Internal Migration and Urbanization in I.R. Iran

United Nations Population Fund

University of Tehran

STATISTICAL RESEARCH AND TRAINING CENTER

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Hossein Mahmoudian, PhD

(University of Tehran)

Ali Ghassemi-Ardahaee, PhD

(Payame Noor University)

Translation from Farsi into English, Hamid Marashi, PhD

2014

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Foreword

Over the past three decades, the Islamic Republic of Iran (I.R. Iran) has been experiencing rapid socio-demographic and economic changes. These shifts have an impact on national development patterns, as well as on the socio-economic situation and the population structure of the country, and vice versa. Rapid urbanization, new patterns of internal migration, declining fertility, the current youth bulge, an upcoming aged population, as well as the growing number of female-headed households are some of the main population issues to have emerged due to broad socio-economic changes. All have the potential to significantly influence the I.R. Iran's future development. Consequently, developing a comprehensive knowledge and generating scientific evidence on these emerging population issues should be a priority for all relevant government and civil society institutions. Such knowledge and evidence will significantly strengthen the capacity of decision-making, programming, planning and evidence-based policy formulation in the I.R. Iran.

Considering the importance of these emerging population issues and associated needs, the 5th Country Programme of the United Nation Population Fund (UNFPA) in the I.R. Iran (2012-2016) placed great emphasis on the analysis and utilization of relevant and up-to-date evidence for decision-making. In addition, a key focus area of the Country Programme is upstream engagement with the government for advocacy and policy formulation in the area of population and development. In this regard, UNFPA has worked closely with its national partners, including the Statistical Center of Iran (SCI), the University of Tehran and the Statistical Research and Training Center (SRTC) of SCI to provide and disseminate comprehensive data and information, as well as to develop in-depth situation analyses on four key emerging population issues: urbanization/internal migration, youth, ageing and female-headed households.

This report is a comprehensive situation analysis on urbanization and internal migration which has been prepared by the Department of Demography of the University of Tehran. I would like to express my deep gratitude to Prof. Hossein Mahmoudian and Prof. Ali Ghasemi Ardehaei from the University of Tehran who developed this valuable report. I would also like to thank my colleague Mr. Kambiz Kabiri, UNFPA Programme Analyst for his contribution and support to this report.

I am confident that this report will provide valuable inputs and recommendations for policy- and decision-makers in the area of population and development in the I.R. Iran.

Dr. M. Hulki Uz
UNFPA Representative

Preface

Migration, which is one of the factors related to population dynamism, brings about change in the size, structure, and growth rate of population. It also affects the society and environment in both the origin and destination. Migration can be viewed as a form of adaptation and compatibility in response to socio-economic needs. Therefore, migration can take place due to regional differences. Migration consequences can be positive (like lessening regional inequality, idea diffusion etc.) and negative (like brain drain, under-development in the origin place etc.). Redistribution of population in the form of urban agglomeration is one of the consequences of migration which itself has many different consequences.

On the average, about one million people have moved within the country annually over the last three decades. This shows the importance of the movement as an influential social and demographic reality which may have strong interrelationships with other related realms. Since the levels of fertility and mortality of the country have declined to the lowest levels, internal migration might play an important role in population growth at regional level in future.

Using census data and other data sources, this report aims to study the situation of internal migration and urbanization in Iran in terms of causes and determinants, consequences, and policy making efforts. This report can also provide necessary data and guidelines for enforcing appropriate policies regarding internal migration and urbanization.

We owe many thanks to those who made contributions to the research. We appreciate the valuable support of Dr Hulki Uz, the UNFPA Representative in Iran, Mr Kambiz Kabiri, the UNFPA Program Manager, and their colleagues Ms Niki Tavakoli and Ms Mehrnaz Soleymanlou. Many thanks go for the administrative and scientific support of the Department of Demography, Faculty of Social Sciences, and Research Deputy of the University of Tehran. We would also like to thank Dr Marashi for the translation of the report to English and those who had contributions to different stages of the report publication.

Hossein Mahmoudian

Ali Ghassemi-Ardehayi

Executive Summary

- Internal migration is a key element of population distribution and socioeconomic changes at both the national and regional level. Migration influences the volume, growth, and structure of population. One outcome of internal migration is an increase in urbanization.

- Over the last three decades in Iran, averages of one million people have moved within the country annually. This trend illustrates the emergence of internal migration as a significant and influential social and demographic issue, which may have complicated impacts on the country's demographic, social, economic, and political matters. The interprovincial migration pattern shown in the four most recent censuses shows that the largest proportion of immigration has been towards the provinces of Tehran (including the now separated province of Alborz), Isfahan, and Khorassan Razavi. Furthermore, the Provinces of Tehran, Khoozestan, and East Azerbaijan have had the largest number of out-migrations, respectively. The net migration rate of provinces demonstrates that the provinces of Tehran (together with Alborz) and Isfahan bore the highest positive net migration while East Azerbaijan, Kermanshah, and Khoozestan the highest negative net migration. According to the data extracted from the 2011 census, the net migration intensity of the Provinces of Alborz, South Khorassan, and Semnan has risen.

- The total migration rate index proves that in the last 15 years, the highest impact of immigrants and emigrants were in the Provinces of Semnan, Ghom, Booshehr, Markazi, and Alborz. In addition, migration in proportion with the indicators of births and deaths contributed to the rise in population in the Provinces of Semnan, Yazd, Tehran, South Khorassan, and Gilan while it had a negative impact in the Provinces of Kermanshah, Hamedan, East Azerbaijan, Ardebil, Chaharmahal and Bakhtiari, and Lorestan.

- Regarding net migration indices, the total migration rate, and migration ratio, the Provinces of East Azerbaijan, Isfahan, Tehran (together with Alborz), South Khorassan, Semnan, Ghom, Kermanshah, Lorestan, Hamedan, and Yazd held a prominent position and witnessed further interventions and interactions with interprovincial migration trends compared to the other 20 provinces of the country; accordingly, the conditions in the aforesaid provinces were subjected to further analysis.

- Within the 1976-2011 period, the rate of urban-urban migration increased significantly while the reverse is true about rural-rural migration. The rising trend in urbanization in Iran within the recent decades would necessitate that the ratio of urban-urban migrations has also gone up in comparison with the migrations between rural areas. It is worth noting the consistent downward trend of rural-urban migration in the last 35 years; this is of particular interest as the 2011 census shows that the percentage of urban-rural migration (15 percent) has for the first time surpassed that of rural-urban migration (13 percent).

- Over the past five years, as the urban population ratio has increased, internal migration – as well as natural causes (such as births and deaths) – has had a marginal role on this increase (with the negative migration balance of 100,000), however the

two factors of "changing rural to urban areas" and "integrating rural within urban areas" were decisive.

- While the highest rates of migration have occurred within the 20-34 age range (the age of marriage, education, and military service) and that the migrants' sex ratio (especially interprovincial migrants) is higher than that of the national population, the dominance of this age group and the sex ratio in the urban-rural migrations tops other modes of migration and rural-urban migration. Rural-urban migrants are mostly prompted to migrate for work and education purposes, in order to enhance their socioeconomic standing. On the other hand, rural-urban migrants are often rural people who are forced to return to their birthplace (for instance, in order to complete their military service and/or end of education).

- The lowest percentage of women's was in urban-rural migration while the highest was in rural-urban migration. These differences demonstrate that women opt for internal migrations based on arising needs. An analysis of the underlying causes of women's migration shows that in addition to following their families (tied migration); women mostly migrate for education purposes. Generally speaking, over two-thirds of migrant women say that they are tied migrants. Only 10 percent of heads of households (who act as the main decision makers in the process of migration) are women. In both economic and tied migration, sex is the prime independent variable and can account for almost half of the changes in the migrations having taken place. In tied migrations, the probability of women's migration is four times higher than that of men, while in economic migration, men are four times as likely as women to migrate.

- Migration for both sexes depends on age range. Approximately 70 percent of migrants who are under 20 are tied migrants, as opposed to the 30 percent who are above 20. Only less than eight percent of men above 20 are tied migrants; for women of the same age cohort, this percentage is 70 percent. In terms of work migration, the percentages for the age cohorts of women are much lower (less than five percent); yet, the percentages for men in several age groups (between 25 and 49) are much higher (above 40 percent). The main gap between men and women in work migration starts in the 25-29 age group and reaches its peak in the 30-39 age group. The gap then decreases as the age increases.

- The first ever census in Iran in 1956 demonstrated that less than one-third of the country's population were urban dwellers. Around 1981, the share of rural and urban dwellers became equal while according to the 2011 census, over 70 percent of Iran's population was residing in cities. Consequently, urbanization increased by 73 percent per year from the first to the most recent census. With 95 percent of its population being urban dwellers, the Province of Ghom occupies the first place in terms of urbanization in both the 2006 and 2011 censuses, closely followed by the Provinces of Tehran, Alborz, and Isfahan. The lowest rate of urbanization in 2006 and 2011 were the Provinces of Hormozgan and Sistan and Baloochestan, respectively.

- The average annual growth of urban population in the periods 1956-1966 and 1966-1976 was five percent, going up by 0.5 percent in the 1976-1986 period. The trend subsequently went downward, standing at 2.1 percent in 2011. A comparison of the urban populations of provinces in the 2006 and 2011 censuses shows that the highest

rate of increase in urban population growth was in the Provinces of Booshehr, Hormozgan, and Chaharmahal and Bakhtiari, with the lowest in Sistan and Baloochestan, Lorestan, and Hamedan. This rise has caused the highest and lowest annual urban population growth in the above provinces, respectively.

- The number of Iranian cities in the first census (1956) was 201. This figure stood at 1139 in 2011, with the Province of Isfahan (with 101 cities) ranking as the province with the highest number of cities, followed by the Provinces of Fars, Khorassan Razavi, Kerman, Khoozestan, and East Azerbaijan. These six provinces together comprise almost 40 percent of Iran's urban areas. At the other end of the spectrum is Ghom (with six cities), as the province with the lowest number of cities. This province, together with Alborz, Kohkilooyeh and Boyerahmad, Semnan, North Khorassan, and Zanjan, house almost eight percent of the cities of Iran.

- According to the 2011 census, almost 33 percent of Iran's cities have a population of less than 5,000 inhabitants. Once the cities with a population of 5,000-10,000 are added to this category, the percentage of cities with less than 10,000 population is 57 percent. In contrast, the number of Iran's densely-populated cities is lower. Before the 1976 census, Tehran was the only city with a population of over half a million inhabitants. It was after this year that Mashad, Isfahan, and Tabriz all reached a population of 500,000. In the 2011 census, 14 cities had more than half a million people. Tehran is Iran's most populated city followed - in order - by Mashad, Isfahan, Karaj, Tabriz, Shiraz, Ahvaz, and Ghom, with a population of over one million each.

- Based on the World Health Organization (WHO) report in 2013, Iran is the eighth most air polluted country in the world. The same report places Ahvaz as the most polluted city in Iran and one of the most polluted cities in the world as well. The Iranian Environment News Agency has reported that Tehran has the highest degree of noise pollution in the country. The majority of environmental issues and peri-urbanism are prevalent in densely-populated cities. It can be argued that the root to most pollution problems is the overwhelming concentration of the population. The growth of Iran's population, coupled with an increase in motor vehicles, shifts in the use of agricultural lands to residential, industrial, and commercial purposes, and the expansion of factories and industrial occupations, are among the key factors leading to environmental pollution. With respect to the high growth of urbanization - with migration playing a major role - the socioeconomic circumstances of urban areas have become vividly different from those of rural areas.

- In recent decades, urbanization and migration programs and policies focused on Tehran. Following the Islamic Revolution, purchasing residential units, issuing occupation licenses to individuals, and the registration of students was done by issuing special economic ID cards of the same city where a given citizen in from. In recent years, a major plan aimed at transferring employees from Tehran to other cities, has taken place. This has also involved constructing townships in the peripheries of highly-populated cities, as well as rural development projects. These migration programs have been implemented to prevent the exponential growth of urban populations. Recent findings encourage the development of more suitable migration programs which would better address the accumulation of the population in the capital and densely-populated cities.

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1. Overview

1.1. Introduction

Migration brings about change in the age and sex composition and the average annual growth of the population and also leads to social, cultural, and economic changes in both the origin and destination of migrants. The movement of individuals is a theme discussed in numerous disciplines. Migration is a spatial movement which occurs for different reasons and objectives. Koppel (1976) asserts that within the modern patterns of migration, industrialization and changes in social thinking can be seen as main causes of migration. Today, movements have been made easier and are most often by individuals seeking progress, and access to welfare and better amenities.

Notwithstanding the fact that migration has always been a human quality, the trend of migration has only come about following the Industrial Revolution, gaining traction in the years that followed. Migration can be seen as a form of social adaptation and compatibility mode in response to economic, cultural, and social needs (Todaro, 1988). Balan (1981) argues that the increase in migration studies since the 1960s is in fact a response to the increasing interest of policymakers and programmers concerning population growth and urbanization.

An analysis of the factors affects the Iran's population growth over the course of the past century demonstrates that changes in mortality and health conditions have played a decisive role in these changes. With an improvement in the health of the population, and fewer deaths due to poor health and livelihoods (Khossravi et al., 2012, 2007), fertility became one of the main factors impacting population growth. The total fertility rate in Iran reached 1.9 in the 2006 census, and 1.8 in 2011, which is below the replacement level (Statistical Center of Iran, 2011). Under the demographic circumstances and in light of other social, economic, and cultural parameters, the influence of internal migrations on Iran's demographic changes at different geographical levels grew in importance. It can be argued that internal migration is among the key factors impacting Iran's population at provincial level and even smaller units.

After the agricultural revolution, the establishment of cities is the second most important revolution in human development. Establishing cities marked the beginning of a social trend which led to fundamental changes in the relationship between humans and their environment (Abedin-Darkoosh, 1985). In Western societies, urban populations have enjoyed an upward trend in health (and thus a fall in mortality), and second, the detachment of rural populations especially in terms of the industrial exploitation of land which means detachment of human resources from it (Jahanshahi, 2005). With the increasingly prominent role of the oil industry agriculture in Iran's economy and the declining role of the agricultural sector, the rural-urban relationship underwent a fundamental change (Maki, 2007). By relying on the export of crude petroleum for economic growth, cities transformed into centres of social change. The increase in foreign trade and growth caused by investments and foreign loans turned cities into major centers of trade and economic dynamism, and hubs for the labor force. The government used the majority of petrodollars in large cities, which caused an unbalanced distribution of urban-rural revenues and a rise in rural-urban migrations. Subsequently, factors intensifying the rural-urban trend of migration included the Land Reform Act of the 1960s, the rapid changes in urban society from the early 1970s onwards (Talleb & Anbari, 2005; Vossooghi, 1987), the Islamic Revolution (Azkia & Ghafari, 2004), the Iran-Iraq War (Rostamalizadeh &

Ghassemi-Ardahaee, 2012), and the approach to planning rural communities (Jomepoor, 1999).

Among the outcomes of internal migration (mostly rural-urban and from small to large cities) is the extension of urbanization. Therefore, rural-urban migration which is one of the main themes of demographic discussions is the prime cause of the increase of urbanization alongside demographic outcomes.

Since population growth and, consequently, the movements of humans in the past occurred at much lower levels, the impact of such movements was not notable in terms of the economic, social, and demographic structure of out-migration and in-migration zones. Nowadays, migration (and peri-urbanism as its outcome) has become a major population issue and social problem in developing countries. In Iran, rural-urban migrations and small to large city migrations have led to a myriad of changes in the thinking, lifestyle, behavior, and psyche of rural inhabitants, which in turn cause unfavorable social repercussions. Places termed as out-migration points are mostly small and disadvantaged areas. While some of these places have made extensive investments in their human resources, they have nevertheless lost much of their skilled labor force due to the absence of institutions such as universities, workplaces and industries.

In addition to the profound economic and psychological effects caused by rural-urban migrations, irregularities also exist in the physical expansion of cities, sometimes resulting in peri-urbanism and the formation of shanty towns. Examples of such problems include: the rise of poverty in cities, inadequate access to housing and services, alienation of citizens from one another, shanty towns, insufficient transportation systems, and inefficient urban amenities. An early and unplanned urbanism can be explained as the unpleasant and imitated transformation of rural to urban life. One reason for the increase in urbanism is Iran's centralized approach to development and the development of rural programs, as well as the dominance of urban-based media. Since migration is one of the prime factors at work in the growth of urbanization in Iran, a coterminous study of migration and urbanization bears significant value.

1.2 Objectives

This report reviews Iran's *internal migration* and *urbanization*, and the relation between the two. The research focuses on:

- The migration patterns in different provinces, based on the prevalence of out- and in-migration;
- The trends of Iran's internal migration in terms of urban and rural origins, the destinations of migration and the typology of intra- and interprovincial migrations;
- The age and sex composition of migrants;
- The causes and determinants of migration;
- The level and trend of urbanization including its determinants and outcomes;
- The national policies and programs related to internal migration and urbanization in Iran.

1.3 Data and Research Methodology

The research methodology is primarily secondary analysis of data obtained in nationwide censuses. The report employs limited data from the censuses from 1956 to 1996, but makes extended use of data from the last two censuses (2006 and 2011). In addition, the 20 percent sample data file of the 2006 census, and the two percent of the 2011 census were also applied in individual-level analyses. The files are available on the portal of the Statistical Center of Iran. Other research on urbanization and its outcomes was also employed.

1.4 Concepts and Indicators

The key variables of *migrant*, *net migration*, *net migration rate*, *total migration rate*, *migration ratio*, and *urbanization rate* are defined hereunder.

Migrant: An individual who has changed his/her city or village of residence between two censuses (which are normally conducted in November). Therefore, a migrant in the 1986 census is one who has changed the place of his/her residence in the 1976-1986 period. Likewise, a migrant in the 2011 census is "a person who has changed his/her city or village of residence between 2006 and 2011."

Internal migration: Migrations which have happened within the Iranian territory can be classified as either intra- and inter-provincial migrations based on political/administrative classifications. If migration occurs between and inside the cities of a province, it is classified as intra-provincial migration, while if it takes place from one province to another, it is coined inter-provincial migration. Furthermore, in terms of the classification of urban and rural origin and destination, internal migrations comprise the four groups of urban to urban, rural to rural, urban-rural, and rural-urban migrations.

Net Migration (NM): The subtraction of the number of the individuals who emigrate from a point within a specific period (E) from the number of individuals who immigrate somewhere within that period (I):

$$NM = I - E$$

Net Migration Rate (NMR): The ratio of NM in one region within a specific period to the overall population of that region in the midpoint of that period (P) multiplied by 1000:

$$NMR = \frac{I-E}{P} \times 1000$$

Total Migration Rate: The ratio of the total number of immigrants and emigrants in one area within a specific period to the total population of that area in the midpoint of that period.

$$\text{Total Migration Rate} = \frac{Emigrants + Immigrants}{Population\ at\ Midpoint} \times 1000$$

Migration Ratio: The ratio of net migrants of an area within a specific period to the number of deaths minus births in that region within the same period. This indicator illustrates the share of migration vis-à-vis the natural increase of the population (births and deaths) within the changes of the population volume.

$$\text{Migration Ratio} = \frac{Number\ of\ Net\ Migrants}{Number\ of\ Deaths - Number\ of\ Births} \times 1000$$

City (Urban Area): Any geographic location with a municipality.

