only organisation who could make decisions about changes in construction density. This report made accusations that, after the announcement of the ceasing of this practice, the Mayor was still granting excess construction density in those regions, behind closed doors.

In the ICCT, the members were divided in two groups, a group in favour of the Mayor's decision and a group against it. This division resulted in the refusal of

some members to attend the Council's meetings and, as a result, the meetings were not recognised as legal. Finally, because of these internal issues, the First ICCT was dismantled by the Mol early in 2003 (BBC Persian, 2016).

A few days after the closure of the First ICCT, Iran's Court of Justice issued a warrant for Malekmadi and he was put in jail after being in office for 10 months (BBC Persian, 2016). This illustrates the political complications of construction density in Tehran which can even result in the closure of the ICCT. More recent development on construction density charges will be revealed in the next chapters.

4-6 THE HOUSING CONSTRUCTION INDUSTRY

The construction industry in Tehran was boosted in the 1990s as the Tehran Municipality relaxed the construction density limits which made construction a profitable business. Among all kind of constructions, housing construction has had a large share. Almost 30% of the urban land in Tehran is residential land (TMICTO & Tehran University, 2011, p. 297), and housing construction is the major construction activity in the city. Traditionally, housing construction has been in the hands of the private sector (Madanipour, 1998, p. 191). The Government's involvement in housing production in Tehran has been limited to the provision of housing for public employees and the construction of new towns outside of the city boundaries.

In Tehran Province, construction of residential buildings encompasses 80% of the total construction activities between 2011 and 2015. Table 4-5 shows the share of residential, mixed-use and non-residential developments in the construction activity of Tehran province. Figures shows that in the first six months of 2015, 80.9% of construction activities were in residential development, 7.3% in building mix-used buildings and 11.8% in non-residential buildings, such as industrial, educational and leisure buildings (Bank-e Markazi, 2016, p. 17).

Year	Residential	Mixed-use	Non-residential
2015 (first half)	80.9%	7.3%	11.8%
2014	83.1%	4.8%	12.1%
2013	89.8%	4.7%	5.5%
2012	90.9%	5.4%	3.7%
2011	87.4%	5.9%	6.7%

Table 4-5: Private investment in construction in Tehran Province; Source: (Bank-e Markazi, 2012, 2013, 2014, 2015, 2016)

4-6-1 HOUSING DEVELOPERS

As mentioned previously, the private sector is the major developer in Tehran's residential construction industry. Nevertheless, cooperatives and the public sector have made a small contribution to housing development. The World Bank (2004, p. 126) reports that in Iran, based on construction permits issued between 1996 and 2000, the private sector built 86% of new housing, housing cooperatives built 11% and the public sector built only 3%.

Briefly, before looking at the private sector developers, housing cooperatives and the public sector's role in housing development will be explored. Housing cooperatives were established in the mid-1960s to assist civil servants and low-income families to become homeowners. However, due to land and capital shortages, they could not produce a large amount of housing for their members (Madanipour, 1998, p. 169).

Despite the Constitution Law's emphasis on the role of Government in housing provision, the contribution of the Government has been very limited. However, in 2007, Ahmadinejad's Government introduced a major housing scheme, which was called the Mehr Housing Plan, to facilitate housing provision for low-income groups. The main mechanism proposed in this scheme was to reduce the price of residential units by removing the land price from the finished price. In order to achieve this objective, the Government started to lease state lands for long-term exploitation rights (Housing Foundation of Islamic Revolution, 2016).

In the Mehr Housing Plan, although the Government is not the developer, it provides the land, mostly out of the city boundaries and in the form of new towns, for private and cooperative developers to construct housing units. This provision of land and other financial exemptions resulted in a 20% reduction in

the final price of the housing units (Rahpoo Sakht-e Sharestan, 2013, p. 22). However, the success of this housing plan in setting and achieving its goals and the quality of the produced housing units came under criticism (Rahpoo Sakht-e Sharestan, 2013).

As mentioned previously, despite this recent scheme of the Government, the major housing developers were from the private sector. Madanipour (1998) categorises these private developers based on their organisation's size and consequently the type of development they will produce. He categorises developers into individual developers, small construction companies, large construction firms and international developers (Madanipour, 1998, pp. 167). The latter is out of the scope of this research as they were active in the development industry of Iran only for a limited time before Iran's revolution.

An individual developer is a person who acquires a piece of land to develop and sell without setting up a formal company. This individual used to be a Master Builder but the profitability of housing construction has attracted many others, such as doctors and civil servants, into this business (Madanipour, 1998, p. 167). Madanipour (1998, p. 167) explains that the individual developer, for tax purposes, might ask the original landowner to transfer the ownership to the final buyer of the property. Later, in Chapter 6, it will be explained that, in many cases, the developer might establish a partnership with the landowner.

By establishing a small construction company, an individual developer can become a formal developer and secure a legal place for itself in the construction industry. However, to develop land, the developer does not need to be a registered company. Both the individual developer and the small construction company supervise a team of workers and contractors during the construction (Madanipour, 1998, p. 167).

Large construction firms began to be formed in the mid-20th century at the time when Tehran's population started to grow rapidly and the demand for housing increased. This category of developers could build any sort of building from a row of houses to a new town. Rapid increases in the number and scope of these large developers reached its peak in the 1970s. Shahrak-e Gharb and Shahrara new towns are some examples of the constructions of these large

developers in Tehran before the revolution. After a few decades of slowdown in activities of this type of developer, in the 1990s they began to be active again (Madanipour, 1998, pp. 167-168).

4-6-2 INVESTMENT IN HOUSING DEVELOPMENT

The main purpose of developing housing units, historically, was for one's own use. However, this purpose had changed over time; and exchange value became an important element in housing production. It was in the 1970s that housing production for self-use declined and housing production for sale, because of its exchange value, peaked (Madanipour, 1998, pp. 173-174). After the revolution in the 1980s, once again the rate of development for own use was higher than the development for sale, due to the economic situation of the country as a result of the war and also because of land regulations set by the Government. In the 1990s, again the rate of development for sale started to increase (Madanipour, 1998, pp. 174-175).

The exchange value of the property has been a detrimental factor for both construction for use and for sale as both are ultimately meant for sale and are expected to increase the surplus value. Housing construction has been a secure form of investment in Tehran. Athari and Yazdani (2008) in their paper found that, between 1973 and 2001, 23% of private investment was attracted to housing real estate while only 18% was attracted to manufacturing. This means that the housing industry was a strong sector which had diverted private investment from manufacturing into the property market.

All of this resulted in the emergence of a type of development agent which Athari (2007) calls 'the landed property bourgeoisie'. Athari and Yazdani (2008) believe that the landed property bourgeoisie was looking to increase their profit margin by increasing the exchange value of real estate by influencing laws and institutions. This group of developers had gained a lot of economic and social powers and selling excess construction density had added to their power (Athari & Yazdani, 2008).

The ever-growing demand for housing and the reality of land scarcity contributed to make housing construction a secure form of investment in Tehran

and increased the exchange value of residential buildings. Demand for housing had risen dramatically in Tehran. Population growth, as a result of the continuous flow of immigrants to the capital city and natural growth of the population, was the main reason for an increase in the demand for housing. The other contributory factor was the change that happened in the structure of households from the extended family to the nuclear family which caused more demand for housing units. The improvement in living standards, for example the number of persons per room, also worked as a trigger to increase the demand for more dwellings (Madanipour, 1998, p. 140).

Lack of effective land-use regulations for a long period of time, fiscal decentralisation policies of the government, and introduction of excess construction density charge made housing construction a profitable industry. Many individuals and companies with access to capital were attracted to this business. Financial dependence of the Tehran Municipality to housing developers increased the power of these developers which affected the interrelationship of developers, the municipality and the planning system. Chapters 6 and 7 will investigate this relationship in detail by presenting primary data collected in Tehran.

4-7 CONCLUSIONS

The aim of this chapter was to provide background information about Tehran, its urban planning and management mechanism, the importance of construction density for the municipality and the housing construction industry of Tehran.

Tehran was a village until the 16th century when it started to attract the attention of kings. In the 18th century Tehran's importance was growing gradually until 1785 when Tehran was chosen as the capital city of Iran. Development pressure during the late 19th and the early 20th century resulted in the expansion of the city, mostly towards the north and west.

Now Tehran is a polycentric city with almost eight million inhabitants accommodated in area of more than 600 km². The city suffers physical, social and economic polarisation between the north and south. While the northern part, with its moderate climate, accommodates the wealthier residents and has

a lower population density, the southern part, with a harsher climate, accommodates less well-off families and has a higher population density.

The urban governance of Tehran is sectoral and fragmented. Although Tehran Municipality, in conjunction with the ICCT, runs the city, many public organisations are involved to provide services for the city. With regard to decision making for the city, based on law, the UPAHC has the highest position to make decisions for Iranian cities, e.g. approving the comprehensive plans of cities. However, more specific decisions are left to CN5 of each city which works closely with the municipality of that city.

Providing formal plans to guide the future growth of the city were recognised in the Municipality Act Amendments approved in 1967 and then the approval of the Urban Development and Redevelopment Act in 1968. Consequently, an American-Iranian consortium prepared Tehran's first Comprehensive Plan to manage the growth of the city for the next 25 years. The main proposal of the TCP was the introduction of a polycentric expansion for the city with a comprehensive network of highways to connect these centres. The plan was abandoned after the 1979 Islamic revolution.

After the revolution, Tehran grew without plans until 1991, when the second plan was prepared for the city. The second plan had two main strategies; one to pursue polycentric development of Tehran but in a different arrangement from the TCP and the other one, to control population growth of the capital. Despite extensive research in the preparation of this plan, Tehran Municipality refrained from implementing it. The Mayor of the time asked the municipality regions to prepare detailed plans of regions, based on the TCP, and ignored the new plan.

Despite approval of some directives and regulations about construction density and building regulations, the city did not have an approved planning document to follow. At that time the urgent need for a plan encouraged the municipality and the Government to form an agency to facilitate collaboration between the different stakeholders involved in the planning process. 22 consultant companies were appointed to prepare a plan of each region and a consultant company was appointed to facilitate the work of those 22 companies. The

TSS(C)P of Tehran was approved in 2007. However, it took another five years to approve the detailed plans of each region which became controversial.

The main characteristics of the TSS(C)P of Tehran were setting a vision for the city and proposing a set of strategies based on the recognised structures of the city. This plan, as previous plans, encouraged the polycentric development of the city. The plan divides the city into four zones and proposes regulations for each zone of the city. 22 DPs (detailed plans of 22 regions), 10 AAPs and 18 TPs were prepared to support the vision of the TSS(C)P.

In the 1980s while Tehran had been growing without a plan, Tehran Municipality started to grant extra construction density to fund its expenditures. In 1983 the Government decided to cease its financial assistance to municipalities. Tehran Municipality started to use innovative ways to generate income; the most controversial of which was excess construction density charge. As a result, construction density which was a planning tool became a financing tool. Before the approval of Tehran's recent plan, the UPAHC and CN5 tried to legalise Tehran Municipality's activities by setting regulations on construction density, the success of which was questionable.

Granting extra construction density in conjunction with other political and economic factors boosted housing construction activity in Tehran in the 1990s. More than 80% of housing construction had been in the hands of the private sector; individuals who were not a registered company, could become involved in the housing development industry, as it was not mandatory to be a company to construct buildings. Besides these individual developers, small construction companies, large construction firms and, in rare cases, international developers were active in the production of housing units in Tehran.

The profitability of housing construction has diverted private investment from manufacturing into property markets. To increase the profit margin, developers try to influence laws and institutions. Raising the barrier of construction density has given developers more power to influence the law.

CHAPTER 5 – THE DIVIDED CITY

- Introduction
- Dividing the city
- Selected regions
- Conclusions

5-1 INTRODUCTION

While the previous chapter provided contextual information about Tehran, its development and management mechanism, this chapter focuses on some characteristics of Tehran's regions. Although the term 'divided city', which is used as the title of this chapter, refers to a specific discourse in urban studies (political, social and physical contestation), here it is merely used to focus on how the city is sub-divided into regions for administrative reasons. First, the focus is on the whole city, how it is divided into regions and what are the specific characteristics of these regions in comparison with others. The focus will then shift towards details of five northern regions which are where this research will concentrate.

Secondary sources of information are used to prepare this chapter; most of the quantitative information is taken from statistics provided by the Statistical Centre of Iran (SCI) or the Ministry of Roads and Urban Development (MRUD). By compiling and analysing the raw statistical information it has been possible to present relevant findings. Alongside statistics, detailed information about each region was obtained from mostly unpublished reports by consultant companies who prepared District Plans of those regions.

5-2 DIVIDING THE CITY

Tehran has 22 administrative regions (Figure 5-1). There are however another 19 organisations which provide services for the city and these have their own sub-divisions. They do not always follow the same pattern as the municipality's divisions, each of which has their own mayor and are under the control and supervision of the Tehran Municipality and the Tehran Mayor.

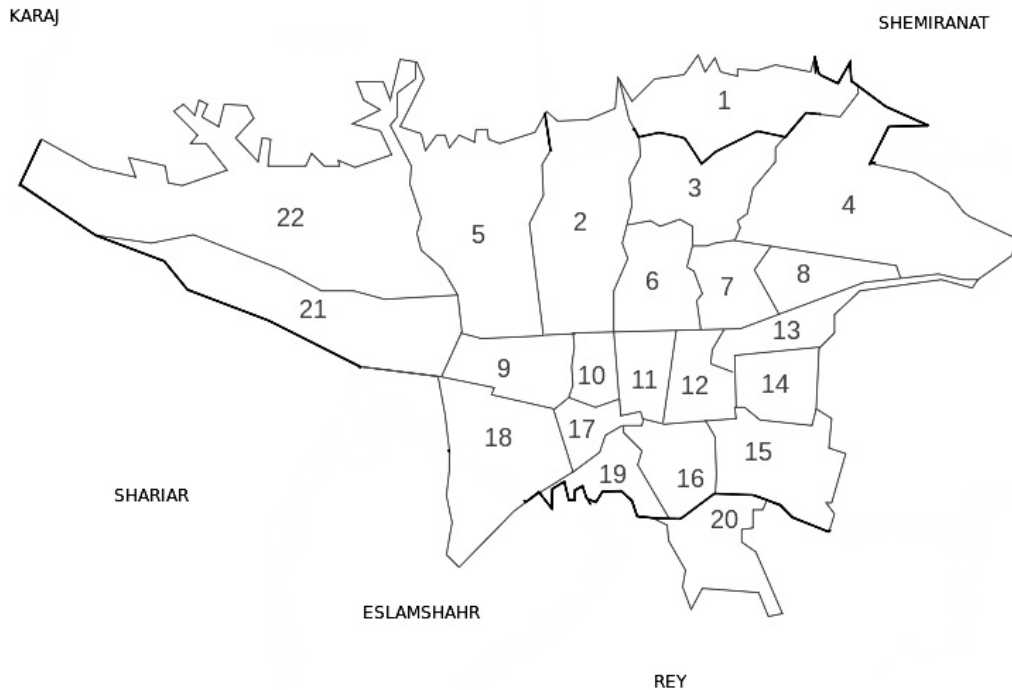


Figure 5-1: 22 Administrative regions of Tehran

5-2-1 METHODOLOGY OF DIVIDING THE CITY

The methodology behind the way the city has been divided into regions is not clear. However, it seems to be based on the size and population density of the different areas; at the time of division there was an attempt to have regions with similar-sized populations. The boundaries of the separate regions were mainly defined by natural barriers, such as river valleys, or by the city's main streets, for example the axis of Azadi Street, Enghelab Street and Damavand Road is a borderline dividing the northern regions from the southern regions (Mohandesin Moshaver ATEC, 1988).

The divisions were implemented by experts of the SCI in 1980 by the order of the Economic Mobilisation Campaign²² (Mohandesin Moshaver ATEC, 1988, p. 69). Originally the city was divided into 20 regions. Later, in 2004, Region 21, which used to be a part of Region 9, became a separate region and Region 22, which was outside of the city, became part of the city in 2000. It should be

²² In Farsi: Setad-e Basij-e Eghtesadi. This campaign was formed to reduce the pressure of economic crisis during wartime; to make it possible to distribute basic necessities to the residents they needed to divide the city.

mentioned that the boundaries of some regions have changed slightly since that time.

In some regions, the physical, social and economic heterogeneities throughout those regions are considerable. For example, in Region 4 there is a considerable difference between the average incomes of residents of Kooy-e Golestan on the western border of the region, which is an affluent area, and residents of Khak-Sefid, which is one of the most deprived areas of the city (Mohandesin Moshaver ATEC, 1988, p. 70). Each region is also divided into further sub-regions and these can include several neighbourhoods. Before the official administrative division of regions was introduced each neighbourhood used to have an unofficial name which are numbers now (Sharan, 2005).

5-2-2 COMPARING THE REGIONS

This section will look at some of the different statistics from these 22 regions. These and other considerations which will be unfolded in this chapter, have resulted in the choice of Regions 1, 2, 3, 4 and 5 as locations for this research. However, not all the areas of each region are homogeneous.

5-2-2-1 THE NUMBER OF CONSTRUCTION PERMITS

Table 5-1 shows the number of housing construction permits issued by the Tehran Municipality between 2010 and 2014. On average, 20,000 permits have been issued each year. Tehran Municipality does not have any defined target of how many permits should be granted each year. The number of permits granted depends on the number of applicants wanting to construct on vacant land or reconstruct a developed site²³.

As Table 5-1 shows, the number of permits can vary from one year to another, for example, there is a difference of 11,000 between the number of permits granted in 2013 and those in 2014. The reason behind the difference varies and, in the next chapter, we will look at some of the reasons for this variation as mentioned by the interviewees.

²³ The number of constructions completed in a year is not necessarily the same as the number of permits granted in that year as construction can happen within two years of the permission being granted.

Year	2010	2011	2012	2013	2014
Number of granted construction permits	17,022	29,763	23,757	21,244	10,129

Table 5-1: Construction permits issued between 2010 and 2014. Source: (SCI, 2011, 2012, 2013, 2014, 2015)

The total number of permits granted for housing development in each region varies. Not all regions have the same number of permits granted. The following figure (Figure 5-2) shows the contribution of each region in terms of the overall number of construction permits issued between 2010 and 2014.

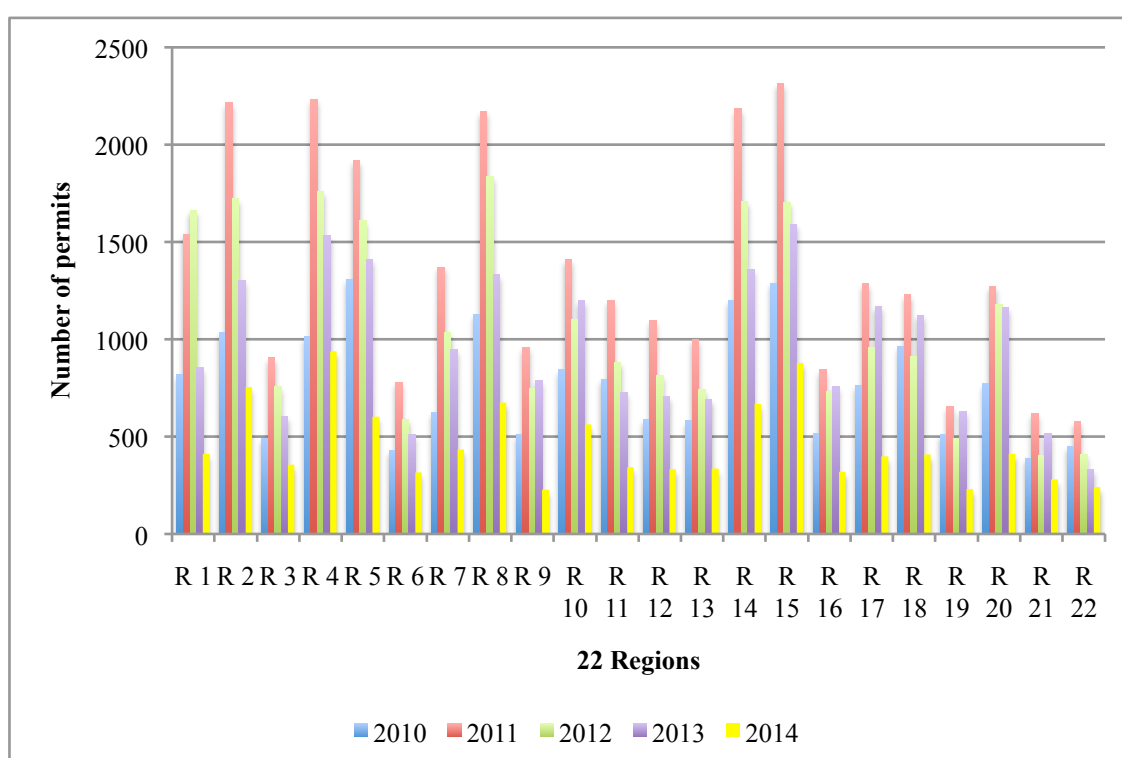


Figure 5-2: Number of permits granted in the 22 regions of Tehran between 2010 and 2014. Based on the data of: (SCI, 2011, 2012, 2013, 2014, 2015)

Figure 5-2 shows which regions received the highest number of permits each year: Regions 5, 15, 14 and 8 in 2010, Regions 15, 4, 2 and 14 in 2011, Regions 8, 4, 2 and 14 in 2012, Regions 15, 4, 5 and 14 in 2013 and Regions 4, 15, 2 and 8 in 2014.

Regions 2, 4, 5, 8, 14 and 15 are the regions with the highest amount of housing construction permits granted during the five-year period. The reasons behind this trend need close examination in order to provide an explanation.

However, the availability of vacant lands in newer regions (e.g. Region 2, 4 and 5) and the incentives for reconstruction in areas recognised as deteriorated neighbourhoods (large parts of regions 14 and 15 are recognised as deteriorated areas) must have played a role in attracting developers and landowners to apply for permission in these regions.

5-2-2-2 FLOOR AREAS OF PERMITS

The following figure (Figure 5-3) shows that although Regions 8, 14 and 15 are among those where the number of permits issued are high, the floor area to be built is not as great as in some northern regions, such as Region 1. This implies that in those Regions (8, 14, 15) the buildings to be constructed are not large developments or high-rise buildings. Figure 5-3 shows the floor area that the housing unit gave permission for in each region between 2010 and 2014.

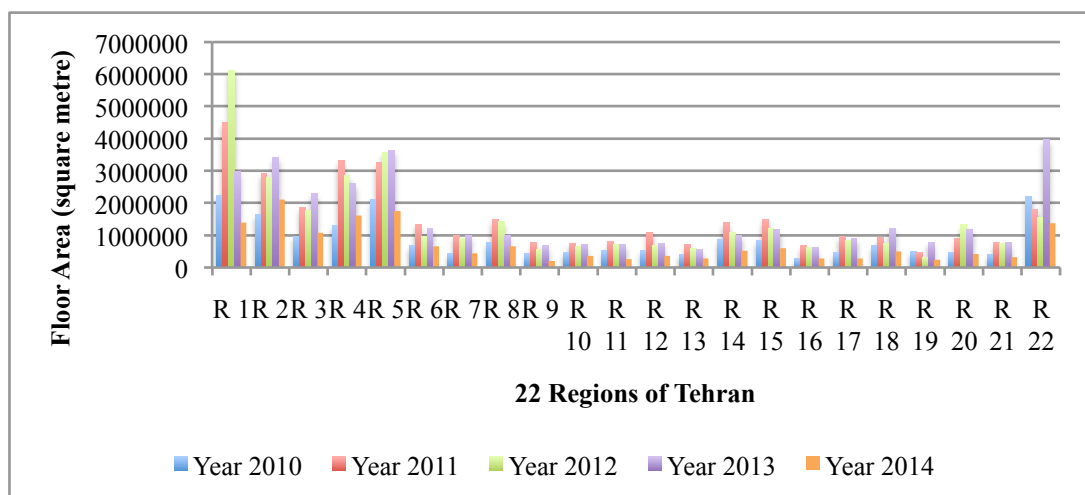


Figure 5-3: Amount of permitted floor areas in the 22 regions between 2010 and 2014. Based on the data of (SCI, 2011, 2012, 2013, 2014, 2015)

According to Figure 5-3, permissions for the largest floor areas have been given, respectively, in Regions 1, 22, 5, 2, 4, and 3 in 2010, in Regions 1, 4, 5, 2 and 3 in 2011, in Regions 1, 5, 4, 2 and 3 in 2012, in Regions 22, 5, 2, 1, 4 and 3 in 2013, and in Regions 2, 5, 4, 1, 22 and 3 in 2014. To sum up, Regions 1, 2, 3, 4, 5, and 22 are the regions given planning permission for developments with the largest floor area between 2010 and 2014. Although the number of permits in some of these regions are not as high as in Regions 8, 14 and 15, this is explained that each permit allows construction of a bigger building in either width or height by exceeding construction density limits.

Despite the spike in the construction of high-rise buildings in Region 22, the region is not chosen as one of the locations included in this research. Region 22 annexed to Tehran recently and the story of its development is different from the other regions. There have been large undeveloped land plots in this region which have been released by the government for construction to governmental and co-operative institutions.

5-2-2-3 POPULATION GROWTH

The map in Figure 5-4 shows the population densities of areas in 1996. Population density in the southern regions of the city is higher than the northern regions. However, in the future this distribution of population may change, as population growth in the northern regions is rising. Figure 5-5 shows that between 1986 and 1996 the highest population growth per year belonged to Regions 2 and 5 and then Regions 1, 3, 4, 13 and 15. With the exception of regions 13 and 15, the other regions with high rates of population growth are those in the north where the size of floor area of construction permits is also high. This implies that migration to these northern regions from other regions, both inside and outside of the city, is high as, for various reasons, these regions are perceived as being attractive.

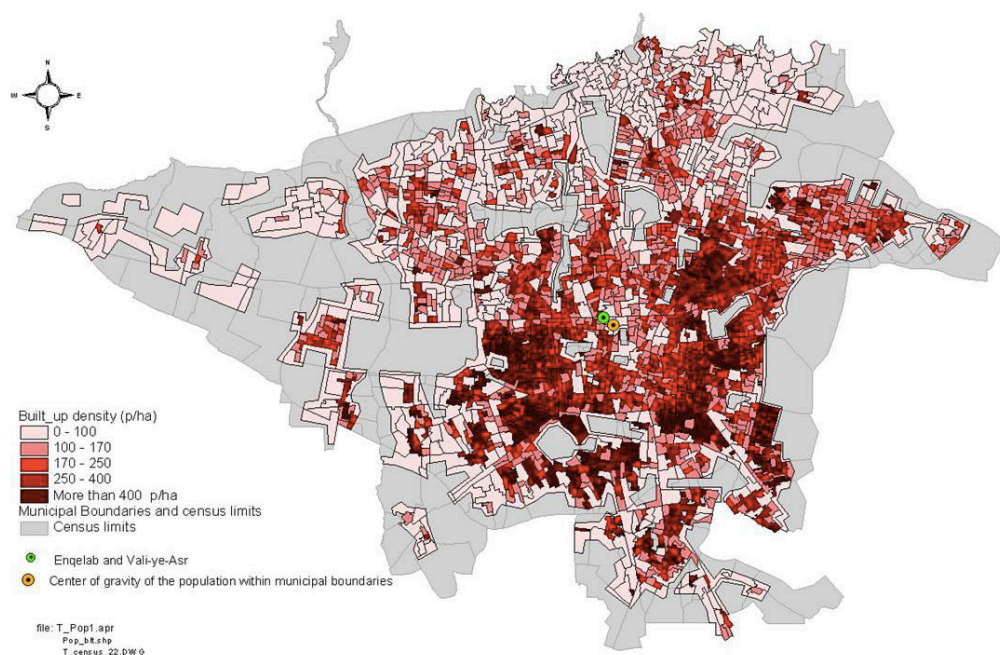


Figure 5-4: Population densities in built up areas of Tehran in 1996. Source: (Bertaud, 2003, p. 26)

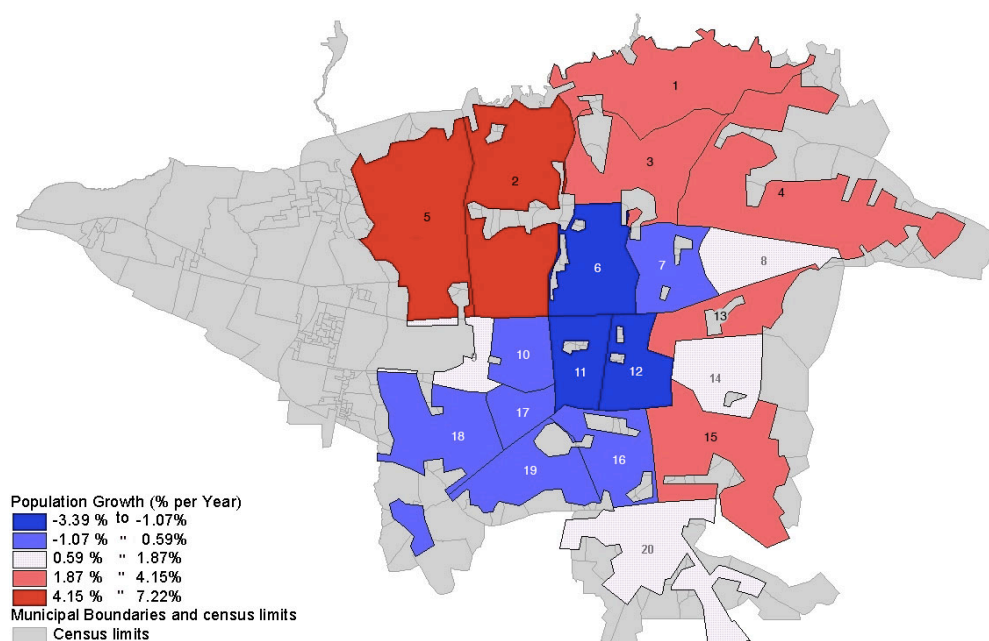


Figure 5-5: Population growth per year per region between 1986 and 1996.
Source: (Bertaud, 2003, p. 29)

Regions	Population 1996	Population 2006	Growth rate in 10 years
R 1	249676	379962	1.52
R 2	458089	608814	1.33
R 3	259019	290726	1.12
R 4	663166	822580	1.24
R 5	427955	679108	1.59
R 6	220331	237292	1.08
R 7	300212	310184	1.03
R 8	336474	378725	1.13
R 9	173482	165903	0.96
R 10	282308	315619	1.12
R 11	225840	275241	1.22
R 12	189625	248048	1.31
R 13	245142	245724	1.00
R 14	394611	483432	1.23
R 15	622517	644259	1.03
R 16	298410	291169	0.97
R 17	287367	256022	0.89
R 18	296243	317188	1.07
R 19	227389	249786	1.10
R 20	356079	335634	0.94
R 21	188890	159793	0.84
R 22	56020	108674	1.94

Table 5-2: population growth in 10 year per region between 1996 and 2006. Based on the data of (SCI, 2006)

A more recent report prepared by the SCI (summarised in Table 5-2) shows that, while the population of Regions 9, 16, 17, 20 and 21 has decreased between 1996 and 2006, the rest of the regions have experienced an increase in population. Among the regions experiencing growth in population, Regions 22, 5, 1 and 2 have gained first to forth places respectively.

5-2-2-4 HOUSING AND LAND PRICE

The following table (Table 5-3) shows the average purchase price of a housing unit per square metre in the 22 regions of Tehran between 2010 and 2015. Based on the numbers in this table, which was collected by the MRUD, Region 1 is the most expensive region of Tehran in which to purchase a housing unit. After which Regions 3, 2, 6, 5 and 4 are in second to sixth positions respectively.

Year Regions	2010	2011	2012	2013	2014	2015
1	33,918	40,189	60,614	87,173	92,183	95,164
2	23,560	28,198	42,181	56,817	60,699	62,903
3	29,158	34,429	50,872	73,253	77,989	79,241
4	18,212	21,117	31,950	42,150	44,227	44,624
5	18,158	22,252	33,978	45,388	47,119	45,566
6	21,882	25,525	38,537	54,312	56,360	57,217
7	17,142	20,578	31,090	41,939	42,973	42,853
8	16,792	19,975	29,663	39,583	40,976	40,527
9	12,055	13,970	20,071	26,158	27,810	27,314
10	12,490	14,554	20,857	27,470	28,555	27,433
11	13,488	15,399	21,912	28,560	30,522	30,153
12	12,632	14,208	20,593	26,480	29,326	28,743
13	15,173	18,223	27,479	35,776	38,260	37,481
14	13,276	15,547	23,195	30,788	32,436	31,686
15	11,043	12,536	17,531	24,397	25,010	23,887
16	10,524	12,697	17,180	20,596	23,640	24,054
17	10,234	11,509	15,164	19,713	21,650	21,715
18	9,401	10,717	14,947	19,136	21,110	20,758
19	10,803	12,261	15,405	20,490	22,415	23,759
20	9,929	11,353	15,701	18,351	20,123	22,503
21	12,368	14,679	21,730	28,108	29,641	28,789
22	14,339	18,615	27,777	36,753	38,520	36,560

Table 5-3: Average purchase price of a housing unit per square metre in the 22 regions between 2010 and 2015 (in Thousands Rial). Source: (MRUD, 2016a)

However, figures in the following table (Table 5-4) suggests that the price of land per square metre does not follow the same pattern of price per housing

unit. Figures show that between 2010 and 2015 land prices in Region 3 had been the highest in Tehran, except in 2011 when Region 1 took the first place. After Region 3, Region 1 mostly has had the second place in land price, except in 2011 and 2010. Regions 6, 2, 5 and 7 are the next most expensive regions in terms of land price.

Year Regions	2010	2011	2012	2013	2014	2015
1	16,766	54,308	77,913	123,814	132,597	112,232
2	18,750	36,621	61,505	70,596	85,735	80,348
3	35,256	49,979	82,983	124,135	136,736	116,245
4	16,334	29,790	45,858	67,578	68,292	53,559
5	18,844	31,221	48,323	54,876	70,369	62,573
6	27,446	42,223	57,664	88,431	94,096	85,303
7	21,984	28,420	47,641	62,355	74,761	77,694
8	17,430	28,407	42,610	58,177	66,882	60,600
9	11,185	14,570	19,212	37,324	33,852	22,850
10	11,225	16,562	25,141	33,321	32,619	31,093
11	13,699	18,518	26,359	41,397	49,464	44,904
12	12,554	15,341	22,749	35,200	40,602	35,580
13	17,554	25,568	38,830	52,720	47,752	53,476
14	15,109	21,190	30,783	41,696	44,190	48,920
15	8,157	14,394	20,214	25,182	27,882	24,916
16	7,468	17,565	14,286	23,908	26,212	28,203
17	8,316	14,092	17,043	29,983	35,400	23,616
18	6,062	10,560	16,069	22,213	23,684	22,525
19	6,930	16,347	13,008	22,151	25,699	27,973
20	-	11,766	15,561	16,426	20,485	17,927
21	9,251	14,394	20,857	43,224	37,892	-
22	12,439	20,305	33,663	51,044	49,000	45,981

Table 5-4: Average purchase price per square metre of land in the 22 regions between 2010 and 2015 (in Thousands Rial). Source: (MRUD, 2016a)

As the above figures show, the prices of housing and urban land are increasing most in the northern regions of Tehran between 2010 and 2015. However, the inflation rate should be considered in order to be able to say whether real prices have been increasing or not. Based on the Central Bank of Iran's (CBI) report (CBI, 2017), the inflation rate of Iran has fluctuated between minimum of 11.9% and maximum of 34.7% between 2010 and 2015. Table 5-5 shows the inflation rate of the country during the mentioned time. If the inflation rate is deducted from the prices shown above, it still means that prices are mostly growing in the northern regions.

Year	Inflation rate
2010	12.4%
2011	21.5%
2012	30.5%
2013	34.7%
2014	15.6%
2015	11.9%

Table 5-5: Inflation rate between 2010 and 2015. Source: (CBI, 2017)

Moreover, although average prices enable us to compare the prices between different regions, it should be borne in mind that the average prices do not represent the actual prices, as the regions are not homogenous. There are regions, for example Region 4, that have very high prices at one end of the scale and very low at the other.