Village (Rural Area): The collection of one or several connected places and areas (agricultural or non-agricultural) which are located outside cities and have an independent customary or registered boundary.

Urbanization Rate: The ratio of the population residing in urban areas to the total country population multiplied by 100.

$$\text{Urbanization Rate} = \frac{Population\ Residing\ in\ Urban\ Areas}{Total\ Population} \times 100$$

1.5 Report Structure

This report consists of five chapters. The first chapter includes introduction, research methodology, concepts, and the theoretical background. The second chapter reviews the conditions of internal migration in Iran followed by an analysis of urbanization in the next chapter. The fourth chapter discusses Iran's policies and programs related to internal migration and urbanization, while the final chapter concludes the report.

1.6 Theoretical Background

Migration comprises many different factors. As such, a plethora of theories exist analyzing why people migrate – both at the macro level, such as the pull-push theory, to the micro level, such as the rational choice theory. The most common contemporary understandings of the theory of migration are presented in the works of Massey and his colleagues (Durand & Massey, 1992; Massey & Espana, 1987; Massey et al., 1993, 1994). Of course migration and the movement of humans in advanced and industrialized states is categorically different from that happening in developing countries. As the reason and nature of these migrations are different, the outcomes and impacts are also different. In an Iranian context, migration increased following the Land Reform Act, the Islamic Revolution and the Iran-Iraq War. To analyze the internal migrations taking place in Iran, one can look to to the value expectancy theory in migration.

According to the value expectancy theory, the player – or the migrant in this context – selects his/her place of residence from a series of alternative places which maximize the sum of benefits in various aspects (De Jong & Gardner, 1981). As stated by Haug (2008), "Certain characteristics affect the decision indirectly by influencing the value or expectation components. These include, firstly, individual and household characteristics, particularly in connection with demographic or socio-economic variables; secondly, social and cultural norms; thirdly, personality factors such as a readiness to take risks or adaptability; and fourthly, the opportunity structure" (p. 587). De Jong (2000) maintains that value expectations and goals determine the incentives for migration. The decision of households to deploy individuals or their own movement takes place with the expectation of achieving value goals. From this perspective, the previous intentions of migrants are the primary determiners for the real migration of migrants. De Jong argues that expectations and objectives so the family in terms of migration are the predictors of the original intention for

movement which are the immediate determiners of the act of migration respectively (Figure 1).

In order to study decision-making in migration, De Jong has identified the concepts of expectations/values, family migration norms, gender roles, satisfaction of residence, migrants' network, and direct behavioral facilitators and requirements. In their study on migration in rural Thailand, De Jong et al. (1996) conclude that the major factors determining decision-making for migration among men are dependency and welfare, social networks, the presence of young people in the households, and land possession. For women, the prominent determinants are income and welfare, the presence of elderly people in households, the size of the community, and loss of opportunity.

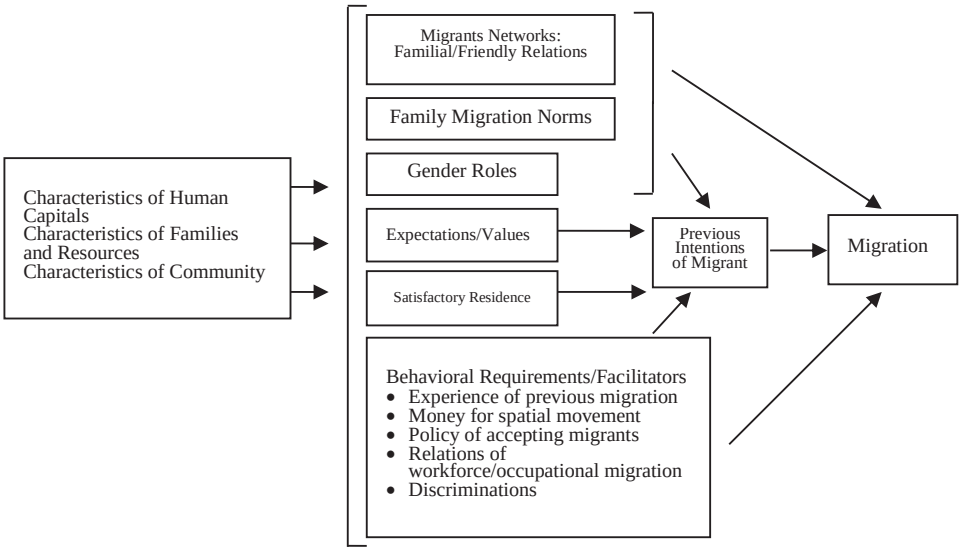

Figure 1 – De Jong's Model of the Process of Individuals' Decision-Making for Migration

1.7 Studies of Migration and Urbanization in Iran

As migration and urbanization are comprehensive and interlinked issues, extended studies have been carried out on these topics. Each researcher and institution has dealt with the issues in accordance with their own goals and needs. Researchers have frequently assessed the socio-economic situation, attitudes, and tendencies of migrants. These studies are often based on the data gathered from censuses and conducted through secondary data analysis. The studies have also analyzed the characteristics of migrants and discussed the themes of the development and underdevelopment of the country's provinces. In recent decades, the increase of rural-urban and urban-urban migrations and the unfavorable economic, social, and cultural outcomes have become areas of focus by researchers. Social crises and pathologies, the ever-increasing growth in urban population, and the overpopulation of cities are among the themes in recent studies of urbanization.

Among the studies on migration and urbanization in Iran, one central theme is rural-urban migration, which is considered as one of the central factors creating an increase in urbanization. In these migrations, the emphasis has been on the social, economic, cultural, and environmental causes affecting the social adaptation of migrants in cities; the heightened socioeconomic problems among rural migrants; accelerated urbanization and the imbalanced distribution of the urban population; and the lack of access to health and welfare services in rural areas. Adopting a meta-analysis approach, the studies conducted on the two domains of migration and urbanization in Iran have been analyzed by Mahmoudian and Ghassemi-Ardahaee (2012) with a summary of these studies provided in Appendix I and Appendix II.

2. Internal Migration in Iran

This section presents the findings on the status of migration in Iran. Age, sex, and regional analyses have been covered in the majority of these findings. The tabulation of data and the findings have been classified according to these demographic variables and regulated to make it possible to move from general analyses and interpretations to more detailed ones, in order to employ them in programming and policymaking. All data appearing in the tables and figures of this report are extracted from the nationwide censuses conducted in I.R. Iran except where otherwise stated.

2.1. Number of Migrants 1976-2011

A total of 5.7 million people migrated internally in Iran from 1976 to 1986. This figure is around 11.6 percent of the country's population in 1986. The huge influx of Afghans into Iran in this period (Gharokhloo & Habibi, 2006) accounted for a significant number of individuals (12.2 percent) reporting that their previous place of residence was "outside the country". As Table 1 shows, the subsequent censuses showed that the impact of migrations from outside the country was marginally affected the changes of the country population. Based on the 1996 census, the ratio of Iran's migrant population rose to 14.5 percent, with a gradual increase in the 2006 census to 17.2 percent. In the 2011 census – with the new decision to conduct censuses once every five instead of 10 years – the percentage of internal migrants decreased to 7.4 percent. A comparison of this figure with that of the 1996-2006 period shows that the ratio of internal migrations has dropped considerably in the last five years. Had the intensity of internal migration from the 1996-2006 continued, the figure would have been nine percent for the 2006-2011 period.

It is noteworthy that in the 2011 census, a significant percentage (7.1 percent) did not declare their previous residence. With the previous residence of such a sizeable cohort unknown, there could be a significant change in the reporting of net migrations in the provinces and also the typology of internal migrations with a rural or urban origin and destination. Below is a detailed breakdown of urban and rural migration.

Table 1 – Distribution of Migrants Based on Previous Place of Residence Disaggregated by Urban and Rural Places between the Censuses of 1986 and 2011

Year	Areas	Total	Place of Census		Other Cities of the Province		Cities of Other Provinces		Outside Iran	Not Declared
			City	Village	City	Village	City	Village		
1976-1986	Nationwide	6744687	270596	1283639	957944	441589	1362417	500517	699978	228007
	Urban	3984224	125912	855409	651579	316563	1134749	363555	377138	169319
	Rural	1760463	144684	428230	306365	125026	227668	136962	332840	58688
1986-1996	Nationwide	8718770	1229360	1959393	1849384	457807	2524121	415800	238331	44574
	Urban	6122675	788648	1252203	1325093	335954	1948430	301748	137714	32885
	Rural	2596095	440712	707190	524291	121853	575691	114052	100617	11689
1996-2006	Nationwide	12148148	1638662	2259380	2549939	561750	4201075	572965	260495	103881
	Urban	8999709	995650	1442307	2028369	432561	3361646	455186	198159	85832
	Rural	3148439	643013	817073	521570	129190	839429	117780	62336	18049
2006-2011	Nationwide	5534666	1162508	802842	995037	112667	1857041	108450	102519	393602
	Urban	4302086	871961	489796	8147665	80847	1572314	84608	78789	309006
	Rural	1232580	290547	313046	180272	31820	284727	23842	23730	84596

In order to show the number of migrants moving internally in Iran between 1996 and 2011, the question "duration of residence in city or village"[1] was used in the censuses (for migrants only). In the 2006 census, residence durations of "less than one year" and "nine years" were reported however in 2011 census "less than one year" and "five years"[2] having been reported. By joining these 15-year residence durations, the frequency of migrations in the 15 years studied could be calculated. Figure 2 shows that the frequency of internal migrants in the 1996-2006 period were relatively stable. The decrease in the 1965-2004 period can be attributed to the replacement of "one year" for "less than one year".

[1] This was done under the assumption that migrants had not declared the place of residence to the surveyors. Regarding the retrospective nature of the question, it is clear that a significant number of migrants did not have an accurate sense of the time of their migration. Therefore, the number of the migrants increased around the time of the census. This is especially true of those reporting "less than one year" in the 2006 census. Accordingly, a model for annual internal migration has been developed for Iran.

[2] Regarding the five-year interval between the 2006 and 2011 censuses, such a classification of duration could not be reasonable and the last duration of residence should have been reported in four-year intervals as it is the sum of these which could allow a five-year duration of residence and less for migrants. Nevertheless, the duration residence of five years which includes 1.7 percent (92,967 persons) was integrated in the four-year residence duration.

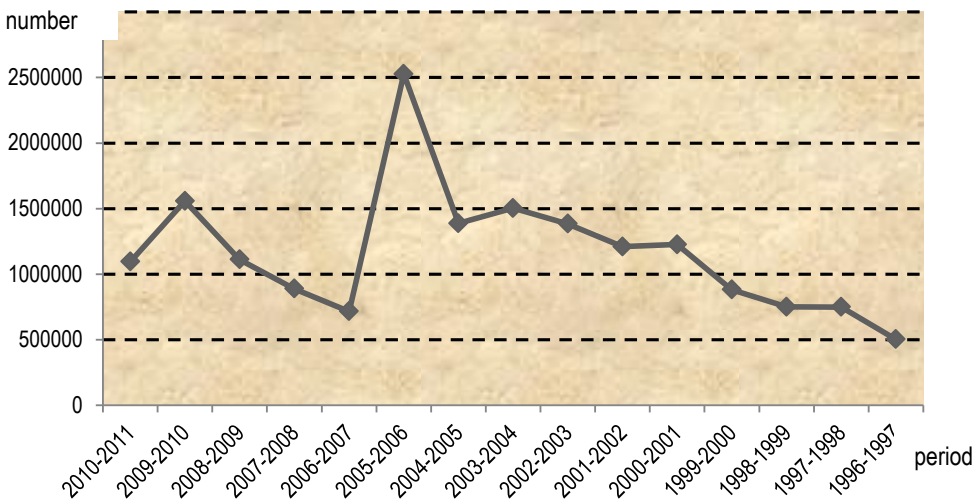

Figure 2 – Number of Internal Migrants 1996-2011, based on the Year of Migration

2.2. Internal Migrations with Rural and Urban Origins and Destinations

Figure 3 shows internal migrants in Iran based on origins and destinations (rural or urban) of migration in the 1986 and 2011 censuses. From 1976-2011 the ratio of urban-urban migrations increased significantly and rural-rural migrations decreased. Linked to the upward trend of urbanization in Iran in recent decades, the ratio of migrations between urban areas and rural areas has also increased. It is noteworthy that rural-urban migration rate has experienced a downward trend of in the past 35 years.

The 2011 census shows that the number of urban-rural migrations is higher (755,546 people in total) than rural-urban migrations (655,251 people in total). This is a new situation in Iran and it can be concluded that along with natural population impacts (births and deaths), internal migrations have contributed negatively to Iran's urban population level in the last five years. This is in contrast to previous years (with a negative migration balance of 100,000). Two factors - rural to urban development and integrating rural into urban areas have been central to this development.

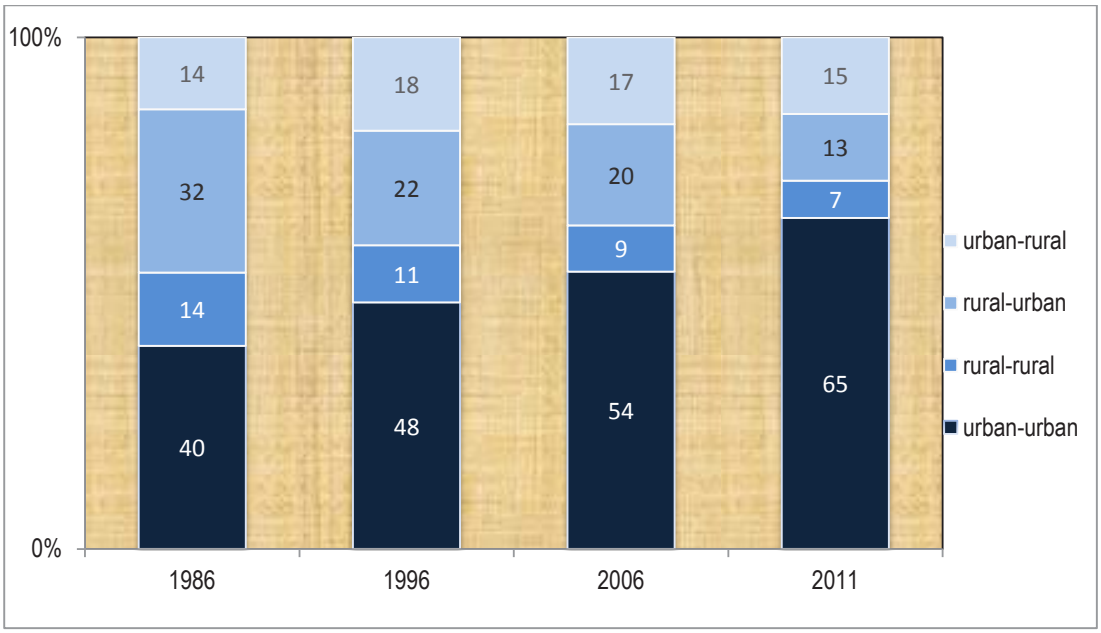

Figure 3 – Relative Distribution (Percentage) of Internal Migrants Based on Rural/Urban Origins and Destinations in the 1986 and 2011 Censuses

The number of intra-provincial migrations with both urban and rural origins and destinations is impacted by the percentage of rural and urban inhabitants. The Provinces of Ghom, Tehran, and Isfahan held the highest percentage of urbanization in the 2006 census as well as the highest percentage of urban-urban migration and the lowest percentage of rural-rural and urban-rural migration. In contrast, the Provinces of Kohkilooyeh and Boyerahmad, Hormozgan, North Khorassan, South Khorassan, and Kurdistan accommodated the highest rates of rural populations, the lowest percentages of urban-urban migrations and the highest percentages of rural-urban and rural-rural migrations (Figure 4).

The 2011 census revealed that the patterns of migration in provinces are similar to those five years ago. The provinces of Ghom, Alborz, Tehran, and Isfahan have the highest number of urban-urban migrations, and the lowest rate of rural-urban, rural-rural, and urban-rural migrations. In contrast, the provinces of North Khorassan, South Khorassan, Zanjan, and Kurdistan have the lowest urban-urban and highest other modalities of migration (Figure 5).

2.3. Internal Migrations Based on State and Geographical Divisions

Knowledge of the rate of inter- and intra-provincial migrations plays a major role in policymaking on population and migration. Figure 4 shows that the lowest percentage of inter-provincial migration took place in 1996 while the highest was in 2006. In the context of intra-provincial migrations throughout the last 35 years, urban-urban migrations decreased, and intra-city migrations fluctuated, peaking in 2011. These findings show that in the last five years, people have moved mostly to areas near their original place of residence and have more or less avoided longer migrations.

From 1996-2011, the provinces of Ghom, Semnan, Markazi, and Yazd (and Alborz in the 2011 census) were the highest recipients of inter-provincial migrants, while the highest rate of intra-city migrations occurred in the provinces of Fars, Kerman, Sistan and Baloochestan, and East Azerbaijan. This trend should be viewed in relation to the migration motives of in-migrants in these provinces (Figures 7 and 8).

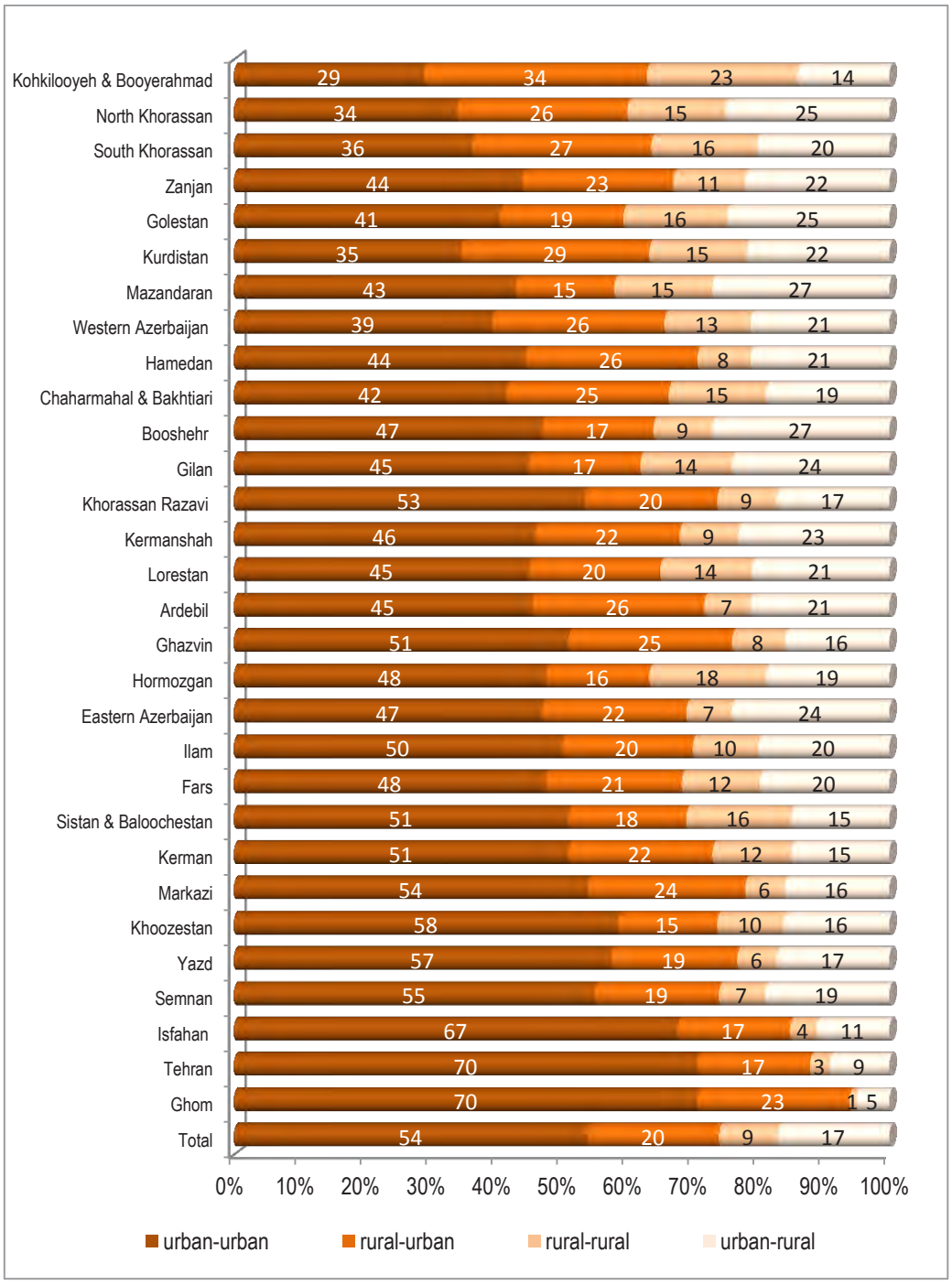

Figure 4 – Relative Distribution (Percentage) of Internal Migrants Based on the Direction of Migration Disaggregated by Province 1996-2006

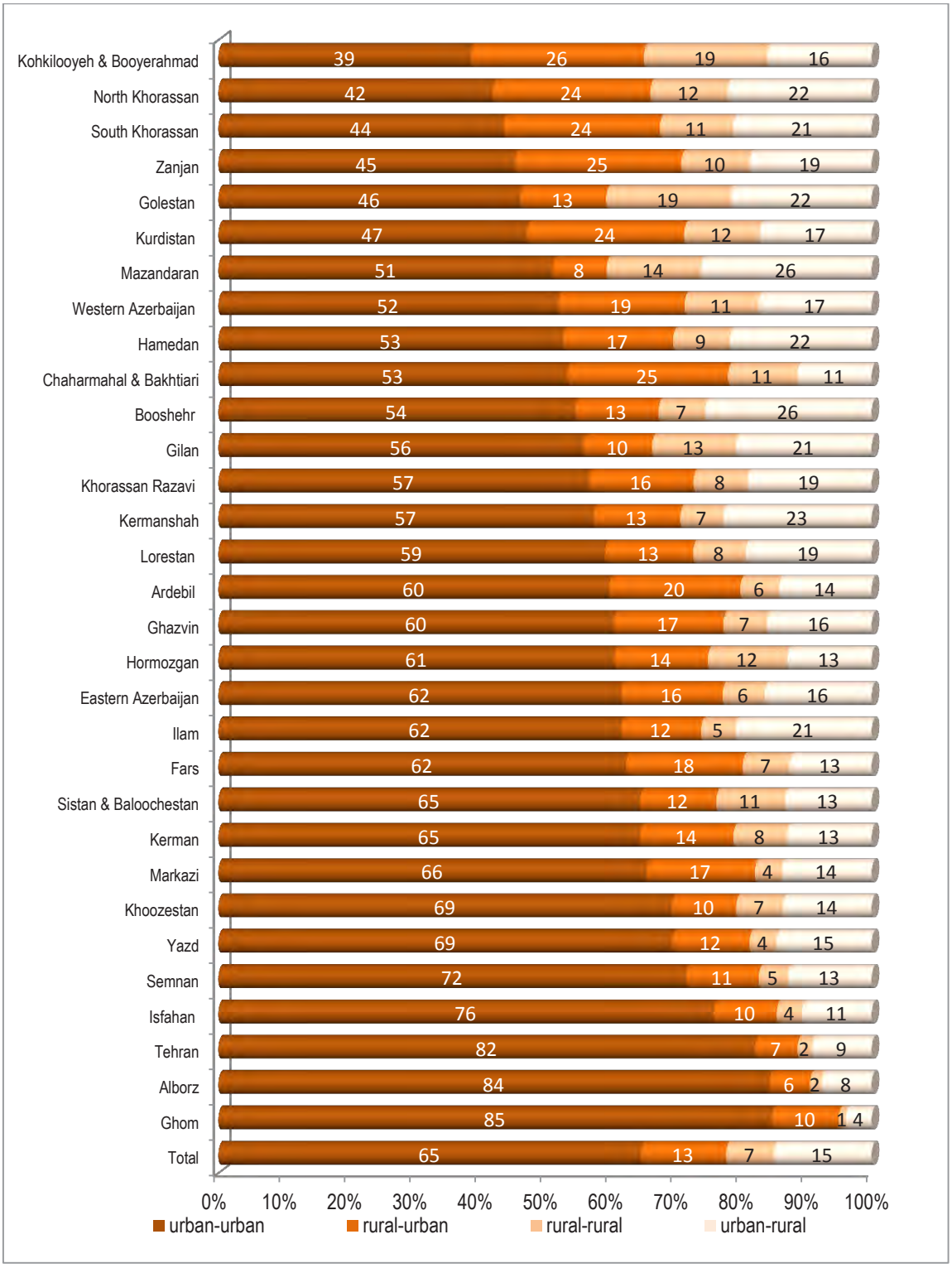

Figure 5 – Relative Distribution (Percentage) of Internal Migrants Based on the Direction of Migration Disaggregated by Province 2006-2011

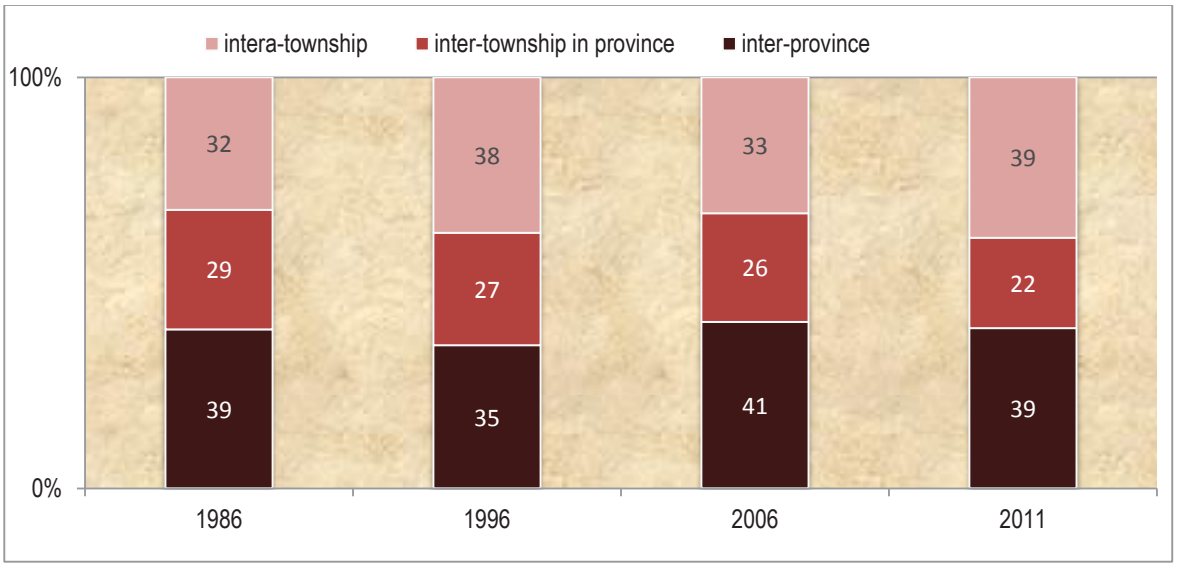

Figure 6 – Relative Distribution (Percentage) of Internal Migrants Based on State Divisions in the Censuses 1986- 2011

2.4 Migration Balance of Provinces

An analysis of the trends in inter-provincial migration based on the four censuses carried out between 1986-2011 (Table 2) shows that the highest number of migrants have moved to the provinces of Tehran (and Alborz), Isfahan, and South Khorassan, while Tehran Province has also had the highest rate of out-migrants, along with Khoozestan, and East Azerbaijan provinces. The provinces of Ilam, Chaharmahal and Bakhtiari, and Kohkilooyeh and Boyerahmad have had the lowest number of in-migrants and the provinces of Ilam, Kohkilooyeh and Boyerahmad, and Yazd (all among low-population provinces) have had the lowest number of out-migrants.

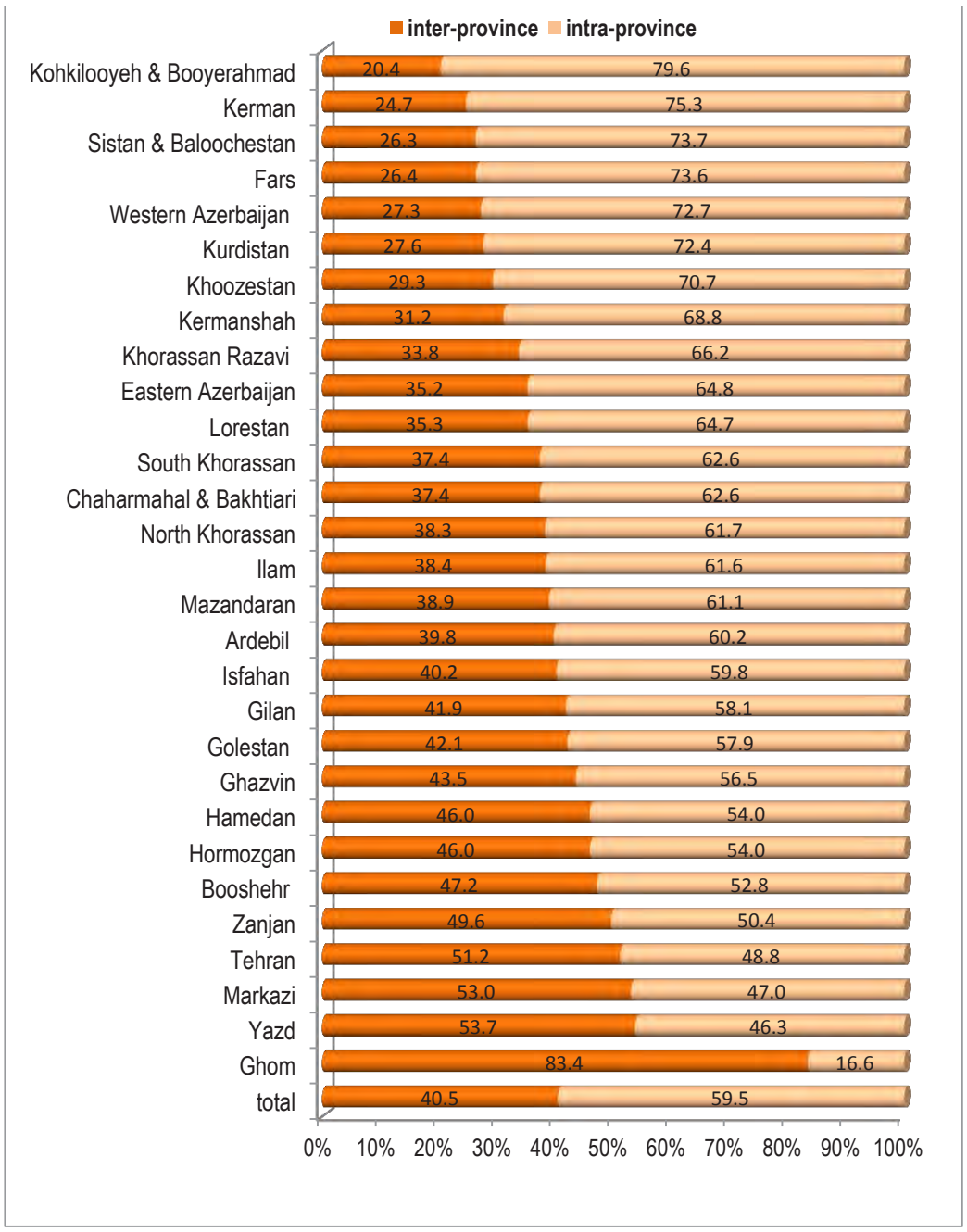

Figure 7 – Relative Distribution (Percentage) of Internal Migrants Based on State Divisions Disaggregated by Provinces in the Censuses 1996-2006

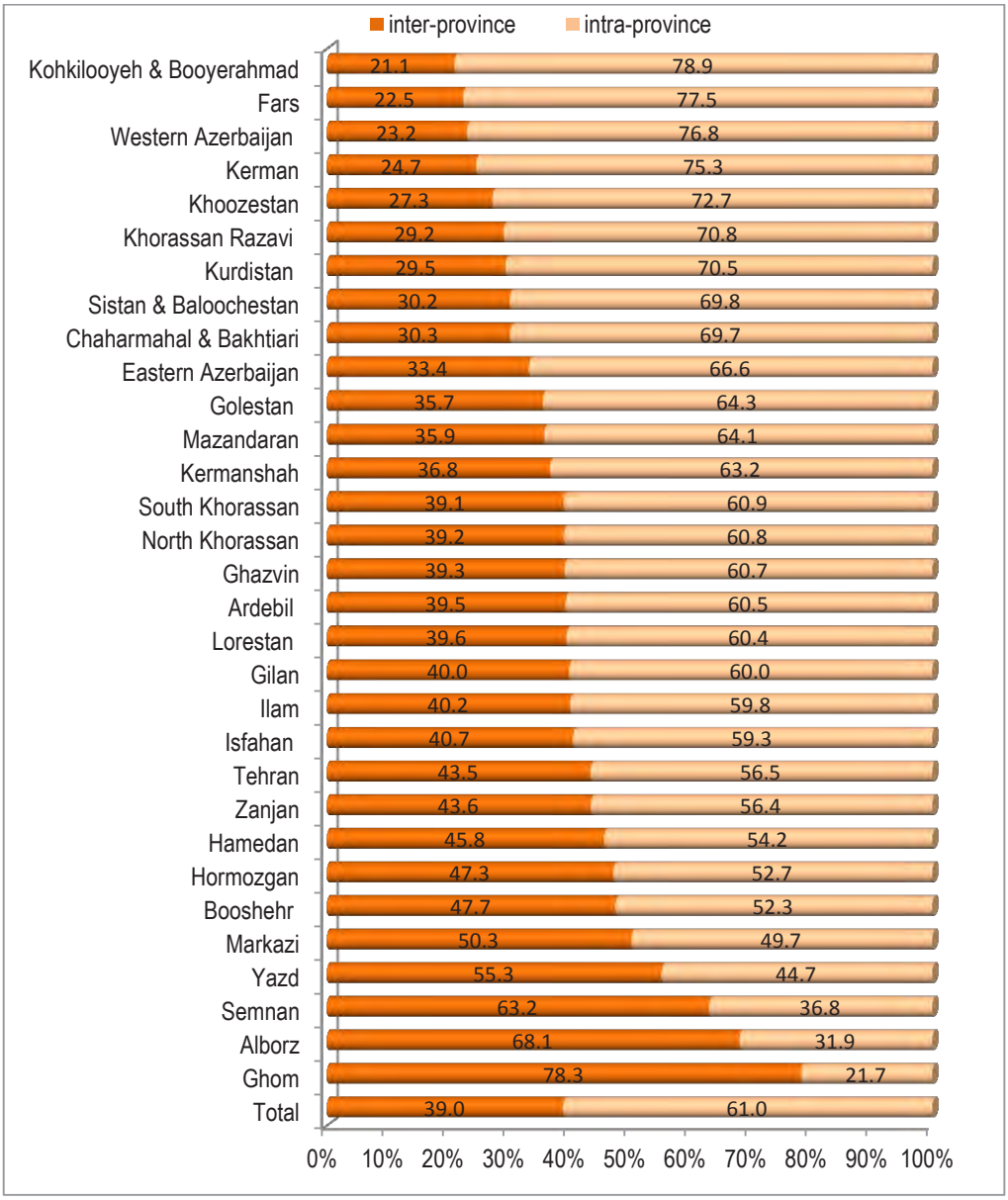

Figure 8 – Relative Distribution (Percentage) of Internal Migrants Based on State Divisions Disaggregated by Provinces in the Censuses 2006-2011

The net migration level of provinces illustrates that the provinces of Tehran and Isfahan have always had the highest positive net migration rates, while the highest negative net migration rates belong to East Azerbaijan, Kermanshah, and Khoozestan. The Iran-Iraq War in the period leading up to the 1986 census caused the Province of Khoozestan (as the first war-stricken province of the country) to have the highest negative net migration from 1976-86 (-267,644). In the following decade (1986-1996), Khoozestan became the third-highest province in terms of positive net migration, due to the end of the war, the return of internally-displaced people to Khoozestan and population movements to repopulate war-stricken areas.

The Province of Fars enjoyed the highest positive net migration from 1976-1986. Tehran Province became one of the provinces with a higher negative net migration rate in the next three census periods. In contrast, Gilan Province, following two census periods (1976-1986

and 1986-1996) with negative net migration, increased its population to the point where it was third-ranked in terms of positive net migration in 2011.

There has been a considerable change in net migration in Tehran province over the course of the past four censuses. In the 1986, 1996, and 2006 censuses, this Tehran Province had the highest positive net migration; however, Tehran Province became an origin for out-migration in the 2011 census (with a migration balance of -21,663). This was due to the fact that Alborz Province, which was part of Tehran Province in the previous censuses, played a major role in establishing Tehran as a destination for in-migration.

Regarding the fact that the discrepancy of the population share of provinces in the total nationwide population bears a direct impact on the net number of migrants in each province, one could conclude that net migration is not much of an applicable indicator for clarifying the circumstances of migration in provinces. Therefore, to better understand the conditions of migration in provinces, the annual net migration rate of provinces over a 15-year period (1996-2011) is shown in Figure 9 based on Table 3 and Table 4.