5-2-2-5 COMMISSION NO. 5 (CN5) DECISIONS

As briefly mentioned in Chapter 4, one of CN5's responsibilities is to decide about cases that are not in line with the approved detailed plans of regions, such as, the change in use of a land/property and an increase in construction density of a plot (Moeini, 2006, pp. 37-38). The following figure (Figure 5-6) shows the amount of decisions that CN5 made in Tehran's regions between 1989 and 2000.²⁴

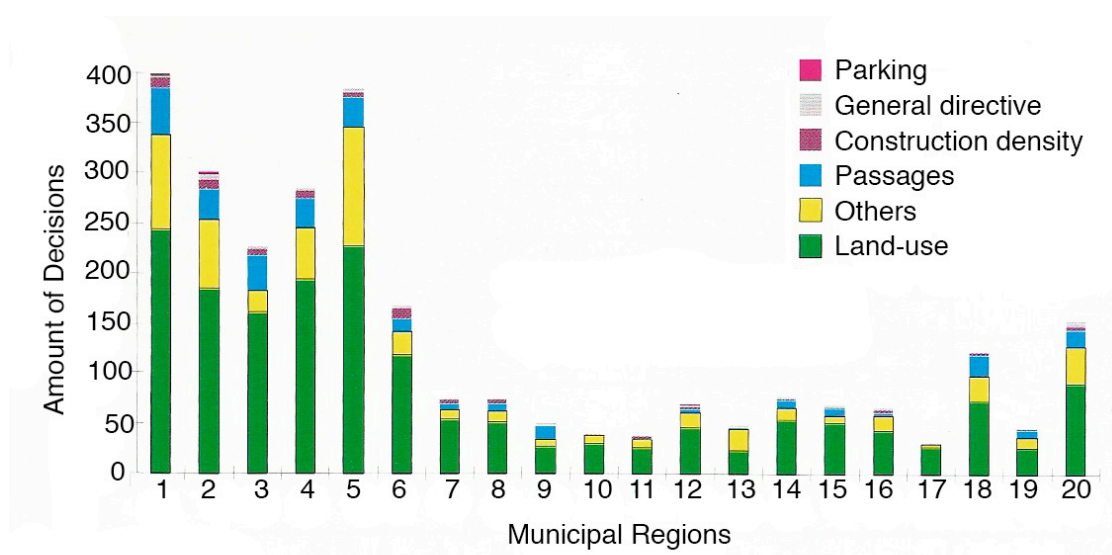


Figure 5-6: Distribution and amount of CN5 directives in the Tehran regions between 1989 and 2000 (Moeini, 2006, p. 41)

²⁴ Regions 21 and 22 are not in this table as they were not part of Tehran at that time.

Although the figure in Figure 5-6 is not up to date²⁵, it still shows that the number of requests to get permits beyond regulations are higher in the northern regions. In order, Regions 1, 5, 2, 4 and 3 are the regions with the highest amount of decisions made by the commission. Based on Moeini's (2006) research, more than 59% of CN5's directives are allocated to Regions 1, 2, 3, 4 and 5.

5-3 SELECTED REGIONS

This section investigates the characteristics of Regions 1, 2, 3, 4 and 5 in more detail. These regions are the focus of this research and are where most of the interviews were conducted.

These five regions share the same characteristics: they are under pressure to accommodate more housing; they are witnessing a high rate of population growth; the price of land and housing units are higher than the other areas of the city; and the numbers of requests from CN5 to get permits are noticeably higher than the other regions.

Based on the information presented above it could be argued that Regions 6 and 22 should also be included in this research. However, Region 22 was annexed to Tehran in 2000 and both the availability of land and the change in regulations have caused a rapid growth in that region making it a concern for a separate investigation. Region 6 is not included in this research as this region is under pressure for commercial development rather than residential development. Although the land and housing price are high in this region, the demand is mostly for commercial, institutional and service uses (Naqsh-e Jahan-Pars Consultants, 2005).

The following sections will look at inter- and intra-regional differences between these regions by looking at their population growth, the property market activity and the pressure for development. Most of the information used in these sections has been researched from development patterns and detailed plans

²⁵ During the field trip to Tehran in September 2015, the author attempted to update the number of decisions of Commission No. 5, but the Commission's decisions' archive was not made accessible for researchers.

and reports prepared by consultant companies working in these regions. In addition to consultant companies' reports, websites of the Region's municipalities were used to find the required data. Statistics from the SCI were also used to understand the development rate of these regions.

5-3-1 INTRODUCING THE FIVE REGIONS

Figure 5-7 shows a map giving the position of these five Regions in Tehran. All these Regions are located in the northern half of the city and on the mountain slopes. Regions 1, 2, 4 and 5 in the north are limited by the mountain ranges while Region 3 is extended to the south of Region 1.

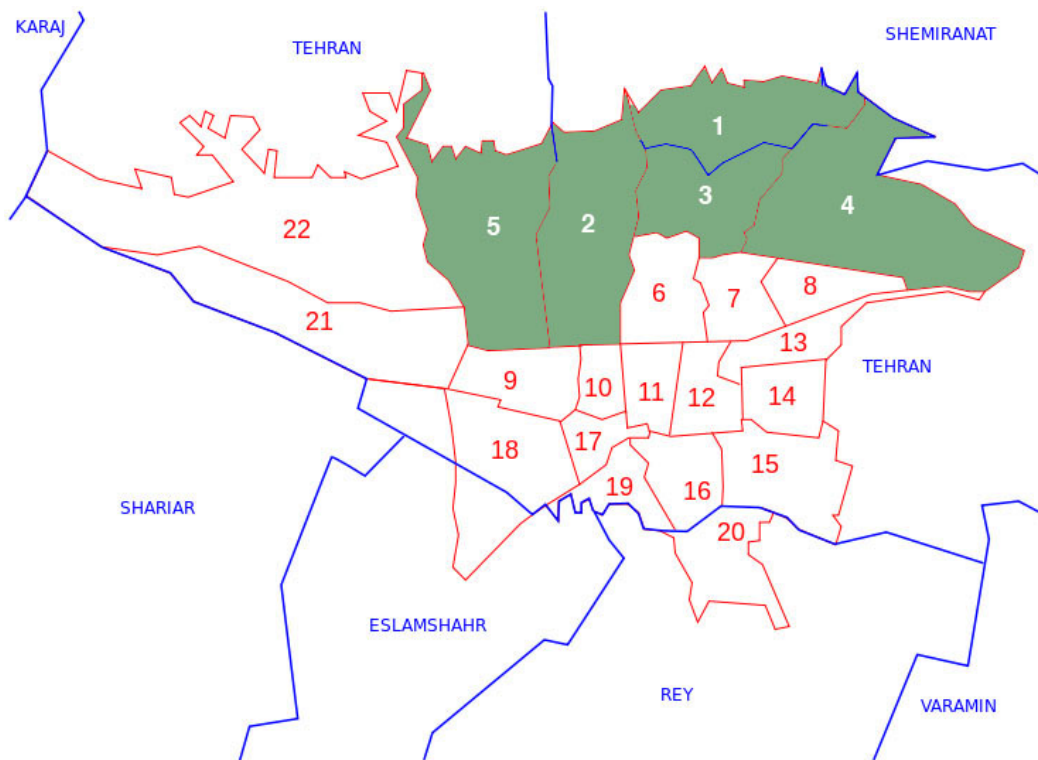


Figure 5-7: Locations of Regions 1, 2, 3, 4 and 5

Each Region is comprised of a few sub-regions and each sub-region represents a number of neighbourhoods. Region 1 with an area of 3,605 hectares consists of 10 sub-regions (Figure 5-8). Region 2 is approximately 5,000 hectares and has nine sub-regions, which are shown in Figure 5-9, and 14 neighbourhoods. Region 3, with an area of 2,945 hectares, has six sub-regions and 11 neighbourhoods (Figure 5-10). Region 4, with an area of 7,033 hectares, is the largest and most populated region; this region has nine sub-regions (Figure 5-

11). Region 5, with an area of 5,287 hectares, has seven sub-regions and 29 neighbourhoods (Figure 5-12).

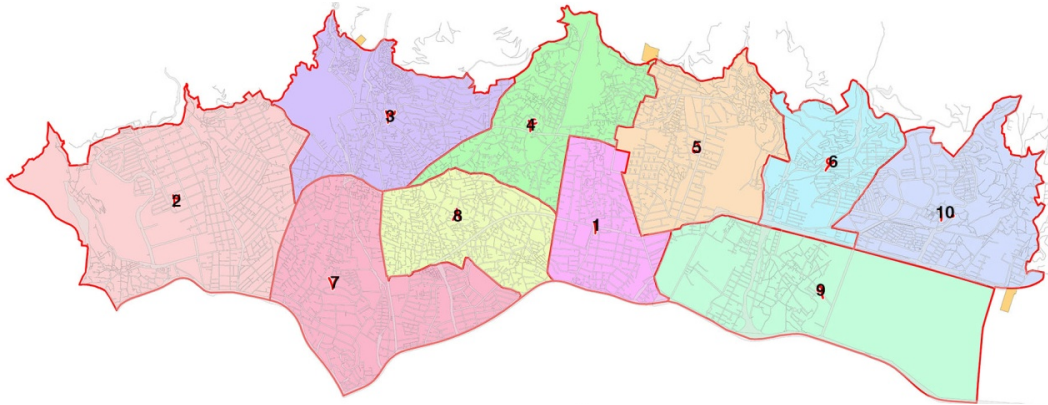


Figure 5-8: Sub-regions of Region 1. Source: (Shahrdari Mantagheh 1, 2016)

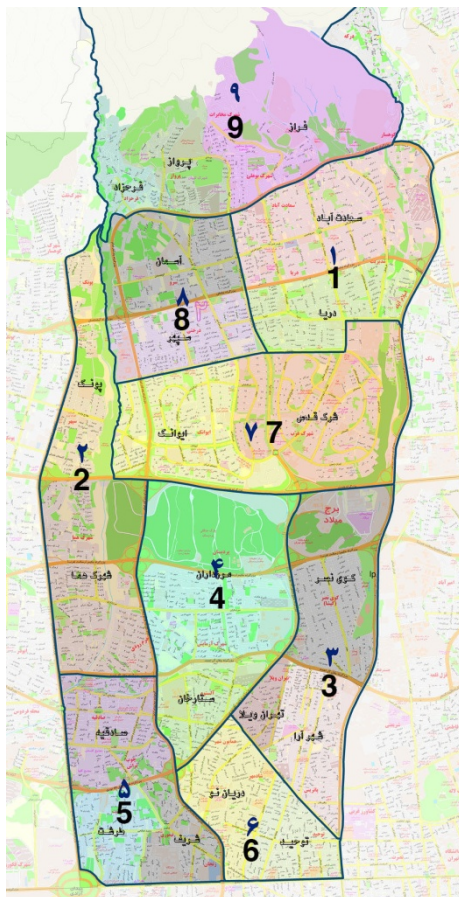


Figure 5-9: Sub-regions of Region 2. Source: (Shahrdari Mantagheh 2, 2016)

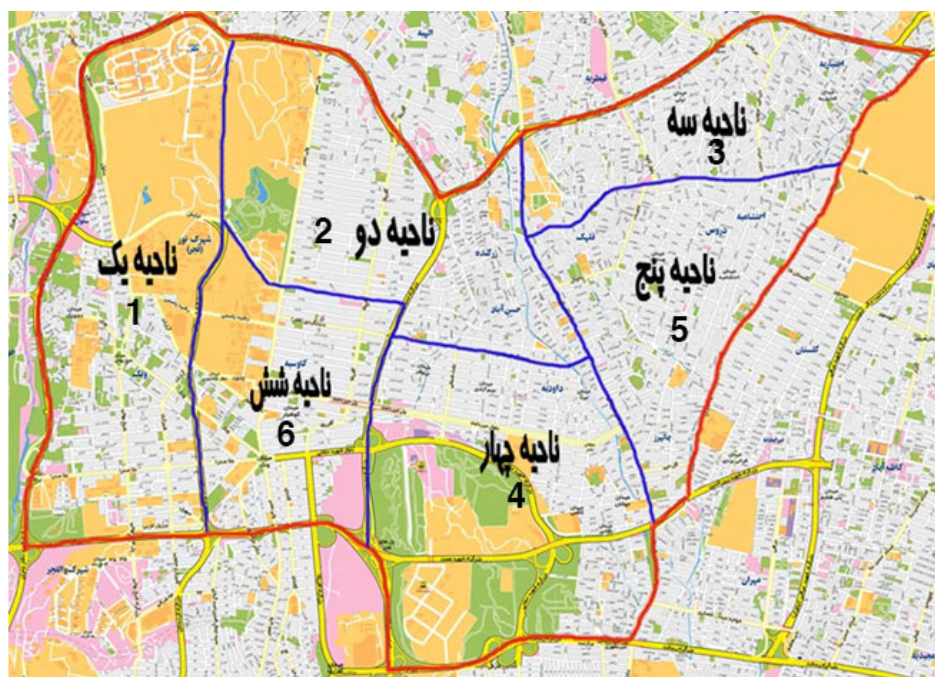


Figure 5-10: Sub-regions of Region 3

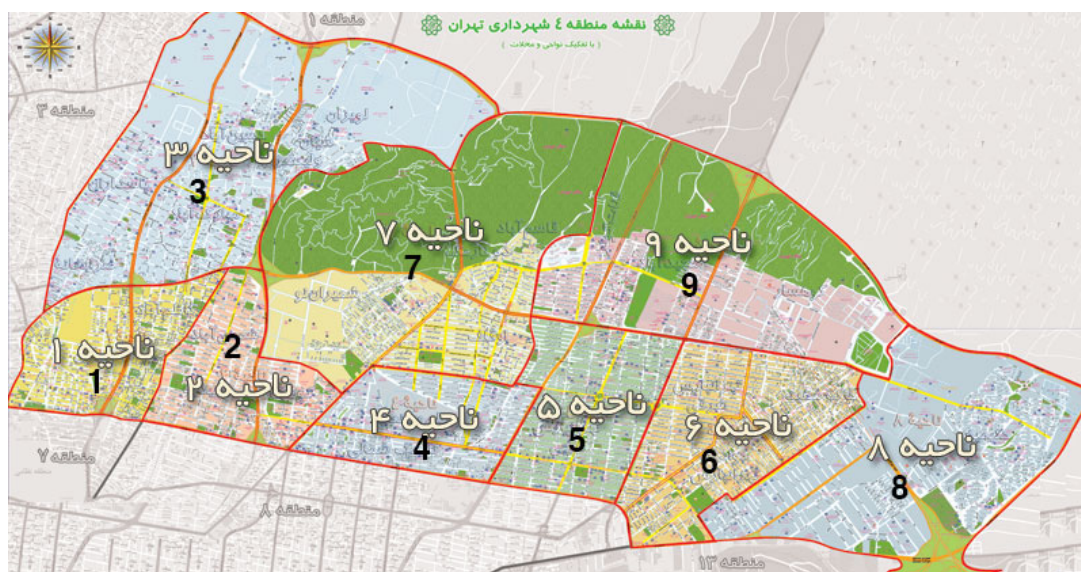


Figure 5-11: Sub-regions of Region 4. Source: (Shahrdari Mantagheh 4, 2016a)

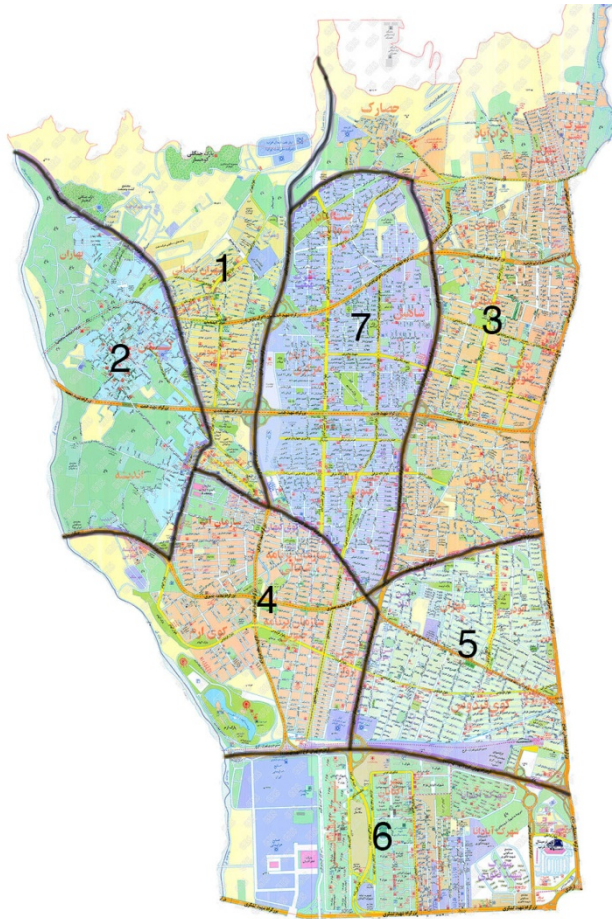


Figure 5-12: Sub-regions of Region 5. Source: (Shahrdari Mantagheh 5, 2016)

5-3-2 LAND USE

The most frequent land use in all of these five regions is residential use. These regions used to be villages and farms, located outside of the city and became part of the city after the expansion of its boundaries. However, these regions are changing as more commercial and tourist development is under construction.

Most of the area of Region 1 is allocated to residential use and is well known for accommodating international diplomatic residencies. In fact, 1.7% of the whole region (equal to 61,039 hectares) is allocated to international diplomatic residencies (Baft Shahr, 2005, p. 22). It benefits from many public and private green spaces and gardens. Historically this region has been famous for its natural resources (Baft Shahr, 2005, p. 24) and today 22% of the region is still green space; 3% public green space, 3% semi-public green space and 16% is private green spaces (Baft Shahr, 2005, p. 18). However, approximately 45% of

the private gardens in the region have been destroyed between 1991 and 2001. Sub-region 2 of the region witnessed the most of this garden conversion. This phenomenon has affected the ecology of the area (Baft Shahr, 2005, p. 19).

Leisure is another major use of land in this region. Many of the employees' clubs of ministries and organisations and recreational camps are located in this region. In total 1.65% of the area is allocated to this function (Baft Shahr, 2005, p. 23). Region 1 has the lowest number of economic units (commercial activity) in Tehran. Only 2% of all the economic ventures of the city are located in this Region (Baft Shahr, 2005, p. 21). However, recently a lot of shopping centres are emerging which will change the figures in the future.

Region 2 historically has been a residential region. 1,480 hectares, equal to 30%, of the Region, is residential. 17% by area of the Region is allocated to public service, 11% to green spaces and parks, 3% to infrastructure, 2% to private gardens, 1% to commercial, 1% to institutions, 7% of the area is vacant land or under construction and almost 30% of the region is the road network (Saravand, 2005, p. 2, 5).

The Sarvand Consultant Vompnay (2005, p. 6) reports that there is a tendency in the region to develop for tourist and intra-regional activities. As a result, the development of non-residential uses is expanding in the region. The construction of three five-star hotels and the Yademan Complex, which includes the Milad Telecommunication Tower with several concert halls and restaurants, are evidence of this kind of non-residential development.

The dominant use of Region 3 is also residential which occupies 39.2% of the region. The other uses are green space (9.4%), administrative (6.5%), sport facilities (3.9%), commercial (3.4%), educational and higher education institutes (2.5%) and cultural facilities (2.2%). Religious facilities, infrastructure, military and industrial uses also exist in this region but are a small portion. Road networks occupy 23.2% of the area of this region (Sharan, 2005, p. 4).

In addition to the residential use, Region 3 enjoys a number of trans-regional uses (Sharan, 2005). Two large-scale trans-regional sites are located in the Region; they are mainly in sub-regions 1 and 4. One of these sites is in the

northwest of the Region with an area of 500 hectares and includes the International Exhibition Centre, the Enghelab Complex, the Park Mellat, the Khatam-ol Anbiya Hospital and some other facilities. The other one is on Abbas Abad hills with a 350 hectare area which includes the National Library, the Taleghani Park, the Central Bank and other major buildings (Sharan, 2005, p. 2).

Commercial and office uses are growing in Region 3 and it is obvious that, as the commercial use increases, so the residential use will decrease (Sharan, 2005). In this respect the Sharan Consultant Company (2005) reports that many housing units in this region have been converted to offices and commercial use without official permission from the municipality.

Region 4, historically, used to be a hunting ground for the king, an unloading ground (e.g. in Khak-Sefid neighbourhood) for commodities coming from eastern cities, a number of military areas and some industries (Arseh, 2006, p. 116). It was in the 1960s that the first residential neighbourhood of the region was built (northern Narmak neighbourhood) (Arseh, 2006, p. 118). At the moment 17% of the region is used by the military which is a considerably large proportion (Arseh, 2006, p. 116).

Historically, Region 5 used to be open land with scattered villages, such as Kan village (Sharmand, 2005, p. 1). The physical development of the region has happened in the last 50 years and mostly during the 80s and 90s (Sharmand, 2005, p. 1, 2). Region 5 is mostly a residential region and 27.3% of the region is in residential use. Green spaces and gardens occupy, respectively, 7.5% and 9.5% of this region (Sharmand, 2005, p. 10). Sharmand Consultant Company (2005) reports that, at the time of their data collection, 10% of the region lay vacant and unbuilt which provides a definite development opportunity. This region used to have large gardens which have been destroyed and replaced by housing apartments in recent years (Sharmand, 2005, p. 18).

5-3-3 POPULATION

These five regions are experiencing population growth as a result of immigration from other areas of the city. However, in most parts, the population

density of these five regions is still lower than some southern regions of the city. Education and the income rate of residents of these five regions, with exceptions in some parts of Region 4, are higher than Tehran's average.

Region 1 accommodates 3.7% of Tehran's population (Baft Shahr, 2005, p. 21). Population growth in this region is higher than in other regions of the city. The population growth rate of this region per year between 1986–1996 was 1.44% while the average growth rate in Tehran in the same period was 1.13% (Baft Shahr, 2005, p. 21). However, whilst the natural population growth of the region is 0.9%, in Tehran this growth is 1.5%. This nevertheless shows that the birth rate in the area is lower than Tehran's average (Baft Shahr, 2005, p. 21).

The growth in population of this region is mostly due to the high rate of immigration which is 3.9% compared with Tehran's immigration rate which is 3.7% (Baft Shahr, 2005, p. 21). Immigrants to this region are affluent residents who move from other regions of the city (Baft Shahr, 2005, p. 19). The following table shows the population growth of the region between 1976 and 2006.

Year	1976	1986	1996	2006
Population	182,883	216,467	249,676	379,962

Table 5-6: Population of region 1 between 1976 and 2006. Data sources: (TMICTO & Tehran University, 2011, p. 78)

Although the population growth rate is high in this region, its population density is 67.3 persons per hectare which is lower than Tehran's average which is 92 persons per hectare (Baft Shahr, 2005, p. 19). The portion of people educated to higher education level is high in this area and many of the city's highly-skilled workers live in this region (Baft Shahr, 2005, p. 25).

Region 2 which is located on the west side of Region 1, began to take shape in the 1950s and its population has grown quickly since then (Saravand, 2005, p. 1). It was forecast that in 2016, the population of the region would be 640,361 (Shahrdari Mantagheh 2, 2016). The following table shows the population of the region in 1976, 1986, 1996 and 2006.

Year	1976	1986	1996	2006
Population	220,545	269,482	458,089	608,814

Table 5-7: population of region 2 between 1976 and 2006. Based on the data of: (TMICTO & Tehran University, 2011, p. 78)

The population density of the region is 93 persons per hectare (Shahrdari Mantagheh 2, 2016) which is 1% more than Tehran's average at 92 persons per hectare. However, this population density is not equally distributed throughout the region. Based on the 1996 census, 39% of the region's population lives in the northern part (which comprises 53% of the area of the region) and 61% lives in the southern side of the region (which comprises 46% of the area of the region). This shows that the population density of the southern side of the region is more than the northern part.

This uneven distribution of the population in northern and southern parts of Region 2, has affected the quality of life in these two parts. The northern part benefits from a higher floor space for public space and amenities per person compared with the southern part.

The region has a high level of literacy and 95% of the residents are literate, which is 5% more than Tehran's average (Saravand, 2005, p. 2) and many of its residents are high-income residents (Saravand, 2005, p. 8). These high-income residents prefer to live in the northern part of the region which has resulted in a heterogeneity in the social and economic fabric of residents of the northern and southern areas (Mohandesin Moshaver ATEC, 1988, p. 69)

Region 3, which is located on the southern side of Region 1 and eastern side of Region 2, has not experienced the same level of population growth between 1976 and 2006 as Regions 1 and 2. This is probably because this region had joined Tehran long before Regions 1 and 2. The following table (Table 5-8) shows the population growth of the region between 1976 and 2006. As the table suggests, the region has had population growth except in 1986 when the population of the region reduced.

Year	1976	1986	1996	2006
Population	222,007	217,084	259,019	290,726

Table 5-8: population of Region 3 between 1976 and 2006. Based on the data of: (TMICTO & Tehran University, 2011, p. 78)

Although the population growth of the region is not high (Sharan, 2005) compared with Regions 1 and 2, it is still higher than the cap suggested by the former plans of the region (Sharan, 2005). The main reason for the population growth in this region is immigration from other regions of the city as the rise in the birth rate is low (Sharan, 2005).

Residents of this region are mostly high-income, skilled workers. The average income of households in this region is twice the average of households in Tehran (Sharan, 2005). The region is known as one of the more affluent areas of the city. Based on the 1996 census, 49.3% of the working population of the region are high-ranking civil workers, academics and technical employees (Sharan, 2005). However, this distinction has decreased lately and the region is becoming more middle-class (Sharan, 2005).

As mentioned before, commercial and office use is growing in Region 3 and this has been reflected in the day and night population of the region. Sharan (2005) reports that the day population of the region is more than its night population and the difference between these two is growing as people come to work and visit this area instead of living there.

Region 4, which is located on the eastern side of Regions 1 and 3, with 864,946 residents is the most populated region and has 11% of Tehran's population (Shahrdari Mantagheh 4, 2016b). The following table (Table 5-9) shows the population growth of the region in 1976, 1986, 1996 and 2006. Population growth in this region has been above Tehran's average. The growth was 3.3% between 1986 and 1996 while Tehran's average was 1.1% and was 5.3% between 1996 and 2006 while Tehran's average was 1.6% (Arseh, 2006a, p. 6).

Year	1976	1986	1996	2006
R 4	316,904	479,512	663,166	822,580

Table 5-9: population of region 4 between 1976 and 2006. Based on the data of: (TMICTO & Tehran University, 2011, p. 78)

In general, there is a drastic social and economic difference between the western and eastern edge of the region. While the western sub-regions of the region (closer to Regions 1 and 3) accommodate residents with higher income and education with less population density per residential unit, the residents of the eastern sub-regions are mostly poorer with less well-educated people and a high population density (Arseh, 2006, pp. 52- 55). These social-economic variations have also translated into the built environment of the region. The eastern side of the region has subdivisions of a smaller size and has a poorer-quality environment.

Although the whole region's literacy average is higher than Tehran's average (with 92.4% compared to 90.06%), there is a difference between its neighbourhoods. While in the western sub-regions 98% of residents are educated, in some neighbourhoods located in the central and eastern parts of the region the rate of educated residents is around 84% which is lower than Tehran's average (Arseh, 2006, p. 32, 33)

Region 5, which is located to the western side of Region 2, is a relatively new region and its population has been growing fast. This region is a popular destination for migrants from other cities and from other regions of the city. It is mostly a dormitory region with its residents working outside of the region. In terms of education, the region is above Tehran's average education rate. The unemployment rate is lower in this region than Tehran's average. Income of the residents is above Tehran's average and is in the upper-middle class category (Sharmand, 2005, p. 13).

The following table (Table 5-10) shows the population of Region 5 between 1976 and 2006. The population of the region grew by a factor of 10 between 1976 and 2006.

Year	1976	1986	1996	2006
Population	67,199	243,824	427,955	679,108

Table 5-10: population of region 5 between 1976 and 2006. Based on the data of: (TMICTO & Tehran University, 2011, p. 78)

These five regions are all gaining in population due to immigration rather than natural growth as a result of births. Residents of Regions 1, north of 2 and east

of 4 are mostly highly-skilled residents with a higher amount of income while residents of Regions 5, south of 2 and 3 are upper-middle class residents. The population density in these regions is lower than Tehran's average, except in the southern section of Region 2.

5-3-4 PROPERTY MARKET

As presented above in section 5-2-2-4, Region 1 is the most expensive region of Tehran in which to purchase a housing unit. Regions 3, 2, 6, 5 and 4 are in the second to sixth positions respectively.

Relying on average prices to understand the property market of a region could be misleading, as regions are not homogenous. There are regions that have very high prices at one end and very low at the other, such as Region 4. However, access to the actual prices (as opposed to the average prices) of all the neighbourhoods of a region was not possible for all of the five regions, for this reason average prices are used here. In the regions where actual prices vary across the region, these differentiations are addressed.

To be able to assess the growth of the real price from one year to another, inflation rates of each year have been considered in the figures presented below²⁶. The price of housing and urban land in Regions 1 and 3 are much higher than the other regions of the city. Although the price of land per square metre in Region 3 is higher than Region 1, the price per square metre of a housing unit in Region 1 is higher than Region 3. This indicates affluent residents' desire to live in this region (Baft Shahr, 2005, p. 20)

The average annual growth of land price in Region 1 is 24.9% while the average in Tehran is 21.6%. This growth rate has resulted in a great influx of capital investment in the real estate market of the region. The population of this region is mostly people with a high income who can afford to live there. (Baft Shahr, 2005). Table 5-11 shows the average and discounted for inflation purchase prices per square metre of housing units in Region 1 between 2010 and 2015.

²⁶ For more information regarding inflation rate refer to table 5-5

Year	2010	2011	2012	2013	2014	2015
Average price	33,918	40,189	60,614	87,173	92,183	95,164
Discounted for inflation	29,848	31,549	42,127	56,924	77,803	83,840

Table 5-11: Purchase price of a housing unit per square metre in Region 1 between 2010 and 2015 (in Thousands Rial). Based on the data of: (MRUD, 2016b)

The following figure (Figure 5-13) shows the price growth of purchasing per square metre of housing in Region 1 between 2010 and 2015. The figure shows that growth rate was steep between 2011 and 2014. The price of housing has increased almost three times between 2010 and 2015 excluding the rise in inflation.

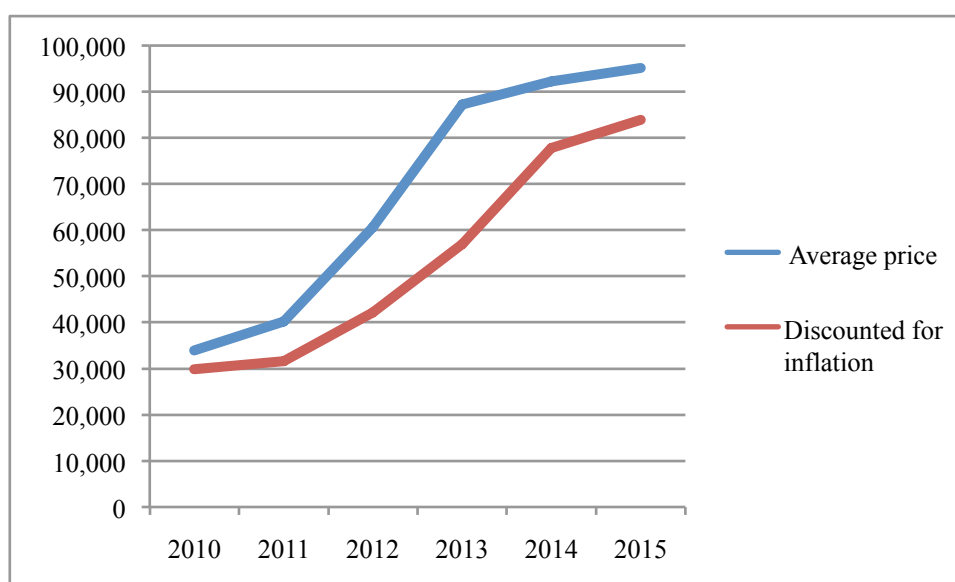


Figure 5-13: Growth of purchase price of a housing unit per square metre in Region 1 between 2010 and 2015 (in thousands Rial). Based on the data of: (MRUD, 2016b)

The average cost of renting a housing unit in Region 1 has also grown between 2010 and 2015. However, if the inflation rate is considered, we can see that the real price of renting is dropped between 2011 and 2012. The following table and figure (Table 5-12 and Figure 5-14) demonstrate this growth in the price of renting a housing unit in Region 1 between 2010 and 2015.

Year	2010	2011	2012	2013	2014	2015
Average price	155,315	186,575	233,084	290,005	335,478	377,482
Discounted for inflation	136,056	182,462	161,994	189,374	283,144	332,562

Table 5-12: Average rent of a housing unit per square metre in Region 1 between 2010 and 2015 (in Rial). Based on the data of: (MRUD, 2016a)

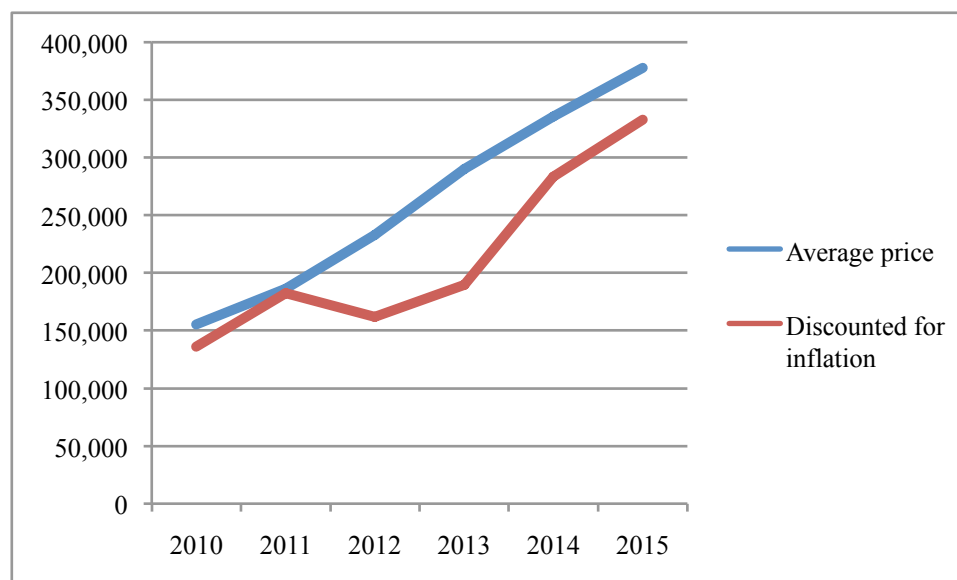


Figure 5-14: Average rent of a housing unit per square metre in Region 1 between 2010 and 2015 (in Rial). Based on the data of: (MRUD, 2016a)

After Regions 1 and 3, Region 2 is the most expensive region of Tehran in terms of the cost of a housing unit. The following table (Table 5-13) shows the price of one square metre of housing between 2010 and 2015. During this time the price has risen from 23,560 thousand Rial in 2010 to 62,903 thousand Rial in 2015, which equates to a growth factor of 2.67 times.

Year	2010	2011	2012	2013	2014	2015
Average price	23,560	28,198	42,181	56,817	60,699	62,903
Discounted for inflation	20,639	21,921	29,316	37,102	51,230	55,418

Table 5-13: Purchase price of a housing unit per square metre in Region 2 between 2010 and 2015 (in thousands Rial). Based on the data of: (MRUD, 2016b)

The following figure (Figure 5-15) shows the rise in the price of one square metre of housing in Region 2 between 2010 and 2015. The figure shows that the growth rate was steep between 2011 and 2014; the same trend as Region 1.

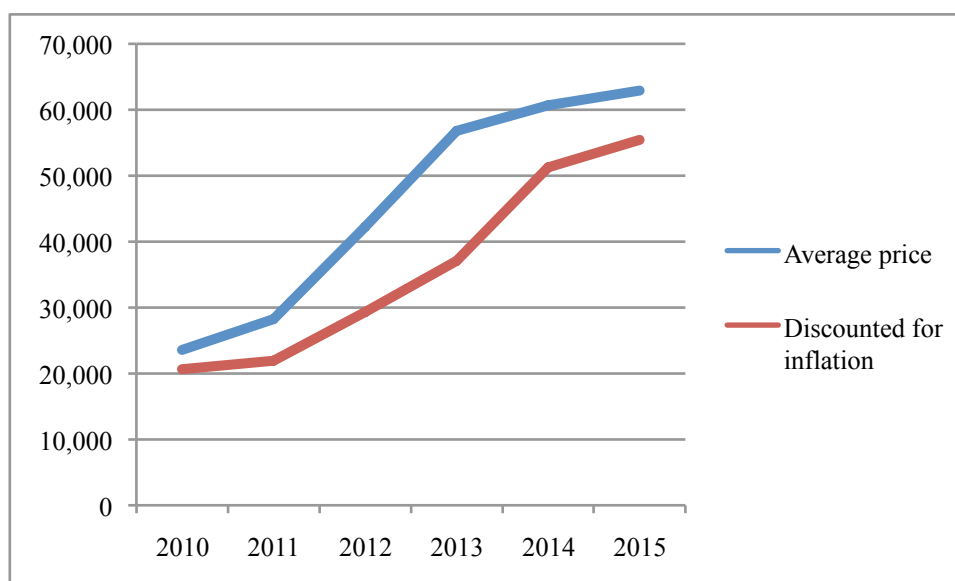


Figure 5-15 Purchase price of a housing unit per square metre in Region 2 between 2010 and 2015 (in thousand Rial). Based on the data of: (MRUD, 2016b)

Although the region is an attractive one in terms of the property market, the north-south segregation has resulted in higher value property in the northern rather than the southern section of the region. Many investors in housing and in mixed-use developments have been attracted to invest in the northern section (Saravand, 2005, p. 7).

The Saravand Consultant Company (2005, p. 8) reports that unofficial statistics of the region show that, between 1996 and 2004, the value of land and property grew more than 10 times in some areas located in the northern section of the region. This is despite the average growth of 2.67 throughout the whole region, showing that not all areas are the same.

The cost of renting a housing unit in Region 2 is also growing but this is not as high as the rising cost of purchasing. The following table and figure (Table 5-14 and Figure 5-16) demonstrate the growth of the price in renting a housing unit in Region 2 between 2010 and 2015.