Table 2 – Percentage of Inter-Provincial Migrants Immigrating and Emigrating and the Net Migration of Provinces in the 1986-2011 Censuses

Province	Percentage of Immigrants				Percentage OF Emigrants				Net Migration in the Period			
	1976-1986	1986-1996	1996-2006	2006-2011	1976-1986	1986-1996	1996-2006	2006-2011	1976-1986	1986-1996	1996-2006	2006-2011
Eastern Azerbaijan	2.08	4.31	3.32	1.64	14.09	7.31	6.33	1.82	-224790	-88358	-143733	-7398
Western Azerbaijan	1.65	3.23	2.55	0.96	2.39	3.27	3.11	1.32	-13814	-1397	-26819	-13881
Ardebil	*	1.25	1.66	0.67	*	2.60	2.82	1.01	*	-39556	-55392	-13595
Isfahan	8.72	8.08	6.28	3.55	4.17	5.66	4.85	2.36	85157	71073	68623	46712
Alborz	*	*	*	4.84	*	*	*	2.49	*	*	*	92542
Ilam	0.58	0.76	0.78	0.4	0.8	1.00	1.01	0.47	-4197	-6962	-11136	-2655
Booshehr	3.81	1.43	1.92	1.31	1.07	2.76	1.59	0.7	51155	-38937	15580	24207
Tehran	39.6	28.5	30.1	9.65	14.2	16.6	17.25	10.2	475996	350383	615027	-21663
Chaharmahal & Bakhtiari	0.64	0.48	1.02	0.38	1.17	1.58	1.37	0.8	-10041	-32499	-16933	-16586
South Khorassan	*	*	1.05	0.79	8	8	1.27	0.45	*	*	-10205	13702
Khorassan Razavi	5.04	5.84	6.4	2.77	4.41	5.98	5.72	2.93	11690	-441	30854	-6194
North Khorassan	*	*	1.08	0.76	*	*	1.62	0.77	*	*	-25381	-402
Khoozestan	4.35	9.47	3.57	1.54	18.64	7.38	5.84	2.91	-267644	61349	-108212	-402
Zanjan	2.89	1.02	1.68	0.77	4.45	2.17	2.01	0.68	-29204	33862	-15955	3397
Semnan	1.29	1.72	1.5	1.06	1.06	1.12	1.33	0.59	4279	17682	8063	18250
Sistan & Baloochestan	1.52	1.78	1.4	0.69	1.63	2.28	2.89	1.54	-2032	-14592	-71332	-33414
Fars	6.3	4.12	3.47	1.86	3.05	4.97	4.18	2.51	60877	-24863	-33846	-25419
Ghazvin	*	*	2.03	0.8	*	*	1.99	0.97	*	*	1824	-6400
Ghom	*	3.63	2.53	1.16	*	1.91	2.04	1.04	*	50629	23406	4714
Kurdistan	0.84	1.86	1.5	0.94	2.72	3.13	2.73	1.19	-35221	-37145	-58889	-10161
Kerman	1.57	1.89	1.83	0.96	1.27	2.10	2.39	1.12	5486	-6384	-26644	-6143
Kermanshah	1.91	1.69	1.69	0.99	2.85	3.79	4.19	1.96	-17606	-61695	-119128	-38111
Kohkilooyeh & Booyerahmad	0.87	0.67	0.6	0.33	0.48	0.86	0.92	0.44	7308	-5521	-15110	-4253
Golestan	*	*	2.63	1.33	*	*	2.04	0.95	*	*	28129	13838
Gilan	2.62	3.49	4.24	2.19	4.26	4.10	3.72	1.43	-30772	-17772	24680	29818
Lorestan	1.59	1.44	1.57	0.64	3.33	3.43	3.01	1.55	-32491	-58606	-68790	-35744
Mazandaran	4.10	4.46	4.16	2.01	4.04	5.40	3.42	1.37	2103	27529	35444	25287
Markazi	2.12	2.66	2.86	1.31	3.34	2.98	2.73	1.11	-22760	-9508	6268	7795
Hormozgan	2.68	2.02	2.19	1.31	0.93	2.34	2.19	1.1	32866	-9484	-243	8010
Hamedan	2.04	2.82	2.27	1.16	4.76	4.33	4.14	1.62	-50933	44356	-89504	-18212
Yazd	1.1	1.40	2.09	1.28	0.88	0.99	1.27	0.62	4588	12151	39354	25931
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**				

* Not provinces at the time.

Table 3 – Population at Midpoint, Immigrants, Emigrants, and Net Migration of Iran's Provinces in the 1996-2006 Period

Province	Population at Midpoint	In-migrants		Out-migrants		Net Migration		Net Migration Rate (Annual)	Total Migration (In the Period)
		Number	Percentage	Number	Percentage	Throughout the Period	Annual		
Eastern Azerbaijan	3464498	158424	3.32	302157	6.33	-143733	-14373	-4.15	133
Western Azerbaijan	2684890	121623	2.55	148442	3.11	-26819	-2682	-1.00	101
Ardebil	1198083	79331	1.66	134723	2.82	-55392	-5539	-4.62	179
Isfahan	4241256	299943	6.28	231320	4.85	68623	6862	1.62	125
Alborz	516837	37292	0.78	48428	1.01	-11136	-1114	-2.15	166
Ilam	814971	91596	1.92	76016	1.59	15580	1558	1.91	206
Booshehr	11883166	1438406	30.13	823379	17.25	615027	61503	5.18	190
Tehran	809539	48705	1.02	65638	1.37	-16933	-1693	-2.09	141
Chaharmahal & Bakhtiari	585951	50244	1.05	60449	1.27	-10205	-1021	-1.74	189
South Khorassan	5156491	305305	6.40	274451	5.75	30854	3085	0.60	112
Khorassan Razavi	772109	51484	1.08	76865	1.61	-25381	-2538	-3.29	166
North Khorassan	4010876	170450	3.57	278662	5.84	-108212	-10821	-2.70	112
Khoozestan	932746	80132	1.68	96087	2.01	-15955	-1596	-1.71	189
Zanjan	545595	71778	1.50	63715	1.33	8063	806	1.48	248
Semnan	2064161	66792	1.40	138124	2.89	-71332	-7133	-3.46	99
Sistan & Baloochestan	4076957	165694	3.47	199540	4.18	-33846	-3385	-0.83	90
Fars	1055729	96758	2.03	94934	1.99	1824	182	0.17	182
Ghazvin	949891	120688	2.53	97282	2.04	23406	2341	2.46	229
Ghom	1393270	71493	1.50	130382	2.73	-58889	-5889	-4.23	145
Kurdistan	2328371	87427	1.83	114071	2.39	-26644	-2664	-1.14	87
Kerman	1828991	80819	1.69	199947	4.19	-119128	-11913	-6.51	154
Kermanshah	589328	28647	0.60	43757	0.92	-15110	-1511	-2.56	123
Kohkilooy& Booyerahmad	1521688	125742	2.63	97613	2.04	28129	2813	1.85	147
Golestan	2323379	202385	4.24	177705	3.72	24680	2468	1.06	164
Gilan	3464498	75131	1.57	143921	3.01	-68790	-6879	-4.17	133
Lorestan	1650481	198520	4.16	163076	3.42	35444	3544	1.28	131
Mazandaran	2762220	136621	2.86	130353	2.73	6268	627	0.49	207
Markazi	1290035	104492	2.19	104735	2.19	-243	-24	-0.02	170
Hormozgan	1232915	108342	2.27	197846	4.14	-89504	-8950	-5.29	181
Hamedan	1690612	99782	2.09	60428	1.27	39354	3935	4.37	178
Yazd	900610	158424	3.32	302157	6.33	-143733	-14373	-4.15	133

Table 4 – Population at Midpoint, Immigrants, Emigrants, and Net Migration of Iran's Provinces in the 2006-2011 Period

Province	Population at Midpoint	Immigrants		Emigrants		Net Migration		Net Migration Rate (Annual)	Total Migration (In the Period)
		Number	Percentage	Number	Percentage	Throughout the Period	Annual		
Eastern Azerbaijan	3664038	–7398	64330	1.64	71728	1.82	–1480	–0.40	37
Western Azerbaijan	2977018	–13881	37851	0.96	51732	1.32	–2776	–0.93	30
Ardebil	1238322	–13595	26232	0.67	39827	1.01	–2719	–2.20	53
Isfahan	4719284	46712	139168	3.55	92656	2.36	9342	1.98	49
Alborz	2245266	92542	190341	4.84	97799	2.49	18508	8.24	128
Ilam	551693	–2655	15858	0.4	18513	0.47	–531	–0.96	62
Booshehr	959608	24207	51612	1.31	27405	0.7	4841	5.05	82
Tehran	11763869	–21663	379158	9.65	400821	10.2	–4333	–0.37	66
Chaharmahal & Bakhtiari	876587	–16586	14965	0.38	31551	0.8	–3317	–3.78	53
South Khorassan	649477	13702	31201	0.79	17499	0.45	2740	4.22	75
Khorassan Razavi	5793741	–6194	108827	2.77	115021	2.93	–1239	–0.21	39
North Khorassan	839650	–402	29836	0.76	30238	0.77	–80	–0.10	72
Khoozestan	4403350	–53972	60521	1.54	114493	2.91	–10794	–2.45	40
Zanjan	990168	3397	30277	0.77	26880	0.68	679	0.69	58
Semnan	610480	18250	41506	1.06	23256	0.59	3650	5.98	106
Sistan & Baloochestan	2470035	–33414	27000	0.69	60414	1.54	–6683	–2.71	35
Fars	4466768	–25419	73170	1.86	98589	2.51	–5084	–1.14	38
Ghazvin	1172383	–6400	31598	0.8	37998	0.97	–1280	–1.09	59
Ghom	1099205	4714	45644	1.16	40930	1.04	943	0.86	79
Kurdistan	1466901	–10161	36793	0.94	46954	1.19	–2032	–1.39	57
Kerman	2795701	–6143	37792	0.96	43935	1.12	–1229	–0.44	29
Kermanshah	1912306	–38111	39020	0.99	77131	1.96	–7622	–3.99	61
Kohkilooyeh & Booyerahmad	646464	–4253	12940	0.33	17193	0.44	–851	–1.32	47
Golestan	1697051	13838	51017	1.33	37179	0.95	2768	1.63	52
Gilan	2442868	29818	85924	2.19	56106	1.43	5964	2.44	58
Lorestan	1735385	–35744	24991	0.64	60735	1.55	–7149	–4.12	49
Mazandaran	2998188	25287	78947	2.01	53660	1.37	5057	1.69	44
Markazi	1382608	7795	51333	1.31	43538	1.11	1559	1.13	69
Hormozgan	1490929	8010	51437	1.31	43427	1.1	1602	1.07	64
Hamedan	1730768	–18212	45512	1.16	63724	1.62	–3642	–2.10	63
Yazd	1032623	25931	50490	1.28	24559	0.62	5186	5.02	73

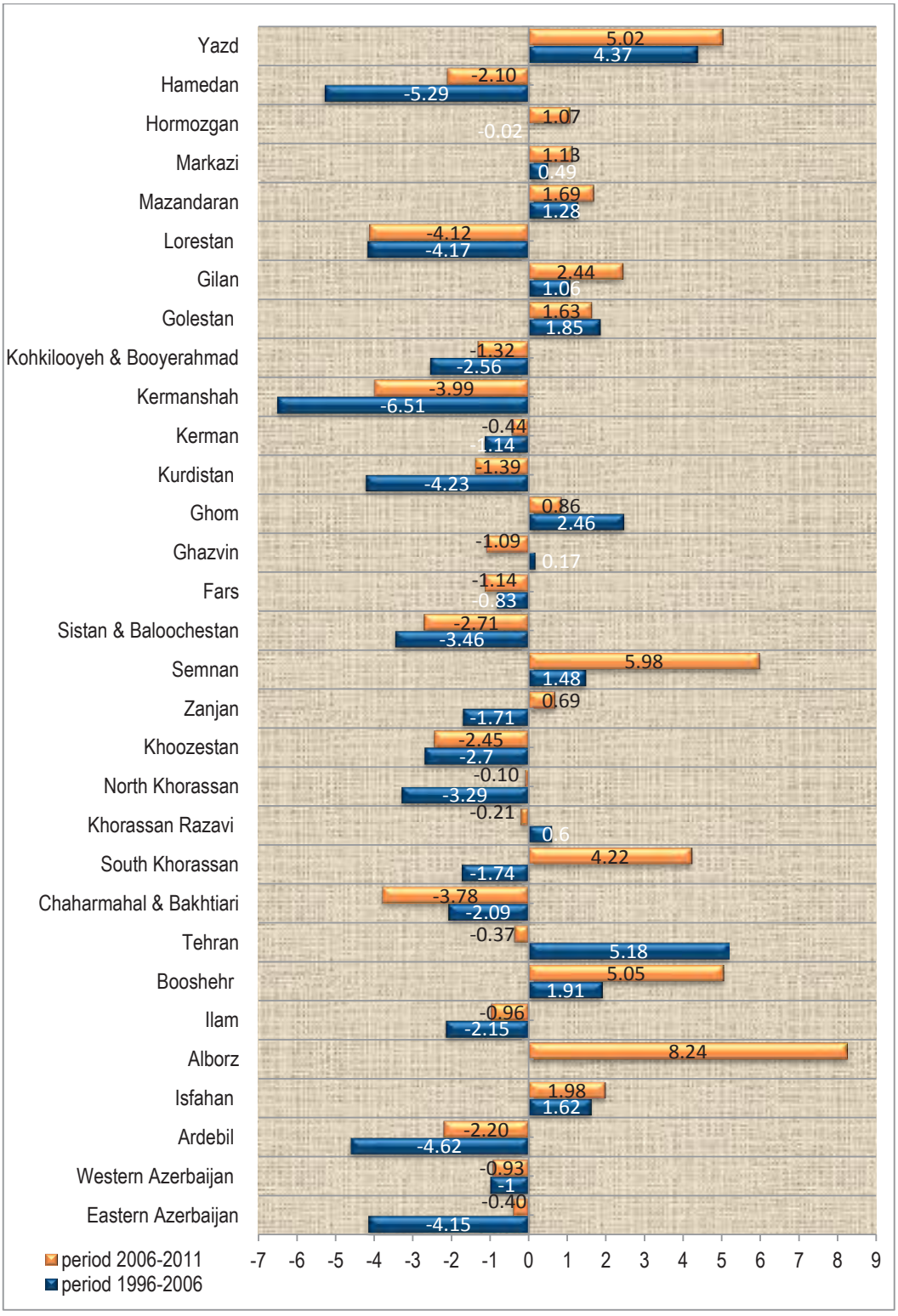

Figure 9 – Annual Net Migration Rate of Provinces during 1996-2006 and 2006-2011

In the 1996-2006 period, the highest positive net migration rates were in the provinces of Tehran, Yazd, and Ghom, while the highest annual negative net migration rates were reported in the provinces of Kermanshah, Hamedan, and Ardebil. A comparison of these results with

those of the 2006-2011 period underlines three important points. Firstly, in the 2006-2011 period, the provinces of Alborz, Semnan, and Booshehr had the highest positive annual net migration rates, while the provinces of Lorestan, Kermanshah, and Chaharmahal and Bakhtiari had the highest negative annual net migration. Secondly, the migration patterns of certain provinces had changed over the course of five years. The provinces of Tehran (due to the separation of the Province of Alborz), Khorassan Razavi, and Ghazvin had turned into out-migration spots, while the provinces of South Khorassan, Zanjan, and Hormozgan had become in-migration destinations. Thirdly, there was a major discrepancy in terms of the negative annual migration rate of provinces throughout the 1996-2006 period while the difference is significant in the positive annual migration rate during the 2006-2011 period.

2.5. Total Migration Rate and the Migration Ratio of Provinces

With respect to the migration balance in the numerator of the index of the net migration rate, the impact of migration waves on provinces populations would be excluded. Consequently, the total migration index is used to illustrate the impact of the total migration process on the provinces' population changes. An analysis of the findings of the above-mentioned index in the 1996-2006 and 2006-2010 periods (Figure 10) illustrates that the provinces of Alborz, Semnan, Ghom, Markazi, and Booshehr were impacted most by inter-provincial migrations with the provinces of Kerman, Fars, Sistan and Baloochestan, and West Azerbaijan were impacted least. For instance, in the Province of Semnan from 1996-2006 and in the Province of Alborz from 2006-2011, 25 out of each 1000 people in the two provinces were to inter-provincial migration trends (immigrants and emigrants). Interestingly, the impact of inter-provincial migrations on provincial populations in the five years leading up to the 2011 census was significantly lower than that of the 1996-2006 period; the highest change was reported in the northwestern provinces of the country.

The migration ratio index is used to demonstrate the share of migration vis-à-vis births and deaths (natural factors) in population changes. Table 5 and Figure 11 show that migration plays a major role in the population increase compared to natural factors, particularly in the provinces of Semnan, Yazd, Gilan, Tehran, and South Khorassan, while it contributes negatively in the provinces of Kermanshah, Hamedan, East Azerbaijan, Ardebil, Lorestan, and Chaharmahal and Bakhtiari.

For every 1000 people naturally added to the population in Semnan Province between 1996-2011, immigration accounted for 939 people and 638 people betweem 2006-2011. In the Province of Kermanshah, on the contrary, the population was reduced due to out-migration by 587 and 347 people for each 1000 people during the 1996-2006 and 2006-2011 periods. Compared to births and deaths, migration had no effect on population changes in the provinces of Khorassan Razavi and North Khorassan, while the highest impact of migration in the two periods was reported in the Province of South Khorassan which stands second after the Province of Semnan in the 2006-2011 period.

2.6. Inter-Provincial Migration in Selected Provinces

In terms of the overall situation of the provinces (in-migration and out-migration) and also the result of the indices of net migration rate, total migration rate, and provincial migration ratio in 1996-2011, the provinces of East Azerbaijan, Isfahan, Tehran (including Alborz), South Khorassan, Semnan, Ghom, Kermanshah, Lorestan, Hamedan, and Yazd were influential provinces in internal migration trends and included more inter-provincial migrations. This has prompted further analysis of these provinces in terms of migration. An overview of the inter-provincial migration patterns of these provinces can be found in Appendices III-XIII.

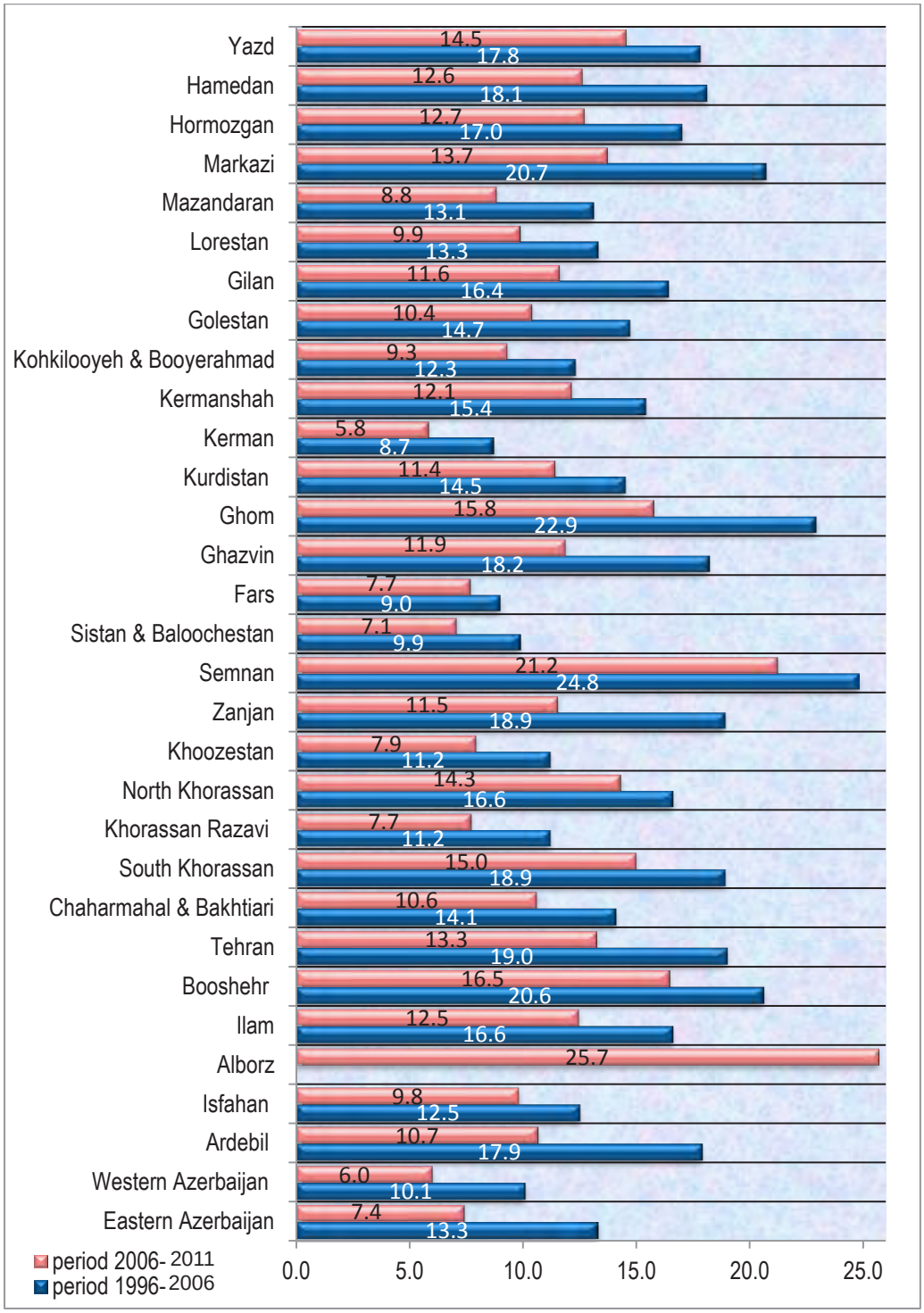

Figure 10 – Total Annual Migrations of Provinces during 1996-2006 and 2006-2011

Table 5 – Births, Deaths, and Migration Ratio of Provinces during 1996-2006 and 2006-2011

Province	1996-2006			2006-2011		
	Births*	Deaths*	Migration Ratio	Births**	Deaths**	Migration Ratio
Nationwide	**11659237**	**4090150**	–	**6626159**	**2205036**	–
Eastern Azerbaijan	602009	280214	–447	329418	156998	–43
Western Azerbaijan	570161	146421	–63	303831	94112	–66
Ardebil	236699	102858	–414	117169	32033	–160
Isfahan	620844	362022	265	357994	127978	203
Ilam	88812	23252	–170	50023	15601	–77
Booshehr	144999	40550	149	92554	25417	361
Tehran***	1725547	542003	520	1003539	300489	101
Chaharmahal & Bakhtiari	170652	91345	–214	92605	22511	–237
South Khorassan****	1296343	394550	–5	66626	41534	546
Khorassan Razavi****				599958	181080	–15
North Khorassan****				92916	38941	–7
Khoozestan	840711	195685	–168	491097	148244	–157
Zanjan	165349	49213	–137	89430	27706	55
Semnan	81468	72881	939	45145	16544	638
Sistan & Baloochestan	639665	123000	–138	399566	79432	–104
Fars	677587	216633	–73	393279	131399	–97
Ghazvin	173479	74969	19	97900	32410	–98
Ghom	159787	90969	340	99260	29769	68
Kurdistan	251895	75922	–335	134922	41053	–108
Kerman	480645	160086	–83	276340	58916	–28
Kermanshah	326199	123297	–587	169444	59721	–347
Kohkilooyeh & Booyerahmad	129423	31127	–154	73475	29448	–97
Golestan	289177	91749	142	179791	50700	107
Gilan	338212	268877	356	159461	87760	416
Lorestan	330741	110535	–312	172890	62432	–324
Mazandaran	417539	147905	131	218711	99187	212
Markazi	194190	66726	49	101986	48505	146
Hormozgan	282713	42429	–1	165693	77389	91
Hamedan	277268	102100	–511	148575	53201	–191
Yazd	147123	42429	376	102561	34526	381

* Civil Registration Organization, 2007

** Civil Registration Organization, 2012

*** As the Province of Alborz was separated from the Province of Tehran in 2010 and the data on the deaths and births of this province was not provided during 2006-2011, the data of this province was included in the Province of Tehran.

**** With respect to the establishment of the three provinces of Khorassan Razavi, North Khorassan, and South Khorassan in 2004 and the lack of data on the registry of births and deaths disaggregated by these three provinces between 1996-2004, the data of these provinces have been presented in the part on the Province of Khorassan in 2004, 2005, and 2006.

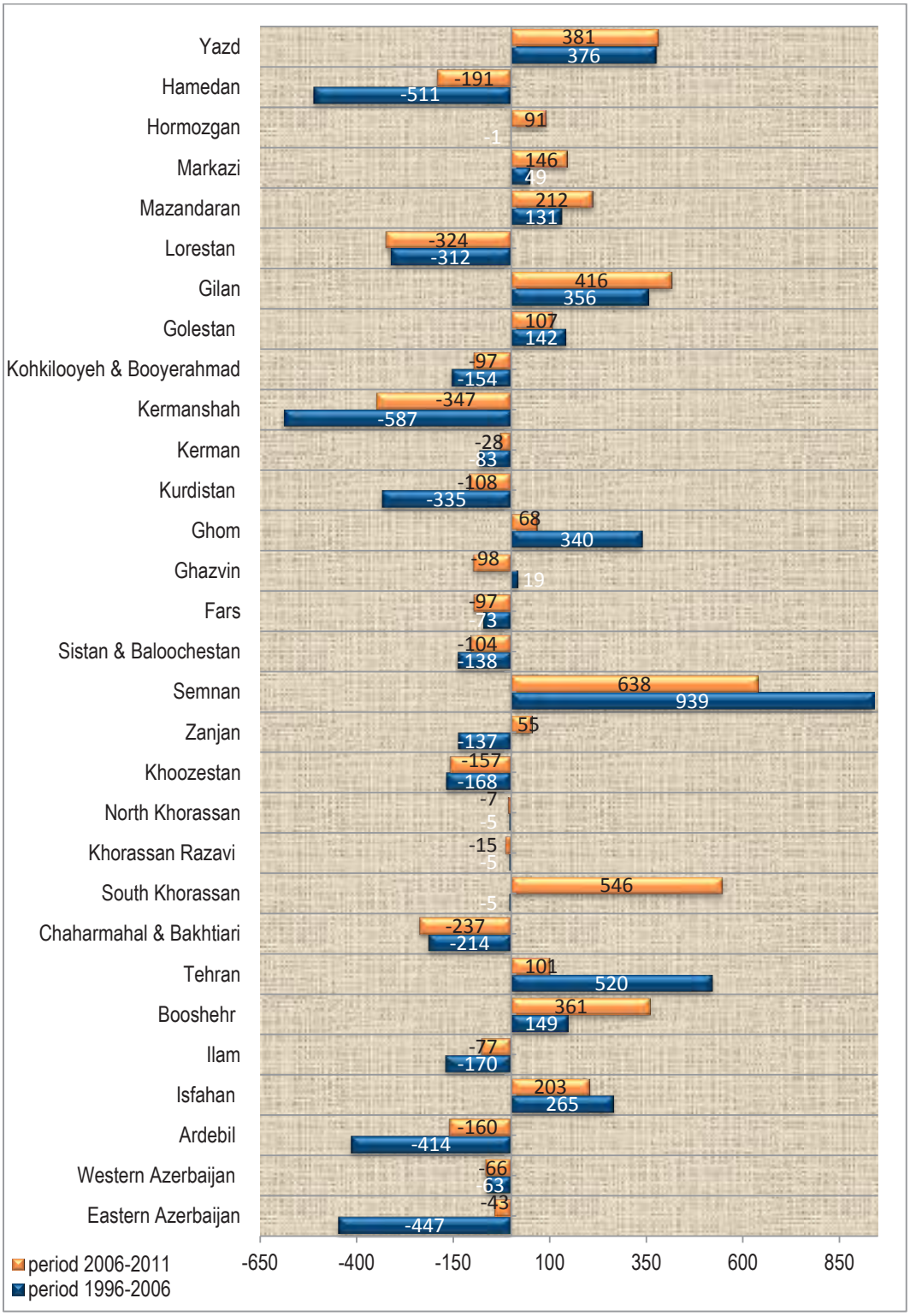

Figure 11 – Ratio of Migration in Provinces during 1996-2006 and 2006-2011

2.6.1. East Azerbaijan

As the province with the highest rate of out-migration up until 2006 (with many of emigrants bound for Tehran), East Azerbaijan fell drastically, to the 13th rank in terms of out-migration in the 2011 census. At the same time, the largest number of immigrants moving to East Azerbaijan between 1996-2006 was from Kurdistan, Khoozestan, Kermanshah, and Sistan and Baloochestan provinces. Emigrants from East Azerbaijan moved to Tehran (57 percent), Ghom, Ardebil, and Gilan. From 2006-2011, the migration balance of East Azerbaijan with Ardebil reversed. Ardebil, West Azerbaijan, Kurdistan, and Khoozestan had the largest number of emigrants to East Azerbaijan, while the provinces of Tehran, Alborz, Zanjan, and Ghom received the highest number of emigrants from East Azerbaijan. It is worth pointing out that the population share of out-migrants from East Azerbaijan in-migrating to Tehran (together with Alborz) in the same period went down from 57 percent in 1996-2006 to 45 percent in 2006-2011. The interaction between the populations of East Azerbaijan with Kurdistan, Sistan and Baloochestan, and Lorestan (with diverse geographies and ethnicities) is worth further analysis.

2.6.2. Isfahan

Throughout the last four decades, the Province of Isfahan has always been an in-migration spot in Iran, second only to Tehran (together with Alborz). Almost seven percent of emigrants from various provinces moved to Isfahan in the past four decades.

Isfahan is an in-migration hub for emigrants from Khoozestan, Chaharmahal and Bakhtiari, and Lorestan. Over 20 percent of immigrants in Isfahan come from Khoozestan, which plays a key role in maintaining Isfahan as the second-highest net migration province. Another province impacting on Esfahan's migration patterns is the Province of Tehran. Tehran Province has had the highest negative net migration rate vis-à-vis Isfahan, with 34 percent of Isfahan's emigrants moving to Tehran by 2006. The 2011 census revealed that Tehran had a positive net migration rate vis-à-vis Isfahan as 21 percent of Isfahan's emigrants had in-migrated to Tehran (together with Alborz). Among the provinces with which Isfahan held a negative net migration rate in the 1996-2011 period are Yazd, Gilan, Mazandaran, Golestan, Alborz, and Semnan.

2.6.3. Tehran (Including Alborz)

The largest percentage of inter-provincial emigrants and immigrants have always move to/from Tehran Province. Up until the 2011 census, this province held the highest positive net migration. However, when Alborz Province became separated from Tehran Province, the net migration rate became negative for this province. This trend illustrates that the cities in Alborz (particularly Karaj) were major inter-provincial in-migration hubs in the censuses prior to 2011.

Between 1996-2006, the highest number of immigrants to Tehran were from East Azerbaijan followed, in order, by the provinces of Hamedan, Khorassan Razavi, and Gilan. The target of Tehran's own emigrants was first and foremost Khorassan Razavi followed by Gilan, Mazandaran, and Isfahan. The inter-provincial migration balance in the 2006 census shows

that the highest positive net migration were from East Azerbaijan, Hamedan, Kermanshah, Ardebil, and Lorestan (provinces in the west and northwest of Iran) with low development. The highest negative net migrations were with Yazd, Mazandaran, and Semnan (in the north and center of the country) which enjoy high development levels [1]. Another point worth noting is that 20 percent of Tehran's positive net migration was due to immigrants from East Azerbaijan which together with the emigrants from Hamedan, Kermanshah, and Ardebil add up to 50 percent of Tehran's net migration. In addition, and contrary to expectation, it has only been the city of Tehran which has had a negative net migration (-360,000), while the other cities of Tehran province have seen a positive net migration, with the highest being in Shahriar (354,000) (Ghassemi-Ardahaee, 2013).

In the 2006-2011 time period, the pattern of inter-provincial net migration of Tehran has been maintained with the out-migration and in-migration provinces in the same manner of the previous period, and East Azerbaijan has given its rank in terms of increasing Tehran's population to Kermanshah. During this period and according to the 2006 census, the largest number of emigrants from Tehran have in-migrated to the cities of this province (including Alborz). This is an inter-provincial migration trend between Tehran and Alborz which have led to Tehran's holding a negative net migration for the first time.

The pattern of the inter-provincial in-migration and out-migration of Alborz is similar to that of its parent province (Tehran). The provinces affecting the increase/decrease of the population of Tehran determine the population of Alborz.

2.6.4. South Khorassan

Between 1996-2006 South Khorassan Province was detached from the Province of Khorassan. The same period saw a negative net migration of -10,000 while the Province of Khorassan Razavi enjoyed a positive net migration. In the 2006-2011 period, an unexpected change happened in the direction trend of inter-provincial migration took place in the Province of South Khorassan. Net migration was 14,000, and the province held the fifth place in terms of the net migration rate and the second place in terms of migration ratio.

The most influential provinces affecting migration changes in South Khorassan Province were the three neighboring provinces of Khorassan Razavi, North Khorassan, and Sistan and Baloochestan. In both studied periods, Khorassan Razavi and Sistan and Baloochestan contributed to the rise of net migration in South Khorassan. The status of Khorassan Razavi is completely reversed over the two periods. While in the 1996-2006 period, above 70 percent of the negative net migration in South Khorassan was caused by the migration balance with Khorassan Razavi, the positive net migration of the province between 2006-2011 was the result of this migration. Assuming that the migration data of this province are accurate and that, in particular, a significant error has not occurred in coding the previous and current places of residence of inhabitants (due to the nominal similarity of the two provinces), this migration shift should be deemed important for demographic analysts and socioeconomic planners.

[1] Gharokhloo and Habibi (2006) have employed a taxonomic technique to analyze the data collected between 1996-2002 and identified the development rank of the provinces in terms of human and occupational factors, health and treatment, housing and construction, culture and tourism, and telecommunications. The results portray that Semnan was second, Mazandaran sixth, East Azerbaijan 16th, Hamedan 23rd, Kermanshah 24th, Ardebil 25th, and Lorestan 27th among the then 28 provinces of the country.

2.6.5. Semnan

An affluent and developed province (Gharokhloo & Habibi, 2006; Roshan-Sangachin et al., 2013), Semnan has turned into a significant in-migration hub from other provinces. The province has seen a consistent and sizeable positive net migration between 1976 and 2011 (the period studied in this report): with its annual net migration standing at six and a total annual migration rate of 21 (the 2011 census), Semnan ranks second after Alborz. It further holds the first place in terms of the migration ratio in both above-mentioned periods.

The provinces of Tehran, Khorassan Razavi, and Mazandaran strongly affect Semnan's high ranking in terms of positive net migration. Interestingly, in the 2011 census, Semnan did not have a negative net migration rate with any province in Iran, which proves that Semnan has always benefited quantitatively from other provinces when it comes to its migration balance with other provinces.

2.6.6. Ghom

The Province of Ghom has been quite similar to the Province of Tehran in the past three in terms of development level and net migration. Ghom has always been one rank below Semnan in terms of migration indices. In the 2006 and 2011 censuses, Hamedan, East Azerbaijan, Khoozestan, Zanjan, and Lorestan held the highest positive net migration rates with Ghom. The highest negative net migration in 1996-2006 was in with with Tehran, Isfahan, and South Khorassan. In the next five years, it was with Gilan, Alborz, and Isfahan. Just like South Khorassan, the migration balance between Ghom and Tehran underwent a major directional shift between 2006 and 2011. According to the 2006 census, Tehran's migration balance saw an almost 40 percent decrease in Ghom's positive net migration. Based on the 2011 census, almost 10 percent of Ghom's positive net migration was from Tehran. Tehran and Alborz Provinces had almost no effect on the increase or decrease of migrations flows in the province in Ghom.

2.6.7. Kermanshah

The Province of Kermanshah has always been studied in the context of out-migration. In the last four censuses, Kermanshah has seen sizeable negative net migration making it the second highest-ranked province when it comes to inter-provincial emigrants. Compared to the natural increase of its population, internal migration has played a significant role in the reduction of the population of Kermanshah. In the two most recent censuses, Kermanshah has always had the highest negative net migration rate in the country.

Almost all provinces have had a redcution effect on Kermanshah's net migration rate. From 1996-2006, this province's net migration rate was negative vis-à-vis other provinces. In the next census, it had only a small positive migration balance with Lorestan, West Azerbaijan, Khoozestan, Sistan and Baloochestan, Fars, and Chaharmahal and Bakhtiari. Tehran (including Alborz), Markazi, Kurdistan, and Hamedan play an important role in attracting emigrants from Kermanshah and keeping Kermanshah's negative net migration high.

2.6.8. Lorestan

In the past three decades, the Province of Lorestan has ranked second after Kermanshah in terms of out-migration. Lorestan is among the top three provinces with the highest negative net migration. Lorestan holds the highest annual net migration.

In the most recent census, Lorestan has had a positive net migration with only two provinces: Fars and Sistan and Baloochestan (108 people in all). With all other provinces, the net migration is negative. Lorestan's emigrants have mostly moved to Tehran (Alborz), Isfahan, Khoozestan, and Markazi (almost 70 percent) and these provinces have had the highest negative net migration rates with Lorestan.