Year	2010	2011	2012	2013	2014	2015
Average price	126,263	151,523	188,334	234,306	270,312	305,087
Discounted for inflation	110,607	118,946	130,893	153,002	228,144	268,782

Table 5-14: Average rent of a housing unit per square metre in Region 2 between 2010 and 2015 (in Rial). Based on the data of: (MRUD, 2016a)

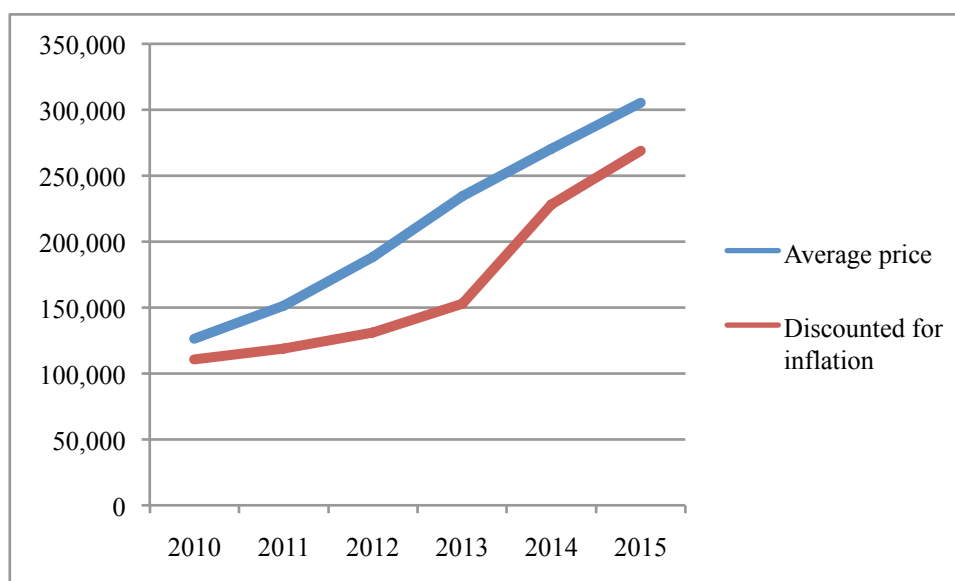


Figure 5-16: Rent of a housing unit per square metre in Region 2 between 2010 and 2015 (in Rial). Based on the data of: (MRUD, 2016a)

The land price in Region 3 is more than Region 1. Table 5-15 shows the purchase price per square metre of a housing unit in Region 3 between 2010 and 2015.

Year	2010	2011	2012	2013	2014	2015
Average price	29,158	34,429	50,872	73,253	77,989	79,241
Discounted for inflation	25,543	27,027	35,357	47,835	65,823	69,812

Table 5-15: Purchase price of a housing unit per square metre in Region 3 between 2010 and 2015 (in thousands Rial). Based on the data of: (MRUD, 2016b)

Although housing prices have been increasing between 2010 and 2015, the growth was higher between 2011 and 2014.

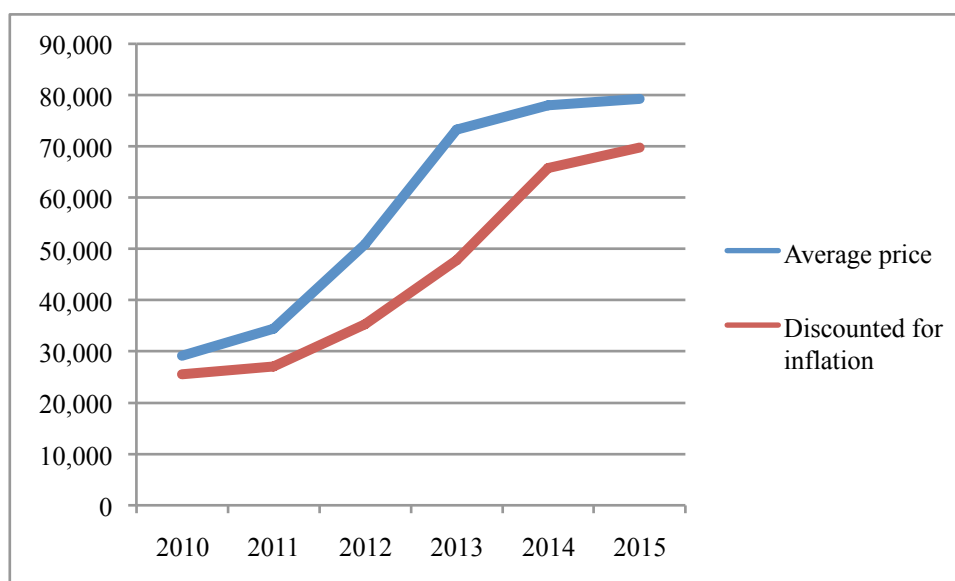


Figure 5-17: Purchase price of a housing unit per square metre in region 3 between 2010 and 2015 (in thousands Rial). Based on the data of: (MRUD, 2016b)

The average renting price of housing in Region 3 has been growing between 2010 and 2015 while the real price of renting has decreased in 2011. The following table and figure (Table 5-16 and Figure 5-18) show the rent cost per square metre of housing in Region 3 between 2010 and 2015.

Year	2010	2011	2012	2013	2014	2015
Average price	175,365	183,184	221,791	278,230	324,598	361,817
Discounted for inflation	153,620	143,800	154,145	181,685	273,961	318,761

Table 5-16: Rent of a housing unit per square metre in Region 3 between 2010 and 2015 (in Rial). Based on the data of: (MRUD, 2016a)

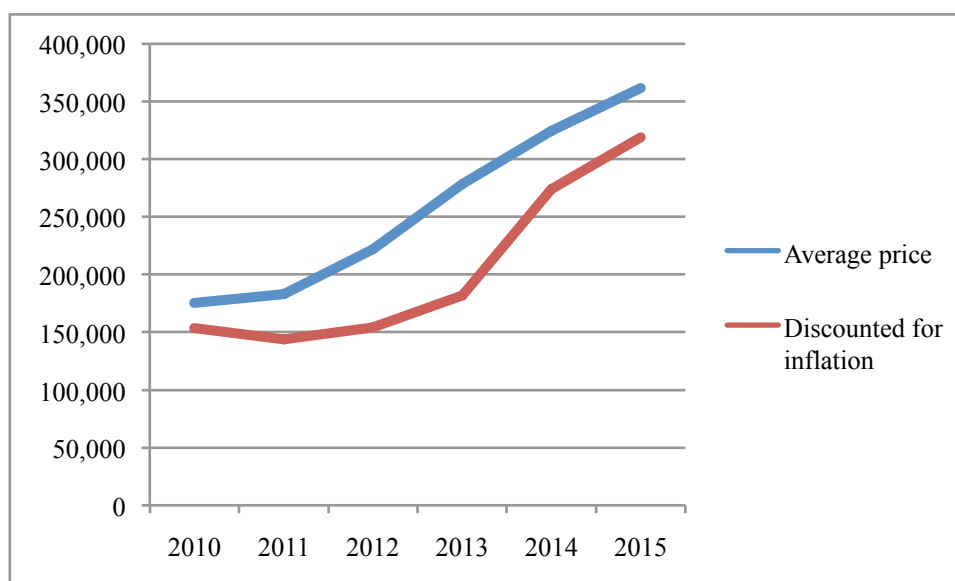


Figure 5-18: Rent of a housing unit per square metre in Region 3 between 2010 and 2015 (in Rial). Based on the data of: (MRUD, 2016a)

The average size of a housing unit in Region 3 is 411 square metres which is bigger than Tehran's average of 228.4 square metres (Sharan, 2005). The Sharan Consultant Company (2005) reports that there are two categories of land in the region, larger plots (with an area of 1,000 square metres or more) with mostly high-rise buildings and smaller plots with an average plot size of 400 square metres with mostly low-rise buildings.

In Region 4, although the price of housing and residential land is not as high as the other three regions addressed above, housing prices are still high compared with other regions of Tehran. The Arseh Consultant Company (2006, p. 46) reports that in Region 4 the price of housing has grown more than Tehran's average. While between 1993 and 1998 the rate of growth of housing price in Tehran was 23.25%, in Region 4 this rate was 31.8% and between 1998 and 2003 Tehran's was 34.20% while in Region 4 this growth rate was 39.43%. Table 5-17 shows the average and real purchase price per square metre of a housing unit in Region 4 between 2010 and 2015.

Year	2010	2011	2012	2013	2014	2015
Average price	18,212	21,117	31,950	42,150	44,227	44,624
Discounted for inflation	15,954	16,577	22,206	27,524	37,328	39,314

Table 5-17: Purchase price of a housing unit per square metre in Region 4 between 2010 and 2015 (in thousands Rial). Based on the data of: (MRUD, 2016a)

Although the housing prices have been increasing throughout the period between 2010 and 2015, the growth has been more between 2011 and 2014.

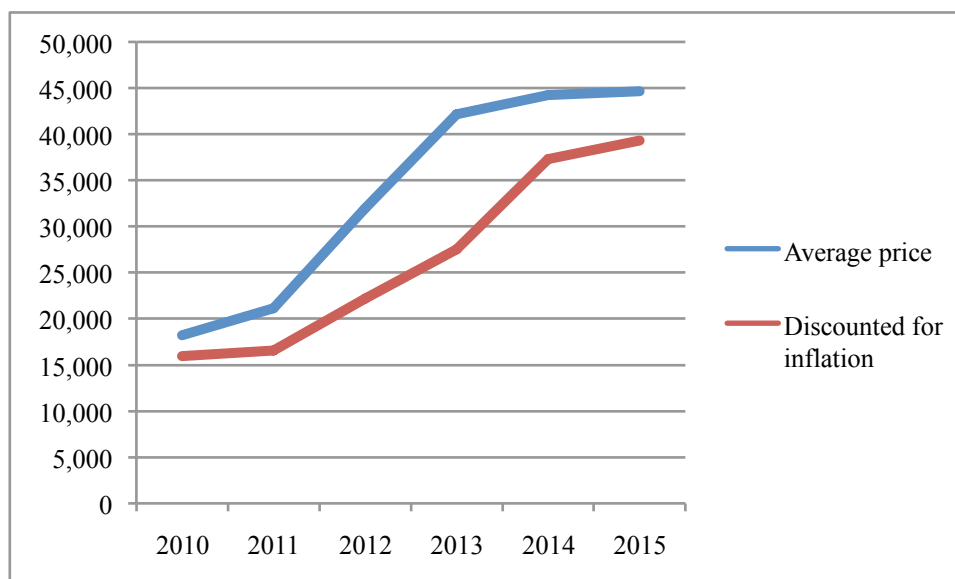


Figure 5-19: Purchase price of a housing unit per square metre in Region 4 between 2010 and 2015 (in thousands Rial). Based on the data of: (MRUD, 2016a)

The renting price of housing in Region 4 has also been growing. The following table and figure (Table 5-18 and Figure 5-20) show the rent cost per square metre of housing in Region 4 between 2010 and 2015. The cost of renting a housing unit more than doubled in the period from 2010 to 2015.

Year	2010	2011	2012	2013	2014	2015
Average price	108,483	133,536	159,306	191,598	214,222	238,838
Discounted for inflation	95,032	104,826	110,718	125,114	180,804	210,417

Table 5-18: Rent of a housing unit per square metre in Region 4 between 2010 and 2015 (in Rial). Based on the data of: (MRUD, 2016a)

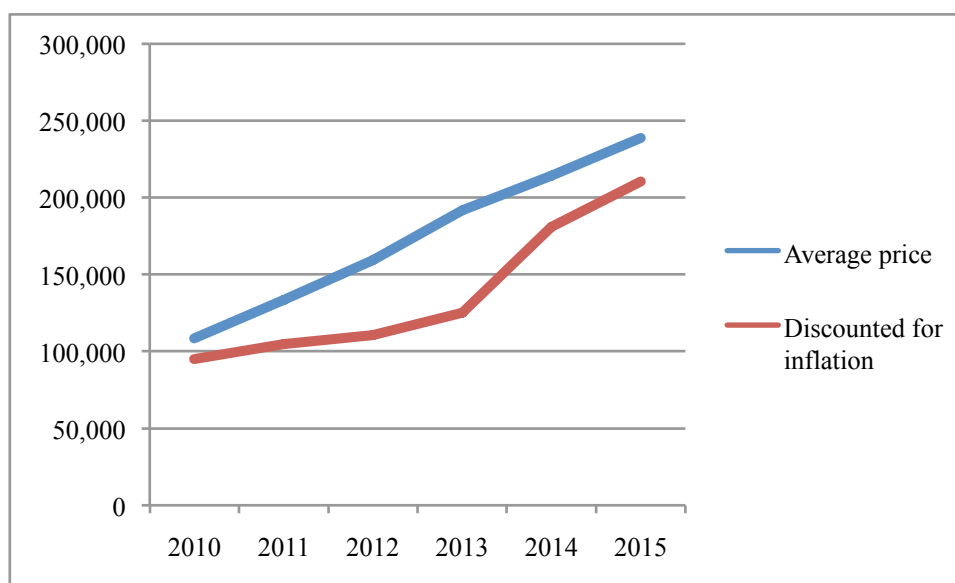


Figure 5-20: Rent of a housing unit per square metre in Region 4 between 2010 and 2015 (in Rial). Based on the data of: (MRUD, 2016a)

Based on the field work carried out by Arseh Consulting Engineers (2006, pp. 46-51) in 2004, the price of residential land varies dramatically in the different neighbourhoods of Region 4. The most expensive areas are located on the western edge of the region; for example, streets branching from Pasdaran Avenue like 7th Negarestan Street and Golestan Street. The more we approach the eastern edge of the region the more the price drops down, as in the Khak Sefid neighbourhood.

In Region 5, the availability of land, reasonable housing and land prices and the good natural environment have made the region an attractive one for residents (Sharmand, 2005, p. 17). Although the region benefits from good surroundings, its housing price is not as high as Regions 1, 2 and 3. Table 5-19 shows the purchase price per square metre of a housing unit in Region 5 between 2010 and 2015.

Year	2010	2011	2012	2013	2014	2015
Average price	18,158	22,252	33,978	45,388	47,119	45,566
Discounted for inflation	15,907	17,468	23,615	29,639	39,769	40,144

Table 5-19: Purchase price of a housing unit per square metre in Region 5 between 2010 and 2015 (in thousands Rial). Based on the data of: (MRUD, 2016a)

Although the housing prices have been increasing between 2010 and 2014, in 2015 the average housing price per square metre has fallen. The figure below

(Figure 5-21) presents the growth rate of the purchasing price of housing in Region 5.

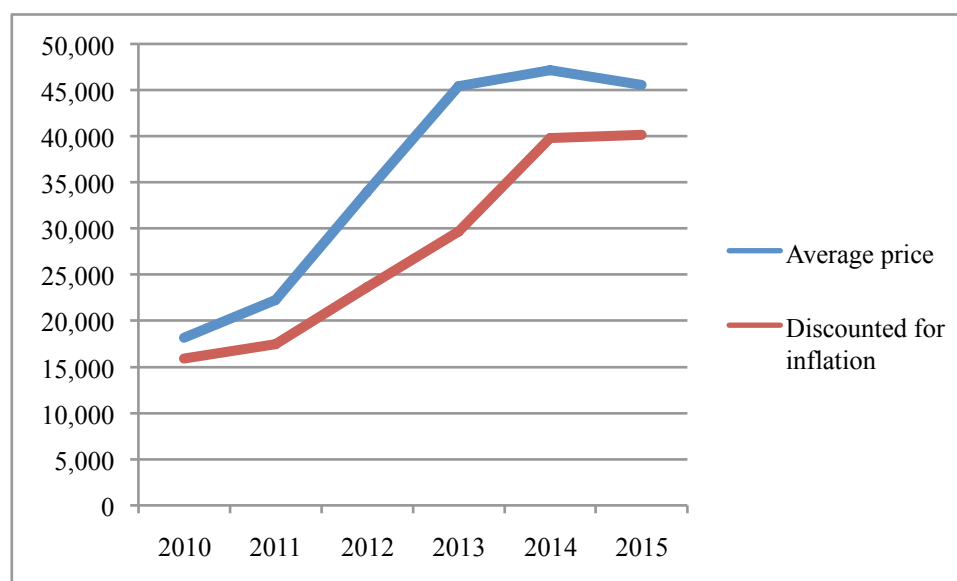


Figure 5-21: Purchase price of a housing unit per square metre in Region 5 between 2010 and 2015 (in thousands Rial). Based on the data of: (MRUD, 2016a)

The price of housing rents in Region 5 has also been growing. The following table and figure (Table 5-20 and Figure 5-22) show that the average rent cost per square metre of housing in Region 5 rose by more than 2.3 times from 2010 to 2015.

Year	2010	2011	2012	2013	2014	2015
Average price	102,776	133,577	160,691	197,067	222,245	244,093
Discounted for inflation	90,032	104,858	111,681	128,685	187,575	215,046

Table 5-20: Rent of a housing unit per square metre in Region 5 between 2010 and 2015 (in Rial). Based on the data of: (MRUD, 2016a)

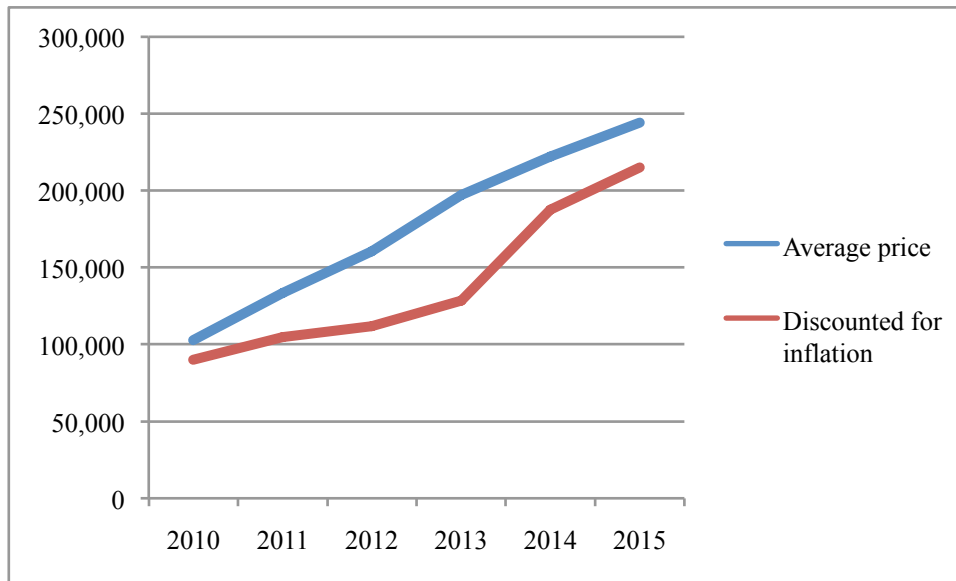


Figure 5-22: Rent of a housing unit per square metre in Region 5 between 2010 and 2015 (in Rial). Based on the data of: (MRUD, 2016a)

The following figure (Figure 5-23) compares the average purchase price of a housing unit in these five regions between 2010 and 2015. As the figure shows, Regions 1, 3 and 2 are respectively the most expensive regions and, after that, Regions 4 and 5 are almost in the same range. It should be borne in mind that these figures are the average price in the regions and the price in different neighbourhoods would vary. The extreme cases of the variation in price exist in Regions 2 and 4 where, respectively, the northern part and the western edge are more expensive compared to the other parts.

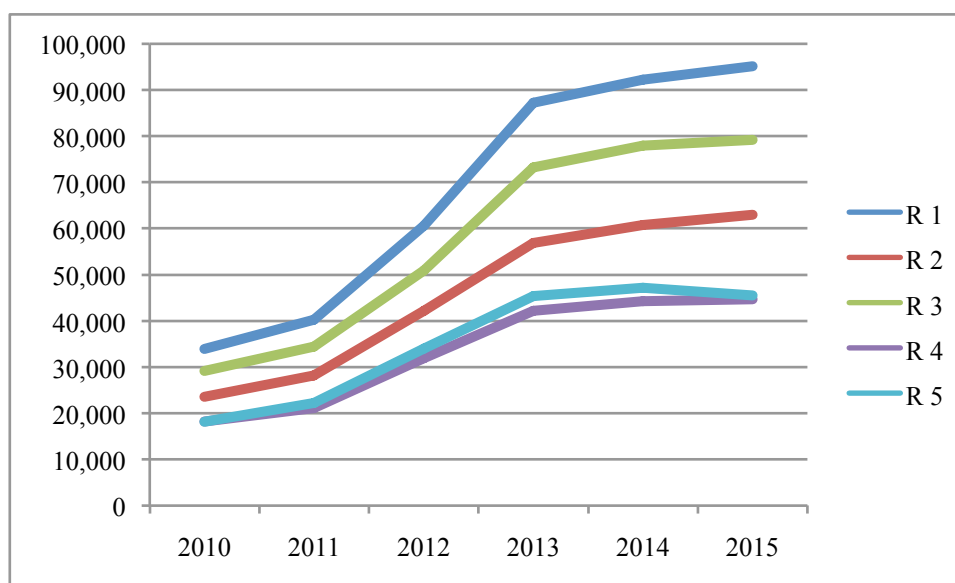


Figure 5-23: Average purchase price of a housing unit per square metre in Regions 1, 2, 3, 4 and 5 between 2010 and 2015 (in thousands Rial). Based on the data of: (MRUD, 2016a)

The following figure (Figure 5-24) compares the average renting price of one square metre of housing unit in the five regions discussed. Regions 1 and 3 are the most expensive regions, and then Region 2 is the third most expensive region. The average rent price in Regions 4 and 5 is almost in the same range.

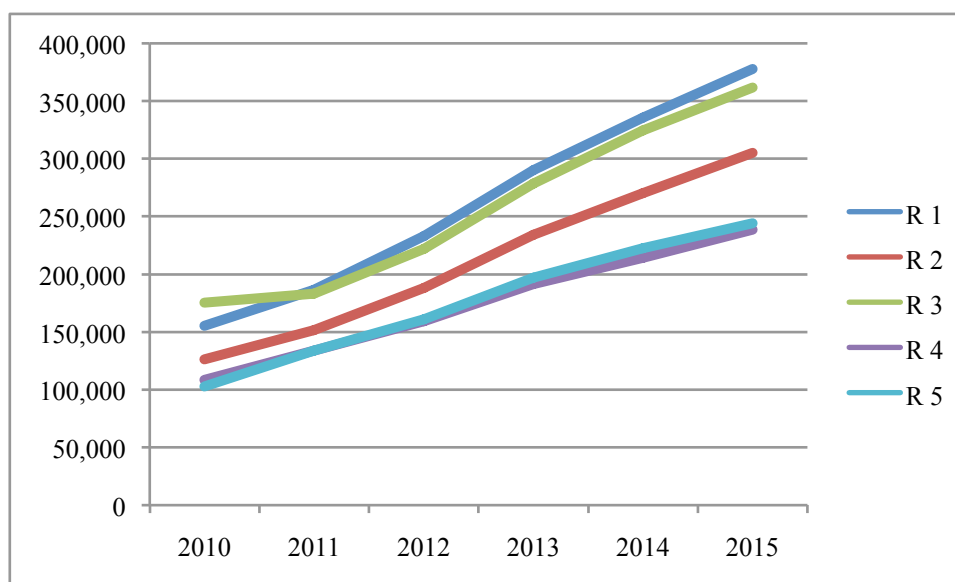


Figure 5-24: Average rent of a housing unit per square metre in Regions 1, 2, 3, 4 and 5 between 2010 and 2015 (in Rial). Based on the data of: (MRUD, 2016a)

5-3-5 CONSTRUCTION ACTIVITIES AND CONSTRUCTION DENSITY

This section looks at the number of construction permits issued, the floor areas and the residential units of those permits in Regions 1, 2, 3, 4 and 5 between 2010 and 2014. The construction density²⁷ growth of each region, where information is available in the report of the consultant companies, will be presented for each region.

The popularity of Region 1 for living and investment has resulted in a high demand for housing. As mentioned in sections 5-2-2-1 and 5-2-2-2, although the number of construction permits issued in Region 1 is not as high as some other regions, the permitted floor area in construction permits in this region is very high which means the demand for the construction of buildings with higher construction density is high. The following three figures (Figures 5-25, 5-26 and 5-27) show the number of construction permits issued, the floor areas and the residential units of those permits between 2010 and 2014 in Region 1. In 2011 and 2012, these numbers have increased dramatically.

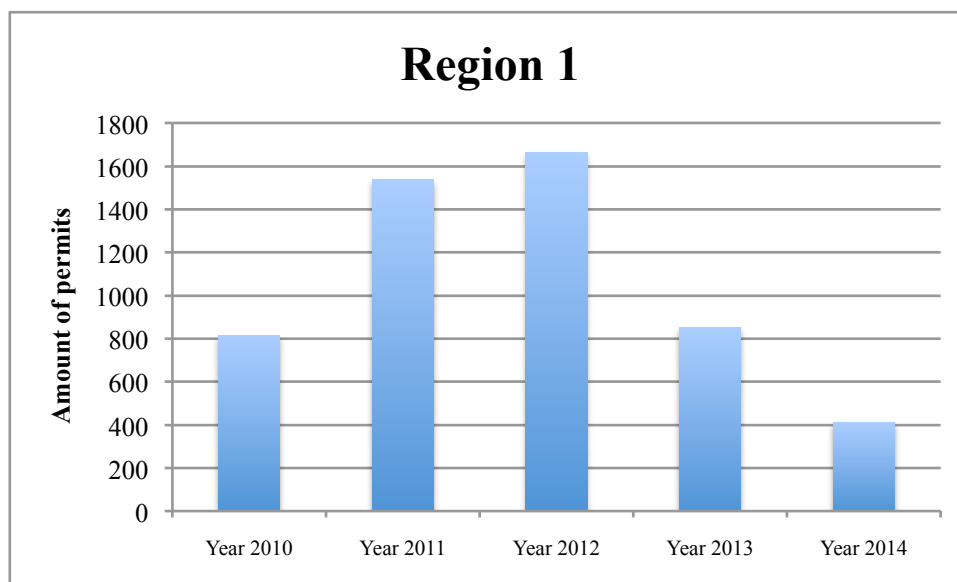


Figure 5-25: The number of permits in Region 1 between 2010 and 2014. Based on the data of: (SCI, 2011, 2012, 2013, 2014, 2015)

²⁷ In this thesis construction density and floor area ratio (FAR) are used interchangeably

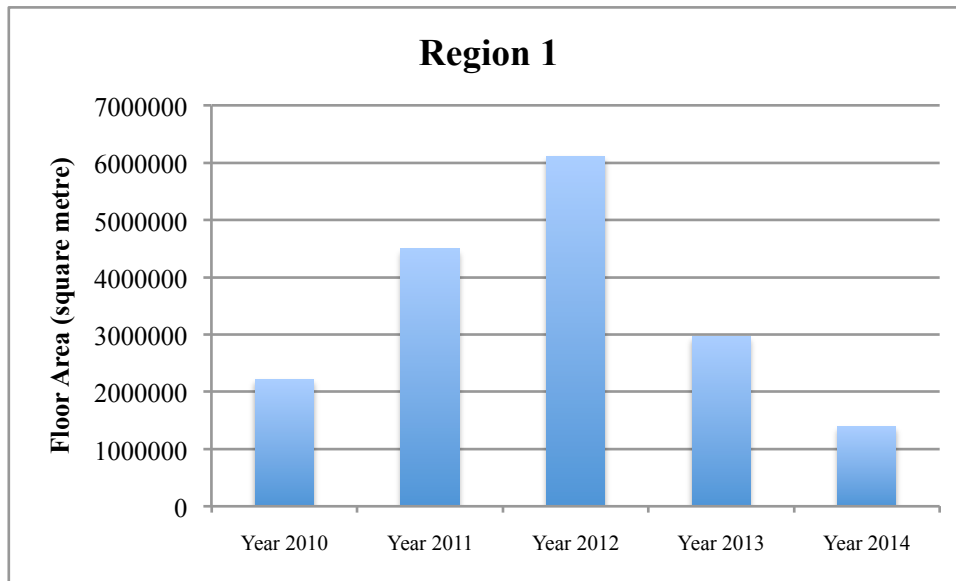


Figure 5-26: The amount of permitted floor area in Region 1 between 2010 and 2014. Based on the data of: (SCI, 2011, 2012, 2013, 2014, 2015)

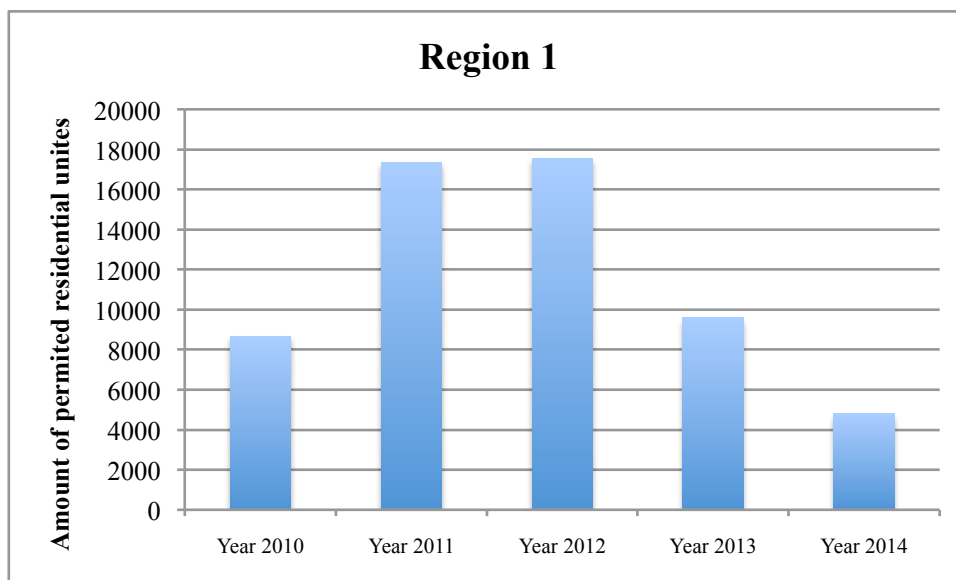


Figure 5-27: The amount of permitted residential units in region 1 between 2010 and 2014. Based on the data of: (SCI, 2011, 2012, 2013, 2014, 2015)

As the Baft Shahr Consultant Company (2005, p. 21) reports, the tendency is to construct high-rise buildings in Region 1. Although the Tehran Comprehensive Plan (the first plan for Tehran) proposed maximum construction density of 282% for high-rise buildings in this region, studies of the Baft Shahr Consultant Company (2005) show that the construction density of high-rise buildings in this region exceeds that allowed by up to 500%.

Region 1's average construction density has increased from 71.92% in 1990 to 285% in 2001 (Baft Shahr, 2005, p. 20). Most of the high-rise buildings are located in the southern and central parts of the region as a result of the destruction of inner city gardens (Baft Shahr, 2005, p. 24). Various challenges are imposed on the region as a result of the increase in construction density. The Baft Shahr Consultant Company (2005, pp. 24- 39) recognises the following issues for Region 1, which could also be applied to the other regions:

- Blockage of the visual corridors towards the mountain ranges. The lack of regulations on specifying the location and appearance of high-rise buildings has contributed to this issue.
- Many of these high-rise buildings are located in narrow streets which have caused traffic problems.
- High-rise developments have increased the capacity to attract a rise in the population while the service and infrastructure per capita have decreased in this region.
- The proximity of the high-rise buildings have caused over shadowing, privacy issues and produced a dramatic change in the skyline

The Baft Shar Consultant Company (2005, pp. 31-39) says that construction density limits of the previous plans of the region have been deliberately ignored because the municipality relies on the income coming from the construction density charge generated in this region. The granting of excess construction density has created an increase in the economic rent and the growth of speculative property development. CN5 directives and permits beyond the limits of previous plans helped to legalise this process (Baft Shahr, 2005, p. 40).

Region 2 is under a lot of pressure to increase development as it enjoys the benefit of new infrastructures and land parcels are relatively large and cheap while the region is also well-connected to the centre of the city (Saravand, 2005, p. 1). As the consultant company responsible for the production of the plan of this region, Savarand (2005), says between 1993 and 2002, 12 million square

metres of building were permitted to be built in the region which resulted in massive construction activities causing inconvenience to the residents.

The following three figures (Figures 5-28, 5-29 and 5-30) show the number of issued construction permits, floor areas and residential units of those permits between 2010 and 2014. In 2011 and 2012 these numbers have increased dramatically.

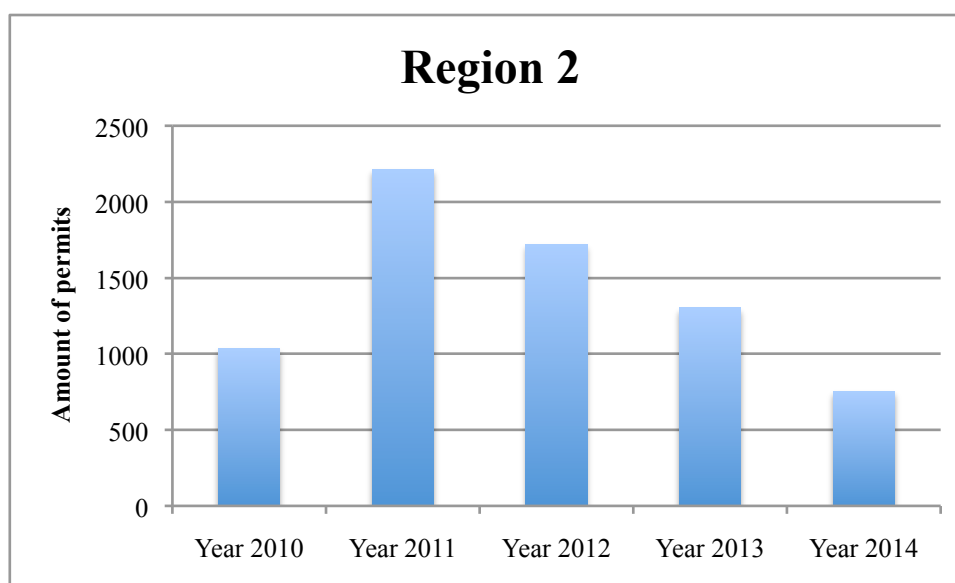


Figure 5-28: The number of permits in Region 2 between 2010 and 2014. Based on the data of: (SCI, 2011, 2012, 2013, 2014, 2015)

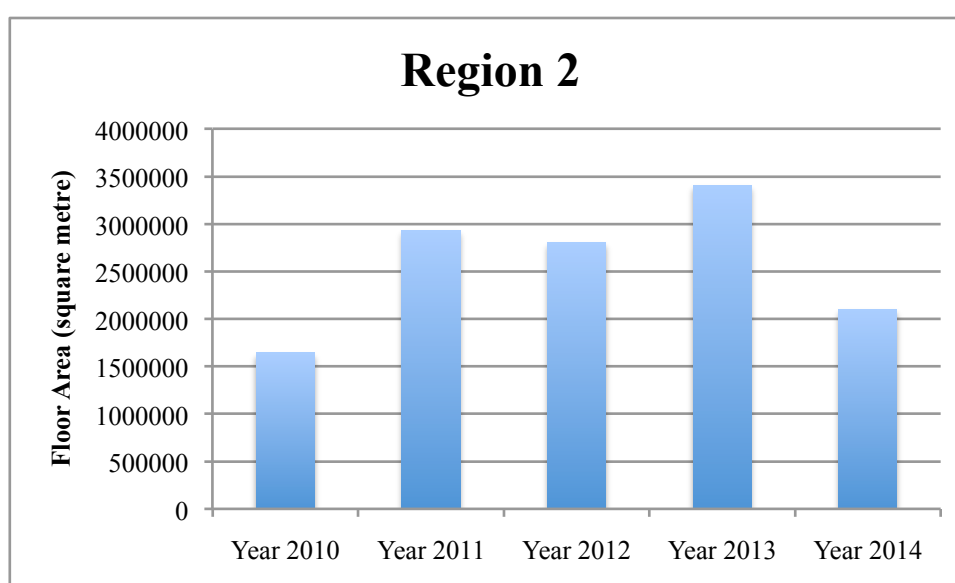


Figure 5-29: The amount of permitted floor areas in Region 2 between 2010 and 2014. Based on the data of: (SCI, 2011, 2012, 2013, 2014, 2015)

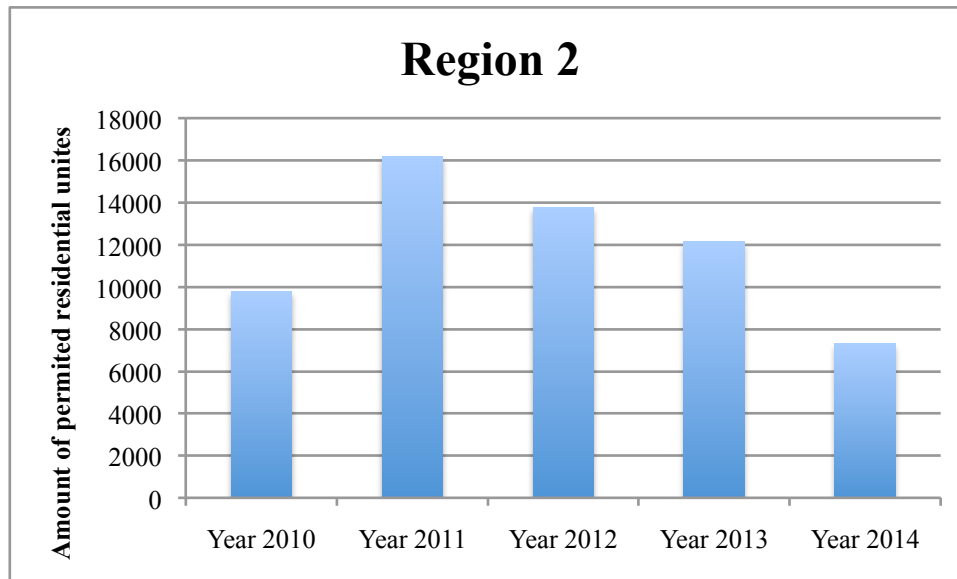


Figure 5-30: The amount of permitted residential units in Region 2 between 2010 and 2014. Based on the data of: (SCI, 2011, 2012, 2013, 2014, 2015)

As already mentioned, the region is physically and socially segregated. The size of land and housing units confirm this segregation. Smaller plots in the southern section of the region have intensified the use of the land and housing. In the northern section land and housing per capita are 40 per square metre and 55 per square metre respectively while in the southern section these numbers are 24 per square metre and 32 per square metre (Saravand, 2005, p. 2).