2.6.9. Hamedan

In the last four censuses, the net migration pattern of the Province of Hamedan has been similar to that of Khoozestan. The 1986 census showed that it ranked third after East Azerbaijan and Khoozestan with regard to negative net migration. In 1996, Hamedan had a positive net migration rate while seeing a significant negative net migration rate in the next two censuses. For example, in the 2006 census, Hamedan had the highest annual net migration and migration ratio after Kermanshah.

In the two most recent censuses, Hamedan has shown the highest positive net migration rate after Kurdistan and Kermanshah, and the highest negative net migration vis-à-vis Tehran (Alborz), Ghom, and Markazi. If such a migration relation did not exist between Hamedan and Tehran (and also Alborz), the net migration of zero would have been achieved for Hamedan in the two recent censuses.

2.6.10. Yazd

The Province of Yazd is among the few provinces which have seen a positive net migration rate in the last four censuses. It held the third and fourth place in the 2006 and 2011 censuses, in terms of the number of net migration and migration ratio compared to other provinces. Yazd also ranked second in the 2006 census with respect to annual net migration.

The 2006 and 2011 censuses show that the highest number of immigrants to Yazd came from Kerman, Sistan and Baloochestan, Tehran, and Fars; these four provinces contributed significantly to keeping Yazd's positive net migration high. This province has a low negative net migration with very few provinces. For example, in the 2011 census, only South Khorassan and Semnan had a negative net migration with Yazd, at 157. This demonstrates that Yazd is among the provinces which have benefited more in Iran from inter-provincial population movement and has a positive migration balance with nearly all provinces.

2.7. Migrants' Sex and Age Composition

With respect to population statistics, women comprise half of a country's population. An analysis of global sexual ratios around the world shows that the number of men is consistently higher than that of women. The same global trend applies to Iran, with the sex ratio being more than 100 in past censuses: the highest was 107.3 in 1966 and the lowest in the most recent three censuses 101.8 (2011). This may be attributed to various sociocultural factors such as the decline in the preference of the sex of children, improvements in women's health, and the increase in the socioeconomic status of women. One key demographic change to be studied is fertility and child-bearing patterns. The higher a woman's socioeconomic status is in terms of education and professional position, the more significant their other demographic behaviors will be, such as on migration.

Among the influential variables which impact migration are the sex and age of migrants. People often decide to migrate in specific age periods (usually between the ages of 20-40). Certain studies have looked at the role of gender in migration (Boyle, 2002; Chant, 1992; De Jong, 2000; Fincher, 1993; Heering et al., 2004) and concluded that in general, men are more prone to migrate, and that women are often tied migrants. This study sheds light on the amount, type, and causes of migration in Iran with respect to migrants' sex and age, taking into account the importance of internal migration in the changing population structure and the role of women and youth in migration.

2.7.1. Estimating Inter-Provincial Male and Female Migrants for the Country's Provinces

A comparison of the statistics on in-migration and emigrants of the country's provinces disaggregated by sex (Table 6) elucidates that the pattern of women's in-migration to the four provinces of Tehran, Ilam, North Khorassan, and Zanjan is very different. Despite the fact that Tehran had a negative net migration in the period between 2006 and 2011 –, the net migration for women is positive. This demonstrates that Tehran is still an ideal in-migration destination for the women of other provinces. Contrary to Tehran, almost all the negative net migration of the Province of Ilam (-2655) is related to women. This piece of data proves that Ilam has not served as a desirable place of residence for the women of the province and thus a large number of these women have migrated to other provinces. The circumstances in the Province of North Khorassan are no different. In this province despite the fact net migration is positive for men; women's net migration is negative. Zanjan is another province where the migration balance between men and women is significantly different. Almost all the positive net migration of the province relates to men and women with their net migration standing at 170 have almost no role in the positivity of the net migration of the province.

2.7.2. Estimating Male and Female Migrants Based on Age Groups

People usually embark upon migration in specific age groups and the cause of their migration in these age groups differs according to their sex. The age pyramid is an appropriate determiner of the age and sex composition of the population of an area. Accordingly, the age pyramid is used to express the age and sex composition of the migrant population and also compare it with that of the non-migrant population. Figures 12-15 of Iran's age pyramid present the migrant and non-migrant population for the two periods of 2006 and 2011.

The age pyramids indicate that the age and sex model of the non-migrant population is somewhat like that of the total population of the country. Since the highest focus of internal migrants is in the 20-24 age denomination (according to the 2006 census), the same age group has the highest relative frequency in the overall age pyramid of the country while in the 15-19 age group in the non-migrant population holds the highest relative frequency.

The shape and structure of the age pyramid of the migrant population is drastically different from the age pyramid of the non-migrant population and that of the total population. In the 2006 census, approximately 38 percent of the migrant population is in the two age groups of 20-24 and 25-29 followed by the 15-19 and 30-34 age cohorts. These age groups consist mainly of those who are working and active, studying, getting married, and doing their military conscriptions (for males). Young people seeking jobs and educational opportunities in this age migrate. People under 15 and above 60 have a much less share in the population of migrants and are mainly tied migrants.

Table 6 – Immigrants, Emigrants, and Net Migrations in the Provinces of the Country Disaggregated by Sex during 2006-2011

Province	Men & Women			Women			Men		
	Emigrants	Immigrants	Net Migration	Emigrants	Immigrants	Net Migration	Emigrants	Immigrants	Net Migration
Total	**1965491**	**1965491**	**-**	**874204**	**874204**	**-**	**1091287**	**1091287**	**-**
Eastern Azerbaijan	71728	64330	–7398	30449	26291	–4158	41279	38039	–3240
Western Azerbaijan	51732	37851	–13881	18720	14880	–3840	33012	22971	–10041
Ardebil	39827	26232	–13595	18030	9175	–8855	21797	17057	–4740
Isfahan	92656	139368	46712	42404	62629	20225	50252	76739	26487
Alborz	97799	190341	92542	47824	95555	47731	49975	94786	44811
Ilam	18513	15858	–2655	7975	5358	–2617	10538	10500	–38
Booshehr	27405	51612	24207	11613	18209	6596	15792	33403	17611
Tehran	400821	379158	–21663	184043	187262	3219	216778	191896	–24882
Chaharmahal & Bakhtiari	31551	14965	–16586	13775	6523	–7142	17886	8442	–9444
South Khorassan	17499	31201	13702	7300	12120	4820	10199	19081	8882
Khorassan Razavi	115021	108827	–6194	50702	48346	–2356	64319	60481	–3838
North Khorassan	30238	29836	–402	13934	12257	–1677	16304	17579	1275
Khoozestan	114493	60521	–53972	49913	24833	–25080	64580	35688	–28892
Zanjan	26880	30277	3397	11884	12054	170	14996	18223	3227
Semnan	23256	41506	18250	9937	19175	9238	13319	22331	9012
Sistan & Baloochestan	60414	27000	–33414	23404	10098	–13306	37010	16902	–20108
Fars	98589	73170	–25419	42255	30527	–11728	56334	42643	–13691
Ghazvin	37998	31598	–6400	17743	14279	–3464	20255	17319	–2936
Ghom	40930	45644	4714	19652	21548	1896	21278	24096	2818
Kurdistan	46954	36793	–10161	18158	14773	–3385	28796	22020	–6776
Kerman	43935	37792	–6143	18898	15303	–3595	25037	22489	–2548
Kermanshah	77131	39020	–38111	33961	14448	–19513	43170	24572	–18598
Kohkilooyeh & Booyerahmad	17193	12940	–4253	7451	6164	–1287	9742	6776	–2966
Golestan	37179	51017	13838	16727	20850	4123	20452	30167	9715
Gilan	56106	85924	29818	26529	38516	11987	29577	47408	17831
Lorestan	60735	24991	–35744	27118	11782	–15336	33617	13209	–20408
Mazandaran	53660	78947	25287	25328	35307	9979	28332	43640	15308
Markazi	43538	51333	7795	20653	22769	2116	22885	28564	5679
Hormozgan	43428	51437	8010	20145	۲۰۱۴۵	2218	25500	31292	5792
Hamedan	63724	45512	–18212	28845	20689	–8156	34789	24823	–10056
Yazd	24559	50490	25931	11162	22339	11177	13397	28151	14754

The 2011 census demonstrated that the age and sex structure of the country's population is significantly different from that of the migrant population and especially with that of inter-provincial migrant population. The largest difference is in the 20-34 age group and the 20-24 age group in particular. In this 15-year age span, the percentage of inter-provincial migrants is more than that of all migrants and the percentage of all migrants is also more than the total population. In the under-15 and above-40 populations, the percentages gained for the total population exceeds that of the statistical group. In the two censuses discussed here, the ratio of men is beyond that of men in migrants' age groups. This discrepancy in the 20-40 age group is readily tangible and considerable while not so significant in other age groups. In the 2006 census, the difference between men and women in the 20-24 age group is 3.2 percent (11.9 percent for men and 7.8 percent for women), 2.8 percent in the 25-29 age group (10.1 percent for men and 7.3 percent for women), 1.4 percent in the 30-34 age group (six percent

for men and 4.6 percent for women), and 0.9 percent in the 35-39 age group (four percent for men and 3.1 percent for women).

A comparison of the sex ratios derived from the age pyramid of the 2011 census delineates that the sex ratio of the total population of the country (101.8) is lower than the sex ratio of all migrants (110.7) and especially inter-provincial migrants (124.6). The sex ratio of inter-provincial migrants is higher than the total population in all age groups excluding the last one. The largest discrepancy pertains to the 15-24 (with the difference of 41) and subsequently the 35-69 group (with the difference of 30). These cases establish the dominance of men in internal migration, especially inter-provincial ones. Consequently, internal migrations in the aforesaid age cohorts are male-oriented. One of the primary reasons for this is the migration of men in these age groups to gain job opportunities and military service, especially in the 20-24 age denomination which is almost the age of conscription and the largest discrepancy between the ratio of male and female migrants is observed.

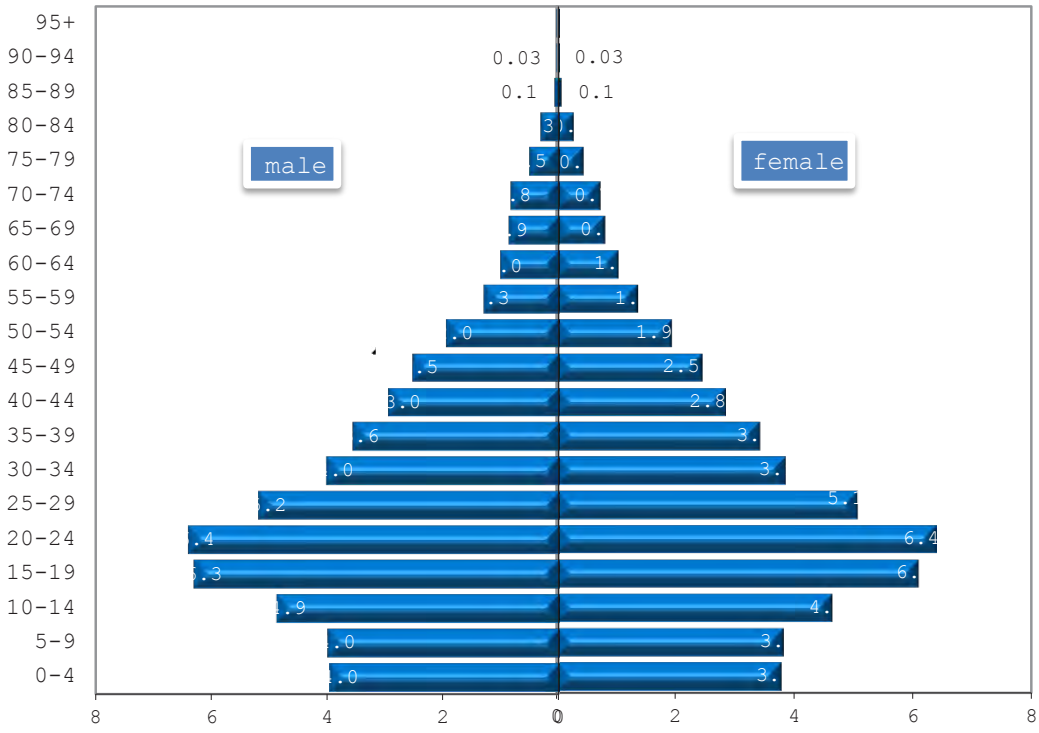

Figure 12 – Age Pyramid of the Total Population, 2006

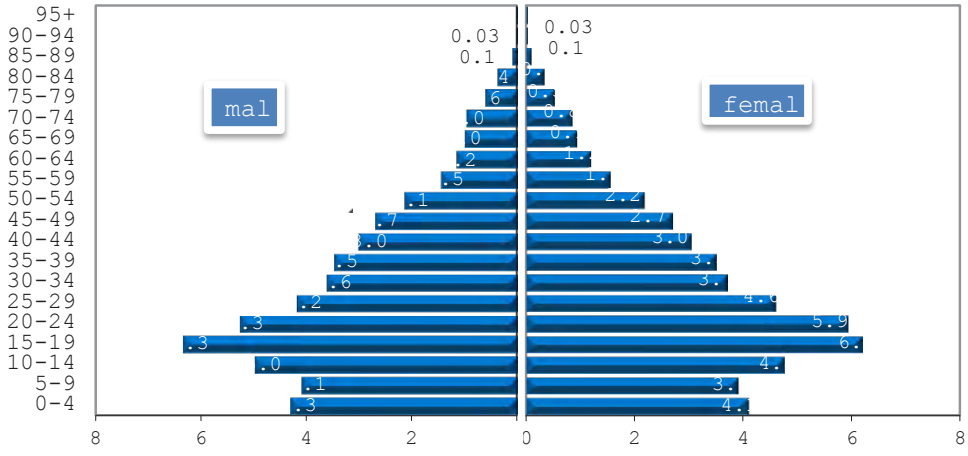

Figure 13 – Age Pyramid of the Non-Migrant Population, 2006

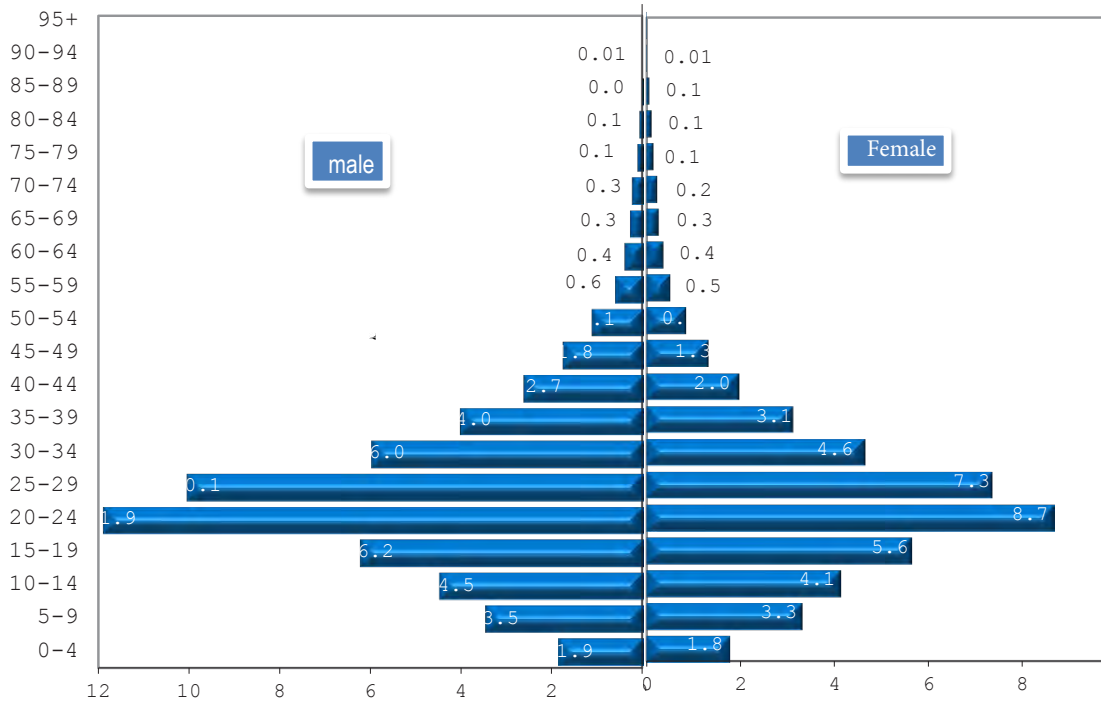

Figure 14 – Age Pyramid of the Migrant Population, 2006

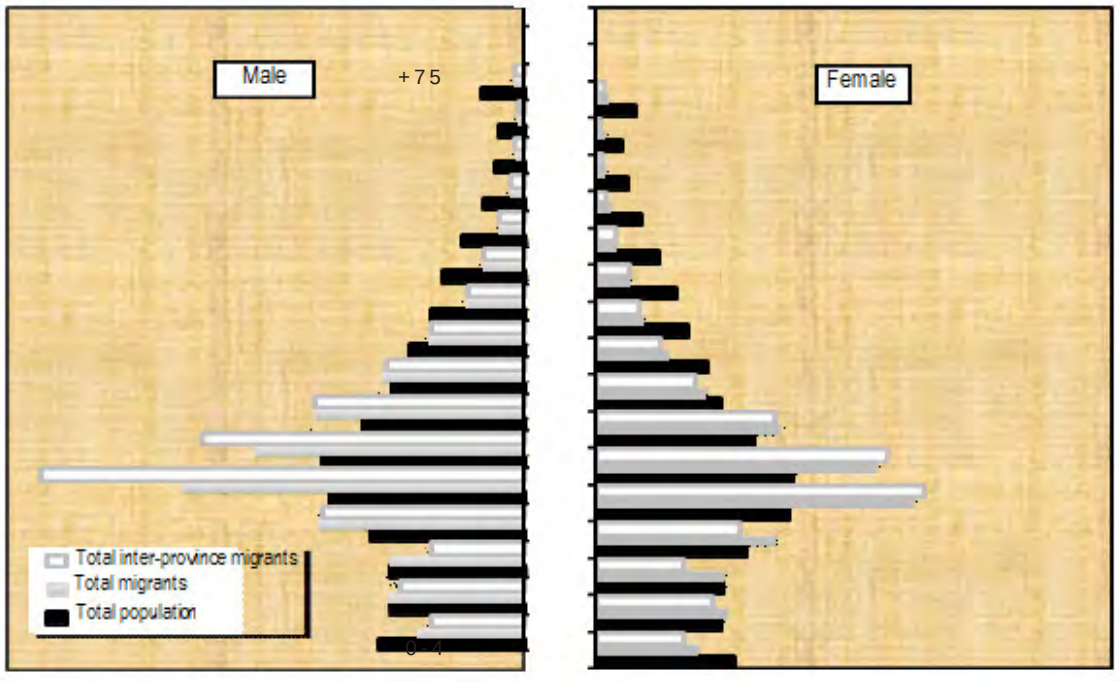

Figure 15 – Age Pyramid of the Total Population, Total Migrants, and Total Inter-Provincial Migrants, 2011

2.7.3. Estimating Male and Female Migrants Based on Internal Migrations

One should note that the age-sex composition of internal migrants with respect to the migration pattern and the origin/destination being rural/urban may differ. This discrepancy for the 1996-2006 period has been shown in Figure 16. The highest percentage of men (71 percent) engaged in urban-rural migrations while the highest percentage of women (48 percent) out-migrated from villages to cities. The age structure in urban-rural migrants is different from other migrations. Over 50 percent of urban-rural migrants are 20-29 years old while this percentage in other migrations has dropped to less than 40 percent, the least of which is observable in the rural-urban pattern.