Although the population density of the southern part of the region is higher than the northern part, construction density in the northern part is higher than the southern part. The tendency for building high-rise building in the northern section is higher than in the southern part. The average number of floors of buildings in the northern part are 3.23 floors while in the south this number is 2.4²⁸ (Saravand, 2005).

High demand for construction in the region has increased the income of the region's municipality. 85% of this income was provided by the construction sector. From 1996 to 2001, the income of the region's municipality grew by 50%. Except in 1996, the income of the region's municipality was more than its expenditure. The excess income was transferred to the central municipality. In

²⁸ These numbers are based on the data available in 2005.

the year 2001, approximately 11% of the total income of the Tehran Municipality was provided from Region 2 (Saravand, 2005).

The number of construction permits issued in Region 3 is not as much as the other five regions considered in this research. This is mainly because this region is smaller than the other four regions. While Region 3 occupies 4.58% of the city Regions 1, 2, 4 and 5, respectively occupy 5.61%, 7.78%, 10.94% and 8.23% of Tehran. Moreover, as mentioned above, two large sections of this region are non-residential areas (Sharan, 2005).

The following three figures (Figures 5-31, 5-32 and 5-33) show the number of construction permits issued, the floor areas and the residential units of those permits between 2010 and 2014 in Region 3. In 2011, the amount of issued construction permits and permitted residential units was at its peak. However, the amount of permitted floor areas was at its peak in 2013.

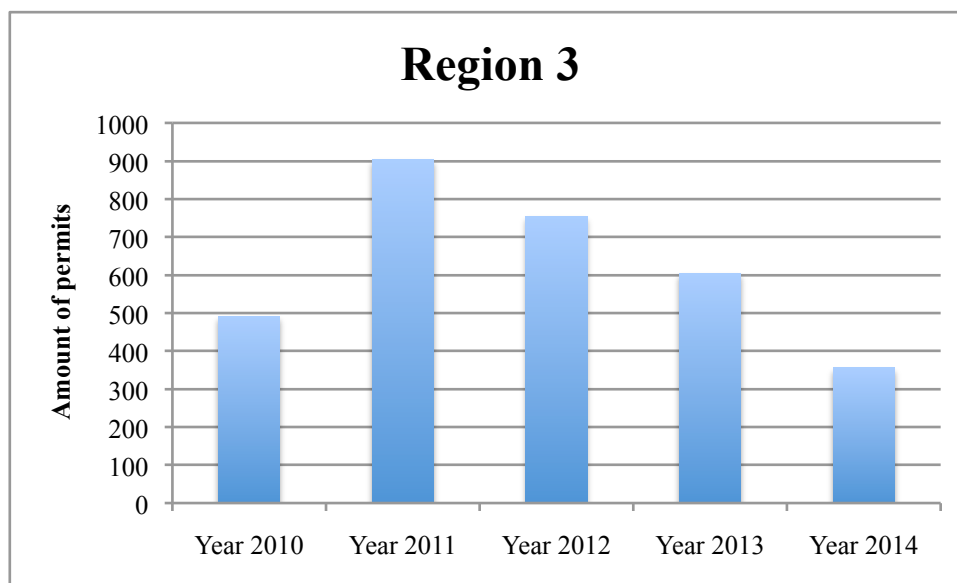


Figure 5-31: The number of permits in Region 3 between 2010 and 2014. Based on the data of: (SCI, 2011, 2012, 2013, 2014, 2015)

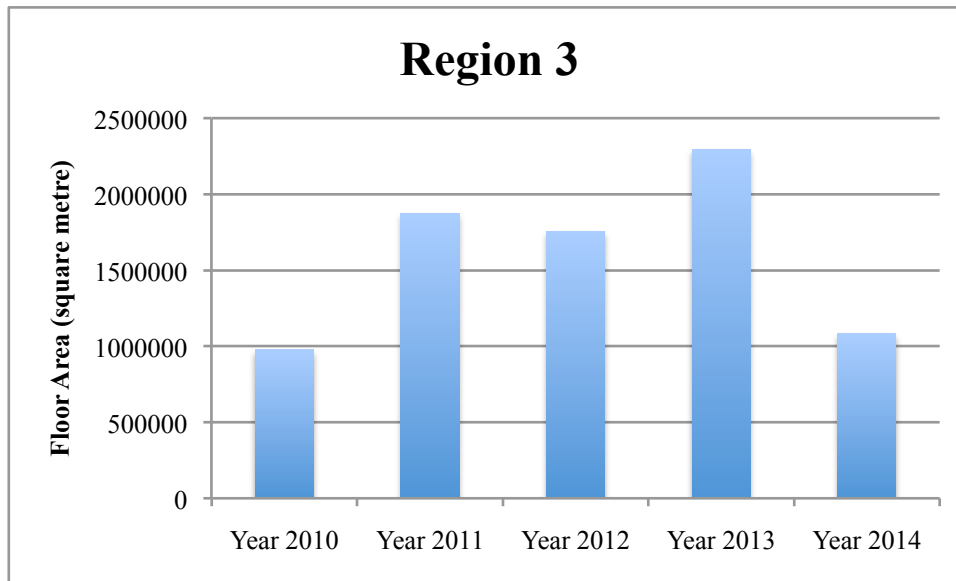


Figure 5-32: The amount of permitted floor areas in Region 3 between 2010 and 2014. Based on the data of: (SCI, 2011, 2012, 2013, 2014, 2015)

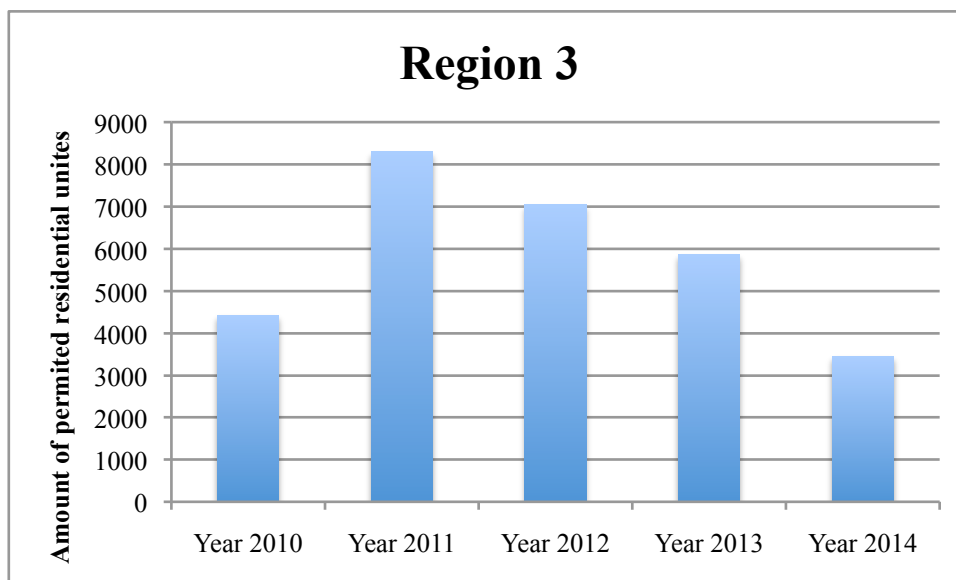


Figure 5-33: The amount of permitted residential units in Region 3 between 2010 and 2014. Based on the data of: (SCI, 2011, 2012, 2013, 2014, 2015)

Region 3 accommodates many high-rise buildings. Two types of high-rise buildings are recognised in this region by the Sharan Consultant Company (2005), first the planned tower blocks built before the Revolution such as Eskin, Parc des Princes, Aftab, Iran Sokna and Garney. These are the first generation of high-rise constructions in Tehran. These tower blocks formed the structure of the region. The other type is the second generation of high-rise constructions built in small plots and narrow streets without planning considerations.

Region 3's buildings' height is more than Tehran's average. The average number of floors of buildings in this region is three floors while Tehran's average is 2.61 floors (Sharan, 2005). Although buildings in Region 3 are taller than Tehran's average, the density of housing units per hectare, which is 64 housing units per hectare, is lower than Tehran's average (Sharan, 2005). This implies that housing units are big in this region, which is a sign of wealth.

The Sharan Consultant Company (2005) reports that the new constructions in the area at the time of their report have higher construction density, with more housing units and more ground coverage compared to the existing, older buildings. The Sharan Consultant Company (2005) observes a tendency in the region to sub-divide the large parcels and also increase the construction density. Besides that, many of the gardens of the region were converted into housing blocks.

The following three figures (Figures 5-34, 5-35 and 5-36) show the amount of issued construction permits, floor areas and residential units of those permits between 2010 and 2014 in Region 4. In 2011, the amount of issued construction permits, permitted residential units and permitted floor areas was at its peak.

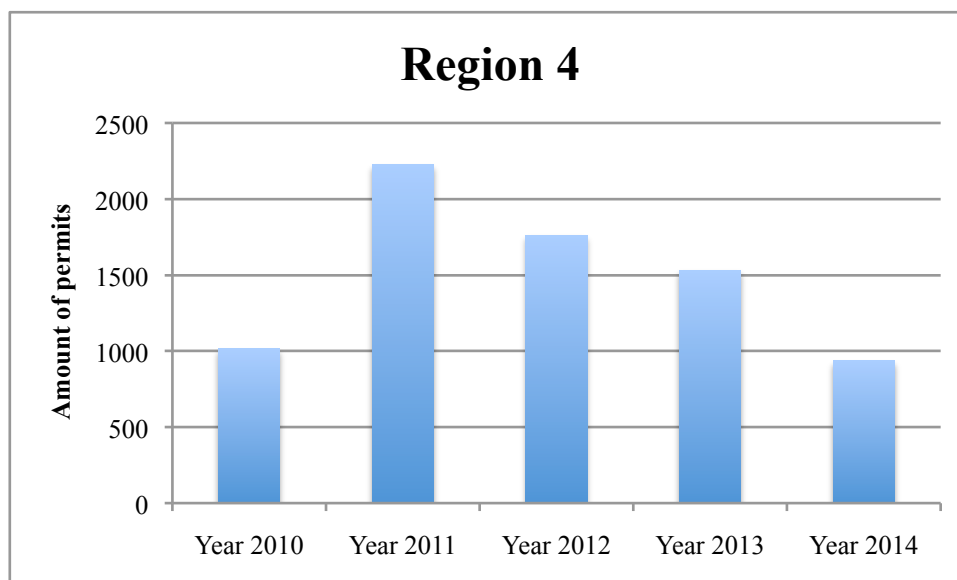


Figure 5-34: The number of permits in Region 4 between 2010 and 2014. Based on the data of: (SCI, 2011, 2012, 2013, 2014, 2015)

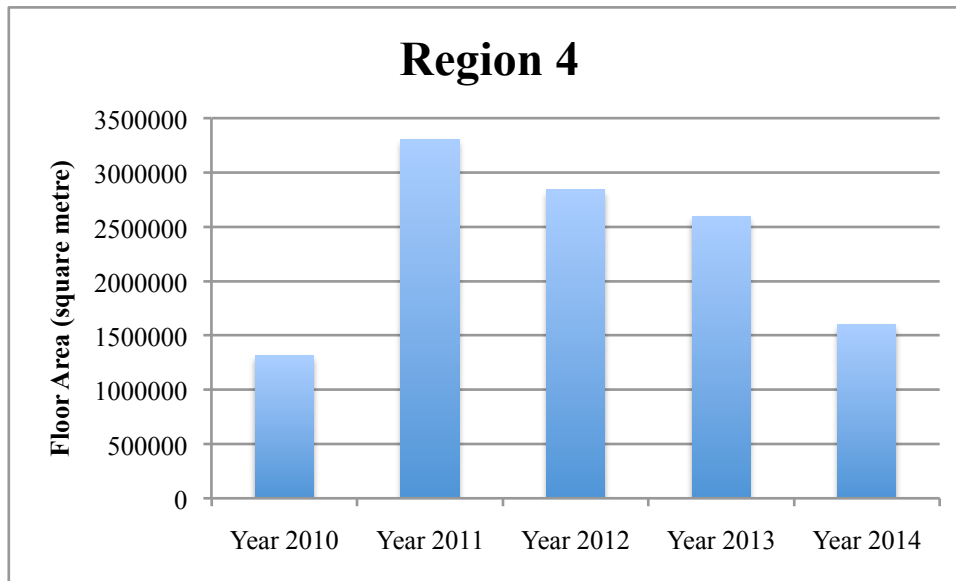


Figure 5-35: The amount of permitted floor areas in Region 4 between 2010 and 2014. Based on the data of: (SCI, 2011, 2012, 2013, 2014, 2015)

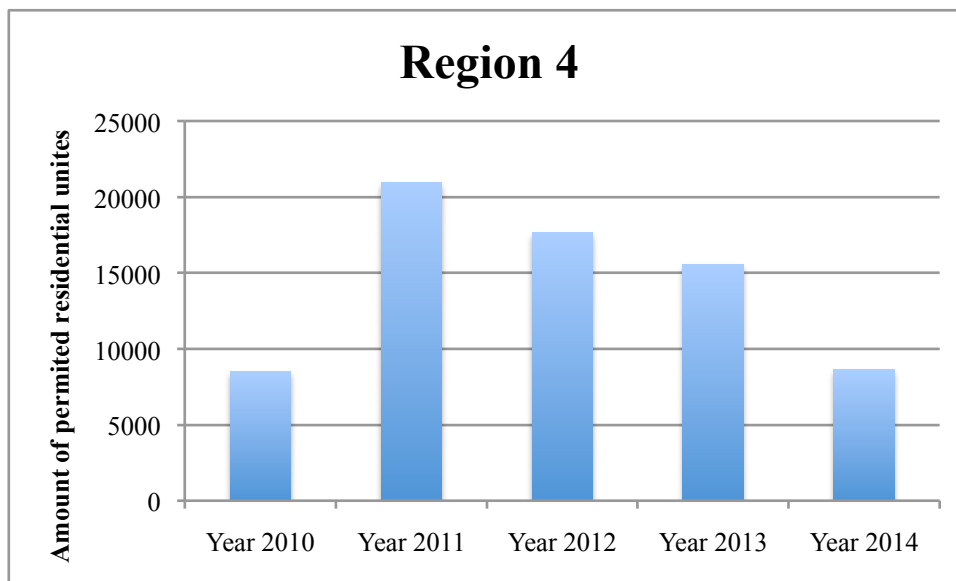


Figure 5-36: The amount of permitted residential units in Region 4 between 2010 and 2014. Based on the data of: (SCI, 2011, 2012, 2013, 2014, 2015)

The average construction density of the region is 104% with average ground coverage of 62% which shows the horizontal development of the region. However, it is hard to generalise the findings, as the region is quite heterogeneous (Arseh, 2006a). The Arseh Consultant Company (2006b) reports that some parts of the region's structure have been changed as a result of the excess construction density that the municipality has sold to developers

which has reduced the feasibility of the plans of the region. However, the Arseh Consultant Company did not elaborate on this matter in their report.

In Region 5, the Sharmand Consultant Company (2005, p. 11) reports that massive construction activities are happening as the region is new and vacant land is available. On average in 2001, 133 construction permits had been granted each month. 81% of these permits were to redevelop a site, 17% to construct buildings on vacant land and 2% were undefined (Sharmand, 2005, p. 29).

The following three figures (Figures 5-37, 5-38 and 5-39) show the number of issued construction permits, floor areas and residential units of those permits between 2010 and 2014 in Region 5.

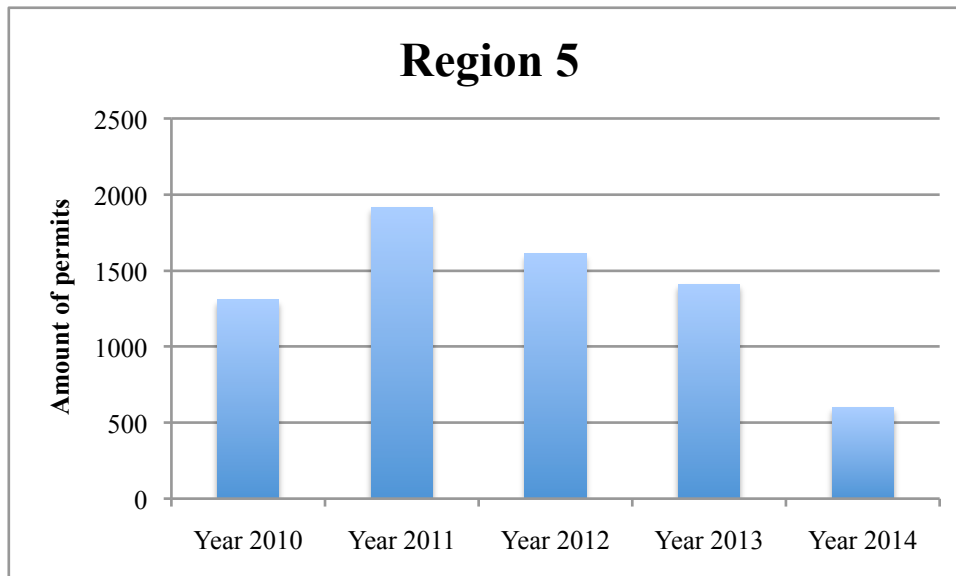


Figure 5-37: The number of permits in Region 5 between 2010 and 2014. Based on the data of: (SCI, 2011, 2012, 2013, 2014, 2015)

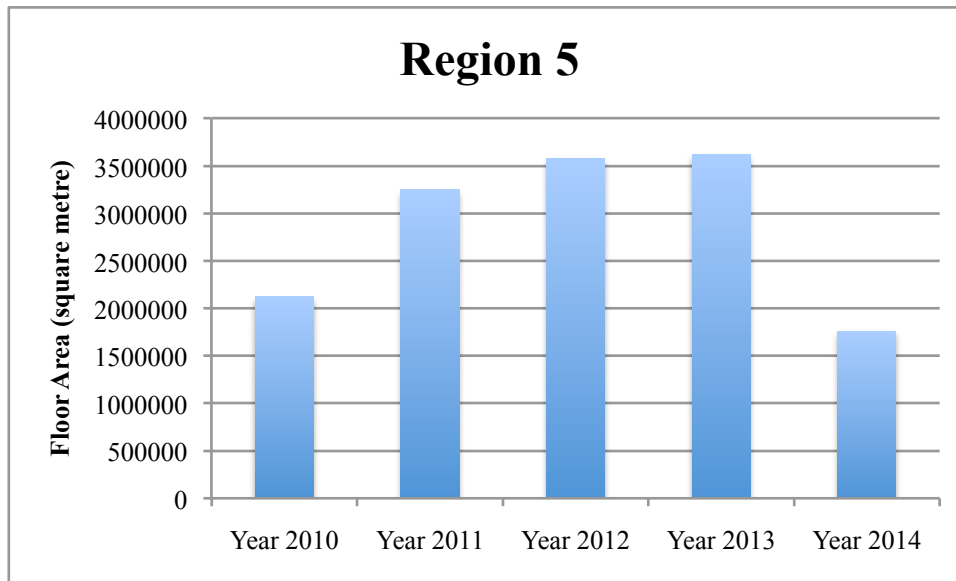


Figure 5-38: The amount of permitted floor areas in Region 5 between 2010 and 2014. Based on the data of: (SCI, 2011, 2012, 2013, 2014, 2015)

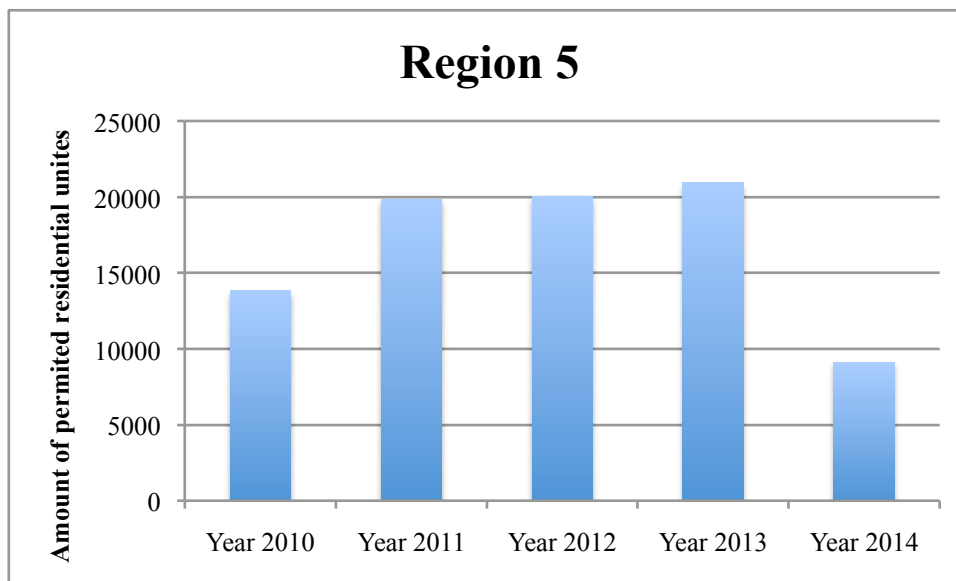


Figure 5-39: The amount of permitted residential units in Region 5 between 2010 and 2014. Based on the data of: (SCI, 2011, 2012, 2013, 2014, 2015)

Region 5's development report, prepared by the Sharmand Consultant Company (2005), has not provided any information regarding the level of construction density in the region.

These five regions have been under development pressure. This pressure reached its peak in 2011 when the number of granted permits was more than other years discussed here. The number of permits granted dropped in 2014. Later, in Chapters 6 and 7, the reasons behind this fluctuation will be explored.

Based on the reports provided by the consultant companies, and the plan of these regions, construction density limits have been compromised in most of these regions to generate income for the municipality.

5-4 CONCLUSIONS

This chapter provides information about the number of construction permits and the floor area permitted in them, population growth, housing and land prices, and CN5's decisions of 22 regions of Tehran. Based on the data, it was decided that five regions (Regions 1 to 5) would be the localities on which this research would focus to generate data.

Analysing the data regarding the number of granted housing construction permits and the amount of floor areas to be built in those permits shows that between 2010 and 2014:

- Regions 2, 4, 5, 8, 14 and 15 are the regions with the highest number of granted housing construction permits.
- Regions 1, 2, 3, 4, 5, and 22 are the regions with the largest amount of floor area granted to be built in those construction permits.

Although the number of permits in Regions 1, 3 and 22 are not as high as Regions 8, 14 and 15, each permit allows the construction of a bigger building in width and/or height by exceeding the construction density limits. As a result, Regions 1, 2, 3, 4, 5 and 22 are the regions under pressure for the development of buildings with higher construction density. Despite the fact that Region 22 is under pressure for the construction of high-rise buildings, the region will not be included in this research as it was annexed to Tehran recently and the story of its development is different.

Based on the presented information, although the population density is low in Regions 1, 2, 3, 4 and 5, these regions have been experiencing population growth in recent years. The highest population growth per year between 1996 and 2006 belonged to Regions 2 and 5 and then Regions 1, 3 and 4. Immigration from other regions of the city to these regions is the main

contributor to the population growth of these regions. Moreover, education and the income rate of residents of these five regions, with some exceptions in some parts of Regions 4, are higher than Tehran's average.

These five regions plus Region 6 are the most expensive regions of the city in which to buy or to rent a housing unit and in which to buy a piece of land:

- Region 1 and then Regions 3, 2, 6, 5 and 4 are respectively the most expensive regions in which to buy a housing unit.
- Region 3 and then Regions 1, 6, 2, 5 and 7 are the most expensive regions in which to buy a piece of land.
- Regions 1, 3 and then Region 2 are the most expensive regions in which to rent a housing unit and after that Regions 4 and 5.

These expensive regions of the city are desirable areas in which to live and for developers to invest. Although Region 6 is also expensive, it is under pressure for commercial development rather than residential development. That is why it is not included as a region of interest for this research.

Apart from the reasons already mentioned, the number of issued permits that are in contrast with the plans is also higher in these five regions. In order, Regions 1, 5, 2, 4 and 3 are the regions with the highest amount of decisions made by CN5. More than 59% of CN5's directives are for Regions 1, 2, 3, 4 and 5. This shows that construction beyond the limits of plans is higher in these five regions.

In the next two chapters, Chapter 6 and 7, the data collected from the interviews carried out with developers, planners and other interviewees in these five regions will be presented and analysed to explore answers to the research questions.

CHAPTER 6 – MUNICIPALITY FINANCING MECHANISM AND HOUSING DEVELOPERS

- Introduction
- Tehran Municipality's finance
- Housing developers
- Dynamics between the Tehran Municipality and housing developers
- Conclusions

6-1 INTRODUCTION

Using secondary evidence, Chapters 4 and 5 presented background information about the building development process in Tehran and its 22 regions. This chapter and the subsequent one will elaborate further on what happens behind the scenes with a special focus on the excess construction density charge. Both chapters will present and analyse primary data collected in Tehran by conducting semi-structured interviews with both developers and planners. Most of the interviews took place in 2014 and 2015 with a few final ones conducted in 2016.

This chapter will begin by exploring Tehran municipality's financing mechanism and then, in section 6-3, will focus on housing developers' decisions. Section 6-4, will discuss how Tehran municipality's financing mechanism has affected the decisions of housing developers and this discussion will be continued further in Chapter 7.

6-2 TEHRAN MUNICIPALITY'S FINANCE

Tehran Municipality's finance is a critical factor influencing the development of the city of Tehran. First Tehran Municipality's budget will be discussed, then, concentration will be on the excess construction density charge.

6-2-1 TEHRAN MUNICIPALITY'S BUDGET

6-2-1-1 SELF-SUFFICIENCY

As already clarified in Chapter 4, in 1983 the government at that time agreed that all of Iran's municipalities should become financially independent from central government. However, that bill also stated that the government would prepare a plan to define the ways in which the municipality would generate income; this did not happen. Interviewee P21 describes the bill in its early stages:

'It was in Hashemi-Rafsanjani's government that self-sufficiency of the municipality was approved. That bill had two parts; firstly saying that from that date the municipalities should

manage the cities without receiving any funding from the government. In the second part it says that the government, meaning The Ministry of Interior and The Ministry of Roads and Urban Development, should prepare a bill to explain and define the sources of the income for the municipalities. The first part was implemented but, unfortunately, the second part has been ignored.’ (Interview-P21, 2015)

P21 goes on to explain the reasons behind not paying attention to set sources of income for municipalities:

‘Sadly, in Iran we do not pay attention to long-term planning which does not have tangible results for people in the short-term [...].’ (Interview-P21, 2015)

Cutting the financial aid from central government to the municipalities has resulted in some municipalities becoming increasingly independent which has reduced the government’s ability to question the municipalities’ conduct. P25 observes:

‘It (self-sufficiency of the municipalities) was a necessary move but it was not enough [...]. The government could keep the municipality accountable while it still had some sort of financial dependence on the government.’ (Interview-P25, 2015)

6-2-1-2 SOURCES OF INCOME

In the absence of a well-researched and established framework to define its sources of income, the Tehran Municipality started to use a variety of ways to generate money. Income coming from the construction sector, known as development charges, has become the main source of income for the municipality. P2 provided the researcher with an unpublished report on the Tehran Municipality’s income sources and requested that the details of the people who prepared the report should be kept confidential. This report shows that in the years between 2002 and 2012 at least 75% of the Tehran Municipality’s income came from the development charges. The data of that report is summarised in the following table (Table 6-1)

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Share*	86%	83%	80%	79%	84%	86%	87%	82%	79%	80%	75%

* Share of the development charges in the total income

Table 6-1: Share of the development charges in the total income of the Tehran Municipality between 2002 and 2012. Source: (Unpublished confidential document)

P2 believes that relying on the construction industry for income raises a couple of issues:

‘The dependency on the construction sector is not right for many reasons. Firstly, the city becomes addicted to the construction sector and an addict can’t appreciate its best interest [...] and may sell anything; today it may sell a historic house for money and tomorrow it may destroy a garden. Secondly, this system creates rent (positional advantage), for example if I have good relations with the Mayor I can take advantage and ask for better deals [...].’ (Interview-P2, 2015)

The Tehran Municipality’s sources of income can be divided into the sustainable, which are reliable and predictable, and unsustainable sources. The income generated from construction activities are considered as unsustainable because the amount of construction activity in a year is not consistent and could vary a lot. In this regard P25 explains that:

‘The municipality’s budget has various income codes, they did not categorise the income sources into sustainable and unsustainable but it is possible to identify which ones are unsustainable. Based on the codes, for example, charges on the construction density, changing function and omission of parking are unsustainable sources [...] as they are not constant and might be less in one period and more in another period depending on the property market.’ (Interview-P25, 2015)

An analysis of the municipality budget for the year 2015 was prepared by one of the municipality’s budget experts who wishes to remain anonymous but used to

work at the Budget Office of the Tehran Municipality; it shows that 70% of the income of the Tehran Municipality comes from unsustainable sources. Based on this report it means that of 17,460 billion proposed credits, almost 12,000 billion, comes from unsustainable sources. The following table (Table 6-2) shows the contribution of these unsustainable sources to the budget of the Tehran Municipality in 2015.

Unsustainable income sources	Amount (billion toman)
General charges on buildings and lands	1,389
Parking omission charges	170
Fines by Commission No 100	45
Charges on the construction density and changing the function	7,700
Selling the municipal properties	2,079
Receiving loans from banks	600
Total	11,983

Table 6-2: Unsustainable sources of income of the Tehran Municipality in 2015.
Source: (Unpublished confidential document)

Sustainable sources of income for the Tehran Municipality are VAT and property tax. However, the amount generated from these sources is limited. Based on the analysis mentioned above, in the year 2015, in total 3,200 billion toman of municipal income came from VAT, which is only 18% of its total income. This source of income has been introduced since 2007–2008 as a new source for the municipality and it is hoped to expand this source in future (Interview-P25, 2015).

The income coming from property tax in year 2015 was even less than that from VAT. As P25 mentions:

‘At the moment the property tax provides only 1 to 1.5% of Tehran Municipality’s income while in other countries 40 to 50% of the municipal income would come from property tax [...].’
 (Interview-P25, 2015)

The reasons why the property tax contribution is so limited in the municipal budget are the low rate of land and property taxes compared to their market value. There is no will to increase this tax despite the stress that experts put on the importance of it being a sustainable source of income for the municipality.

The resistance of the Tehran Municipality to increase property tax and reduce the income coming from construction is elaborated by P25:

‘The municipality has got used to this system (to earn money from construction) [...] in this way it has to deal with only 20 to 50 thousand people who are involved in large construction and they are willing to give the municipality the money rather than dealing with the 3 million residents of Tehran. So, the municipality is not responsive to residents’ needs as they do not pay for the city and they do not feel they can question the municipality’s performance and say, for example, this project is not our priority.’ (Interview-P25, 2015)

6-2-1-3 THE AMOUNT OF THE MUNICIPAL BUDGET

A dramatic increase in the size of the annual budget of the Tehran Municipality has exacerbated its dependency on development charges. P2 talks about the increase in the amount of income for the Tehran Municipality:

‘When Karbaschi became the Mayor of Tehran, the Tehran Municipality’s formal budget was 50 billion toman, when he left the municipality this amount had increased to 200 billion toman. Then Alviri became the Mayor and increased the budget to 550 billion toman. After Alviri, Malek-madani proposed a budget of 1,200 billion toman. Then Ahmadinejad increased the budget to 2,300 billion toman. [...] In the first term of Ghalibaf’s mayoral period he increased the budget to 8,000 billion toman and now the budget is 17,000 billion toman. Where is the source of this income? Mostly selling the regulations!’ (Interview-P2, 2015)

The municipal budget should be approved by the city council each year. P21 believes that approving a bigger budget for the municipality by the city council is wrong:

‘Each year the city council approves a bigger budget for the municipality than the previous year, which is wrong. Approving a larger budget for the municipality means encouraging the

granting of illegal construction density, because there is no other source of generating money. This is not beneficial for the city. At the same time, when the municipality has a lot of money it proposes unimportant projects which are not a priority for the city.’ (Interview-P21, 2015)

The municipality proposing unimportant projects, as mentioned by P21, is something that concerns experts. Regarding this P2 says:

‘When the municipality has a lot of money it proposes less necessary projects, like adding a second level to the Sadr Highway.’ (Interview-P2, 2015)

6-2-2 THE CONSTRUCTION DENSITY CHARGE

6-2-2-1 THE IMPORTANCE OF THE CONSTRUCTION DENSITY CHARGE FOR THE MUNICIPALITY

The income generated from the construction density charge comes under the category of development charges. The following table (Table 6-3), has been prepared based on the report accessed at P2’s office and shows the share of the construction density charge as a percentage of the total income generated from all the development charges. This table shows that the construction density charge is an important component of the municipality’s annual budget.

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Share*	70%	73%	62%	76%	73%	75%	77%	77%	55%	45%	44%

*Share of the construction density charge

Table 6-3: Share of the construction density charge in the total development charges of Tehran Municipality’s income between 2002 and 2012. Source: (Unpublished confidential document)

Although, based on the above table, the percentage of income coming from the construction density charge has fallen since 2010; the real amount of cash income from this source has been growing each year (Interview-P2, 2015). The reason behind the decrease of the portion of the construction density charge in total development charges is because of the growth or emergence of the other

categories of development charges, such as the emergence of a charge for private swimming pools (Interview-P2, 2015). Commenting on this, P2 says:

‘The municipality’s income codes are not transparent. It is not presented in a way so that you can easily find out what’s going on. Look here, you might think that the share of the construction density charge is decreasing in recent years compared to 2009. But if you look closely you will see that other codes are growing or new codes are emerging which used to be put together [...] for example a row is added as a private swimming pool construction charge! Which is mainly for construction happening in Region 1, in the other regions they do not have a private pool!’ (Interview-P2, 2015)

6-2-2-2 THE ROOTS OF THE CONSTRUCTION DENSITY CHARGE

In Chapter 4, section 4-5-2, the roots for the emergence of the construction density charge were discussed. However, to better understand this process, this section will review the subject further by interviewing planners on the subject.

Despite the public belief that Karbaschi, Mayor of Tehran between 1989 and 1998, introduced the construction density charge, P4 (Interview-P4, 2015) says that actually the Urban Planning and Architecture High Council’s Acts²⁹ led the municipality towards generating income from construction density. In his own words P4 says:

‘After the revolution, in the early years, nothing was immune from the attack of the new system, including the construction density which used to vary in different parts of the city based on the Tehran Comprehensive Plan. In some parts of the city we even had 600% construction density but after the revolution they made it 120% everywhere. As a result, the city expanded a lot. It was in 1991 that the High Council approved an act to control the expansion of the city and also to provide a way for municipalities to become self-sufficient. Based on this act, the

²⁹ For more information regarding these Acts refer to Chapter 4, section 4-5-2

construction density of Tehran and the other five metropolises of Iran were increased by up to 25%. Municipalities were permitted to charge applicants for the extra construction density in order to generate income and also to address the horizontal expansion of the city. Unfortunately, the municipalities actions began and continued to be based on unprofessional agreements rather than on a correct framework.’ (Interview-P4, 2015)

Expanding on this point, P8 says that it was not wrong to propose a densification programme for the city but the method was problematic:

‘Cities should provide money for themselves. This was the right thing to do but the method was horrible [...] based on Farmanfarmaiean’s plan (Tehran Comprehensive Plan), Tehran had the capacity to become denser as it was not dense enough. That plan determined which areas could become denser but when they started to define the construction density they left it to the open market and to the demand! That was the problem [...].’ (Interview-P8, 2015)

6-2-2-3 CONTROLLING THE CONSTRUCTION DENSITY

From the early 1990s, the arbitrary granting of an excess of construction density to applicants started to concern experts in the field, both in the private and public sectors. As mentioned in Chapter 4, both Commission No. 5 and the Urban Planning and Architecture High Council tried to introduce directives and acts to control the granting of excessive construction density charges.

Two interviewees who were involved in the process of the production of Acts to control the granting of excessive construction density gave their opinion of the process.

REGULATIONS FOR CONSTRUCTING BUILDINGS WITH SIX STOREYS OR MORE

P4 who has a private consultant company and was very concerned about the consequences of arbitrarily granting of construction density to applicants, wrote a letter to the Mayor at the time, Karbaschi. He says:

‘I wrote a letter to Mr. Karbaschi in 1995. I told him that it is right that we need to increase the construction density limits and as a result capture the increased value for the municipality. But the way that you are doing it is not right [...] he replied to me sarcastically and said if you think you can do a better job, then come and do it. After that I made a contract to prepare a set of regulations for high-rise buildings.’ (Interview-P4, 2015)

As mentioned in Chapter 4, this set of regulations was approved in 1999 in the High Council with the title of *Regulations for Constructing Buildings with 6-storeys or more in Tehran*. However, the process of preparing these regulations put the preparation team under pressure. P4 elaborates on this:

‘We were under pressure from two sides. On the one hand we were under pressure from the High Council and the experts who were pushing us towards a lower construction density and on the other hand from the municipality who wanted to have more density. We had to find the balance between these two.’ (Interview-P4, 2015)

For a few years the regulations of this Act was the basis of action. However, because at the time of the approval the municipality deleted one of the proposed regulations which was about the physical shape of these buildings, most of the buildings constructed in this period ended up like a pyramid on top of a cube (Interview-P4, 2015). This final shape was considered as being a symbol of Freemasonry by Khaled Mashaal on his visit to Tehran and resulted in halting the implementation of the regulations by the municipality (Interview-P4, 2015).

PRICING CONSTRUCTION DENSITY CHARGE

The need for setting a method of deciding on the amount of the charge resulted in the preparation of a mathematical formula. P17 who is a Tehran Municipality employee and made this formula explains:

‘Right after the deposition of Mr. Karbaschi, in one of the deputies’ meetings I said that it is necessary to have a formula to charge applicants for the excess construction density. As a result they assigned me to prepare this formula. At that time I was only 23 years old [...]. The first formula was: $A=2(D+P)(1+T)$ and was approved at the 30th meeting of the First Tehran City Council. In this formula:

A is the amount of charge per square metre

D is the material of the building structure (concrete structure: 25,000 toman, metal structure: 20,000 toman)

P is the transaction value of the property based on the Ministry of Economic Affairs and Finance’s booklet

T is the price adjustment factor. The whole city was divided into five areas. For example, T for Regions 1, 3 and 6 is 1.25, for Regions 7, 12 and 13 T is 0.5

[...] this was the first formula and became the basis of action for a while but it had a couple of errors. The first error was the T factor, because, in reality, regions are quite different and you can’t set the same T factor for Regions 1, 2 and 3, so the amount of T should not be the same. The second error was factor D: What is the difference between concrete structures and metal structures? We had to keep D fixed. The third error was the inversion that happened because of $1+T$. Living in a dead-end street, 12 metres wide is more desirable than living in an 18-metre wide street which has a lot of traffic and pollution. Based on this formula the price of building on the 18-metre

wide street would become more expensive compared to that on the 12-metre wide dead-end street.’ (Interview-P17, 2015)

To correct the errors of the first formula, a second formula was proposed. This second formula was: $A=0.8[2(D+P)(1+T)]$. In the formula 0.8 addresses the rate of inflation and D is fixed for all types of structures. The T factor in this version varied in each region but was fixed in one region. However, even in a region the property market and the quality of the built environment could vary a lot (Interview-P17, 2015). P17 gives an example:

‘For example, the T factor for Region 2 was set at 2.5 but Region 2 is very big. Javid-Abad, which is behind Sharif University, is a hub for drug dealers in Region 2 whereas Kooy-e Faraz in Saadat-Abad (in the north of Region 2) was unbuilt at the time but was still in Region 2 [...] and, based on the price booklet of the ministry which was set in 1961 [...], the price of a property in Javid-Abad was higher than Kooy-e Faraz as at that time Kooy-e Faraz was like a desert [...]. But when you look you will see now the quality of Kooy-e Faraz which is on the side of the mountains is better than Javid-Abad. So, why is the construction density charge more in Javid-Abad?’ (Interview-P17, 2015)

To address the deficiencies of the second version of the formula, the final version which is: $A=(7D+P)T$ was approved by the City Council in 2004. In this formula T factors varied and were determined for different areas in the regions. As a consequence of using this formula the amount to be paid for construction density is very high in expensive areas of the city (Interview-P17, 2015). P17 explains:

‘As a result of this formula, the construction density in northern areas got very expensive and in the southern areas got very cheap. This was because we wanted to move the wealth in the city towards the south but the formula was only used for two months. At that time, Ahmadinejad was the Mayor of Tehran. Stakeholders and beneficiaries put him under pressure to

cancel the directive! So, Ahmadinejad cancelled it!' (Interview-P17, 2015)

Although the formula was halted for a while, it came back in use later and was developed further at the Office for Regulations, Supervision and Permit Issuance of the Tehran Municipality (Interview-P17, 2015). All attempts to arrange an interview with the manager of this office, or one of his colleagues, to get more updates on the development of this formula and its effect on the construction process were declined.

However, as mentioned by P17 the stakeholders and beneficiaries who are mainly investors in the construction sector could affect the use of this formula and there was a resistance towards disciplining the process and the pricing of the construction density bonus.

6-3 HOUSING DEVELOPERS

Developers play a key role in the production process of new developments. However, information about their nature and their decision-making processes are very limited. As a result, in-depth semi-structured interviews were carried out to understand the housing developers' characteristics and their decisions. This section presents the results of the interviews conducted.

The first part of this section (Section 6-3-1) looks at the characteristics of housing developers in Tehran and tries to answer the following questions:

- ☐ Who are the housing developers?
- ☐ What is their background?
- ☐ How long have they been in business?
- ☐ How do they work and finance the construction process?

The second part of this section (Section 6-3-2) elaborates on the decision-making process of housing developers. It looks at:

- ☐ The locations in which they prefer to work
- ☐ Whether they prefer to move around or stay in one region

- ☐ When they get involved in construction activity
- ☐ For whom do they build (who is the potential buyer)
- ☐ What kind of building do they prefer to produce
- ☐ How the extra construction density has been addressed in their decisions.

It should be mentioned that the data presented in this section does not represent the characteristics and the decision-making mechanism for all of the developers working in Tehran, as this section is prepared based on the overview of a specific number of developers.

6-3-1 THE CHARACTERISTICS OF DEVELOPERS

Table 6-4 below summarises the nature of work and the length of time that each of the interviewed developers has been active in the construction sector.

Developers' code	Individual developer or small company	Large development company	Length of time in the business
D1	√	—	Unknown
D2	√	—	Unknown
D3	√	—	Unknown
D4	√	—	Unknown
D5	√	√	21 years
D6	√	—	2 years
D7	√	—	4 years
D8	—	√	Unknown
D9	—	√	Unknown
D10	√	—	24 years
D11	√	—	4–5 years
D12	√	√	9 years
D13	√	—	25 years
D14	√	√	23 years
D15	—	√	Unknown

Table 6-4: Interviewed developers

6-3-1-1 WHO ARE THE HOUSING DEVELOPERS?

As mentioned in Chapter 4, a developer in Tehran can be an individual developer (or group of individuals working in partnership), a small registered company or a large company. Research visits to Tehran in 2014, 2015 and 2016 confirm this categorisation of developers. In this research, individual

developers and small registered companies are classed in the same category, as their decisions and the way they work are similar.

All of the interviewed people confirmed that most of the housing developers in Tehran are individual developers and small companies who have access to capital to carry out the construction activity. As well as these individuals and small registered developers, there are large companies who construct large-scale residential developments, mostly high-rise buildings and tower blocks. The government's contribution in producing residential projects inside the city boundary of Tehran is very limited. All of the constructions for the Mehr Housing Plan in which the government does cooperate happen in the outskirts of Tehran such as Parand, Pardis and Roud-e Hen (Interview-D12, 2015).

Without having official statistics, it is impossible to define the precise ratio of individual developers in housing construction. However, all the interviewees agreed that more than 70% of housing developers in Tehran are individual developers or small companies. For example, D12 says:

‘I think 80% are individual developers. The government is mostly responsible for the Mehr Housing Plan which is taking place out of Tehran's official boundary [...] only 20% are big companies with banks behind them. These companies are private companies but they are under the supervision of banks.’
(Interview-D12, 2015)

However, D12 mentions that the construction of commercial developments is mostly in the hands of large private development companies that have the backing of banks as the construction of a commercial building is beyond the financial ability of individual developers (Interview-D12, 2015).

One of the reasons mentioned by interviewees regarding why individual developers are the main participants in housing construction in Tehran is the size of land parcels. As the land parcels are mostly small, a limited number of floors and housing units can be built, based on the construction regulations. This kind of construction is not big enough to make it profitable for a large

developer to get involved in the construction. D11 says that in regions in which he has been active:

‘[...] the texture of these neighbourhoods is such that it is not suitable for mass development, land parcels are mostly between 200 and 300 m² or maximum 400 m² which is not large enough for the construction of a big compound. [...] Mostly they suit an individual developer’s who have sufficient resources to build up the land.’ (Interview-D11, 2015)

D10’s overview is the same. He says:

‘[...] there is not much mass development happening inside the city boundaries [...] although there might be a few investors who build luxury high-rise buildings, the common practice is the construction of 10, 20, 30 or maximum 40 units which can be done by individual developers. It is not like what happens in other countries where large companies are producing housing.’ (Interview-D10, 2015)

In confirming D10’s overview, D13 (Interview-D13, 2015) who has worked in Regions 3, 4 and 5 says that his biggest project had 20 housing units and his smallest project had eight units. Also D14 (Interview-D14, 2015) says that he builds approximately 30 to 40 units of housing per year. This means that the constructions are mostly small in size.

This small-scale production is in contrast with the quantity of housing that a large developer produces each year. D8 who works at a large development company called Sherkat-e Sarmayehgozari-ye Maskan says:

‘In the years that the Mehr Housing Plan was on the table our company would produce approximately 5,000 housing units each year. And without the Mehr Housing Plan, we produce 3,500 to 4,000 units each year.’ (Interview-D8, 2015)

An individual developer is not required to register a company or have a specific speciality to initiate a construction project; as previously stated, anyone with

enough capital can enter the sector (Interview-D14, 2015). However, a large development company needs to have at least two qualified engineers on its board of directors (Interview-D14, 2015).

An individual developer is usually also the investor in the project while a large-property development company has external investors. Most of the large-developers are connected to financially-powerful institutions like banks or governmental institutions (Interview-D5, 2014; Interview-D11, 2015; Interview-D12, 2015). P22 elaborates on the affiliation of these companies with banks and governmental institutions:

‘The majority of these private companies are in some way connected to the state. Mostly they are related to the Revolutionary Guards³⁰ and foundations like Fifteen of Khordad Foundation who owns many of the tower blocks located in the north [...] or social security organisations and pension organisations [...] also all the banks are involved in real-estate, it is almost impossible for small companies and individual developers to get involved in the production of tower-blocks.’
(Interview-P22, 2015)

For example, in Sherkat-e sarmayeh gozari-ye Maskan, Housing Bank (Bank-e Maskan) holds 51% of the company’s shares and is in fact the investor for development projects of the company (Interview-D8, 2015).

These private but large companies are mostly involved with the construction of luxury high-rise building in the north of the city.

6-3-1-2 THE DEVELOPERS’ BACKGROUND

The interviewed developers’ educational and occupational backgrounds are diverse. For example, D6 is currently a university lecturer who works as a part-time developer while D10 used to be a simple manual labourer in construction who gradually became a developer. Some of the interviewed developers are still active in their previous occupation, for example D1 is an engineer in a company while working in housing construction as his second job. Some others have left

³⁰ The full name of this organisation is Army of the Guardians of the Islamic Revolution

their previous occupation and now are concentrating only on the housing construction sector.

There is no educational requirement to become an individual developer. The only requirement to enter to the residential construction sector is to have enough available capital. D14 observes:

‘In Iran, anybody who has the money can build a [residential] building; there is nowhere else in the world like this. If you have the money you can do it, you do not need to be an engineer, nor have a registered company.’ (Interview-D14, 2015)

The interviewed developers had differing reasons for entering the housing construction industry. Some started to work as a developer by redeveloping their own family home which was old and had the potential to be redeveloped into multi-storey housing; the profit from this project kept them in the business. Others have been introduced to the industry by friends and colleagues or their previous job was somehow related to the construction industry. Another group includes those developers who were not content with their previous occupation or field of education and therefore were attracted to the housing construction industry.

One of the interviewees in response to why she was attracted to the housing construction industry says:

‘After graduation, I was wondering what I could do, I didn’t want to become an employee. My father said that he could put in some money to start this business (housing construction) [...] I could not have lived the life I wanted to if I had become an employee.’ (Interview-D7, 2015)

This quote also shows the desire to be self-employed rather than an employee, which was noticed in other interviews as well.

D14 explains that at certain times housing construction is very profitable, for example at the time when selling extra construction density was very common and easy to get, people from other fields were attracted to housing construction

(Interview-D14, 2015). He says that doctors, dentists, merchants, traders and fast food restaurant owners are among those who joined the industry to benefit from the situation and make some profit.

6-3-1-3 THE LENGTH OF TIME IN THE INDUSTRY

The length of time that the interviewed developers have been active in the housing construction industry as developers varies from only six months, e.g. D12, to 25 years, e.g. D13. It is interesting that there was no one among the interviewees who has been active in the business for more than 25 years which is approximately concurrent with the time that the extra construction density has been available. As mentioned in Chapter 4, housing construction started to grow fast in the 1990s.

D5 who has been in the business since 1995 says that in Tehran there are many developers who start to work in housing construction, grow quickly for a few years and, after collecting some benefits, they then stop their activity (Interview-D5, 2014). Interestingly, among the interviewed developers all, except D12 who has been working in the construction industry for nine years, have been in the industry for more than 20 years or for less than four years. This confirms D5's observation

6-3-1-4 HOW DOES A DEVELOPER WORK?

A developer would begin by finding a suitable plot of land which potentially ensures a secure financial return. After getting the construction permit, commissioning the experts required and providing the finance, the construction process would begin. The responsibility of the developers will be over at the end of the construction period when units are sold. P2 comments:

‘After the construction finishes, the developers have no after sale responsibility for the maintenance of the buildings. This affects the quality of the production as the responsibility of the developer is over after the construction.’ (Interview-P2, 2014)

To carry out the construction, the individual developers should acquire a certified architect and a certified civil engineer to prepare and sign the plans

which should be submitted to the municipality in order to get the construction permit. After acquiring permission, one or more contractors are needed to carry out the construction work. Besides the contractors, four engineers including one architect, one civil engineer, one electric engineer and one mechanical engineer are required to supervise the construction process (Interview-D7, 2016).

A large development company normally has all the required specialists in-house or it employs externally. For example, Sherkat-e Sarmayehgozari-ye Maskan has its own team of architects, engineers, contractors and even a selling team in-house (Interview-D8, 2015).

Financing for a housing construction project depends on the size of the development, the required funding of the construction and the financial ability of the developer. The main finance provider of a project could be either the individual developer or a partnership that he/she forms with other individuals or companies. In building tower blocks and big projects, a team of financiers can be created: one might provide the land, one the main capital with others providing the rest of the capital (Interview-D15, 2015). In very rare cases, one person has been able to provide all the necessary funding for the construction of a high-rise building project (Interview-D15, 2015).

The most common way of funding construction is going into partnership with the landowner. Almost all of the interviewed developers have used this method in their work. The price of the land is a very high proportion of the development's total expenditure. This encourages the developers to enter into a partnership with the landowner to reduce the costs. Depending on the ratio of the land price to the total expenditure, the developer and the landowner share the profit. D7 says:

‘Mostly 60% of the built area will be for the landowner and 40% for the developer [...] if the land is in an expensive area the landowner may even ask you for a pre-payment too.’
(Interview-D7, 2016)

Besides forming a partnership to finance a construction project, another common practice is to pre-sell housing units before or during the process of

construction. Normally a few units will be sold to future occupiers of the flats or to investors who wish to sell off the flats at a higher price after the project is finished. In some cases the developer may pre-sell most of the units to fund a new project. Elaborating on such a situation, D12 talks about a 21-storey tower in Niyavaran, Region 1, where he was the construction manager:

‘When I was working at Borj-avarán Company all the 68 flats of the tower were pre-sold immediately after the project began. The company bought other land with the money raised by pre-selling those flats. This caused a severe delay in the completion of that tower block, as the money was not spent on it but was invested in another project.’ (Interview-D12, 2015)

Another common method of financing a housing project is by borrowing money from banks. The amount of the loan depends on the size of the project and the number of flats in that project. Therefore, the developers of small projects are not interested in bank loans as the amount of the loan is insignificant compared to the expenditure and the interest rate is high. Describing this, D7 says:

‘We do not use bank loans as banks’ interest fees are high [...] and the amount they give as loan is not enough. For example, they give 20 to 30 million toman for each flat, which is almost nothing when you are constructing a project. For a five-storey building with five flats you will receive approximately 100 million toman which will only cover a week of your expenditure during the construction period.’ (Interview-D7, 2016)

However, if the loan is for a big project, for example with 100 units, the amount of the loan could be considerable (Interview-D1, 2014). Moreover, large development companies can negotiate with banks and financial institutions to get loans with better conditions or they might even become partners with them in projects. For example, Borj-avarán Company, which is backed by Tasse-eh Credit Institute in one of its projects, got a 100-billion toman loan from Sina Bank by depositing the land’s deed as security (Interview-D12, 2015).

6-3-2 THE DEVELOPERS' DECISIONS

This section looks at reasons behind the decisions that developers make on where, when and what to build. Then, at the end, it explores the possible role of excess construction density on the decision-making process of the interviewed developers; developers try to make decisions that increase their profit by reducing risk and increasing returns.

6-3-2-1 LOCATION

The map below (Figure 6-1) shows where the interviewed developers were working at the time of the interview or used to work in the past. They all have justifications for the locations where they work or where they wish to work.

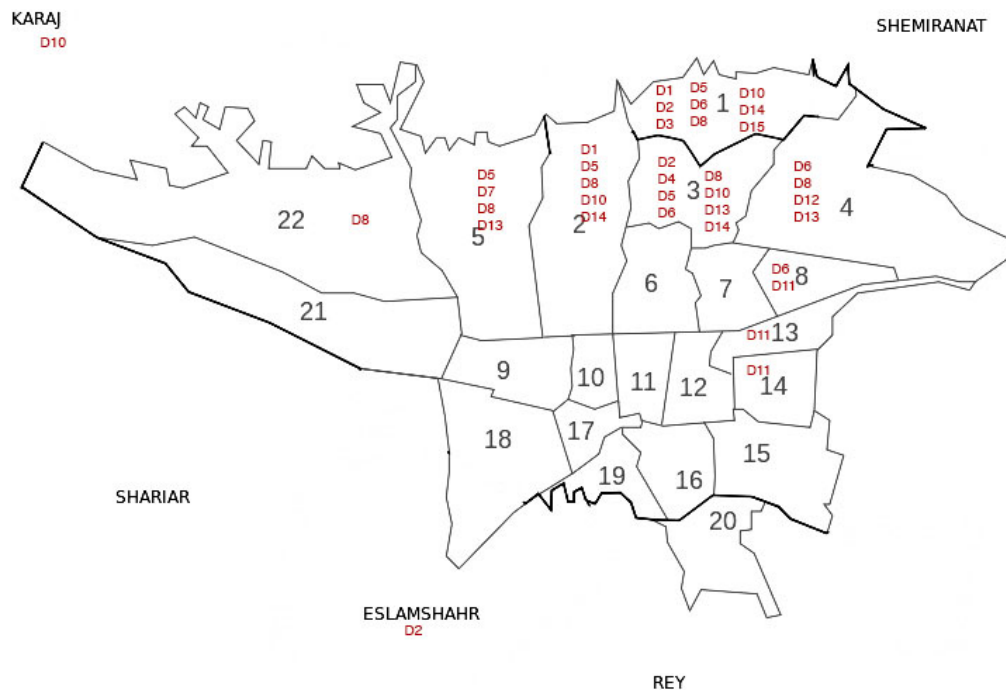


Figure 6-1: Mapping locations where the interviewed developers are working or used to work

The prime agenda of housing developers in Tehran is to maximise their profit margin. The location of the construction has a direct impact on that margin for a variety of reasons. The interviewed developers mention that the following reasons have affected their decision when selecting the location of the site they choose to develop or re-develop:

- Property market activity in that area (house price and a fast sell)
- Their available funds
- The availability of land
- Demand
- Knowledge of the area, its municipality and the estate agents.

For the interviewed developers, the performance of the property market of an area plays an important part in their decisions. They mainly consider two aspects of the activity of the property market in an area: the selling price of a housing unit and the length of time it takes to sell a housing unit.

The interviewed developers prefer to work in areas where the housing price is high. In this regard D6 says:

‘I think that if someone has had the experience of developing, even if only once, they would know that the economic turnover would be more in areas where the house price is higher.’
(Interview-D6, 2014)

Although the selling price of housing units is important for them, they must bear in mind that, in areas where housing units are too expensive (e.g. some parts of Region 1) more time might be needed to sell the flats. Depending on the developer’s risk management strategies, he/she might decide to work in an area where he/she can sell as expensively as possible and/or as soon as possible.

For example, D14 mostly works in Region 2 but has also had experience of working in Regions 1 and 3. He prefers to work in Region 2 because of the quick sale of properties in this region. He says:

‘[...] it (property in Region 2) is like cash money, the turnover in this region and also in Region 5 is very high in comparison with any of the other regions. The maximum waiting time to sell a property in these regions is only one month while in other regions it takes one or two seasons to sell what you have produced.’ (Interview-D14, 2015)

D14 believes that, compared to Regions 2 and 5, it is more difficult to sell a property in Region 1, as the supply there is more than the demand and the flats are too big and too expensive which makes them more difficult to sell (Interview-D14, 2015). However, there are certain developers (e.g. D15) who prefer to wait longer to sell but develop in Region 1. D15 explains:

‘Because we have our brand and buyers know us, we are sure that we can sell all of the units. It might take time sometimes but it is worth it. We have long-term plans and we can afford to wait for the right buyer.’ (Interview-D15, 2015)

For this kind of developer their reputation for working in a given area with a specific style for a particular market targets is quite important.

Although the property market performance of an area is crucial for developers in deciding where to work, the funds available limits their decisions. Land price and other construction costs could make construction activity very expensive. In this regard D7 who works in Region 5 says:

‘Here (in Region 5) prices are such that I can afford to construct; if I want to work in Regions 1 and 2 expenses, for example the price of land, are a lot more. In Region 5 costs are more acceptable but the profit is not as much as in expensive areas.’ (Interview-D7, 2015)

D11 who is active in Regions 8, 13 and 14 says that he works in these areas mainly because he can meet the expenses there. However, he prefers to build in the northern regions where he finds it challenging to work. He says:

‘Usually north of the city is better but the costs are higher there and consequently making partnership with the landowners is more difficult. The prices of flats are normally in the same range in the areas where I work but, in the north, prices can be different from one building to another based on the structure of the building or the brand of the developer [...] for example, if you say that this building is built by x, this can affect the price of the units. This makes it difficult to form partnerships with the

landowner. It is definitely better to work in the north but it needs a big capital outlay and a strong team.' (Interview-D11, 2015)

D11's account shows that competition between developers to establish their reputation in expensive areas is high. Moreover, the landowners of those specific areas are selective in choosing developers. These landowners are looking for developers who are perceived as unique as this could facilitate the selling process.

The availability of land for development or a redevelopment opportunity is another factor which affects the decisions of developers on where to work. There are some areas which are not prime locations but, for various reasons, such as the increase in construction density, they have become interesting locations for some developers.

For example, Hakimiyeh neighbourhood in Region 4 is not an expensive neighbourhood but is interesting for developers especially developers who are new in the business. D12 builds in this neighbourhood because there are many landowners in the area who are willing to redevelop their land as a result of the change in construction density limits in the area. At the same time there are some limited developers active in the area (Interview-D12, 2015).

Besides the reasons mentioned above, interviewed developers said that knowledge of an area, its municipality and the estate agents also affects their decisions as to where to work. For example, D12 who used to work in a big construction company decided to form his own business and had worked as an individual developer for six months before the date of the interview. He started his first project in Region 4, Hakimiyeh neighbourhood because his friends were working in that area and they introduced him to potentially interested landowners (Interview-D12, 2015).

The most important reasons that most of the interviewees mention regarding why they decide to work in a particular area are being, or becoming, familiar with the municipal bureaucracy of a region, having connections with the employees of that municipal region, familiarity with the area and knowing the estate agents. In this regard, D14 who works mostly in Region 2 says:

‘[...] having a good relationship with the municipality, knowing and trusting the municipal employees – all have a major contribution in the progress of your application. Also land parcels here are not such that everyone can invest in them easily; some of them have objections which need to be resolved, some of them have problems which make it difficult to get the construction permission or have issues with neighbours and neighbourhoods. When they know you and trust you in the municipality they take it easier on you, they accept your cheque as they know it will be cashed with no problem, or when you say I will bring the plan before a certain date they know you will or when you say I will correct the position of the windows in the plan they can trust you [...].’ (Interview-D14, 2015)

D2, D7 and D13 find connections with estate agents very important in working in an area as these estate agents connect the landowners and developers in the neighbourhood to form a partnership (Interview-D2, 2014; Interview-D7, 2016; Interview-D13, 2015). D7 says:

‘They (landowners) approach estate agents and express their interest in redevelopment of their plot, then the estate agent will contact the developers that they know well and with whom they are comfortable, to recommend them. Normally estate agents do not recommend a developer that they do not know.’ (Interview-D7, 2016)

As mentioned above, a combination of various reasons shape the decision of the developers in where they decide to work. However, as D1 (Interview-D1, 2014) says, the existence of infrastructures like public transportation and the proximity to an underground station is not an important factor for developers in deciding where to develop as they target car owners.

6-3-2-2 MOVING OR STAYING IN A REGION

Most of the interviewees who are individual developers prefer to stay in a neighbourhood rather than moving to different neighbourhoods. This is mainly

because of the connections they have made in that region with the municipality, estate agents and locals and also the knowledge they have gained in that locality through their work. However, large development companies and high-rise builders are more likely to move around the profitable regions and work in different areas of the city if they find an opportunity there.

In this regard, the interview with D5 is worth mentioning:

‘Small developers who build, say, five-storey buildings with, for example, 10 flats, normally stay in a neighbourhood. For example, a person is working in Gisha (a southern part of Region 2) for 10 years or working in Narmak (partly in Region 4 and partly in Region 8) for 10 years; they stay in those areas [...] they know good estate agents, who can sell their flats for a good market price or find them good and cheap land, they also know a trustworthy notary office in the area who charges them less when they sell a property and want to transfer the ownership to the buyer [...]. These developers stay in a neighbourhood.

But tower block builders may stay in a region or may move across the regions. For them finding a piece of land on which they can build a tower block or a big building is very important, so they don't restrict themselves to one neighbourhood. Some of them stay in a region, for example, Region 2, and become high-rise builders only in that region which is a big region with almost 2 million inhabitants. The other type of high-rise builder moves around Regions 1, 2, 3 or 4. These are big investment companies usually with strong connections and power [...]' (Interview-D5, 2014)

In confirming what D5 says regarding big investment companies, D8 says that the large development company that she works in, Sherkat-e Sarmayeh gozariye Maskan, is active in many parts of the city and even the country (Interview-D8, 2015).

Although small developers prefer to stay in an area because of the reasons already mentioned, they might change the location of their activities because of economic justifications (Interview-D6, 2014). As we see in Figure 6-1, most of the individual developers who have been in the business for a while have, at some point, changed the neighbourhood or the region in which they were working. However, when they move to another region they will then stay there for a while (Interview-D2, 2014). Although this is common practice among interviewed individual developers, there are some developers, such as D10, who says that he works in different parts of the city at the same time (Interview-D10, 2015).

6-3-2-3 DECIDING WHEN TO BUILD

As housing construction is a business activity for the developers, they do not get involved in the production of housing unless they are confident that they can make enough profit. The performance of the property market, the costs of construction, the banks' interest rates and the political stability of the country play a crucial role in a developer's decision whether it is a good time to invest in housing or not. In this context D6 says:

'[...] We do a simple math; we calculate our total costs and returns to find out the size of our profit. Then we compare this profit to the banks' interest rate. If the construction generates more profit for us than putting our money in the banks, then we do it.' (Interview-D6, 2014)

At the time of the interview, D7 preferred not to start a new project because the property market was stagnant and people who were buying for investment did not invest in the property market at that time. She says:

'It (housing construction) used to have 40% profit for us, but now, with the slow market and reduction of prices, it only gives 30% profit which is almost equal to the bank interest! So, I prefer to do nothing and put my money in the bank and get the interest.' (Interview-D7, 2015)

D12 has the same view. He says:

‘Why would I get involved in a project and deal with the municipality, labourers, neighbours, contractors and engineers if the profit is not good enough? The profit of construction should be more than the bank interest. This means if the bank interest rate is 23%, construction should have at least 30% profit. Otherwise we won’t do it. [...]’ (Interview-D12, 2015)

The political stability of the country also affects the investment in housing construction. When the country is not in a stable condition, investment in landed properties will be reduced. D12 (Interview-D12, 2015) mentions that the result of Iran’s deal with P5+1, which was not reached at the time of the interview, would be very important for him in deciding whether to invest in construction or not. D8, in this regard, says:

‘When Iran is not politically and economically stable, capital goes to small and movable things; such as foreign currencies, gold coins and cars, rather than property. In recent years, our international relations with the West and also the attractiveness of the markets in our neighbouring countries like Turkey and UAE and even Spain and Cyprus, attracted many investors to invest there rather than investing in Iran [...]’ (Interview-D8, 2015)

With regard to Iran’s international relations and investment in housing, D10 comments:

‘If our nuclear energy issues (with the West) are resolved, we will certainly have more stability. And what will happen? The Dollar exchange rate will be reduced [...] and people, instead of investing in purchasing luxury cars to sell at a profit when they are shipped here [...] will probably invest more in housing.’ (Interview-D10, 2015)

6-3-2-4 WHAT TO BUILD

The final physical shape and dimensions of flats, number of units in one building and the amount of communal space of a residential building are determined based on what is profitable for the developer, what is in demand and what is practical. To a smaller extent, personal taste and the background of the developers are also influential in the final product.

For the developers, it is important to make as much use of the space as possible. In Tehran properties are priced and sold based on the price per square metre. As a result, it is important to increase the saleable space. D5 gives an example:

‘If a developer wants to construct a seven-storey building in 120 m² of a 200m² land, without considering the communal spaces, 820m² can be built. How much of this 820m² can be saleable? One architect might design it in a way to make 500m² of saleable space the other one might make it to 550–600 m². Each metre of this extra 50 or 100 m² is profit for the developer. As a result, he puts pressure on the designer to achieve what is profitable for him [...].’ (Interview-D5, 2014)

Although D5 thinks that the developer puts pressure on the designer to maximise the saleable space, D8 says:

‘This is not pressure. We can’t say that a developer puts pressure on the designer; this is an interactive and communicative process. It is the investor’s right to optimise the project and an architect should provide the best possible service for the client.’ (Interview-D8, 2015)

Although increasing the saleable area is crucial for the developers’ financial gain, accommodating buyers’ demands is mentioned as another important factor by the interviewed developers in determining what to build. Depending on the region and the neighbourhood where the building is located, buyers’ and users’ requirements vary which needs to be taken into consideration. In high-end northern neighbourhoods, luxury buildings with swimming pools and extra-

allocated parking are in demand (Interview-D10, 2015) while in southern and poor areas flats are smaller with fewer facilities (Interview-D11, 2015). D10 says:

‘The kind of building that you will build depends on its location. If it is in a stylish area then you will construct a luxury building because it has the potential [...] to be sold, for example, for 30 million toman per square metre. You need to provide three or four parking places for each flat, spacious communal areas, a spa and a swimming pool, reception area, a space for a porter and [...].’ (Interview-D10, 2015)

In the prosperous northern areas where the property market is buoyant, developers compete against each other to attract potential buyers. As a result, the developers try to present themselves as the best or make a brand for themselves in order to attract the attention of the targeted buyers. D5 says:

‘[...] as there are many vacant flats in the northern areas, the developers try innovative ways. For example, they may spend a lot to have an outstanding and expensive façade [...] made by travertine stone, the use of high-quality windows [...] they also work a lot on the plan of flats to have a very efficient layout [...].’ (Interview-D5, 2014)

Besides increasing the saleable space and satisfying the demand, consideration of the construction regulations will affect the final outcome of the development. There are two ways that construction regulations could affect the decision of developers. Firstly, construction regulations set specific obligations which should be addressed to get the construction permit. For example, the area of the land and the width of the street impose restrictions on the construction density of a development. Based on Tehran’s plan in the areas where land parcels are smaller than a specific amount or the width of a street is narrower than a set width, it is not possible to build tall buildings (interview-D13, 2015). In some cases these regulations have forced a large company to change its focus and consider the construction of smaller-scale buildings. For example, although Sherkat-e Sarmayeh Gozariye Maskan is a large development

company, at the moment they are working on smaller developments as access to large lands is limited in inner Tehran (Interview-D8, 2015).

Secondly, by considering the construction regulations developers try to avoid extra expenditure. Although building to maximise the saleable space is a priority for the developers, at the same time they need to be careful about the construction regulations which might compromise their profit. D12's example clarifies this point:

'[...] we made a contract with the landowner to build a six-storey building with three flats on each floor. We started the process of getting the construction permission and they (the municipality) told us that in order to build three flats in six floors we need a second staircase. This is because of fire regulations. This is a new regulation. [...] we did a calculation and we realised if we put the second staircase we would lose 140m² which means 600 million toman less profit. So, we decided to build two flats, in each of six floors. The area of each flat becomes 125m² which is bigger and harder to sell but still better than losing 140m².' (Interview-D12, 2015)

D12 also explains that if the total area of the building is more than 2,000 m² then the developer needs to provide extra technical plans endorsed by the relevant authorities and that the contractor for the construction should be a registered company rather than an individual builder. These requirements cost both money and time for the developers and they will not decide to do this unless his/her calculations support the profitability of such a decision (Interview-D12, 2015).

D8 gives another example of why they might decide not to build the maximum amount they can build. She says that based on regulations if a development has more than 400 housing units they are required to provide an educational centre as well, which does not have added value for them. As a result, instead of building the maximum amount, which in one of her projects was 420, she decided to build 398 flats (Interview-D8, 2015).

6-3-2-5 EXTRA DENSITY AND THE DEVELOPERS' DECISIONS

The construction density limit of a land parcel contributes to the decision of developers as to whether or not to build on that land. As mentioned before, economic justifications play a major role in developers' decisions. Due to rising land prices in Tehran, if the construction density of a land is less than a certain amount, which would differ in each case, it is not always economically justifiable for the developer to build on that land.