Excluding men in the 20-29 age range, the percentage of rural-urban migrants exceeded that of urban-rural migrants in all age groups for both men and women. This demonstrates that urban-rural migrants are more young men of 20-29 while in other kinds of migrations (especially rural-urban migrations), the distribution of migrants in different age groups and also between men and women is more appropriate. The age pyramids which have been derived from the 20 percent sampling of the 2006 census are almost identical to those derived from the total data of the censuses. Men account for 58.3 percent of urban-rural migrations while the number of women migrating from villages to cities is higher (38,460 compared to 37,377).

In both rural-urban and urban-rural migrations, the percentage of migrants in the 20-29 age cohort exceeds that of other age groups. In urban-rural migrations, more than one-fourth of migrants are men in above age range and together with women, this age group comprised over 40 percent of migrants. In rural-urban migration, the women aged 20-29 comprised 31 percent of migrants and the relative distribution of migrants in age groups is more balanced compared to urban-rural migrants. Generally speaking, the mean age of male migrants (26.1) is higher than that of female migrants (25.5).

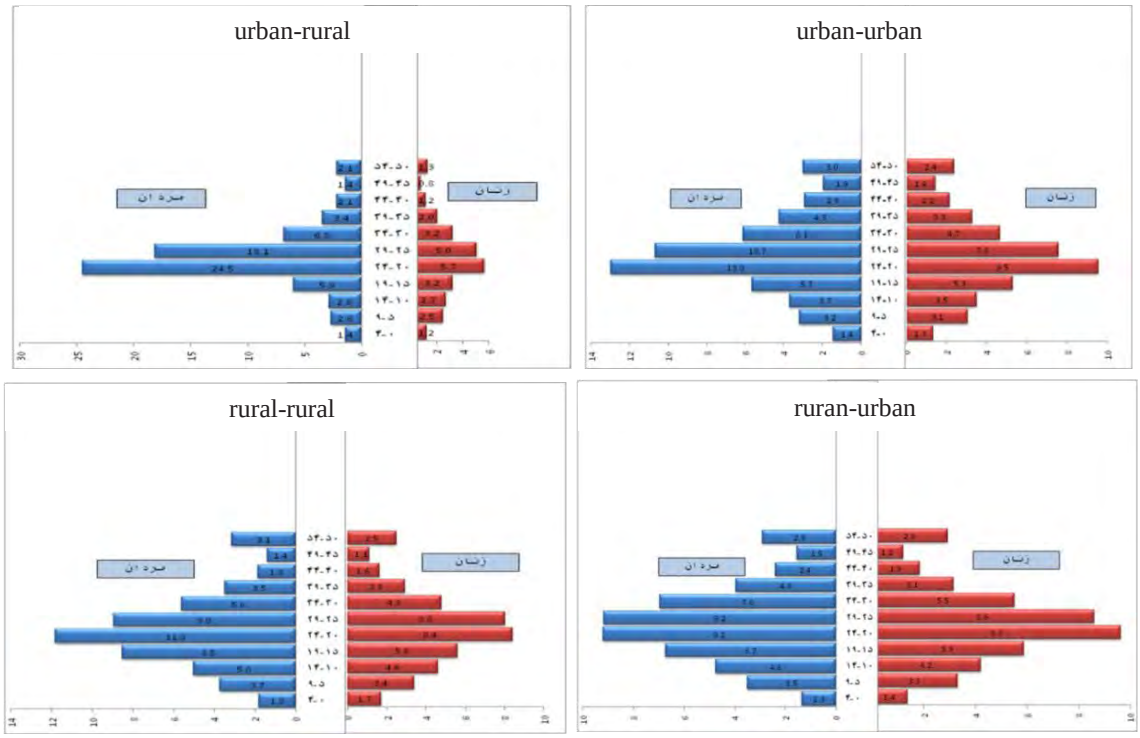

Figure 16 – Age Pyramids of Urban-Urban, Urban-Rural, Rural-Urban, and Rural-Rural Migrants, 1996-2006

2.8. Causes of Migration in Iran

It is clear that migration can take place for various reasons and socioeconomic factors play a decisive role in the movement of migrants. Garasky (2002) asserts that the process of deciding to migrate is affected by the three important individual, familial, and social factors. In order to classify the immigrants based on the cause of their migration, eight categories were adopted in the 2006 census; in the subsequent census of 2011, one more category was also added (a total of nine). In both censuses, 48 percent of migrations were tied (Table 7). The next most common reasons were education, work, and military conscription. The addition of "gaining more suitable housing" in the 2011 census has decreased the percentage of "military service", "education", and "miscellaneous" compared to the 2006 census.

Table 7 – Relative Distribution of Migrants Based on the Cause of Migration Disaggregated by Rural-Urban Destination, Kind of Migration, and Sex during 1996-2011

Year of Census		Number	Cause of Migration									Total
			Finding Jobs	Finding Better Jobs	Job transfer	Education and Graduation	Military Service	Gaining Better Housing	Tied Migration	Miscellaneous	Not Declared	
2011	Total	5534666	6.6	3.8	4.5	14.0	5.8	10.6	46.2	6.2	2.3	100
	Men	2908560	11.2	6.5	7.5	13.8	11.0	15.3	26.0	6.5	2.2	100
	Women	2626106	1.5	0.8	1.2	14.2	0.0	5.4	68.6	5.9	2.4	100
	Urban	4302086	6.6	3.9	5.1	15.4	4.1	10.1	46.0	6.6	2.2	100
	Rural	1232580	6.7	3.6	2.4	8.9	11.9	12.3	46.8	5.1	2.4	100
2011 (2 %)	Urban	20301	7.5	4.2	5.7	6.3	2.2	14.8	54.3	7.7		100
	Rural		7.0	4.4	2.5	2.3	6.7		56.4	5.9		100
2006	Total	12148148	8.7	5.0	5.1	9.9	10.4	-	46.0	10.1	4.8	100
	Urban	8999709	8.6	5.2	5.8	11.3	7.5	-	46.7	10.1	4.8	100
	Rural	3148439	9.1	4.6	3.1	5.7	18.5	-	43.9	10.3	4.8	100
2006 (2 %)	Men	89978	25.7		7.8	5.5	19.1	-	43.9	10.3		100
	Women	75903	2.6		2.2	4.9	0.0	-	82.4	7.9		100
	Urban-Rural	90791	13.6		4.7	3.7	17.6	-	50.1	10.4		100
	Rural-Urban	75091	17.1		5.9	7.0	1.7	-	57.7	10.5		100
	Urban-Rural	52972	21.5		6.6	3.6	30.0	-	25.6	12.6	Men	100
	Rural-Urban	37004	31.6		9.5	8.2	3.5	-	34.6	12.6		100
	Urban-Rural	37818	2.4		1.9	3.9	-	-	84.5	7.3	Women	100
	Rural-Urban	38084	2.9		2.5	5.8	-	-	80.3	8.5		100

The underlying causes of migration for those in-migrating to rural and urban areas are different and so are the trends of migration. Excluding tied migrations and miscellaneous factors, military service (and finding better housing in the 2011 census) leads to more urban-rural migrations compared to rural-urban ones. As for the other factors (finding jobs, finding better jobs, job transfer, and education and graduation), more migrants are bound for urban areas (urban-rural migration).

The classification of the causes of migration was much more general in the census questionnaires and thus they do not lead to an analysis of the detailed economic, social, and cultural aspects of the causes of migration. It is through surveys that these more detailed and accurate analyses can be identified and employed in socioeconomic policymaking.

2.8.1. Causes of Migration for Women and Men

The causes of migration for men and women are different in Iran. In both 2006 and 2011 censuses, the causes of education and graduation and tied migration (forced migration) is higher for women compared to men. Furthermore, men chose miscellaneous causes more than women. The difference in the causes of migration between men and women in 2006 is significant (Table 7).

The cause of migration among men and women is also different with respect to the kind of migration. Excluding the cause of tied migration, ending military service is the highest cause of urban-rural migration among men (25.6 percent) which accounts for 30 percent of men's urban-rural migration alongside fulfilling military service. The same two factors account for 30 percent of rural-urban migrations among men. The reasons pertinent to work and education are more influential factors for rural-urban migration of men compared to their urban-rural migration. For women, excluding the factor of tied migration, the share of the other causes of migration are approximately 18 percent. For urban-rural female migrants, the percentage of graduation is higher than that for rural-urban migrants. As for the remaining causes, the percentages achieved for female rural-urban migrants are higher than urban-rural migrants. The most significant difference is in the cause of education which has been established for rural-urban migrant women (0.2 percent) and for urban-rural migrant women (1.5 percent).

All this arrives one at the conclusion that the most important factor for the prominence of men's urban-rural migration in Iran is ending military service: rural men are deployed to cities during their conscription and thus return home once the service is over. Yet, this factor has lost its impact in rural-urban migration and, as a result, the percentage of women has outgrown that of men. Education plays a crucial role in women's rural-urban migration being larger than that of men's; meanwhile, this factor highlights the disparity in access to educational facilities between rural and urban areas. According to the data presented by the Statistical Center of Iran (2003), it was in the 2002-2003 academic year that the ratio of women in the population of university students surpassed men. Almost all universities are in cities and this prompts rural women to migrate to urban areas for education.

According to the two percent census of 2011, in the context of the migrant being tied to the household head, 30 percent of migrants were heads of households, 28.5 percent spouses, 37 percent children, and 4.5 percent parents, siblings, and/other kinship and in-laws. A total of 91.5 percent of the household heads were men. Interestingly, the overwhelming majority of female heads of households were single women (2324 people). The percentages drawn from Table 8 illustrate that tied migration – as a cause of migration – was less important compared to other migrants. This percentage for men (4.3 percent) was lower than the similar percentage for women (13.9 percent). In contrast, occupation and finding more suitable housing were more important causes for the migration of household heads. Over one-third of female heads of households have migrated to gain more suitable housing.

Table 8 – Relative Distribution of Migrant Heads of Households Based on the Cause of Migration Disaggregated by Sex during 2006-2011

Sex of Household Head	Cause of Migration								Total	Number
	Finding Jobs	Finding Better Jobs	Job transfer	Education and Graduation	Military Service	Gaining Better Housing	Tied Migration	Miscellaneous		
Total	18.2	11.9	14.1	3.7	1.4	32.6	5.1	12.9	100	27761
Men	19.2	12.8	15.0	3.3	1.5	32.3	4.3	11.6	100	25437
Women	7.3	2.8	4.2	7.9	-	36.0	13.9	27.9	100	2324

2.8.2. Causes of Migration in the Age Cycle

In the life cycle approach, the notion is that migration occurs at specific ages, and that migrants have different reasons for migration behaviors, based on age group. Table 9 displays the causes of migrations based on age cohort. The results demonstrate that the under-10 cohort can be characterized as tied migrants, i.e. they are obliged to migrate with their families. Within the 10-24 age cohort, education is one of the factors affecting people's choice to migrate. Completing and/or concluding military service is an important reason for migrating specific to the 15-29 age group.

Table 9 – Migrants of Different Age Groups According to Cause of Migration 2006-2011

Age	Cause of Migration										Total	Number
	Finding Jobs	Finding Better Jobs	Job transfer	Education	Graduation	Military Service	Gaining Better Housing	Tied Migration	Miscellaneous	Not Declared		
0-4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	87.35	2.69	9.96	100	332232
5-9	0.00	0.00	0.00	1.20	0.05	0.00	0.00	86.82	3.25	8.68	100	426717
10-14	0.97	0.64	0.72	24.98	0.15	0.00	4.07	64.28	3.15	1.04	100	417857
15-19	2.85	1.10	0.64	36.87	0.61	9.04	2.75	41.95	3.26	0.92	100	618333
20-24	5.51	2.28	1.68	26.42	1.58	19.49	3.68	34.62	3.82	0.92	100	1052595
25-29	11.53	6.01	5.78	7.82	1.90	6.01	11.18	42.44	6.30	1.03	100	880868
30-34	12.26	7.84	10.12	2.65	0.55	0.51	18.84	38.67	7.46	1.09	100	627576
35-39	11.02	7.77	12.32	1.55	0.26	0.13	22.64	35.07	8.10	1.15	100	403216
40-44	9.43	6.98	12.12	1.48	0.26	0.11	24.55	33.64	9.99	1.42	100	270700
45-49	8.51	6.18	9.77	1.22	0.18	0.08	25-97	33.76	12.50	1.82	100	169480
50-54	8.41	5.69	6.08	0.93	0.11	0.00	27.39	32.33	16.73	2.33	100	119281
55-59	7.36	4.84	3.68	0.77	0.15	0.00	30.20	31.53	18.89	2.59	100	72606
60-64	6.56	3.85	2.41	0.69	0.05	0.00	31.68	30.54	21.74	2.48	100	43909
65-69	4.96	2.80	1.60	0.65	0.06	0.00	32.81	28.49	25.81	2.82	100	27025
70-74	4.73	2.29	1.05	0.40	0.05	0.00	37.77	26.87	23.90	2.95	100	21900
75 and above	2.69	1.50	0.65	3.05	0.05	0.00	26.70	29.95	31.77	3.63	100	34170

The importance of occupation (finding jobs, finding better jobs, and job transfer) rises in the migration of individuals above 25 and comprises a considerable share of the causes of migration up to the age of 65 with the most being for 30-45 individuals. Gaining more appropriate housing which was included as one of the causes of migration in the 2011 census turns into a significant reason for migration in the above 30 denominations with an average of 28 percent of migrations happening in this age span. Of course the figure of four percent stated for the 10-14 age group should be further investigated. The pattern for the migration of individuals in the different age groups can be seen based on Figure 17.

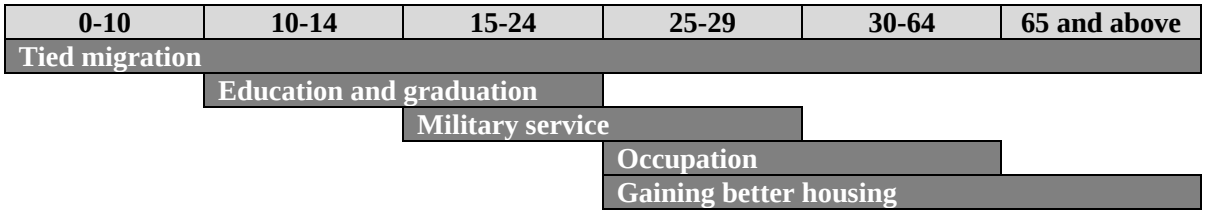

Figure 17 – Importance of the Causes of Migration in Migrants' Age Groups during 2006-2011

Previous studies (Ghassemi-Ardahaee, 2013) conclude that tied migration and work migration (seeking jobs, seeking better jobs, and job transfer) in Iran and its provinces are extensively influenced by the migrant's sex as there are meaningful gaps between the two sexes in their migration within certain age groups. This is why tied migration and work migration in the different age groups of migrants disaggregated by their sex is discussed further here.

As the head of a household decides to migrate, the spouse, child/children, and other relatives dependent upon them are forced to follow them in this spatial and geographic relocation. As most women are dependent upon men in families and also children and adolescents are also more dependent upon youths and adults, it is observed that 70 percent of women as opposed to 29 percent of men and 70 percent of the under-20 population in contrast with the 30 percent above-20 population (Figure 18) are tied migrants. This significant discrepancy between men and women begins from the age of 15. It is clear that in the above 20 group, the percentage of tied migration for men falls down to the negligible figure of eight percent while standing at 70 percent for women. Therefore, one may conclude that it is children, adolescents, and women in households who are the passive migrants in this population relocation within the geographic borders of Iran and are included among migrants as they follow the head of their households.

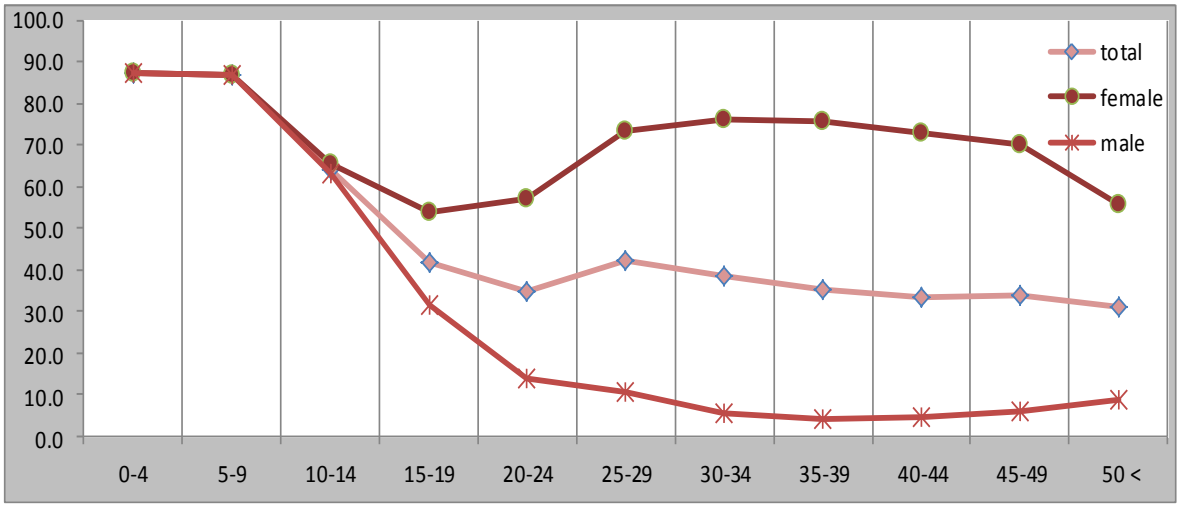

Figure 18 – Relative Distribution of Tied Migrants Disaggregated by Age and Sex, 2006-2011

In contrast with tied migrations, work migrations can be viewed as migrations done through the awareness and personal will of migrants themselves. Considering the different nature of these two trends of migration, it is clear that those engaged in this migration process are also different from tied migrants in their demographic characteristics, including sex and age. Figure 19 portrays work migrants based on their age and sex. As is seen, the highest percentage goes to 30-39 migrants while the highest number of work migrants falls within the 25-49 age category.