D6 elaborates on the importance of the construction density limit on his decision:

'Normally, the maximum construction density of land is one of the very important parameters that you should consider when you want to build either for personal use or for business. Let me give an example. It has been two to three years since we have been thinking about redeveloping my father's house which is now very old. But the construction density that they give to it is 240%. When we did the maths we saw that it was not worth investing in redeveloping it [...] because if we deposit our money in the bank we could get 20% profit which is the same as the profit that we could get by redeveloping that land. This is because they gave us a maximum construction density of 240% which means four floors which does not have an economic justification. Because the land price will be divided into four, this makes each flat more expensive than the area's average price and it will be hard to sell them [...].' (Interview-D6, 2014)

Most of the interviewed developers perceive extra construction density as a positive factor in their work and for the final users. However, they think increasing construction density without planning would have a negative effect for the city. D10 says:

'It is an advantage for me to build six storeys instead of four, for us as developers we could build with less costs if we build

buildings with more floors [...] because the land cost is the same and we only have to pay the municipality for the extra construction density and pay for the construction of those extra floors [...]. But if we can't get extra construction density the housing will become more expensive [...] when I build less, the final price for each flat will be higher and this causes inflation. In my opinion if they continue selling extra construction density it will be a win-win situation for all. The municipality benefits from it, the developer benefits and people could buy homes more cheaply.' (Interview-D10, 2015)

He continues:

'Selling construction density has been good for us and the municipality but not very desirable for the city as the city is getting more and more busy and polluted.' (Interview-D10, 2015)

D11 has the same attitude toward extra construction density:

'Selling construction density has a positive effect on our work. It has created inflation but for us it was good and financially justifiable but I am not sure if it has been good for the city.' (Interview-D11, 2015)

As mentioned, developers mostly try to get as much extra construction density as possible. They try to maximise their profit by using each extra square metre that they can to construct (Interview-D1, 2014). For example, D13 says that he tries to increase the storeys of the buildings that he constructs from five floors to six or seven (Interview-D13, 2015). However, the arbitrary granting of extra construction density has been reduced recently as a result of the approval of Tehran's new plan. Reacting to this, D10 says:

'At the moment, the selling of extra construction density is not as it was before. Until two years ago (2013) they used to sell construction density massively. But now, regulations are taken more seriously by the municipality. It is not like before when

they would give extra construction density even to a plot located in six-metre-wide passages [...].’ (Interview-D10, 2015)

The reduction in the granting of extra construction density has discouraged some developers and landowners in getting involved in the construction industry. D11 says:

‘It is more than a year since selling construction density has been reduced [...] this has affected the tendency to construct buildings. The more the construction density, the more there will be an economic justification for landowners and us to initiate a project. With less construction density, it would be hard to convince landowners and our partners to start a construction project.’ (Interview-D11, 2015)

However, some of the interviewed developers believe that the execution of construction density restrictions imposed by Tehran’s plan cannot be carried out as it has affected the Tehran Municipality’s income. For example, D6 says:

‘At the moment, restrictions of the Tehran’s plan for zones are loose again ... as the Tehran Municipality’s main income is from selling construction density. When they started to implement the new plan, because of the restrictive regulations, the application for construction permits reduced a lot. The municipality had to relax some of the regulations again.’ (Interview-D6, 2014)

Although it is common practice to try to increase the construction density as much as possible, there are situations where the developer would decide not to increase the construction density or even, not to use all of the permitted construction density. For example, in the projects with large land parcels the developer might not need to get extra construction density. D8 explains:

‘In big parcels, normally our ground coverage is less than the permitted ground coverage of 60%. 60% of a big parcel is quite a lot. The meaning of 60% of 200 m² is quite different from the meaning of 60% of 2000 m². [...] Besides that, in some cases if

we wanted to build extra floors by buying construction density it wouldn't be profitable. For example, if we build more than 400 units we have to provide an education centre too. In these cases we would try to finish off with 398 units rather than getting extra construction density to build 420 units [...].'
(Interview-D8, 2015)

In the cases when a developer wishes to construct a building exceeding the height restrictions of an area or on a particular plot of land, she/he should prepare a justification plan. Making the decision on whether to grant a construction permit to this kind of project is mostly beyond the region's municipality responsibility. These projects will be referred to Commission No. 5 to be approved. D14 shares his experience in this scenario:

'The average height is five to six floors in Region 2, depending on the area of the land and the width of the street [...] but if the land is big and you can prepare a justification plan which complies with Tehran's plan and has a technical justification, then you can submit it to Commission No. 5 to get a construction permit. We recently submitted one justification plan to the commission but it will take a while to receive their response [...] we might need to wait for six months to a year.'
(Interview-D14, 2015)

In some cases, developers prefer to get permission to build a development exceeding the height restrictions from the region's municipality rather than submitting a justification plan to Commission No. 5. It is very difficult to get such permission from a region's municipality now. Big investors who have the right connections and capital might be able to negotiate with the municipality to get this kind of permission. Among the interviewed developers only one of them explicitly talks about an example from his previous employer who got the permit from the region's municipality:

'The land (located in Niyavaran) on which we built the building was one where we could have built a maximum of nine floors but we got permission for 21 floors. [...] These big companies

can get permission for extra construction density easily but normal people like me can't [...] they can negotiate. For example, the developer gives a flat to the person responsible in exchange for five more floors [...] But in some cases the project may stall, we had a project in Vanak and one in Zaaferaniyeh which were stopped; sometimes it gets beyond the region's municipality control. It becomes a war between powers. In these cases, you may be forced to lose one floor. As long as it is in the hands of the region's municipality it can be resolved amicably. [...] but when Commission No. 100 gets involved it will get tricky [...] In the Zaaferaniyeh project a verdict was issued to lose a floor but I am not sure what has happened in the end [...] I myself saw the verdict which said that one parking floor should be filled with concrete [...].’ (Interview-D12, 2015)

This is not something that a regular developer can do. D2 (Interview-D2, 2014) says that a developer might be able to get away with some minor lawbreaking by paying the penalty to Commission No. 100 but building an extra floor is beyond the redline.

6-4 THE DYNAMICS BETWEEN THE TEHRAN MUNICIPALITY AND HOUSING DEVELOPERS

The following sections will discuss the nature of the relationship between the Tehran Municipality and the housing developers which has resulted in giving more power to the developers and them being able to negotiate their own idea of what is constructed in Tehran. The magnitude of that negotiating power is not the same for individual developers as for the large-scale development companies.

6-4-1 THE FINANCIAL NEED OF THE MUNICIPALITY

While for developers maximising profit is the prime goal, for the municipality increasing the amount of its income is one of its main priorities. As mentioned above, 75% of the municipality income comes from development charges. The

municipality is therefore dependant on the construction sector. As a result, the municipality tries to make development activity profitable for the developers so that it can generate income from those activities.

Without receiving any financial assistance from the government, the municipality is under pressure to provide its own finances for the city. The implementation of large-scale projects like Tehran's underground system and the renovation of the bus system is a major expense for the municipality (Interview-P21, 2015). With this in mind, P21 says:

'A big share of the Tehran Municipality's budget is allocated to the construction of public transport and railways (tube system); the government should help the municipality in this regard [...], previous governments did not help the municipality, the current government promised to help but because of the issues created by the previous government, like the international sanctions, this government has not been able to help yet. Also the reduction in the price of oil has put the government under pressure. We are not optimistic that this government, despite its promise, will be able to assist the municipality.' (Interview-P21, 2015)

Apart from the high cost of large-scale projects imposed on the municipality, there are also projects being proposed by the municipality which are not priorities for the city (Interview-P2, 2014). Being Tehran's Mayor is a good opportunity for him to prove his management capability to the residents of Tehran and justify persuading them to vote for him in a presidential election. Proposing and implementing projects like the expansion of the highway system of the city, e.g. making a second level for Sadr Highway, are not the city's major priority but it provides good publicity for the Mayor (Interview-P21, 2015).

To generate money for the city, the municipality needs the payments received from the developers and to achieve that the municipality has been compromising the implementation of Tehran's plans. P24 describes the meeting he had in the 1990s with one of the finance deputies of the municipality which shows their attitude:

‘We produced a set of regulations for high-rise buildings. I wanted to meet the finance deputy of Tehran Municipality when Karbaschi was the Mayor, Mr. ****, to discuss the plan with him and in a way to get his unofficial approval. [...] I asked him how I can make sure that if you are offered money you do not put the regulations in your drawer? He laughed and told me, ‘You don’t know how heavy is my responsibility; I have to earn a lot of money per day for the Tehran Municipality!’ (Interview-P24, 2015)

To build or re-develop land on more than two floors (120% of 60% of a land parcel) the developer must pay the construction density charge. This is a legal payment if the construction density is in line with Tehran’s plan. The problem is that the municipality grants extra construction density beyond the plan by negotiating with the investors (Interview-P17, 2015).

Compromising the construction density regulations of the plan has been happening in certain areas of the city more than in other areas. Areas with a higher surplus in the housing construction investment have experienced the construction density regulations being dismissed more frequently (Interview-P2, 2014). Agreeing with this, P19 says:

‘In the areas where the price of land and real estate are high, ignoring the plans by the municipality to generate money is more probable.’ (Interview-P19, 2015)

P25 explains that most of the municipality’s income comes from the northern and western regions of the city where housing and commercial construction are prosperous. He says:

‘We have four regions that provide more than 60–70% of the municipality’s income. These are Regions 1, 3, north of 2 and 22. [...] Region 22 is a very fast developing region with big malls and housing developments. [...] North of region 5 is not bad too but not as good as regions 1, 2, 3 and 22. [...]. In

Region 4 only Pasdaran³¹ is good but in general Region 4 is the most populated region with many deprived areas which impose a lot of expenditure on the municipality.’ (Interview-P25, 2015)

Although Tehran City Council has the legal authority to inspect the performance of the municipality, it has not been able to stop the Tehran Municipality from generating illegal income. The reason behind Tehran City Council’s inability to fully oversee the performance of the municipality is an issue for further investigation. However, P21 who was a member on Tehran City Council at the time of interview points out:

‘The structure of the city council institution is such that in the case of any problem it will first give an official warning to the mayor, if the warning is not effective then the council can summon the mayor to the city council. If the summon is not effective then the council can plan to interpellate the mayor. If we suppose that the city council is politically homogeneous, then the mayor can be deposed easily, which is not good for the city management. But if the city council is politically divided, like the forth council³², when I plan to interpellate, the council members who are on my side in terms of expertise but politically are on the mayor’s side would not vote to dismiss the mayor [...]. It would be better to have a mechanism like the government and if we had a question on e.g. transportation then we can interpellate the transportation deputy of the municipality rather than the mayor.’ (Interview-P21, 2015)

This highlights the varied factors that are influential in restraining the authority of the city council.

6-4-2 THE POWER OF DEVELOPERS

This section looks at the power of developers in Tehran to pursue their agenda even when this goes against existing plans and rules. This power was

³¹ Pasdaran Street is located on the western side of Region 4

³² In the Fourth Tehran City Council, 13 members were from The Reformist Party and 18 from The Principlists (Conservative) Party.

established and then institutionalised because the municipality is financially dependent on the construction sector and the charges received from the developers. Concerning this P2 says:

‘As expenditure of the municipality is more than its sustainable income, investors are the ones who determine what will happen.’ (Interview-P2, 2015)

Throughout the last 30 years of construction in Tehran, the scale of this power has changed. At some stages developers have had more power to get what they wanted, and at others their powers have been more confined. It is not possible to say exactly when they had more power and when they had less. The following situation shows the complexity of judging the power of the developers.

During the 90s when the construction density bonus became widespread, almost everyone could get it but the bonus was mostly for one to two additional floors. However, in recent years only a limited number of developers can get additional construction density but they have received it to build towers that are five to ten floors more than the density regulation of an area. It is hard to define exactly in which of these two periods the developers had the most power in deciding about construction density.

The size of an agent carrying out the development has a direct relationship with its bargaining power. Although approximately 70–80% of the developers in Tehran are small-sized development companies or individual developers, the rest who are large investors are in a strong position to make big deals and impose their own agendas. In respect of this P10 says:

‘The influence of those 20% (developers of high-rise buildings) is much more than the other 80%. Those 80% can get permission for a maximum of two extra floors but the 20% shape the built environment in some areas because the municipality needs them and they need the municipality.’ (Interview-P10, 2015)

To generate income the municipality deals with large-scale developers. P2 says:

‘The mayor himself told me once that he is managing (providing) the city with money coming from only 25–30 investors. This means that the money that the municipality receives from other sources is far less than the amount it is receiving from these 30 persons/institutions.’ (Interview-P2, 2015)

P25, who used to be in a position to closely observe the mechanism with which the municipality deals with the developers to generate money for the municipality, describes the complexity of the relationship between the municipality and the large-scale developers:

‘There is a complex framework in which the municipality works. There is an economic rent. The large-scale players in the property market in Tehran are influencing the development process in two ways. On the one hand they are major contractors of the municipality and carry out municipal projects. On the other hand, as large-scale developers, they are the major source of income for the municipality. When they do something for the municipality they ask in return for special permissions. And the interesting thing is that they propose to the municipality what project it should carry out next. The municipal projects are not proposed as a result of being the priority of the community.’ (Interview-P25, 2015)

It could be concluded that there is a bilateral relationship between big developers and the municipality. These large-scale development companies have access to resources which puts them in a strong negotiating position.

Some of these large-scale developers are those building high-rise residential buildings in the northern regions and the others are those involved in the development of commercial malls and shopping centres which have recently become a fast growth area (Interview-P25, 2015). These developers are mostly connected to financial institutions. P25 says:

‘Most of the banks in Iran have a construction company associated with them. These construction companies search for gardens in Region 1, they change the land-use from garden to residential and then construct a 20–30 floor tower block. This is not something that ordinary developers can do. Zaafaraniyeh, Elahiyeh, Darband and Niyavaran are the areas in Region 1 affected a lot from this process.’ (Interview-P25, 2015)

The current government’s High Council has stopped (or delayed) the construction of a few of the buildings that gained permission in the framework mentioned. For example, the High Council stopped a tower block project in Region 2, Iran-Zamin Street as it was in conflict with the regulations (Interview-P2, 2015). However, as P2 explains, it is not possible to terminate all of these sorts of projects:

‘Before the current government, municipality made a 8,000 billion deal with Ansar Bank and in return gave them permission for large-scale developments like the Atlas Mall projects; we were in a hard situation. On the one hand we could not accept it, on the other hand we could not stop it because terminating such a deal would bankrupt the municipality. However, we are trying not to let the municipality enter into such deals anymore.’ (Interview-P2, 2015)

Big developers and investors prefer to carry out a construction project with high profit, mostly in the northern regions for more affluent residents. As a result of the power they have gained in providing for the municipality, they bend the rules and regulations as much as possible. P24 says that:

‘As a planner, you can’t say that I decide that this parcel should be built on four floors, your will and power is nothing compared with the will and the power of investors and the market; that is why the construction density proposed by all the 22 consultant companies have been changed by the municipality.’ (Interview-P24, 2015)

It should be mentioned that apart from the financial dependency of the municipality on private developers there are other factors empowering housing developers to achieve their agendas. In Iran there is a branch in the Judicial System of Iran, called Divan-e Edalat-e Edari, which emphasises the vested rights and ownership rights of individuals. In many cases the landowners who, for whatever reason, have been restricted from building on their land or have had restrictions put on their building, appeal to Divan-e Edalat-e Edari to protect their ownership rights (Interview-P31, 2016).

6-5 CONCLUSIONS

This chapter presented and analysed the primary data that was collected during the researcher's field trip to Tehran. There are two major considerations in this chapter: firstly, how the Tehran Municipality generates income and secondly, how housing developers work. The ways in which the financial objectives of the Tehran Municipality were matched with housing developers' agendas was highlighted. The next chapter will focus on how the common interests of the Tehran Municipality and those of the housing developers affect Tehran's plan.

To summarise; since 1983 the Tehran Municipality began to become self-sufficient. As a result, new financing tools to charge new developments were devised. The excess construction density charge forms the majority of the development charges. Development charges in general, and excess construction density charge in particular, have generated a considerable amount of income for the Tehran Municipality. However, this financing mechanism resulted in the following consequences:

- The Tehran Municipality is not accountable to the central government or to the residents because it does not receive money from the central government and the amount of tax that it receives from residents is negligible.
- The Tehran Municipality has become financially dependent on the construction sector and the money it receives from developers. This source of income is unsustainable because the amount of

construction activities in a year is not predictable and can vary considerably.

- The Tehran Municipality is under pressure to accommodate the economic interests of developers which has resulted in an increase in the bargaining power of developers.

Offering excess construction density in the 1990s has boosted the construction sector and attracted many individuals to work as housing developers. Between 70 and 80% of housing developers in Tehran are either individual developers or small construction companies. Only 20% of the housing developers in Tehran are large development companies who are interested in large-scale developments such as high-rise buildings.

The prime agenda of housing developers in Tehran is to maximise their profit margin. To achieve this goal, the location of the development site plays a strong role in their development decisions. They prefer to develop in locations where:

- The property market is active which means the housing price is high and they can sell properties reasonably fast. Depending on the developer's risk management strategies, he/she might decide to work in an area where he/she can sell as expensively as possible and/or as soon as possible
- They can afford the costs of construction. Land prices are very high in some areas which requires greater resources to initiate a construction project
- They can compete with other developers working in that area
- Suitable land supply or redevelopment opportunities exist
- They have enough knowledge of the area, its municipality and its estate agents.

Housing developers mostly prefer to continue to work in the same neighbourhood rather than moving around the city. The reasons behind this preference are the connections they have made in that region with the

municipality, estate agents and locals and also the local knowledge that they have attained from that area. However, large development companies might move between regions, as they need to find a suitable land parcel for the construction of a high-rise building.

Housing developers decide to initiate a development project when the property market is performing well and also construction is more profitable than other investment methods. The physical shape of a construction would be affected by what the developer conceives as profitable, what is in demand by buyers and what is practical in terms of regulations.

Due to rising land prices in Tehran, the construction density limit of a land parcel contributes to the decisions of developers. Extra construction density is perceived as a positive factor for housing developers to initiate a construction project. If the construction density of a land is less than a certain amount, which would differ in each case, it is not economically justifiable for the developer to build on that land.

Housing developers mostly prefer to increase the construction density of the building that they want to construct. By doing so they can increase the saleable area of the building. However, individual developers and small construction companies are mostly able to increase the construction density for a maximum of just two more floors while large development companies would try to increase the construction density as much as possible and for as much profitable as possible.

Large-scale development companies are in a better bargaining position with the municipality as they have access to resources and the municipality needs the charge that they pay to them. To accommodate developers' interest, the Tehran Municipality has been compromising the implementation of the Tehran plan which will be discussed in the next chapter. Compromising the construction density regulations of the plan has been happening in certain areas of the city more than others. These are mostly the expensive areas in which the housing developers are most interested. As a result, most of the municipality's income comes from those expensive northern and western regions of the city.

CHAPTER 7 – PLANNING AND UNPLANNED DEVELOPMENT IN TEHRAN

- Introduction
- Tehran Plan
- Dynamics between the Tehran Municipality and the housing developers which influence the plan
- The development pattern
- Conclusions

7-1 INTRODUCTION

This chapter concentrates on what happens behind the scenes of the development process by using primary data collected in Tehran. In Chapter 6, by exploring the Tehran municipality's financing mechanism and the decisions of housing developers, it was concluded that the financial objectives of the Tehran municipality are matched to the agendas of the housing developers. As a result, the Tehran Municipality has to accommodate developers' interests when setting its financial plans.

This chapter will focus on the implications that the Tehran Municipality's financial dependency on developers have had on the urban planning system of Tehran. Then it will discuss that Tehran's development is not happening based on plans as plans are under influence to accommodate financial needs of Tehran Municipality. The chapter will finish by discussing the spatial manifestations of the dynamic that exists between the Tehran Municipality's financial needs, the developers' interests and those of the planning system of Tehran.

7-2 TEHRAN PLAN

As explained in Chapter 4, the main document that directs the future development of Tehran is the Tehran Structural-Strategic (Comprehensive) Plan (TSS(C)P). This plan looks at the whole city and sets the main strategies and visions for the city (Interview-P22, 2015). This plan has a 1:10,000 zoning map of Tehran attached. The next level of the plan, which is in more detail, is the District Plan (DP) which is the basis for regions' municipalities to grant construction permits to applicants. In the following sections the process of preparation, approving and implementation of these plans will be discussed.

7-2-1 OCCIDENTAL INSPIRATIONS

From the 1960s to the 1990s in Iran, planning documents used to be in the form of comprehensive and detailed plans. In the 1990s a new system was introduced and the comprehensive plan was replaced by a structural-strategic

plan and the detailed plans were replaced by District Plans (DPs), Area Action Plans (AAPs) and Thematic Plans (TPs).

Urban planners in Iran found the linear system of comprehensive and detailed plans ineffective. P6 remembers that:

‘Comprehensive and detailed plans used to be prepared based on the Geddes approach [...]. This approach is a linear process and is in three steps; the first step is data collection, the next step is analysing the collected data and then the proposal is presented.’ (Interview-P6, 2015)

P6 (Interview-P6, 2015) believes that the linear approach of comprehensive and detailed plans made them inflexible, rigid and unable to respond to complicated urban issues.

As a result, a new system of structural-strategic planning was introduced. This system had a spiral approach and was a combination of British-style structure plans and US-style strategic planning (Interview-P6, 2015). P6 says that he learned about these methods of planning at the time that he was doing his Masters and later his PhD at the DPU at UCL (Interview-P6, 2015). He says:

‘I thought that instead of preparing a structure plan or a strategic plan it was more effective to localise the ideas and combine the two methods. This is where the concept of structural-strategic plans emerged.’ (Interview-P6, 2015)

The structural-strategic plan is based on defining four separate structures. These four are: the economic; social and cultural; environmental (ecosystem); and physical structures of the city. After defining them, a set of strategies would be presented to achieve the proposed structures (Interview-P6, 2015).

In 2001, the structural-strategic system was adopted in the Architecture and Urbanism Department (AUD) of the Tehran Municipality in order to prepare a new plan for Tehran. However, P6 says that the prepared plan did not completely follow the method that he had proposed for various reasons such as the limited intellectual capacity of the Ministry of Roads and Urban Development

(MRUD), the architectural background of the consultant companies in Iran and the lack of economic and social expertise in their teams (Interview-P6, 2015).

7-2-2 THE PROCESS OF PREPARATION AND APPROVAL

The process of preparation and approval of the new planning documents for Tehran can be described in three stages: the preparing and approving of a 1:10000 plan, the preparing and approving of a 1:2000 plan and the updating phase. The following sections will look at these three stages.

Accounts from as many interviewed planners as possible have been incorporated into the writing of the following sections but the reports of P17 dominate. This is because he has been involved in the process of plan production and approval from the early stages to almost the end of the process and he has been aware of most of the events and details of the process.

7-2-2-1 THE FIRST STAGE: 1:10,000 PLAN

In 2001, the AUD of the Tehran Municipality appointed 22 consultant companies to prepare the structural-strategic plan of Tehran and the DPs for the 22 city districts. These were undertaken at the same time, producing drawings on a scale of 1:10000. A consultant company, ParsBoom Consulting Engineers, was appointed to facilitate the coordination of these 22 consultants so that they synthesised with each other as well as with the municipality and the government (Interview-P6, 2015; Interview-P17, 2015).

In 2003, the Tehran Municipality, the MRUD (the government) and Islamic City Council of Tehran (ICCT)³³ made a tripartite agreement to establish an inter-sectoral institution to facilitate their collaboration. This body was called the Tehran Urban Planning Agency³⁴ (Agency). Establishing this Agency coordinated the activities of all the parties involved (Interview-P17, 2015).

In 2007, the Urban Planning and Architecture High Council (UPAHC)³⁵ approved the TSS(C)P. The UPAHC is the highest decision-making institution in

³³ Islamic City Council of Tehran, ICCT and city council are used interchangeably

³⁴ In Farsi: Nahad-e Barnameh-rizi Tose'eh Shahr-e Tehran.

³⁵ Urban Planning and Architecture High Council, UPAHC and High Council are used interchangeably

the field of urban planning and development and its decisions are often considered to be law (Interview-P2, 2014). Before the approval of the plan at High Council it had to go through other organisations and institutions and be approved. Firstly, ICCT had to approve it, then the Management and Planning Organisation of Tehran Province (a governmental institution), after that Commission No. 5 (CN5) in the Tehran Municipality, then the Technical Committee of UPAHC and finally the UPAHC (Interview-P17, 2015).

During this lengthy process of approval, each of the involved organisations would have their say which resulted in alterations to the plan (Interview-P17, 2015). P17 explains that:

‘As we had not had the zoning method in our country before and it was a new concept [...] its language and jargon were neither recognised nor familiar. As a result, the members of the commissions to whom we had to submit the plan for approval could not easily discuss and understand the plan. That’s why they were trying to impose alterations. The planning team was desperate to get the approval, so in many cases the alterations would be accepted just to hasten the process.’ (Interview-P17, 2015)

In addition to the fact that the responsible members mentioned were not familiar with the new plan’s terminology, P17 (Interview-P17, 2015) also mentions two other reasons which resulted in negative alterations to the plan at this stage. Firstly, there was the limited planning knowledge of the members of the committees which impeded the process and secondly, there was the negative attitude of these members towards the Tehran Municipality. He explains that:

‘Unfortunately, we are facing a structural problem which is the irrelevant qualifications and lack of expertise of the representatives of the organisations who attend the planning committees and have the right to sign off the plans and documents. Usually their field of study is not architecture or urban planning. For example, the representative of the Department of Environment (in CN5) has a degree in

Mathematics; or the representative of the Ministry of Interior has a degree in Religious Studies [...] how can they discuss urban issues? The other issue is their negative perception of the Tehran Municipality. They presume that the plan is prepared in a way to generate income for the municipality. As they don't trust it they hesitate to sign documents and before signing they try to change the parts that they think have been added by the municipality to generate income. This process had negative implications for the plan.' (Interview-P17, 2015)

In 2008, the approved plan was presented to the Tehran Municipality and the Mayor passed it to all sections of the municipality. The Mayor then asked the AUD of the Tehran Municipality to prepare 1:2000 maps of the DPs (Interview-P17, 2015).

7-2-2-2 THE SECOND STAGE: 1:2000 DISTRICT PLANS

This section looks at the preparation and approval process of the 1:2000 DPs which are the main planning documents used by the regions' municipalities when considering construction applications. The process of preparing 1:2000 plans from 1:10000 plans and elaborating construction codes became controversial and very lengthy.

The first controversy was over who was to prepare the DPs. As P17 explains:

'Disagreement occurred between the AUD of the Tehran Municipality and the Tehran Urban Planning Agency over which of them should supervise and prepare the DPs [...] the municipality really wanted to take over the responsibility.' (Interview-P17, 2015)

In the midst of this argument, the Agency was dismantled as the government arm of the tripartite agreement decided to leave the Agency. As P28 says:

'In 2010, the MRUD announced that we did not need to continue our collaboration with the Agency. The ICCT and the municipality did remain. Subsequently the city council withdrew

its collaboration and said that we did not need a specific research agency. So, the municipality decided to merge the Agency with the Tehran Urban Research & Planning Centre.’ (Interview-P28, 2015)

The government justified its decision to leave the Agency by referring to the law saying that the preparation of the DPs is the responsibility of municipalities and should be approved by CN5. However, P17 believes that the reason behind the decision of the MRUD to leave was related to personal disagreements between the Deputy at that time and the then Head of the Agency (Interview-P17, 2015).

In the absence of the Agency, the AUD of the Tehran Municipality took over the preparation process of the DPs. At the same time in 2009, after seven years of collaboration, the municipality did not renew its contracts with the 22 consultant companies (Interview-P26, 2015). As a result, only the synthesiser consultant company and the AUD of the Tehran Municipality collaborated in the preparation of the 1:2000 DPs (Interview-P26, 2015).

The DPs were prepared in two phases. In the first phase, further details for zoning codes were prepared. Initially zoning codes consisted of two digits in the 1:10000 plan, which were not sufficient for implementation. Three-digit codes were prepared based on those two-digit ones. For example, in the 1:10000 plan R12 was residential with medium density, to elaborate density limits. R12 became two three-digit codes: R121 with 240% construction density (four floors) and R122 with 300% construction density (five floors). Regarding this P17 gives an example:

‘For example, we had a G11 (city parks) zone. On the 1:10000 plan we decided where should be a G111 (public parks) zone and where should be a G112 (special parks) zone.’ (Interview-P17, 2015)

After the approval of this phase in CN5, 1:2000 plans were prepared, consisting of 406 sheets of maps and 15 articles (conditions) which were submitted to the ICCT for approval (Interview-P17, 2015). In 2010, the ICCT approved the plan and 14 of the articles attached to it. The last article, which was about the

supervision of the implementation of the plan, was omitted (Interview-P17, 2015). Although the plan was approved, it took 10 months for it to be received by the municipality because of what P17 describes as ‘an administrative error’ (Interview-P17, 2015).

Based on the Urban Development and Redevelopment Act, the DPs needed to be approved by CN5. However, if there were any major contradictions with the TSS(C)P the contradicting parts should be again approved by the High Council. The contradictions of the DP were approved by the High Council and the final plan approved by CN5 on 24 February 2012 (Interview-P17, 2015).

In April 2012, two months after the approval of CN5, the High Council of the time issued a directive with eight clauses. This directive affected the DPs dramatically (Interview-P17, 2015). The directive imposed the following changes to the plan:

- R111 zones of the plan (villas and maximum two-floor residential buildings) converted to R112 zone in which a maximum of three-floor residential buildings could be built
- R112 and R121 zones (maximum three-floor and four-floor residential buildings respectively) converted to R122 in which a maximum of five-floor residential buildings could be built
- R241 (green conservation residential area) zones with maximum construction density of 30% on a maximum of 15% ground coverage (maximum two-floor building) converted to a zone with a maximum construction density of 120% on 30% ground coverage (maximum four floors)
- Converting the zone of lands owned by the MRUD from any other zones to zones R and M.

As a result of this directive, the population of Tehran could be increased from one and a half to two million by upgrading R111, R112 and R121 zones and increasing the density of R241 zones (Interview-P21, 2015). Moreover, much

land throughout the city owned by the Ministry and proposed as green space converted to zones R or M. With regard to this P17 says:

‘It was ironic because it was proposed to change the G zone of all the land owned by the government to zones R or M. This is ridiculous because the MRUD owns a lot of land parcels in Region 22, which was supposed to become green spaces and parks, but were lost and went under construction by this directive!’ (Interview-P17, 2015)

The decision to approve such a directive was imposed on the then High Council by the President at the time, Ahmadinejad (Interview-P2, 2014; Interview-P26, 2015). In fact, the serving President was present at the meeting in which the High Council approved the directive with eight clauses (Interview-P21, 2015). This shows how important this directive was to the President. The directive was approved despite the objections of the attendees including the members of the city council. All details of this meeting were asked to be kept ‘off the record’ by one of the interviewees who was at that meeting.

On the surface, it was said that this decision by the government was to increase the housing supply and reduce the price of the housing for all residents (Interview-P9, 2015). However, most of the interviewed planners believe that this decision had economic justification for the government. P2 says that Ahmadinejad intervened in the construction density because:

‘Ahmadinejad’s government was experiencing negative economic growth. By stimulating the property market he wanted to conceal the inflation.’ (Interview-P2, 2014)

P2 also stresses that in that period the MRUD was passive and accepted the order of the President (Interview-P2, 2014). P16 (Interview-P16, 2015) says that the property market and its contribution to the economy put Ahmadinejad under pressure to increase the construction density. With the change of Iran’s government in 2013, the newly appointed Head of the High Council tried to cancel some parts of the directive (Interview-P17, 2015). However, many had

already gained permission to construct buildings with higher construction density (Interview-P2, 2015).

Finally, in June 2012, the plan was released and sent to all the departments of the municipality for implementation (Interview-P17, 2015). However, as will be discussed below, alterations to the plan continued in the implementation phase.

7-2-2-3 THE THIRD STAGE: UPDATING

When the plan was released on the municipality's website and became the basis for the decisions on granting construction permits, its errors and deficiencies started to emerge. In respect of this P17 says:

‘The plan was prepared in a virtual and unreal environment and when it was about to be implemented in the real world its practical errors showed up. Now it was necessary to deal with those errors.’ (Interview-P17, 2015)

Most of the errors were due to the changes that had already taken place throughout the city while the plan was under preparation. The plan needed to be updated. P13 explains that:

‘The large portion of the alterations happened because of the time gap between preparations for the plan being started and when it was approved for implementation. During those 10 years the city changed like a living creature. Many of the parcels of land that the consultant companies considered should be reserved were already under construction as the owners had obtained construction permits based on the previous regulations.’ (Interview-P13, 2015)

Moreover, there were misunderstandings about the zoning system; many of the parks and public spaces, which were located in zones R, M or S, were in danger of being developed for building projects. P17 explains this situation with an example:

‘For example, there was a park in Shahrak-e Jandarmeri which had trees and benches and was proposed as green space but,

because in the zoning map it was in zone R122, the land owner, the Law Enforcement Force (NAJA), got a verdict from the judiciary to build a residential building there. We had to try hard to explain that zone R does not mean that all the lands are residential. To avoid these situations, we identified all the parks in zone R and substituted them with G111.’ (Interview-P17, 2015)

For the reasons mentioned, the municipality initiated the revisions of the plan with the purpose of updating it. However, some of the interviewed planners think that updating was merely an excuse for the municipality to make changes to the plan that would secure its income. P13 says about this:

‘The municipality, to secure its income, which it thought would be reduced by half if the plan was implemented, imposed a great change to the plan in the first year [...] it thought if the plan was implemented as it was, the municipality’s income would be reduced substantially and, as a result, its projects under construction couldn’t be finished because of financial difficulties [...]’ (Interview-P13, 2015)

So far, these updates have happened in three phases between 2012 and 2015. In the first wave of revisions, which happened in the first year of the implementation, massive changes were made to the zones in the plan. At this time, the AUD of the Tehran Municipality asked all of the 22 regions’ municipalities to form a committee called the Coordinating Council³⁶ in which the errors and the parcels of land that should be fixed would be identified and reported to CM5 (Interview-P13, 2015).

P13, who was one of the experts in this revision process, depicts this period as follows:

‘The Coordinating Council’s responsibility was to revise the zones [...] but the problem was that councils were working under the banner of a region’s municipality. To put it simply, the

³⁶ In Farsi: Shoray-e Hamahangi.

region's municipalities did whatever they wanted. For example, if an applicant wanted to get a construction permit and his plot was in an unacceptable zone, the region's municipality would tell him to write and request a change. Then they would send all of these requests to the central municipality to be sent to CN5. Or in other cases the region's municipality would think it better to change a zone. Let me give an example, Damavand Street used to be S121 in the plan but the region's Deputy asked to change the zone to M111. Interestingly, later when a new Deputy was appointed, they asked to return the zone to S again. The alteration was made based on individual wishes. The synthesiser consultant company could not look at all of these proposals. All the requests were submitted to CM5 and, as they could not look at all the changes in detail, because there were about 5,000 areas of land, they accepted and signed all the changes.' (Interview-P13, 2015)

The second phase of revisions happened in the second year of implementation. In this second year the alterations were limited. At this time the 11th government came to office and many changes occurred in the political sphere of the country. One of the influential political changes which affected the alteration process in a positive way, was the new composition of the High Council and CM5's members (Interview-P16, 2015; Interview-P13, 2015).

In the third phase, it was decided to prepare general directives based on the different categories of issues in the plan rather than by case-by-case alterations. The synthesiser consultant company and the municipality became responsible for the preparation of directives. The prepared directives could take effect straight away if the directive had no effect on the general orientation of the plan. However, if the directive affected the plan then it had to be approved by CN5 (Interview- P13, 2015; Interview-P17, 2015). At the time of collecting this data this phase was underway.

The main consequence of zone alteration in 6,000 parcels of the plan (Interview-P16, 2015) was the increase of the construction density of Tehran (Interview-P13, 2015), which will be looked at later in this chapter.

7-2-3 THE PLAN AND THE CONSTRUCTION DENSITY

In the following two sections, the process of deciding about the construction density limits and its implications on controlling construction density will be explored.

7-2-3-1 CONSTRUCTION DENSITY IN THE PLAN

From the beginning of the planning process to preparing the recent plan, controlling the construction density in different zones of the city was one of the most important topics. As P22 says:

‘The construction density was the most fundamental, pivotal and urgent discussion in the preparation of the new plan.’
(Interview-P22, 2015)

It was believed by the planning team that, in the plan, the construction density was used as a planning tool to harness growth. P22 says that:

‘Using construction density as a tool to manage and arrange the city was attempted. In our opinion, the construction density should first have addressed the housing need of the residents, especially in deteriorated urban areas which needed to be renovated [...]. And secondly, the construction density is a tool to organise the areas of the city and road networks. Previously only some parts of the city, such as Tehran-Pars, Narmak, Shahrak-e Gharb [...] were organised based on this system. Now we are pushing the whole system towards this approach. However, there is a big difference between what is on paper and what is implemented in our society.’ (Interview-P22, 2015)

Although the plan used the excess construction density to renovate deteriorated urban areas, its success is under question. P28 comments:

‘In many parts of the city, such as in deteriorated urban areas, the excess construction density could help the renovation of the area but the problem is that developers and investors are not interested in those parts of the city. They are interested in parts of the city which should be preserved such as Region 1 and then Regions 2 and 3 where gardens and many heritage sites are located. But now all of them are turning to sites with permission for high-rise buildings.’ (Interview-P28, 2015)

Two considerations were recognised at the time of planning for zoning of the construction density. Firstly, in this plan the amount of construction density was based on the width of the streets and the size of the parcels. Secondly, the construction density of the plan varies based on the quality of the urban district. For example, organic urban areas have lower densities (e.g. zone R21) compared to High Streets (e.g. zone M11) (Interview-P22, 2015).

The DP of Tehran has tables showing the amount of maximum construction density in different zones of the city. The table for zone R is presented here, in Table 7-1. In these regulations, there is a relationship between the construction density and the ratio of ground coverage. This means the lower the ratio of ground coverage, the taller a building can be (Interview-P22, 2015).

1-digit code	Main zones	2-digit code	Zones	3-digit code	Sub-zones characteristics	Max construction density	Max floors	Max ground coverage	Min parcel size	Min street width
R1	General Residential	R11	Low-density Residential	R111	Villas and 2-storey residential	120%	2	60%	–	–
				R112	3-storey residential	180%	3	60%	–	–
		R12	Medium-density Residential	R121	4-storey residential	240%	4	60%	200	8
				R122	5-storey residential	300%	5	60%	250	10
		R13	High-density Residential	R131	6-storey residential	360%	6	60%	300	12
R2	Special Residential	R21	Valuable rural residential	R211	2-storey residential	100%	2	50%	–	–
				R212	3-storey residential	120%	3	40%		
		R22	Valuable historic residential fabric	R221	Valuable historic residential (variable storey)	100%	2	50%	–	–
		R23	Valuable contemporary residential fabric	R231	Valuable contemporary residential fabrics	Fixation of the current situation based on previous plans				
		R24	Valuable green residential fabric	R241	Valuable green residential fabrics	120%	4	30%	–	–
		R25	Special central residential	R251	Central zones residential	250%	5	50%	300	12
		R26	Special urban axis zones residential	R261	7-storey residential	280%	7	40%	750	14
				R262	9-storey residential	315%	9	35%	1000	14
				R263	Special residential (high-rise with feasibility plan)	600%	12 and more	30%	3000	20

Table 7-1: Regulations for land-use and construction in zone R in Tehran's District Plan

7-2-3-2 SUCCESS IN CONTROLLING CONSTRUCTION DENSITY?

Most of the interviewed planners believe that construction density came under stricter control with the approval and implementation of the TSS(C)P. Although some directives and acts such as the regulations for constructing high-rise buildings (six-storey and more) had been approved before, they did not succeed in controlling where and how the excess construction density should be granted. P21 says of this:

‘Selling density to generate income for the municipality had happened without any solid regulation until 2012. It used to be

arbitrary. One Mayor would agree to give permission for up to seven floors, one wouldn't. Without having any feasibility studies, they would agree on construction density in the Agreements Commission, without even consulting CN5. Since 2012 and based on the plan, if they want to grant a higher construction density CN5 should agree to it.' (Interview-P21, 2015)

At the moment, the construction density is permitted based on the approved zoning construction tables. P2 says that:

'At the moment, the municipality can't give permission to build high-rise buildings in the areas except the high-rise zones which are determined in the plan.' (Interview-P2, 2014)

The approved plan reduced the number of arbitrary decisions of the municipality to less than 15% (Interview-P22, 2015). This means that approximately 85% of the permits are granted based on the plan and regulations. P22 describes the current situation:

'In 2014, approximately 30,000 construction permits were granted. 25,000 of these permits were granted by the electronic system at the City's Electronic Service Offices, they got permission based on the plan [...]. The second set of permits was for applicants applying for construction permits to construct six to 12 floors. These permits couldn't be decided by these offices and should have been referred to the regions' municipalities to make a decision for them. In this set of permits, the regions' municipalities could make the decision without the involvement of CN5. 10 to 12% of the total construction permits were granted in this way for the construction of 10–11 floor buildings. Then there were 50 to 100 permits given for high-rise buildings. 50% of these high-rise buildings permits were without any technical, environmental and traffic considerations, it meant the granting of 50

construction permits in total for the construction of high-rise buildings, which is irrational.’ (Interview-P22, 2015)

The current High Council and ICCT are strict about the implementation of the plan and the performance of the municipality. This has also been influential in the reduction of the arbitrary activities of the municipality (Interview-P2, 2014; Interview-P21, 2015). However, the construction of buildings beyond regulations still happens. With regard to this, P22 says:

‘However, there is a big difference between what is on paper and what is implemented in our society. Generating income to manage the city is one of the reasons [...]. For example, in Jordan Street³⁷ regulation does not allow construction higher than six to seven storeys but now you can find a 22-storey building under construction. [...] They get permission from CN5.’ (Interview-P22, 2015)

Despite the fact that the municipality is under pressure not to grant extra construction density beyond zoning limitations, many high-rise buildings are under construction at the moment which obtained permission ‘a few years back’ (Interview-P22, 2015).

As a result of the approval of the new plan, the bargaining power of the developers has reduced. Interviewed developers mostly believe that approval of the DPs has changed the way they could negotiate with the municipality to get the permission they want. D10 says:

‘I don’t know whether you are aware of it or not but they have a zoning plan for Tehran now, a detail plan has been put in place in the last one or two years. It is not like before when anyone could get permission for building extra floors in the name of selling density. Now land should have certain criteria to build a certain number of floors [...] the Tehran Municipality has a certain definition for each land parcel [...]’ (Interview-D10, 2015)

³⁷ Jordan Street is the previous name of Nelson Mandela Boulevard which is an affluent district in northern Tehran.

Moreover, the establishment of the City's Electronic Service Offices³⁸ has reduced the direct contact between construction permit applicants and the local municipalities (Interview-D10, 2015). Now applicants should refer to these offices to register their applications and get permission, instead of going to the regions' municipalities to acquire construction permits. These offices check the applicants' requests by software to reduce human-related error. However, the Tehran Municipality does process the construction permits for high-rise developments and also construction beyond the regulations (Interview-P13, 2015).

Although the approval of the DPs has reduced the negotiating power of the developers in getting what they want in terms of excess construction density, as discussed below the plan itself has faced waves of increased construction density for financial reasons.

7-3 THE DYNAMICS BETWEEN THE TEHRAN MUNICIPALITY AND THE HOUSING DEVELOPERS WHICH INFLUENCE THE PLAN

This section focuses on how the TSS(C)P and DPs have been changed to meet the financial needs of the Tehran Municipality by accommodating property developers' interests.

Although the approval of the DPs has reduced the power of the developers to negotiate for what they want, there are concerns about the process of preparing, approving and modifying the TSS(C)P and DPs. The plan has experienced alterations and interventions that put into question whether its aim is to secure benefits for the city or increase the municipality's income. P2 says:

‘Now, although permits are granted based on the plan, during the process of preparation and approval of the plan some indefensible changes happened. Mostly by CN5's interventions to secure the income of the municipality.’ (Interview-P2, 2014)

The following sections will explore the process of alterations to the plan and the reasons behind them during the preparation, approval and amendment phases.

³⁸ In Farsi: Dafater-e Khadamat-e Electroniki-ye Shahr.

7-3-1 THE PLAN DISCONNECTED WITH REALITY

As described above, the TSS(C)P and DPs were first prepared in 1:10000 scale by consultant companies, under the supervision of the Tehran Urban Planning Agency. Although the plan at this stage went through various organisations for approval and experienced alterations, these were mostly meant to secure benefits for the public and the city. However, ignoring economic forces in preparation of the 1:10000 phase put this plan in a vulnerable position.

At this stage consultant companies prepared the plan based on technical considerations such as the capacity of the road networks and public amenities in an area rather than based on socio-economic considerations (Interview-P24, 2015). P24 believes that this is one of the main issues for the planning system in Iran. He says:

‘The big issue of planning is that we tend to tackle issues of the city as engineering issues rather than looking at them as socio-economic issues. [...] We prepared an engineering plan by doing the maths and saying that we need x amount of services rather than looking at socio-economic contexts.’ (Interview-P24, 2015)

The planning team of consultant companies do not see themselves as what Adams and Tiesdell (2010) call market actors who play a role in affecting the market. They rather see themselves as technocrats. That is why in many cases they are surprised by how the market works ‘on the ground’. P20 reflects:

‘We are not businessmen and we do not know how they (investors) calculate and make decisions.’ (Interview-P20, 2015)

P16 believes that the lack of a proper understanding of the mechanisms of real estate by the consultant companies in preparation of the initial plan is the main reason behind its later alterations. He says:

‘An academic obsession with the relationship between the width of passages and the height of buildings has resulted in

the production of a plan which does not care about real forces, such as the real estate market in the city.’ (Interview-P16, 2015)

The initial plan (1:10000 plan) was prepared in a sphere that was disconnected from the reality of the dynamics that exist between the municipality and the housing developers. This unrealistic plan paved the way for the later amendments of the plan.

7-3-2 THE TEHRAN MUNICIPALITY PREPARING 1:2000 PLAN

As mentioned before, the process of production of 1:2000 plan was directed in a way to give authority to the Tehran Municipality. They used this opportunity to impose their financial aspirations on the plan. The AUD of the Tehran Municipality became the organisation responsible for preparing the 1:2000 DPs. At the same time, the Tehran Urban Planning Agency was dismantled and later the 22 consultant companies were dismissed (only the synthesiser consultant company was kept).

It was supposed to provide a 1:2000 plan based on the 1:10000 plan. However, some major changes happened during production. P2 says:

‘The detailed plan has contradictions with the comprehensive plan. They were supposed to produce 1:2000 maps based on the 1:10000 maps of the comprehensive plan but they changed the plans. In the name of providing more details for the plan, they changed the plan. This is corruption. The government of the time was busy with the Mehr Housing Plan and didn’t react to these transformations. For example, Region 22 was not supposed to have this amount of buildings and shopping malls.’ (Interview-P2, 2015)

The government of the time (Ahmadinejad’s Government) and its High Council, instead of stopping the alterations, assisted the municipality by approving an eight-clause directive, which was discussed in section 7-2-2-2, to increase the construction density of the city. As mentioned before, P16 (Interview-P16, 2015) says that the real estate and its contribution to the economy put the President of

the time under pressure to increase the construction density. The Tehran Municipality, whose income would be raised by this, supported this directive (Interview-P13, 2015).

P11 believes that, for the municipality, it was important to encourage the developers to invest in the construction sector. That is why the plan was prepared in such a way as to consider the financial profits of developers. He says:

‘The DPs should have been based on the comprehensive plan only with more details. But this plan was prepared based on money! It was planned in such a way as to generate money for the municipality and has substantial contradictions with our ecosystem. Based on this plan, gardens of the city will be destroyed [...] and will be turned into high-rise buildings which puts our water sources at risk because of the foundations required for these tower blocks.’ (Interview-P11, 2015)

The preparation of the 1:2000 DPs by the Tehran Municipality without any supervision facilitated the path for the municipality to impose its financial benefits onto the plan. The High Council’s directive was also detrimental to the plan.

7-3-3 TIME GAP

Between approving the 1:10000 plans and the 1:2000 DPs, there was a time gap of five years (Interview-P21, 2015). This gap was not only due to a lengthy planning process. As P29 and P30 say, the plan was ready in 2010 but it was not sent for implementation. They say that:

‘The plan was ready in 2010 but the municipality intentionally delayed the process. The municipality was aware of the consequences of implementing the new plan; the municipality knew that its income would be decreased [...] the municipality was looking for a way to solve this problem and at the same time granted as many construction permits as possible. Many developers got their construction permits at that time. Many of

the buildings under construction at the present time got permission at that time.’ (Interview-P29 & P30, 2015)

During the time that DPs (1:2000 plans) were under preparation, many of the developers and landowners became aware of the future construction density of their parcels (or the parcels in which they were interested) if the DP got approval. As the construction density is very important to developers, they rushed to get construction permits based on previous regulations before the approval of the new plan. P21 describes that period:

‘In 2010, the Mayor passed the draft of the DPs, which had low density³⁹ to regions’ municipalities. People involved in the construction industry got information about the plan. In such situations people manage to find a way to get information. They found out that, if the plan was implemented, in many areas they could build with less construction density. For example, they found out that in a parcel where previously they could build an eight or nine-storey building they would only be able to build a six-storey one. This resulted in them rushing to get construction permits before the approval of the new plan [...]. Even one extra floor could change their profit margin dramatically. [...] People were queuing in front of the regions’ municipalities to get construction permits. This meant that before the approval of the detail plan, studies of the consultants’ companies became irrelevant as some of the zones, like R241 zone⁴⁰, already had the permits to build at higher densities.’ (Interview-P21, 2015)

The number of construction permits issued each year (Chapter 5 section 5-2-2-1) shows that the peak was reached in 2011. P21 points out that:

‘If you look at the statistics of the construction permits in 2010, 2011, 2012 and even 2013 and part of 2014 you will notice the increase in the number of permits, the increase in the floor area

³⁹ At this time the High Council's directive has not yet been approved and the 1:2000 plan was being prepared based on the 1:10000 plan.

⁴⁰ R241 is a low-density residential zone which was proposed to protect inner city gardens.

permitted and the increased revenue that the municipality generated in those years. Many of these permits are not under construction yet. The municipality's income grew a lot in those years which was mostly spent on large-scale developments [...] like highways – but at what expense?' (Interview-P21, 2015)

Many high-rise buildings under construction got permission during the time that the plan was in preparation but have not been sent to be implemented (Interview-P22, 2015).

During the five years of the 'preparing' and 'approving' of the 1:2000 plan, construction permits were issued to the municipality's benefit. P21, who observed these years, says:

'During this time, the municipality had a planning committee to discuss each construction permit. To ensure that the applicant was determined to get the construction permit, the planning committee would ask the applicant to transfer an amount of A^{41} multiplied by the area of land. For example, if the land was 500 m^2 and A of the area was 200,000 Toman, the municipality would ask the applicant to transfer 100 million Toman to the municipality's account in advance. Then the committee would send the application to the Adaptation Commission⁴² of CN5. This Adaptation Commission was supposed to check the application against the detailed plan which was under preparation to see whether the application was in line with the plan or not. It would be interesting to know exactly what they were doing. If the application was in line with generating revenue for the municipality and the zones of the District Plan, they would give the permit. If the application was in line with generating revenue for the municipality but was not in line with the new DP but was in line with the previous regulations then they would grant the permit based on previous regulations. The

⁴¹ A is a fixed amount set for each region.

⁴² In Farsi: Comiteh-ye Tatbigh.

municipality's performance was quite simply based on its income not on protecting the objectives of the District Plan.'

(Interview-P21, 2015)

As a result of the permits granted during these gap years, before the dissemination of the 1:2000 plan, it was already outdated and many zones had already changed. This five-year gap was an opportunity for the developers to get permissions and the municipality to generate revenue before the implementation of the new zoning plan.

7-3-4 AMENDMENTS

As mentioned previously, for various reasons it was decided to amend the plan after its approval and during the implementation phase. These amendments happened in three phases and resulted in massive changes in the zones of the plan without consulting the High Council and in some cases CN5.

Although some modifications were unavoidable, the municipality used the opportunity to satisfy its financial plans. P21's account shows how and to what extent the municipality's income could affect the plan:

'This (amending the errors) became an excuse for the municipality to generate income. This was a way for the municipality to change the zones. The region's municipalities were under pressure to generate income so they changed the zones of large parcels of land to zones which were more profitable for the municipality. [...] The regions' Mayors were trying to chase big investors and encourage them to invest on those big parcels to increase the income for the municipality.'

(Interview-P21, 2015)

For the municipality, making construction appealing to the developers by changing the plan was the most important thing. There are cases that show that the modification of the plans was more concerned with the market rather than the benefit of the city. D4 says:

‘[...] The Tehran Municipality, to ensure its income, changed parts of the plan. In the initial plan, the amount of revenue generated in some areas was reduced. This is because the plan reduced the tendency of us as developers to work in those areas. [...]’ (Interview-D4, 2014)

He continues:

‘Here, creating profit for the developers has led the municipality to consider the requirements of the property market. For example, areas defined as garden (green zone) in the plan were changed to residential zone or any other zone for which there was a demand. The municipality changed the zone of these lands to satisfy the property market and ensure its income. In fact, this is its way of generating revenue. I myself witnessed this.’ (Interview-D4, 2014)

In a more specific example, D4 talks about a modification in the DP of an area to ensure that developers would construct there:

‘An example is Vanak Square. Initially in the District Plan, it was zoned as a mixed-use zone [...]. But its construction density was less than a residential zone. At the moment, the healthcare industry is concentrated around Vanak Square. Therefore, the demand for commercial or office uses are insignificant there while demand for residential building is high, as doctors can have their clinics in residential buildings. Therefore, to build a medical centre, which has a pharmacy and doctors’ consultation units, a residential construction permit is enough. When the DP was approved, the demand for construction permits in that zone reduced because there was no demand for commercial building for the streets branching off Valiasr Street around Vanak Square. But there was demand for residential construction which was not economically justifiable because of the limited residential construction density. Therefore, the municipality went back one step and increased the density of

residential buildings to increase the developers' interest in applying for construction permits in that area.' (Interview-D4, 2014)

Although developers have no direct contribution in the process of planning, their interest has affected the preparation and implementation of plans. In this respect, P26 says:

'Housing developers in the private sector do not have direct influence on the preparation of the TSS(C)P and DPs but there is a general fact that has been influencing the construction density of zones: capital return and the economic benefits of developers [...].' (Interview-P26, 2015)

7-3-5 THE GARDEN-TOWER DIRECTIVE

Besides the alterations and interventions imposed on the plan to secure the municipality's income, there is another influential directive that has affected the construction density of gardens and should be considered here. This directive is known as the 'Garden-Tower'⁴³ which was approved by the second ICCT in 2004 before the approval of the TSS(C)P in 2007. This directive has affected the construction density of parcels which were registered as gardens in their title deed.

Based on the Garden-Tower Directive, gardens can be built with maximum ground coverage of 30% instead of the normal 60% but in the same construction density as approved for that area. This means that if the construction density of a zone is 300%, on regular land a five-floor building on 60% of the land can be built. However, in a garden a ten-floor building can be built on 30% of the garden. Previously, gardens could be built up only on a maximum of 10% of the ground with the construction density of maximum 20% which means two floors.

The context for approving such a directive was to 'protect' the gardens of the city. Many owners of inner city gardens were attempting to dry out their

⁴³ In Farsi: Mosavabeh-ye Borj Bagh.

gardens, so they could claim that their land was not a garden anymore and they could apply for a normal construction permit. When Ahmadinejad was the Mayor of Tehran he proposed this directive to the city council and the directive was prepared in the city council. P2 explains that the protection of the gardens was a cover for the municipality and that the main reason was to facilitate construction in the gardens. He explains:

‘When Ahmadinejad was the Mayor he said that the gardens should be protected because we can’t buy them and the owners, to be able to construct gardens, dry out the trees. But, in fact, he was looking for a way to legalise the construction of the gardens. Then, in the city council, Mr. Chamran became the theorist of the Tower-Garden Directive. It was said that with this directive we can protect 70% of the gardens and at the same time the right of the owner to benefit from construction will be protected. The idea was interesting but now you have to see what has happened to the gardens of Tehran. On the surface, you see that ground coverage is 30% of the area but under the ground up to 100% coverage has happened! Now we have to ask where is the garden?’ (Interview-P2, 2015)

With 100% coverage under the ground as mentioned by P2, many gardens lost their trees. P11 says:

‘What does 100% coverage underground parking mean? All the roots of the trees went into cement and the construction excavation has dried out most of the trees on the site!’ (Interview-P11, 2015)

As a result of the implementation of this directive more than 4,000 hectares of Tehran’s gardens were transformed into high-rise buildings (Interview-P2, 2015). P21 mainly blames the municipality who implemented the directive in such a way as to have such a result. He says:

‘The city council prepared and approved the Tower-Garden Directive with a positive intention [...] but the regions’

municipalities in their appendix of revenue, gave permission for 40 to 50% of ground coverage instead of 30% or gave permission to construct parking under the ground [...] which resulted in losing the trees. A few trees were planted to make up for the lost trees and then the region's municipality issued the end of construction certificates. I have to add that supervision over the performance of the municipality was very weak at that time too.' (Interview-P21, 2015)

At the beginning of the implementation of this directive, developers and landowners were concerned about their profits but later they found ways to maximise their profits such as constructing underground. P4 elaborates on the reaction of the investors to this directive:

'At the beginning the investors and landowners disagreed with the implementation of this directive. Some of them had strong connections with the municipality and could get good permits if this directive was not in place. I talked to some of them and convinced them to build garden-tower. Later one of them came to me and said that his profit was much more than with the other constructions. He could sell the flats quite expensively as living in a garden-tower became fashionable among rich people.' (Interview-P4, 2015)

Garden-Tower became a good selling factor in the property market.

Most of the gardens in Tehran are in Region 1 and then Regions 2 and 3 where they witnessed the major transformation of the green landscape and the emergence of tower blocks (Interview-P21, 2015). P22 (Interview-P22, 2015) says that this directive contradicts what was planned in the plan. He says:

'We considered the gardens in R241 zone should have a maximum of four floors but the directive of the city council is the basis of actual practice and they can normally build 10 floors.' (Interview-P22, 2015)

7-4 THE DEVELOPMENT PATTERN

As discussed in Chapter 6 and earlier in this chapter, the Tehran Municipality needs the payments received from the developers to generate income for the city. This has resulted in the increase in developers' power in the construction of buildings which are profitable for them but are not in line with the urban plans of Tehran. As a result, the production, approval and implementation of Tehran's plans have been affected to accommodate developers' economic gains. All these forces have resulted in a spontaneous growth of buildings with higher construction density in expensive areas of the city which are of interest to developers.

7-4-1 SPONTANEOUS DEVELOPMENT

Spontaneous development, in this research, refers to a kind of development which is not based on urban planning documents and is market driven. Despite various meanings associated with 'spontaneous' in urban studies (e.g. spontaneous settlements, spontaneous growth), in this research the word is used to show unpredicted and unplanned emergence of buildings exceeding height restrictions in certain parts of the city. Here 'spontaneous development' does not mean informal development. The word 'spontaneous' is chosen for this kind of development as it was noticed that a couple of interviewees use this word (in Farsi: *roshd-e khodroo*) to describe the development of high-rise buildings in Tehran. This kind of development is happening in the development and re-development of residential parcels of land in some areas of Tehran. As P7 mentions:

'In Tehran only 40% of constructions are based on plans, 60% of constructions are based on the economics of property.'
(Interview-P7, 2015)

Although Tehran has had planning regulations before and a zoning plan now, in some areas spontaneous growth is happening. P19 says:

'Unfortunately, our planning system is very weak. There are directives and regulations set by the High Council and

extensive studies done by experts on development plans but the municipalities ignore them. As a result, a kind of spontaneous growth is happening which satisfies the tendency of investors to gain profit and the municipality to generate income. These two working together and hand in hand have created this sort of development.’ (Interview-P19, 2015)

As P19 mentions, the financial need of the municipality has resulted in allowing developers to lead the direction of the development of the city. With regard to this P7 says:

‘The combination of what the municipality wants and what the investors want has shaped the city. As long as developers demand, the municipality provides, if they don’t demand any more then the municipality would give up.’ (Interview-P7, 2015)

Also, P29 says:

‘The city is developing in such a way as to enable the municipality to fund its expenditure on the one hand and on the other hand satisfy individuals. The municipality needs money to do things that make people notice the change.’ (Interview-P29, 2015)

The financial dependency of the Tehran Municipality on developers and the amount they pay for excess construction density charge has led the municipality to compromise the construction density limits of plans. P24 explains:

‘Construction density in Tehran is not only decided by urban planners; it is not only an experts’ issue. Capital and the market affect it a lot [...] 22 consultant companies’ plans can become nothing if the interest of the capital is under threat.’ (Interview-P24, 2015)

Tehran’s plans could not harness the market-led development of the city in terms of construction density. Even in some areas this spontaneous growth is happening faster than the provision of infrastructure. In this regard P7 says:

‘[...] In Tehran the rate of development is usually ahead of infrastructure provision. It is not like other places where infrastructure should be provided first and then the development take place [...], in Tehran they carry out the construction first and then the responsible institutions provide the required services and infrastructures.’ (Interview-P7, 2015)

As mentioned before, 20% of housing developers who are big development companies and are affiliated with financial, pension or insurance institutions could push the construction density limits as the fee that the Tehran Municipality receives from them is considerable. P10 says:

‘The influence of those 20% (developers of high-rise buildings) is much more than the 80%. The 80% can get the permission for a maximum of two extra floors but the 20% shape the built environment in some areas because the municipality needs them and they need the municipality.’ (Interview-P10, 2015)

This specific kind of developer searches for suitable sites to construct high-rise buildings in profitable areas of the city.

7-4-2 THE LOCATION OF SPONTANEOUS DEVELOPMENT

Expensive areas of the city are under more pressure to be built with higher construction density. Developers are looking for areas where they can increase their profit margin. As elaborated in Chapter 6, if the developers have access to sufficient capital they prefer to work in the northern regions of the city.

The Tehran Municipality, which needs to generate income, is interested in granting more construction density where there is a demand, which means the northern regions. With reference to this P31 says:

‘In the northern regions the interests of the municipality and developers are in line. Below Enghelab’s axis (the southern half of the city) there is not much interest in constructing; these regions are not like the northern ones for the developers. The municipality can’t generate much income from these southern

regions either. So, wealthy people are in the northern regions, they are interested in investing in real estate and housing which means that they are looking for more construction density, the municipality is interested in selling excess construction density as their income would grow. So, the municipality's and investors' interests are in one direction which results in granting higher construction density in the northern regions.' (Interview-P31, 2016)

CN5's directives to permit construction of high-rise buildings (12 floors and more) confirm that most of the high-rise buildings granted are to be constructed in these northern regions. Based on an unpublished study which was completed by the High Council's research team and was accessed at P2's office, from 156 directives of CN5 in 2012, 2013 and 2014, 94 of them (65%) were for high-rise buildings. From this, 94 directives, 36 construction permits were granted for the construction of high-rise buildings in Region 1; 14 for Region 2; 18 for Region 3; six for Region 4; and four for Region 5.

The above-mentioned figures show that the tendency for the construction of high-rise buildings which are at the extreme cases of excess construction density is more in the northern regions and especially in Region 1. Big developers, as P25 (Interview-P25, 2015) describes, look for land parcels mainly in Region 1 to construct high-rise buildings. In more detail he says:

'Big developers who are related to governmental institutions or banks [...] try to find a garden in Region 1 [...] and then will turn it to a high-rise building. This is what has been happening for the last 10 to 15 years. Normal people can't buy a garden, especially in Zaafaraniyeh, Elahiyeh, Darband and Niyavaran. Big developers buy up the gardens and then they build a 20 or 30-floor tower blocks.' (Interview-P25, 2015)

P20, who was involved with the preparation of Region 1's District Plan, says:

'Investors in Region 1 are semi-governmental bodies who just want to generate money for their institutions. These investors

have the large areas which used to be lands of the royalty and monarchy during the Shah's time. After the revolution, these lands were confiscated [...] and were given to these institutions [...] or later were bought by big investors. Sometimes the municipality is happy to pay them A amount and buy the garden from them and turn it to a public park but the investors want to build a tower block and raise 10A.' (Interview-P20, 2015)

P29 and P30 who are working at the consultancy company which prepared Region 4's DP say:

'In Region 4 you can see only a few cases go to CN5 for special densities, this happens a lot in Region 1 as the income of the municipality is mostly from this region [...] only in some areas of Region 4 where the price of land is high will this kind of proposal be submitted.' (Interview-P29 & 30, 2015)

These northern regions are also the ones which experienced most of the alterations in their zones to increase construction density during and after the production of the DPs. P31 who was involved in the preparation of a report for the High Council to show how much the zones of the TSS(C)P have been changed by the Tehran Municipality provided the researcher with a diagram (Figure 7-1). This diagram shows that Regions 1, 2, 3, 4, 5, 21 and 22 have experienced a lot of zone changes after the approval of the TSS(C)P.

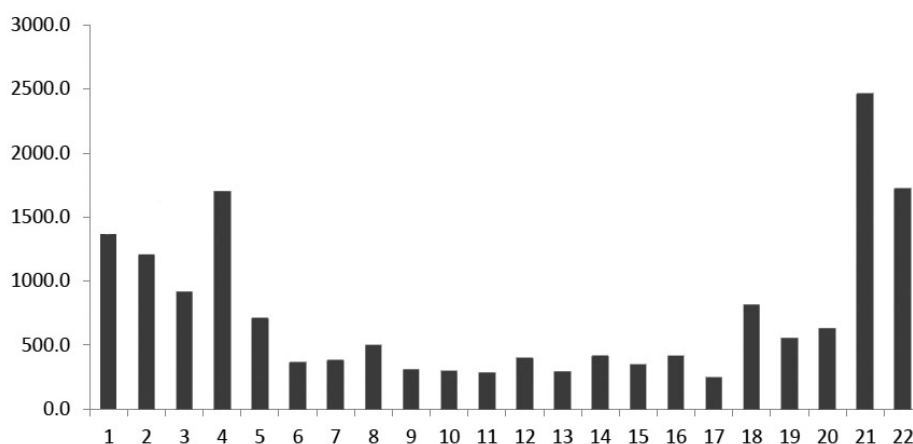


Figure 7-1: Comparison of the zone changes between the 22 regions of Tehran (vertical axis shows changed areas in hectare). Source: (Unpublished confidential document)

P31 explains:

‘As you see, the zones of Regions 1, 2, 3, 4 and 5 have changed a lot. We should leave aside the spike of the diagram’s bar in Regions 18, 21 and 22 because the first two are industrial regions and the change in their zones were to free up preserved land for industrial uses and the story of Region 22, as you may know, is very different. I should mention that in Region 4, like Region 21, many of the changed zones are related to freeing up preserved land [...]. The construction density of the northern regions increased as the municipality knew that these are the regions where it could generate money, not in the southern regions.’ (Interview-P31, 2016)

As discussed in this section, those areas of the city where developers are more interested have experienced more demand for construction with more excess construction density and, in extreme cases, the construction of high-rise buildings. The Tehran Municipality’s income is mostly coming from these areas. Also, these regions experienced more alterations in their zones throughout the planning process. Market-oriented development rather than planned development is taking place in these regions.

7-4-3 SPATIAL MANIFESTATIONS

This kind of spontaneous and market-led development of taller buildings has had some spatial manifestations in the city. Disorder to the landscape’s skyline, the reconstruction of younger, but low-rise, buildings, the conversion of gardens to high-rise buildings and the disintegration of the urban fabric are some of these spatial manifestations which will be looked at in this section.

The landscape of Tehran manifests this spontaneous market-led growth and the tendency of developers to construct high-rise buildings. P25 says:

‘Giving permission for building tower blocks is based on a case-by-case basis without having a general urban design framework. This has affected the landscape of the city. A weird and disorderly skyline is the result.’ (Interview-P25, 2015)

Figure 7-2 shows a part of Regions 3 and 1 of Tehran with a haphazard landscape. In this picture, high-rise buildings are juxtaposed with low-rise buildings which creates an unorganised view. The more one moves away from the northern and expensive regions towards the southern regions of Tehran the more consistency in urban fabric is expected. This is due to the profitability of the construction of high-rise buildings in the northern regions of the city.



Figure 7-2: An example of Tehran's unorganised landscape. Source: (*Photo of Tehran's landscape*, n.d.)

Besides the disorganised landscape, the other consequence of the spontaneous development is the re-construction of buildings that are still in good condition. Low-rise buildings are re-constructed because they have the potential for being rebuilt with a higher construction density. P5 says:

‘Excess construction density has resulted in the death of young buildings whose life is not yet over. These buildings are victims of their construction potential and the possibility of acquiring excess construction density.’ (Interview-P5, 2015)

P9 who works at a consultant company prepared the DP for Region 2 gives an example in this regard:

‘In Region 2 most of the two-three storey buildings which are now in four and five-floor zones are under pressure to be reconstructed.’ (Interview-P9, 2015)

This reconstruction of young buildings is a waste of resources and is not sustainable. P25 says:

‘This is a misuse of our resources. For example, there are buildings going through reconstruction to have two or three more floors. Although the buildings are still stable and are only 15 years old, they are being rebuilt [...] the city is a big construction site [...] which has affected the quality of life in Tehran.’ (Interview-P25, 2015)

Moreover, many of the inner-city gardens have been destroyed to construct high-rise buildings. The Garden-Tower Directive has facilitated the conversion of these gardens. As most of the gardens in Tehran are in Region 1 and then in Regions 2 and 3, this is where the major transformation of the green landscape has been witnessed along with the emergence of tower blocks (Interview-P21, 2015). P15 who works in Region 1’s Municipality says:

‘The regulations for gardens helped the developers to destroy Region 1 and its gardens. Developers build four floors under the ground which means it is not possible for a garden to remain!’ (Interview-P15, 2015)

P23 also says:

‘In Region 2 many gardens in Saadat-Abad and Tarasht have been turned into tower blocks.’ (Interview-P23, 2015)

Figure 7-3 shows an inner-city garden located in Region 1 (Zaferaniyeh neighbourhood) which is under redevelopment to be replaced by a ‘garden-tower’ with 11 floors. This house used to be a villa accommodating Queen Touran, third wife of Reza Shah before Iran’s revolution. After the revolution, the

house was confiscated by the government and then granted to Imam Khomeini Relief Foundation⁴⁴. As Aerial photos of the area shows, the garden's trees were dried out deliberately (Khabaronline, 2016b). In 2015 the garden was granted a construction permit to be redeveloped based on the regulations of Garde-Tower Directive (*memari.online*, 2016).

The house is located in R122 zone, which is a residential zone with medium density of maximum 300% in 60% of the land (maximum five floors). As the land of this house is almost 5,000 m² (*memari.online*, 2016) regulations allow construction of two additional floors, which means seven floors in total. However, as the parcel is registered as a garden the applicant applied for a garden-tower permit of 12 residential floors on 30% of land with four underground floors for parking and other services⁴⁵.



Figure 7-3: Touran's House during destruction. Source: (Khabaronline, 2016b)

7-5 CONCLUSION

This chapter discusses the preparation, approval and implementation of the TSS(C)P and how the DPs have been affected to accommodate property

⁴⁴ In Farsi: Komiteh-ye Emdad-e Imam Khomeini

⁴⁵ Information regarding the number of floors is collected during a site visit in 2016

developers' interest in order to meet the financial needs of the Tehran Municipality. As a result, in some areas of the city spontaneous development of buildings with excess construction density is happening, which has some spatial manifestations.

As discussed above, in the first stage of the preparation of Tehran's plan the following parties had directly collaborated with the Tehran Municipality:

- 22 consultant companies
- A synthesiser consultant company
- Tehran Urban Planning Agency Tehran (inter-sectoral institution between the Tehran Municipality, the MRUD and ICCT).

However, later most of these bodies were dismissed and only the Tehran Municipality and the synthesiser consultant company remained to produce the second stage of the plans (1:2000 DPs). As a result, the municipality gained more control over the production of the DPs.

It took five years to approve the 1:2000 DPs. During this lengthy process, the following events influenced the plan:

- The intervention of the High Council of the time which resulted in the increase in the construction density of some zones
- Many of the developers and landowners became aware of the future construction density of their parcels of land and rushed to get construction permits based on previous regulations before the approval of the new plan.

As a result of the permits granted during these five years, before the dissemination of the 1:2000 plan it was already outdated as many zones had already changed. It was necessary to update the plan after its approval. However, in many cases updating was an excuse for the municipality to make changes in the plan to secure its income, especially in the first year after the approval of the DPs.

Although controlling the construction density was an important topic from the beginning of the planning process, alterations imposed on the plan reduced the effectiveness of construction density as a planning tool to control growth. However, the approval of the DPs has reduced the negotiating power of the developers in getting what they want in terms of excess construction density.

Besides alterations and interventions imposed on the plan which affected the construction density of zones, the Garden-Tower Directive affected the construction density of inner-city gardens. This directive facilitated construction on inner-city gardens and generated a lot of money for the municipality. As a result of the implementation of this directive more than 4,000 hectares of Tehran's gardens were transformed into high-rise buildings.

All the above-mentioned factors have resulted in a spontaneous growth of buildings with higher construction density in the expensive areas of the city which are of interest to the developers. Spontaneous development here refers to a kind of development which is not based on urban planning documents and is market driven.

Spontaneous development happens mostly in the northern regions of the city. These are the regions in which developers with strong financial resources prefer to work and, as a result, the municipality can generate income from them in these regions. Consequently, these regions experienced more alterations in their zones throughout the planning process. Also CN5's directives to permit the construction of high-rise buildings are mostly for these regions. Market-oriented development rather than planned development is happening in these regions.

This kind of spontaneous and market-led development has had some spatial manifestations in the city; a disordered landscape skyline, the reconstruction of young but low-rise buildings, the conversion of gardens to high-rise buildings and the disintegrated urban fabric are some of the consequences.

CHAPTER 8 – CONCLUSIONS

- Introduction
- Main findings
- Research questions and hypotheses
- Other findings
- Main areas for further research

8-1 INTRODUCTION

By using empirical evidence from Tehran, this thesis has looked at how the excess construction density charge, which is a revenue-raising tool used by the Tehran Municipality, has influenced the urban planning system of Tehran through its effects on the development process and its impact on the development of the city. This final chapter, besides summarising the findings of the study, reviews the broader contribution of the thesis and proposes some avenues for future research.

This concluding chapter first presents the main findings of the research in terms of conceptual, methodological and empirical contributions. Then it addresses the proposed research questions and revisits the proposition considered in the early stages of this thesis. It then considers some aspects that have arisen as a result of the research that were not predicted at the beginning of the process. The research has uncovered other areas for further study which are presented at the end.

8-2 MAIN FINDINGS

This research found that in Tehran, the excess construction density charge has assisted the Tehran Municipality to achieve financial independence from central government and has helped it to have some degree of autonomy. However, this has made the municipality dependent on the construction sector and its agents, such as housing developers. Moreover, planning objectives have been undermined by the Tehran Municipality in an attempt to achieve its own financial goals. Besides empirical findings which are summarised in section 8-2-3 of this chapter, this thesis offers some conceptual and methodological contributions which are discussed below.

8-2-1 CONCEPTUAL FINDINGS

This section links the findings presented in Chapters 6 and 7 to the literature reviewed and the overall theoretical framing of the research.

As discussed in Chapters 2 and 3, structure-agency institutional model of development process was chosen as a theoretical framework for this research to explore the dynamics between structure and agency in the development process. The reviewed literature suggests that the development process would be affected by structure (broader social, economic and political structures) in which the development is happening. Findings presented in Chapter 6 confirm that housing developers' decisions in Tehran are framed by social, economic and political structures. For example, it was discussed how economic structures (e.g. market activity), political structures (e.g. Iran's international relations) and social structures (e.g. buyers' demand) have been affecting the involvement of the developers in the development process.

Also it is discussed in the literature review that not only agents' activities are framed by the broader social, economic and political structures, but their activities shape the structure too. As argued by Tiesdell and Allmendinger (2005, p. 57), 'agency is not hopelessly determined by structure' but 'over time agents change structure'. Findings presented in Chapters 6 and 7 show that how activities of development agents (in this case housing developers) affected the planning system of the city and pushed the system to increase the construction density of some zones. Even though in some cases these agents are not aware of their role in shaping structure, the analysis of this thesis shows that their interests had affected the regulatory framework of the city.

In addition to providing empirical evidence to confirm that there is a dynamic relationship between structures and agents, this research showed that this dynamic reinforces a particular model of development for the city. It would be problematic to ascribe this particular model of development either to structure or to agency. It is the product of the both. In the case of Tehran, in chapter 7, it was discussed how buildings exceeding construction density limits (in extreme cases tower blocks) emerged in specific part of the city which can not be ascribed either to planning or to the market as it is the product of the dynamic between the two. Focusing on this wider implication of the dynamic between structure and agency is where this research has an original contribution to the planning studies.

Besides the above-mentioned contribution, this research reflects on the reviewed literature in choosing its case study in Tehran. As mentioned, there is a noticeable shortage of studies of cities on a global scale in which all the cities are considered as important sites for generating theories. Urban theories are biased towards certain global cities as if only these cities have the potential to generate theories. ‘Ordinary cities’ or ‘off the map places’ (Robinson, 2003, 2006) are systematically being ignored. As Robinson (2003, p. 275) highlights this ‘asymmetrical ignorance’ should be addressed. Being aware of this ‘asymmetrical ignorance’, the thesis focused on studying Tehran which is almost invisible in urban theory in spite of its potentials. The financial autonomy of municipalities and local governments which is in the process of happening in some of the ‘global cities’ (e.g. London) has been in place in Tehran for more than three decades. As a result, Tehran offers useful insights on the implications of this process on urban planning and the development process which are discussed in this thesis.

The other contribution of this thesis is on the discussion of the implications of the interactions between urban planning and the market. As municipalities are increasingly relying on the financial resources of private property developers and investors to provide for the cities, the reviewed literature suggests that the cities are moving towards a more flexible and negotiable planning system which could accommodate market needs (Jou et al., 2012; Tasan-Kok, 2012). Some planning cultures explicitly incorporate and address this flexibility in their planning process (e.g. Britain’s planning system). However, this research discovered that even the planning cultures with rigid and top-down planning systems (e.g. Iran’s planning system) which do not officially recognise and address this matter, in practice need to be flexible to support the market. As a result moving towards symbiotic planning system is becoming a common practise in all kinds of planning cultures (either bottom-up or top-down planning cultures).

Despite the academic belief that municipalities who are not financially dependent on central governments could produce and implement plans that benefit the locality without central government’s influence (e.g. Friedmann, 2005; Pourzal, 2008), this study shows that this is not necessarily true;

financially-independent municipalities could decide about their future without central government guidance. However, this research showed that although the municipality would be financially independent from central government, it would be dependent on the capital provided by developers and investors. As a result, it cannot produce and implement plans that benefit the locality without considering interests of those financial providers. In the case of Tehran, this thesis shows how the financial dependence of the Tehran Municipality to housing developers resulted in revision and changes in the plans to accommodate the market needs.

8-2-2 METHODOLOGICAL FINDINGS

There are few methodological contributions that this thesis offers which were not in the scope of its original design but emerged as the research progressed. These methodological contributions shed light on how to carry out research in a politicised and sensitive environment. Moreover, it suggests that considering and reflecting on factors which are not the primary avenue of generating data (e.g. impression management of the interviewees) could provide useful material for the research.

During the primary data collection phase (interviewing stakeholders and key informants in Tehran) of the research, the researcher encountered some challenging power struggles with a number of the interviewees. The social identity of the researcher (e.g. gender and age), the sensitivity of the subject and the social identity of the interviewees (e.g. institutional position) must have contributed to this power struggle. Critical methodological literature addresses the existence of power relations during interviews (e.g. Elwood & Martin, 2000). It is argued that interviews are like any other social interactions in which power dynamics forms a particular relationship between the researcher and the interviewee.

The researcher experienced some challenging power dynamics not only during the interviews but also prior to them when negotiating to arrange interviews. There were some key interviewees (e.g. employees of Tehran Municipality) who refrained from participating in the research, often without explaining why. In

order to mitigate the challenges of power struggle before and at the time of interviews, the following practical strategies were used:

- Asking a mutual contact to introduce the researcher to the potential interviewee prior to the interview greatly facilitated the arrangement and balanced the power struggle at the time of the actual interview as another dimension was added to the dynamic.
- Contacting former employees who used to work in the same role, or close to that role, in the cases where a key informant refrained to participate in the study, helped the researcher to have access to otherwise missed information.

Besides addressing power relations in the process of interview, this research considered Briggs' (2003) and Moore's (2015) proposition of the importance of translating those power relations in the data analysis. Bearing in mind that what is not told or emphasised by the interviewees or how they frame their answers helped the researcher to understand what areas of tension need to be considered while discussing planning and urban development trajectories.

Acknowledging the impression management (Goffman, 1959) of the interviewees also affected the data analysis of this research. Studying the impression management of the interviewees on how they take position against or align with a concept helped the researcher to understand the stance of the interviewee. It was found that it is necessary to be careful when the views of some interviewees (in this research: some municipality's employees) are interpreted to answer the research question. Moreover, the site of the interview embodies layers of meaning (Elwood & Martin, 2000) which this research found could add to the depth of the interpretation of the collected data during the interview. For example, in shared working spaces, interviewees could not talk freely and this could be considered at the time of the data analysis.

8-2-3 EMPIRICAL FINDINGS

Although urban planning literature acknowledges that planning agendas are compromised to address the economic needs of the market there is a lack of

empirical studies to delineate this matter. In most of the cases the argument is left at the conceptual level without in-depth empirical evidences to back it up. This research aimed to contribute to filling this gap by studying Tehran, as its municipality has been financially independent for more than 30 years. Three main empirical finding are generated from this research. The first one addresses the relationship that exists between the Tehran Municipality's financing system and the housing developers. The second focuses on the implications that mutual interest has on the planning system of Tehran. The last explores the use of the city's space and its urban design which are the result of the dynamic that exists in some parts of the city between the Tehran Municipality, housing developers and the urban planning system of Tehran.

8-2-3-1 THE DYNAMIC BETWEEN THE MUNICIPALITY'S FINANCING MECHANISM AND HOUSING DEVELOPERS

The relationship between the structure and agencies in the process of spatially organising the city of Tehran is complex. In general, structure is what drives the development process. Structure could be a local government's rule and in this case is the Tehran Municipality's financing system. This research has found that some alteration in structure would result in changes in the agencies' performance. This means that changes in the Tehran Municipality's financing system have affected the decisions of housing developers who are working within that structure. The following diagram (Figure 8-1) summarises this finding. The fiscal decentralisation of the Tehran Municipality resulted in the adoption of the excess construction density charge and this affected the relationship between the Tehran Municipality and developers.

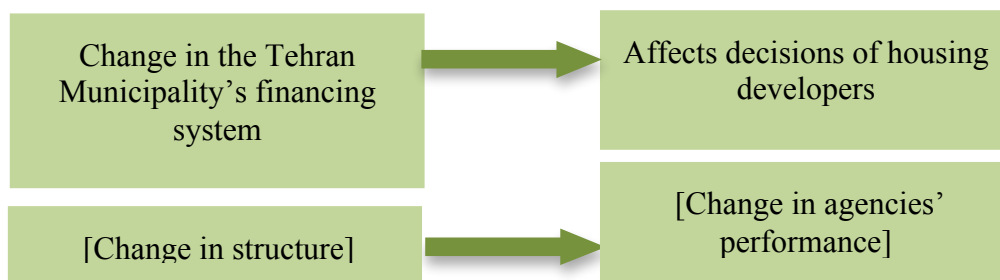


Figure 8-1: A change in structure results in changes to the agencies' performance

The Tehran Municipality needs developers in order to generate income. 75% of the municipality's income comes from development charges and 70% of the construction charge has come from the construction density charge. The financial dependence of the Tehran Municipality on developers led to it giving more power to the developers and allowed them to construct, in some cases, what they wanted in certain parts of Tehran.

It is legal for the municipality to generate income from construction density based on the zoning plan. However, the municipality granted extra construction density beyond that indicated in the plan after negotiations with the developers. Compromising the construction density limits of the plan has happened in certain areas of the city more than in others; areas with higher land prices and more investment opportunities are under more pressure to allow development with a construction density higher than the limits of the plan. The higher the price of the land, the more chance that the construction density would be exceeded beyond the limits of the plan.

The negotiating power of the developers varied depending on the financial needs of the Tehran municipality. When the municipality needed more money, the negotiations would be easier for the developers. Also, the financial status of the developers would affect their negotiating power. Large development companies with strong financial positions were in a better position in negotiating with the municipality compared with individual developers with limited resources. In some cases, these large development companies have a bilateral relationship with the Tehran Municipality as they also implement the municipality's large-scale developments.

8-2-3-2 IMPLICATIONS FOR PLANNING

The dynamic between the Tehran Municipality and the housing developers has had implications for the urban planning system of Tehran (Figure 8-2). The production, approval and implementation of the Tehran Structural-Strategic (Comprehensive) Plan and the District Plans has been affected to meet the financial needs of the Tehran Municipality by accommodating the interests of the housing developers.

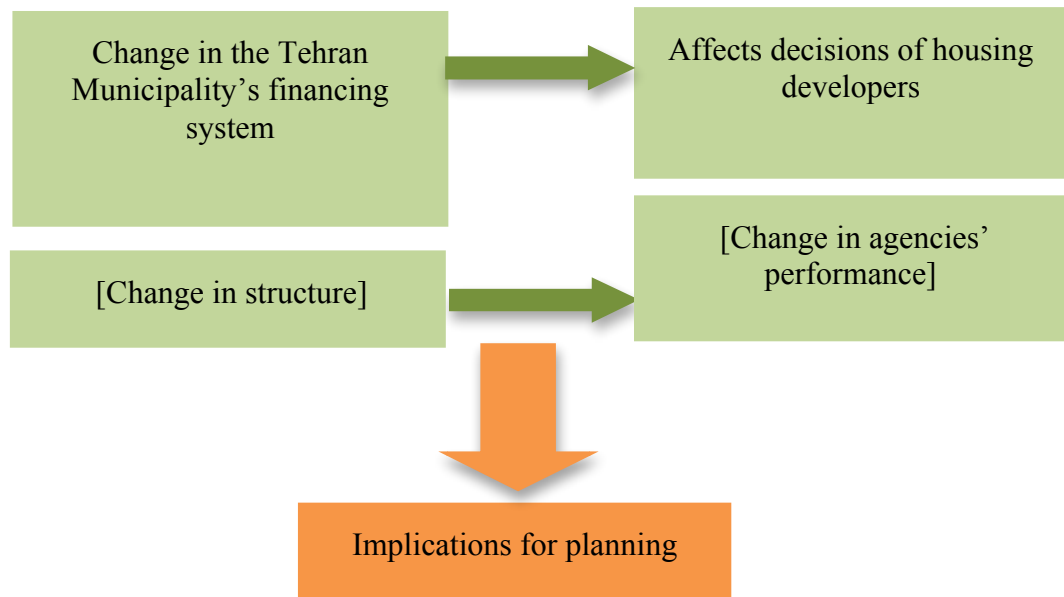


Figure 8-2: The dynamics between the Tehran Municipality and the housing developers influencing the plan

The preparation of the 1:10000 Tehran Structural-Strategic (Comprehensive) Plan and the District Plans happened in a top-down manner and disconnected from the reality of the dynamic that existed between the Tehran Municipality and the housing developers. The implementation of the prepared and approved plan would have reduced the income of the municipality because the approved construction density limits of the income-generating areas would have discouraged housing developers from becoming involved in construction projects in those areas.

During the production of the 1:2000 district plans, the Tehran Urban Planning Agency was dismantled and the 22 consultant companies were dismissed. The Tehran Municipality and the synthesiser consultant company became responsible for the preparation of the 1:2000 District Plans. This was an opportunity for the Tehran Municipality to impose its financial aspirations on the plan by changing some zones. In addition, the High Council at that time approved an eight-clause directive which increased the construction density of some zones.

It took five years to prepare the 1:2000 district plans. During this time many beneficiaries became aware of the future construction density of zones. As the construction density would be reduced in many areas where the developers had interest, they rushed to get construction permits based on the procedures that

had existed before the approval of the new plan. The statistics presented in the thesis show the increase in the number of construction permits granted during these years. Many high-rise buildings (12-floors and more) gained planning permission at that time. As a result, before the 1:2000 plan could be approved it was already obsolete as many zones had already changed. This five-year gap became an opportunity for the developers to get permission and the municipality to generate revenue before the new zoning plan was introduced.

Even after the approval of the 1:2000 district plans, which was already affected by market trends, more alterations were imposed on the plan, especially during the first year of its implementation. At this stage, some modifications were unavoidable; however, the municipality took this opportunity to satisfy its financial ambitions by further changing some zones.

Besides the alterations and interventions imposed on the plan, the 'Garden-Tower' Directive, is one more example of the developers' interests becoming the priority for generating income for the municipality. Before the approval of this directive, the construction density of inner city gardens was limited to 120%. However, based on this directive, inner city gardens could be built on with the same construction density of the zone in which they were located (mostly R122 with a construction density of 300%) but with 30% ground coverage instead of 60% (instead of five floors on 60% of the land, gardens could be built on with buildings of 10 floors on 30% of the land). This directive generated a lot of money for the municipality but more than 4,000 hectares of Tehran's gardens were transformed into high-rise buildings.

8-2-3-3 SPATIAL MANIFESTATIONS

The relationship between the Tehran Municipality and the housing developers and the implications that this dynamic has had on the urban planning system have had spatial consequences in some parts of Tehran (Figure 8-3). Development in Tehran has not always happened according to the plans; the financial need of the municipality has resulted in allowing developers to lead the direction of the development of some parts of the city. The outcome of this process is the spontaneous emergence of buildings exceeding the construction density limits in expensive areas of the city.

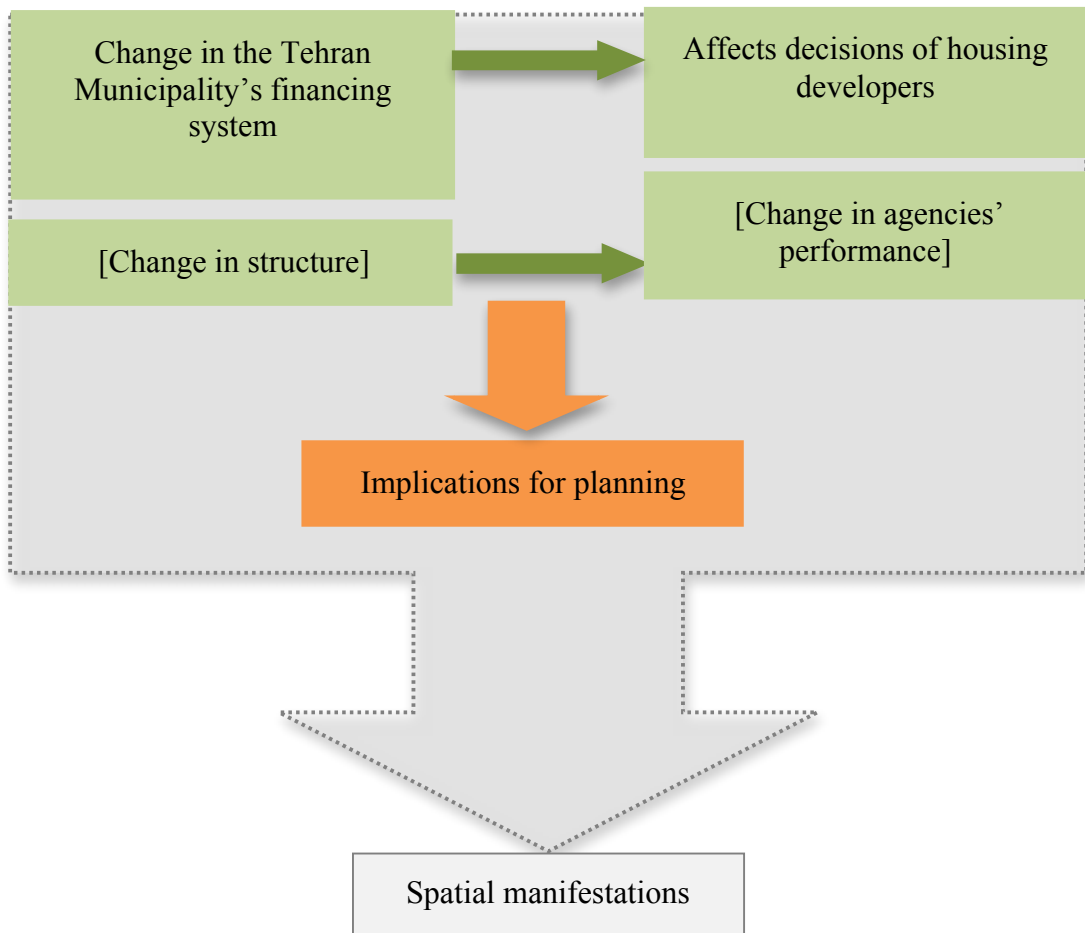


Figure 8-3: The spatial manifestations as a result of the existing dynamic between the Tehran Municipality, housing developers and the planning system

The housing developers with strong financial resources prefer to work in expensive areas which are mostly located in the northern regions. These regions have experienced unplanned development of buildings exceeding the construction density limits. As a result, these are the regions that have generated income for the Tehran Municipality. Consequently, alterations in the construction density of zones during and after the planning process have happened there. Commission No. 5's directives to permit the construction of high-rise buildings are also mostly for the same neighbourhoods.

The market-led development of these regions has had some spatial and physical impact on the city. The skylines of these areas are mostly disordered and an agglomeration of tower blocks in some areas affected the landscape. Young but low-rise buildings located in areas with a strong market are under

pressure of redevelopment. Most inner city gardens are under threat to be replaced by high-rise buildings. The urban fabric of these neighbourhoods is disintegrated and spatial development is incongruous.

8-3 RESEARCH QUESTIONS AND HYPOTHESES

As mentioned in Chapter 3, the aim of this research was to investigate the impact of the municipal financing method of charging developers in exchange for granting excess construction density on the development process and the planning system of Tehran. Three research questions and possible hypotheses were considered for this study. In the following sections those research questions will be answered and the initial hypotheses will be tested.

8-3-1 RESEARCH QUESTIONS AND RESPONDING TO THEM

The first research question asked how the construction density charge affected the decisions of housing developers in Tehran. Research showed that raising the bar of the construction density limits in the 1990s attracted many individuals and corporate investors to the housing construction industry. Due to the high land price in Tehran, if the permitted construction density of a land was less than a certain amount, which differed in each case, it was not economically justifiable for the developer to build on that land. Relaxing the limits of construction density made it profitable to construct residential buildings for sale.

Housing developers prefer to increase the construction density of their plot as much as is profitable. However, individual developers and small construction companies could mostly increase the construction density a maximum of two more floors while large development companies would try to increase the construction density as much as they could and create as much profit as possible. It should be mentioned that after the approval of the District Plans of regions it was less likely that housing developers could exceed the limits of the construction density of these zones. However, as the District Plans went through alterations and an imposition of directives, the construction densities of their zones were already increased to keep the housing developers interested in construction.

Even though, the construction density of a plot was important for developers, the location of the land also played a role in their decision. It was important for them to build in locations where:

- The property market was active (housing prices were high and they could sell properties reasonably fast)
- They could afford the costs of construction
- They could compete with other developers working in that area
- Suitable land supply or redevelopment opportunities existed
- They had enough knowledge of the area, its municipality and estate agents.

If a developer met the required financial conditions, they preferred to carry out construction work in the northern regions in general and more specifically in Regions 1, the northern section of Region 2, Region 3, a very small portion of the western edge of Region 4 and some parts of Region 5.

Besides the construction density and location, there were other factors that encouraged or discouraged a developer getting involved with the construction of housing development such as:

- The general performance of the property market of Tehran
- The costs of construction
- The profitability of other investment methods, e.g. bank interest rates
- The political stability of the country.

The physical shape of a construction would be affected by what the developer conceived as profitable, what was in demand by buyers and what was practical in terms of regulations. Most, but not all, developers tried to increase the saleable floor area as much as possible. Based on the regulations and the buyers' demands, developers could not or did not increase the construction density more than a certain amount, which varied case by case. Moreover, the

shape and size of the land dictated the limitations on what it was possible to build.

The second research question was: how, as a result of using the construction density charge tool, have the decisions of housing developers shaped the city of Tehran. To some extent, the decisions of the housing developers have shaped certain parts of Tehran. As the Tehran Municipality needs the money generated from the construction density charge, it has been flexible with developers in giving them permission to construct buildings beyond the construction density limits of the plans. The demand to exceed construction density limits in some northern regions of Tehran, which are expensive areas, was more than in the rest of the city. These are the areas where large development companies with strong financial positions preferred to construct high-rise buildings. As a result, the city has witnessed a spontaneous and market-led growth of buildings with higher construction density (and in extreme cases high-rise buildings) in expensive areas of the city.

The power of developers in leading the market-led growth of buildings with excess construction density has changed during the three decades that the construction density charge has been used. Before the approval of new planning documents for the city, negotiation with the local municipality was easier for the developers as regulations were loose and scrutiny over what was permitted was limited. During this time, the City Council was a new establishment and did not have all the tools to inspect the municipality's performance. Also, the government was not concerned with what was happening in the municipalities either.

After the approval and implementation of the plan, the construction density of construction permits were mostly issued based on the plan. However, during the preparation and amendment phases the plan had been changed to accommodate market trends so it is hard to say whether, after the implementation of the new plan, market-led growth has been harnessed by the plan.

The third research question asked: How, in turn, this market-led growth has affected the way the city is planned. Market-led growth has affected the urban

planning system of the city. The profitability of investment in the property market by all kind of investors ranging from individual developers to corporate investors such as insurance companies, banks and pensions organisations put the urban planning system of Tehran under great pressure. The history of planning efforts to harness the market shows that the planning system could not stand in the way of capital investment. The financial relationships between the Tehran Municipality and the developers worsened the situation.

Developers do not make a direct contribution in the production phase of urban plans and plans are made in a top-down manner. However, their interests have been incorporated in the plan at different stages because the municipality needs to keep the developers interested in construction. As a result, the plan has experienced alterations and interventions during both the production and the implementation phases to secure the benefit of both the developers' and the municipality's incomes.

During the preparation phase of the 1:2000 plan, the municipality managed to control the situation by appointing the Architecture and Urbanism Department of Tehran Municipality to prepare the 1:2000 District Plans and dismissing the 22 consultant companies. Meanwhile, in the five-year time gap between approving the 1:10000 plan and the 1:2000 plan, the municipality issued an incredible amount of construction permits in many cases without complying with the rules. Many of the high-rise buildings got their construction permits during this time. After the approval of the District Plans the construction density of many zones was changed by the municipality, especially in the year after the approval, to incorporate the interests of developers.

8-3-2 TESTING THE INITIAL HYPOTHESES

Initially this thesis proposed a hypothesis that the city is not managed by official plans but by responding to spontaneous growth, which is partially the result of the application of the excess construction density charge. Although Tehran has a Structural-Strategic (Comprehensive) Plan and District Plans for each region, the city has grown and been managed spontaneously rather than in a planned way. The following points should be considered regarding this statement:

- It is inaccurate to say that all of Tehran is not managed by official plans but by responding to spontaneous growth because there are some projects carried out in Tehran which are based on plans, such as Tehran's underground system or the expansion of the highways network.
- It is more accurate to say that housing construction in some areas of Tehran is happening spontaneously and is market-led.

This research's proposition consisted of three parts. Firstly, that the construction density bonus had created a market that did not exist before, or was not of a considerable size. By adopting the excess construction density charge, the tendency to build higher than the official plans permitted increased the economic benefit of developers and the Tehran Municipality. The construction industry became very profitable and attracted many individuals from other professions to invest and work in this sector. Prime locations became under more pressure for construction. As a result, the spatial development of some parts of the city was handed over to the vagaries of the interests of the housing developers.

This first part of the proposition is correct, as the research has proved that the housing construction industry was boosted after relaxing the construction density limits and that construction became not only economically justified but very profitable, especially in the expensive areas of the city. The second part of this proposition pointed out that the decisions of the housing developers affected the spatial order of the city. Market trends have shaped the city of Tehran to a great extent. In many parts of the city, the spatial development has been shaped by the developers' ability and interest in buying the right to build more densely in the areas that they thought would be more profitable. The financial dependence of the Tehran Municipality on the construction sector boosted the power of the developers to mostly construct whatever benefitted them economically.

The last part of the proposition suggested that market-led growth has affected the way the city is planned. The plans are not driving the growth. They have been adjusted to meet the requirements of spontaneous growth. The density

bonus strategy to finance the municipality's expenditures has changed the logical relationship between plans and developers. Instead of the expected effect of plans on developers' decisions, the developers' agendas have directed the plans. The more recent planning documents of the city are being affected to accommodate the interests of developers and enable the Tehran Municipality to generate income from their construction activities.

8-4 OTHER FINDINGS

Some findings obtained during the collection of the data and its analysis were not predicted when the research questions were formulated. These findings are equally important in order to better understand the development process in Tehran. It became evident that other organisations were responsible in the Tehran Municipality's reliance on the developers to generate income.

Although at the beginning of this research it was supposed that the financial relationship of the Tehran Municipality and the developers was the most important reason behind ignoring the planning documents, through the research it became apparent that central government, its High Council, the City Council and consultant companies have all assisted, in various intentional or unintentional ways, in creating this wrongful mechanism.

The government is culpable as it cut its financial aids to the municipalities without providing any plan. By law the government had to prepare a plan defining the ways that the municipality could generate income; this was never prepared. Moreover, by approving two acts in 1987⁴⁶ and 1991⁴⁷, the High Council provided the legal basis for granting extra construction density in exchange for a fee payable to the Tehran Municipality. This is despite the public belief that Tehran's Mayor, Karbaschi, introduced the construction density charge.

The closure of the Tehran Urban Planning Agency by the government was another decision made during the preparation of the District Plans which affected the preparation process. By so doing, the government left responsibility

⁴⁶ Zoning and Defining Construction Density and Land-use Act

⁴⁷ Increasing Density and High-Rise Building Act

for the preparation of the District Plans to the municipality, who welcomed this decision. By adding a directive with eight clauses to the regulations of the district plans in April 2012, the government and its High Council affected the construction density of District Plans in favour of the real estate market and the municipality.

The City Council's performance should also be criticised. Preparing and approving the Garden-Tower Directive without sufficient research resulted in the destruction of many gardens located in the northern regions of Tehran. Moreover, the City Council, by approving to increase the municipal budget each year, supported the municipality in abusing the planning system in order to generate increased income.

The consultant companies who prepared the plans also contributed to this process. These consultant companies are mostly run by architecture graduates. The lack of a proper understanding of the mechanisms of real estate by these consultant companies resulted in the preparation of plans which ignored the social and economic complexities existing in Tehran, showing in particular a lack of understanding of the relationship that existed between the Tehran Municipality and the housing developers and how that affected the success of the plans that they produced. Their unrealistic plans paved the way for later amendments of the plan.

8-5 MAIN AREAS FOR FURTHER RESEARCH

The discoveries made by this thesis have not only produced its own conclusions but have created further avenues for exploration.

8-5-1 THE RELATIONSHIP OF LARGE HOUSING DEVELOPMENT COMPANIES AND THE TEHRAN MUNICIPALITY

In this research, the focus was on the decisions of the housing developers in general and the effect of the excess construction density charge on their decisions. As the majority of the housing developers in Tehran are either individual developers or small construction companies, most of the interviews were carried out with them. However, the results of this research show that,

despite the fact that large development companies are in a minority in the production of housing in Tehran, their power to pursue their own agendas has had far more impact than those in the majority.

As mentioned in Chapter 6, these large development companies are in a strong financial position because of their affiliation with banks, insurance companies and pensions organisations. These agents have a bilateral relationship with the Tehran Municipality; on the one hand they are contractors of large-scale development schemes of the Tehran Municipality and on the other hand they are active in the construction of high-rise buildings in the northern regions of Tehran. Understanding this relationship is essential in order to be able to better understand the dynamic that exists between this type of developer and the Tehran Municipality.

Additional research in this area could help to gain a better understanding of the details of the interplay between these large development companies and the region's municipality or the Tehran Municipality. Case studies of this research could include a few high-rise buildings which are already constructed or under construction. To understand the current dynamics, it is better to include case studies in which construction permits were granted in the last five years.

This proposed research could investigate:

- The decisions of developers, investors and landowners of these projects
- The strategies acquired to get construction permits and excess construction density
- The relations with the region's municipality
- The details of dealing with Commission No. 5 if the developer had to get commission's approval
- The details of dealing with Commission No. 100 in cases where the developer was fined for breaking the law.

It should be mentioned that carrying out research on this topic could be problematic as neither the Tehran Municipality nor these developers are likely to be willing to participate in such a study. However, it would be possible to acquire strategies following the example of the ones used in this research to generate relevant data on the matter. For example, contacting and interviewing ex-employees who are either retired now or have moved to another organisation and have information on the topic could be a possible approach. Being introduced by someone that the interviewee trusts also could make it easier to negotiate an interview.

8-5-2 THE FINANCIAL BENEFITS OF COMMERCIAL DEVELOPMENTS FOR THE TEHRAN MUNICIPALITY

Looking at the commercial development process and its relationship with municipality funding is also a potential field for research. This research focused on housing developers and the financial dependency of the Tehran Municipality on them. However, during the collection of data in Tehran, both personal observations and the results of interviews revealed that the construction of commercial developments, such as hypermarkets and shopping malls, are growing very quickly in Tehran.

As highlighted in a few of the interviews, large housing development companies and commercial development companies are the main providers of income for the Tehran Municipality. Although the quantity of housing construction in Tehran is far more than the construction of commercial complexes, the funds generated from issuing a construction permit for a shopping centre are proportionally greater. In addition, in the charges received by the Tehran Municipality to grant permission for construction of a commercial development there are other mechanisms in place. In the following paragraph, an example of one of these mechanisms will be briefly elaborated.

One of the interviewees mentioned that, the Tehran Municipality granted a construction permit for a commercial building called Atlas Mall in Region 1 in return for its debt to Ansar Bank, who was the major investor in Atlas Mall. This permit was granted despite the planning regulation of the area and it became a subject of controversy in the media and among the public. However, as the

financial value of the project was 8,000 billion Rial, the High Council could not stop the project because the Tehran Municipality would then have become bankrupt. This case shows the complex relationships between the Tehran Municipality with some financial institutions.

Research could also focus on the dynamics that exist between the Tehran Municipality and the developers of the commercial developments. It would be interesting to investigate:

- The aspirations of these investment companies
- The nature of their relationship with the Tehran Municipality
- The strategies that they acquired to pursue their agendas.

An approach using cases studies could be employed to carry out this research. Large-scale commercial developments, such as the Iran Mall and the Atlas Mall, could both be case studies for this research. Likewise, collecting data for this research could be problematic.

This thesis, in investigating the relationship between developers and planners in Tehran, has provided a prototype methodology that could be used in additional investigations. The methods that focused on the particularities of Tehran Municipality's construction density charges can become a rationale for a succession of future studies.

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APPENDIX 1

EXAMPLES OF INTERVIEW GUIDELINES

1. A guideline to interview developers

- 1- Time and place of the interview:
- 2- Name of the respondent and his/her company name:
- 3- Educational and occupational background of the respondent:
- 4- Nature of the respondent's work (e.g. individual developer, construction firm, development company):
- 5- How long have you been in the business of housing construction?
- 6- Why did you decide to become a developer? And what has kept you in the business?
- 7- Which parts of Tehran do you work? Or used to work? Why?
- 8- Where do you prefer to work? Why?
- 9- What is your target market?
- 10-What are the things that you consider before initiating a development project?
- 11-How do you acquire construction permit from the municipality?
- 12-What are the necessary resources for you to start the construction?
(Land, labour, finance)
- 13-How do you provide these resources?
Land (buying from the land owner, partnership with the owner)
Labour (contractor, architects, fixed construction team)
Finance (bank loan, pre-sell)
- 14-Is the potential construction density (FAR) of a land important for you?
Why?
- 15-Have your decisions (where to build, how to build...) been affected by the amount of excess construction density that you can get?
- 16-How could you increase the construction density of your projects?
- 17-Has the new plan of the city affected the way that you work?

2. A guideline to interview planners

- 1- Time and place of the interview:
- 2- Name of the respondent:
- 3- Working in public sector or private sector:
- 4- Name of the office or firm of the respondent:
- 5- Position of the respondent in that firm:
- 6- Have you been involved in preparing plans for Tehran? If yes, what was your role?
- 7- What is the role of the construction density in planning process and zoning system?
- 8- How have financial tools of the Tehran Municipality affected the planning system and the planning objectives?
- 9- Do you think excess construction density charge has affected the concentration of high-rise buildings in certain parts of Tehran?
- 10- Has excess construction density charge affected the development process? In what ways?

APPENDIX 2

NAMES OF THE INTERVIEWEES

- | | |
|---------------------------------------|-------------------------------|
| 1. Mr Sohrab Mashhoudi | 31. Mr Mohsen Yousefi |
| 2. Mr Majid Paksaz | 32. Mr Habib-allah Taherkhani |
| 3. Dr Mohsen Habibi | 33. Mrs Mahdokht Hamed |
| 4. Mr Naser Nikou-Sheresht | 34. Dr Alireza Mirhabibi |
| 5. Dr Pirouz Hanachi | 35. Mrs Kiaei |
| 6. Dr Hamid Majedi | 36. Mr Farokh Zonouzi |
| 7. Mr Mohammad Haghani | 37. Mrs Hodsani |
| 8. Mr Farhad Soltani-Azad | 38. Mr Khodabakhshi |
| 9. Dr Eskandar Mokhtari | 39. Dr Fariborz Dolatabadi |
| 10. Mr Kavianfar | 40. Mr Rezafar |
| 11. Mr Milani | 41. Mr Behkam |
| 12. Mr Mohammad Salari | 42. Mr Ebrahimi |
| 13. Mr Mohammadzadeh | 43. Mr Khoshnoudiyan |
| 14. Mr Ghoseyri | 44. Mr Saeid Asooyar |
| 15. Mr Ahmadi | 45. Mr Hoshyarkhah |
| 16. Dr Mehrandish | 46. Mr Javadi |
| 17. Dr Masoud Shafigh | 47. Mrs Mahsa Hojat |
| 18. Mr Hamidreza Kakhi | |
| 19. Mr Akbari | |
| 20. Mr Moosavi | |
| 21. Mr Poorsadegh | |
| 22. Mr Bahram Farivar-Sadri | |
| 23. Mr Amir Khalaj | |
| 24. Mrs Asadi | |
| 25. Mr Noorzadeh | |
| 26. Dr Mehdi Moieni | |
| 27. Mr Ahmad Saeidniya | |
| 28. Mrs Golabi | |
| 29. Mr Shahrokhbabadi | |
| 30. Maskan Bozorg Atiyeh
(company) | |

APPENDIX 3

ETHICAL APPROVAL

UCL RESEARCH ETHICS COMMITTEE
GRADUATE SCHOOL OFFICE



Dr Claudio De Magalhaes
Bartlett School of Planning
UCL

13 March 2014

Dear Dr Magalhaes

Notification of Ethical Approval
Project ID: 5431/002: Municipal revenues and urban change in Tehran

I am pleased to confirm that in my capacity as Chair of the UCL Research Ethics Committee I have approved your study for the duration of the project i.e. until March 2015.

Approval is subject to the following conditions:

1. You must seek Chair's approval for proposed amendments to the research for which this approval has been given. Ethical approval is specific to this project and must not be treated as applicable to research of a similar nature. Each research project is reviewed separately and if there are significant changes to the research protocol you should seek confirmation of continued ethical approval by completing the 'Amendment Approval Request Form'.

The form identified above can be accessed by logging on to the ethics website homepage: <http://www.grad.ucl.ac.uk/ethics/> and clicking on the button marked 'Key Responsibilities of the Researcher Following Approval'.

2. It is your responsibility to report to the Committee any unanticipated problems or adverse events involving risks to participants or others. Both non-serious and serious adverse events must be reported.

Reporting Non-Serious Adverse Events

For non-serious adverse events you will need to inform Helen Dougal, Ethics Committee Administrator (ethics@ucl.ac.uk), within ten days of an adverse incident occurring and provide a full written report that should include any amendments to the participant information sheet and study protocol. The Chair or Vice-Chair of the Ethics Committee will confirm that the incident is non-serious and report to the Committee at the next meeting. The final view of the Committee will be communicated to you.

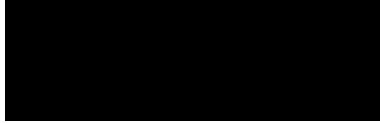
Reporting Serious Adverse Events

The Ethics Committee should be notified of all serious adverse events via the Ethics Committee Administrator immediately the incident occurs. Where the adverse incident is unexpected and serious, the Chair or Vice-Chair will decide whether the study should be terminated pending the opinion of an independent expert. The adverse event will be considered at the next Committee meeting and a decision will be made on the need to change the information leaflet and/or study protocol.

On completion of the research you must submit a brief report (a maximum of two sides of A4) of your findings/concluding comments to the Committee, which includes in particular issues relating to the ethical implications of the research.

With best wishes for the research.

Yours sincerely



Professor John Foreman
Chair of the UCL Research Ethics Committee

Cc:
Katayoun Karampour, Applicant
Professor Mike Raco, Head of Department

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