Quite the contrary to tied migrations, the percentages for work migrations in the different age groups of women is immensely smaller (less than five percent) while percentages of higher than 40 percent (in the 25-49 age group) are observed for men. The major gap between work migrations between men and women commences from the 25-29 age group and reaches its maximum in 30-34 and 35-39 age cohorts and as migrants' age groups go higher, the gap adopts a downward trend.

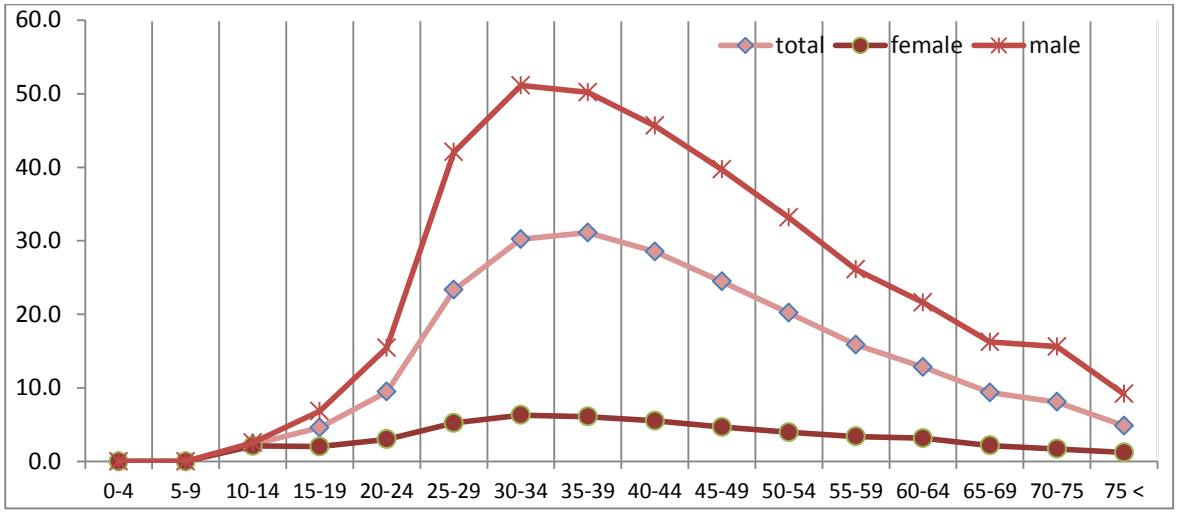

Figure 19 – Relative Distribution of Migrants Due to Occupation Disaggregated by Sex and Age, 2006-2011

2.8.3. Causes of Migration in Provinces

The relative distribution of immigrants into the country's provinces based on the cause of migration in the 2006 census (Table 10) demonstrates that seeking jobs was highest in the Province of Booshehr. The province also holds the first rank in terms of seeking better jobs and job transfer. In terms of education, out-migrants arriving in South Khorassan held the highest percentage while those moving to Ilam as a result of graduation stood at the first rank. As East Azerbaijan, South Khorassan, Kermanshah, and Ilam are border provinces, doing military service constituted the highest relative frequency here, while Zanjan, Golestan, and Ardebil held the highest percentages for completing national service. Tied migration which is the first and foremost cause of internal migration was highest in Tehran, Ghom, and Ghazvin.

The 2011 census revealed that changes were made to the ranks of provinces with respect to the causes of migration (Table 11). Kermanshah and Lorestan ranked first with respect to finding jobs, Khorassan Razavi and Markazi first for finding better jobs, and Booshehr and Sistan and Baloochestan were highest for job transfer. The percentage gained for education and graduation for immigrants to South Khorassan, North Khorassan, and Fars is higher than other provinces while doing and ending military service holds the top rank in Sistan and Baloochestan, West Azerbaijan, Ilam, and Kurdistan. Interestingly, the percentage gained in terms of migration to gain better housing was highest for Tehran and Alborz. This is probably due to the intra-provincial migrations in these two provinces. It does not seem likely that migrants move to these two provinces with such a motive as the price of property (compared to size and quality) is astronomically steep in these two provinces due to the socioeconomic pressures and outcomes of the capital. The two provinces of Tehran and Alborz also hold a high position in terms of tied migration compared to other provinces.

2.9. Determinants of Tied Migrations and Economic Migrations

Within a conceptual classification, the dichotomy of tied migration (following the family) and economic migration (seeking jobs, seeking better jobs, job transfer, and gaining better housing) could be deemed important in internal migration in the context of Iran. These two noteworthy reasons bear different pretexts and thus unquestionably are subject to dissimilar demographic and socioeconomic determinants in shaping the migrations of various populations in the provinces.

With respect to these results, the section below seeks to describe the determiners of economic migration and tied migration for the two groups of heads of households and non-heads of households through a multivariate analysis. The independent variables include: sex (men/women), age at the time of migration (under 30/30-45/above 45), literacy (illiterate/literate), educational level (primary or lower education/lower education and upper secondary/ university), direction of migration (intra-city/inter-city), type of migration (rural-rural/rural-urban/urban-rural/urban-urban), and development level of the province of origin (high/mid/low). As mentioned, the dependent variable (type of migration) has been divided into two variables: economic migration (economic = 1 and tied = 0) for heads of households and tied migration (tied = 1 and economic = 0) for non-heads of households.

Table 10 – Relative Distribution of Immigrants in Provinces Based on the Cause of Migration during 1996-2006

Province	Cause of Migration										Total	Number
	Finding Jobs	Finding Better Jobs	Job Transfer	Education	Graduation	Doing Military Service	Ending Military Service	Tied Migration	Miscellaneous	Not Declared		
Nationwide	8.75	5.02	5.13	8.57	1.31	3.75	6.55	46.01	10.11	4.81	100.0	12148148
Eastern Azerbaijan	5.58	4.39	6.02	11.69	1.07	9.45	10.99	36.72	9.23	4.86	100.0	453216
Western Azerbaijan	7.30	4.90	4.71	7.95	1.22	5.98	10.62	44.69	7.50	5.12	100.0	446437
Ardebil	5.58	4.13	4.15	11.17	2.54	3.83	16.68	40.36	8.05	3.52	100.0	199822
Isfahan	7.29	4.61	4.20	7.92	0.88	3.17	6.40	46.93	14.39	4.21	100.0	788725
Ilam	6.59	3.19	7.56	7.72	4.81	6.44	13.24	39.29	6.39	4.77	100.0	98837
Booshehr	18.56	6.83	9.33	5.81	0.77	3.82	4.44	38.87	7.31	4.26	100.0	199200
Tehran	11.84	5.78	4.44	4.05	0.53	1.66	0.93	53.09	12.93	4.74	100.0	2983889
Chaharmahal & Bakhtiari	5.25	3.39	4.81	11.63	2.00	3.67	13.43	40.83	9.97	5.02	100.0	131148
South Khorassan	6.23	3.92	6.41	19.85	1.96	8.24	4.98	37.70	7.20	3.51	100.0	135110
Khorassan Razavi	7.49	5.60	5.36	9.12	1.93	3.53	9.94	44.33	8.56	4.15	100.0	924674
North Khorassan	7.42	4.18	6.25	12.79	2.88	3.18	10.31	41.19	8.04	3.76	100.0	134827
Khoozestan	8.11	4.20	6.24	7.94	0.83	5.57	5.84	45.94	8.81	6.52	100.0	588544
Zanjan	5.37	4.23	4.41	15.23	2.67	4.10	18.70	35.05	6.82	3.42	100.0	161675
Semnan	11.21	4.99	5.06	15.07	0.89	5.27	2.70	42.95	7.18	4.68	100.0	128123
Sistan & Baloochestan	9.26	4.68	8.17	11.77	0.33	5.95	0.38	43.18	6.58	9.69	100.0	264686
Fars	7.95	4.94	5.72	12.83	2.13	4.36	6.85	39.81	9.24	6.16	100.0	654099
Ghazvin	9.82	4.82	3.22	6.72	0.54	2.84	6.29	49.86	10.95	4.93	100.0	224601
Ghom	8.15	5.28	2.85	11.40	1.16	1.97	4.76	51.80	7.87	4.76	100.0	164579
Kurdistan	8.17	4.75	5.70	7.88	2.08	2.69	8.55	48.22	6.51	5.43	100.0	259204
Kerman	10.34	5.05	5.07	15.08	1.49	5.18	3.22	39.60	8.64	6.34	100.0	365247
Kermanshah	6.73	4.20	6.92	6.76	2.02	7.34	6.21	48.84	7.63	3.33	100.0	264143
Kohkilooyeh & Booyerahmad	7.00	3.09	5.59	13.72	1.82	1.66	3.34	49.42	9.87	4.49	100.0	141314
Golestan	4.46	4.18	4.19	6.87	1.85	3.04	18.05	45.48	8.95	2.93	100.0	300885
Gilan	4.94	4.67	4.69	5.71	2.05	2.73	10.75	47.88	12.78	3.78	100.0	485989
Lorestan	6.29	4.07	5.86	10.15	2.09	6.00	6.83	45.04	7.55	6.11	100.0	213243
Mazandaran	5.76	4.85	4.84	8.69	1.82	3.33	10.37	45.19	10.93	4.22	100.0	510822
Markazi	10.21	5.14	3.45	12.58	1.07	3.47	9.82	42.77	7.98	3.49	100.0	258219
Hormozgan	15.26	5.91	8.44	10.00	0.79	4.16	2.39	41.81	5.99	5.25	100.0	238953
Hamedan	6.03	4.57	4.96	12.20	1.07	3.52	11.10	42.07	9.50	4.99	100.0	238163
Yazd	9.71	6.10	4.26	16.66	2.02	4.96	6.32	38.52	7.78	3.68	100.0	189774

Table 11 – Relative Distribution of Immigrants in Provinces Based on the Cause of Migration during 2006-2011

Province	Cause of Migration										Total	Number
	Finding Jobs	Finding Better Jobs	Job Transfer	Education	Graduation	Doing Military Service	Ending Military Service	Tied Migration	Miscellaneous	Not Declared		
Nationwide	5.97	3.26	4.56	3.40	0.80	5.89	11.14	46.93	6.31	1.33	100.0	5038545
Eastern Azerbaijan	6.08	3.66	4.36	13.58	0.93	8.73	12.08	43.32	5.65	1.62	100.0	200206
Western Azerbaijan	6.23	3.77	4.30	14.65	0.63	9.69	9.91	44.01	4.86	1.95	100.0	177376
Ardebil	8.42	4.65	4.10	14.62	1.26	8.44	6.14	46.30	5.07	0.99	100.0	80052
Isfahan	5.06	3.57	4.08	12.33	0.80	5.06	12.64	47.92	7.34	1.20	100.0	296061
Alborz	5.08	3.42	3.39	5.15	0.21	2.51	15.79	53.56	9.47	1.43	100.0	186873
Ilam	6.58	3.21	6.94	18.99	1.28	9.13	6.62	41.65	4.42	1.18	100.0	42106
Booshehr	6.63	3.61	7.30	13.80	0.72	6.22	8.65	46.17	5.30	1.59	100.0	84104
Tehran	4.05	3.10	3.73	4.86	0.46	3.44	18.32	52.20	8.40	1.45	100.0	892732
Chaharmahal & Bakhtiari	7.52	4.49	4.26	21.31	0.61	4.53	8.82	41.64	5.24	1.58	100.0	66010
South Khorassan	4.71	2.97	5.18	28.27	1.35	6.44	6.73	39.89	3.77	0.70	100.0	66015
Khorassan Razavi	7.09	4.88	4.95	16.25	0.94	5.50	7.62	45.76	5.83	1.18	100.0	379262
North Khorassan	7.80	4.47	4.41	24.37	1.19	7.67	6.17	38.42	4.22	1.26	100.0	76562
Khoozestan	5.55	2.90	5.42	11.46	0.65	8.13	9.76	46.62	7.94	1.58	100.0	274993
Zanjan	7.68	3.99	3.86	22.02	1.14	7.42	6.95	39.96	5.62	1.36	100.0	66132
Semnan	6.27	4.36	5.97	14.84	1.57	8.57	8.28	43.06	5.50	1.57	100.0	47532
Sistan & Baloochestan	5.78	3.11	7.70	12.11	0.77	10.62	5.39	47.48	5.39	1.65	100.0	122328
Fars	6.47	3.83	4.85	20.32	1.04	5.78	9.36	42.01	5.04	1.29	100.0	350203
Ghazvin	6.11	3.72	3.53	9.12	0.60	5.17	12.70	50.53	7.06	1.47	100.0	86878
Ghom	5.58	3.87	6.10	11.82	0.98	4.03	7.43	52.21	6.72	1.27	100.0	53509
Kurdistan	7.85	3.88	4.59	18.01	1.03	9.01	6.51	44.67	3.63	0.82	100.0	135056
Kerman	5.14	3.10	4.57	29.76	1.12	6.05	7.45	36.23	5.16	1.42	100.0	158979
Kermanshah	9.19	3.91	5.34	14.44	0.58	8.18	6.83	46.10	4.41	1.02	100.0	143963
Kohkilooyeh & Booyerahmad	5.10	2.98	4.28	20.37	1.28	2.57	9.11	49.29	4.22	0.81	100.0	65641
Golestan	5.32	3.55	3.34	12.33	0.61	5.77	9.69	53.16	5.21	1.02	100.0	129197
Gilan	6.39	3.81	3.61	7.62	0.66	4.65	13.79	51.38	7.18	0.92	100.0	185234
Lorestan	9.05	4.39	5.92	15.33	0.73	6.38	6.60	45.89	4.45	1.26	100.0	99077
Mazandaran	4.16	3.35	3.68	10.13	1.15	4.85	15.95	48.69	6.56	1.50	100.0	194655
Markazi	8.23	4.71	4.17	12.57	0.89	5.02	8.43	48.59	6.37	1.02	100.0	94231
Hormozgan	5.48	3.69	7.81	19.20	0.70	8.46	6.35	42.29	4.62	1.41	100.0	100706
Hamedan	8.97	4.70	4.97	17.83	0.88	5.91	6.81	44.03	4.76	1.14	100.0	117598
Yazd	6.93	4.03	3.93	18.18	1.69	5.01	9.10	43.88	5.98	1.27	100.0	65274

In economic migrations (Appendix XIV), the variable of sex alone accounts for 13 percent of the changes of the variable of the kind of migration. The likelihood of the economic migration of male heads of households is four times as much as that of female heads. The age of migrants at the time of migration may account for six percent of the changes of the

dependent variable. The likelihood of the economic migration of young heads of households (under 31) and middle-aged heads (31-45) is 1.6 times as much as that of old heads (above 45), respectively. Therefore, middle-aged individuals were most likely than others to migrate. The educational degree of individuals accounted for four percent of the changes of the dependent variable. The higher one's educational degree is, the lower the probability of economic migration. Economic migrants have moved mostly in their own city rather than out-migrating to another city. Furthermore, the likelihood of the economic migration of migrants from developed areas to disadvantaged (and mid-developed) ones was higher.

The importance of the individual characteristics of migrants is categorically higher in understanding tied migration rather than economic migration (Appendix XV) such that 50 percent of the 53 percent of the changes of tied migrations are due to the individual features of migrants. The variable of sex accounts for 12 percent of the changes of this migration. The likelihood of the tied migration of female non-heads of households is approximately four times as much as their male counterparts. Age at the time of migration accounts for 26 percent of migration and is thus the most important variable. The probability of the tied migration of under-16 individuals, compared to others, is higher. Just as was the case in economic migration, educational degree and tied migration are negatively correlated. Two macro variables of migration, i.e. the process of migration and the kind of migration, account for only three percent of the changes of tied migrations. Such migrations are 20 percent more likely to happen in intra-city rather than inter-city relocations. The circumstances of tied migrations in the three categories of rural-rural, rural-urban, and urban-urban are similar and it is only in the process of the urban-rural migration that the probability of the occurrence of such tied migrations is less than other trends and processes of migration, urban-urban ones in particular.

3. Urbanization in Iran

3.1. Rate and Trend of Urbanization

At the time of Iran's first census (1956), less than one-third (31.4 percent) of the population lived in urban areas; the trend continued in the next two censuses, demonstrating that the majority of the population were rural inhabitants (Figure 20). It was around 1981 that the share of the population living in urban and rural areas became equal with the urban population continuing to be larger than those residing in rural areas. The 2011 census puts the figure of the urban population at just above 70 percent. On average, around 0.73 percent has been added annually to the urban population growth rate since the first census up to the last one in 2011 with the urban population increasing more than nine times over the last 55 years.

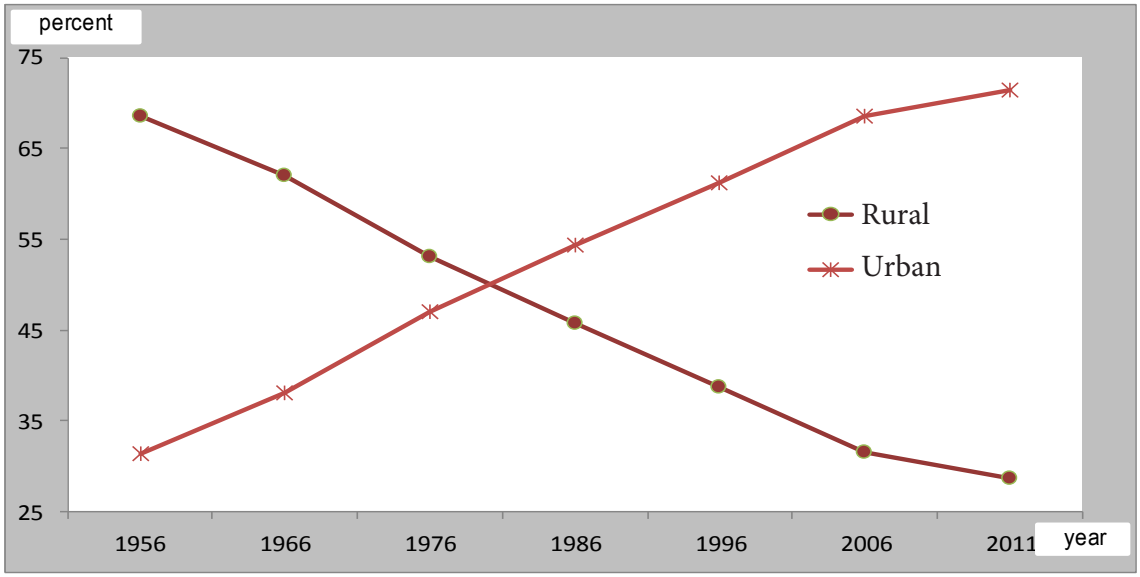

Figure 20 – Rate of Urban and Rural Population 1956-2011

This drastic rise in urbanization may induce huge economic, social, and cultural impacts both at the societal and personal levels of the urban population. The increase of urbanization is synchronous with the diminution and deterioration of agricultural economy and heightened expectations of industrial and service economies, expectations that indeed even the megalopolises of Iran have yet to deliver.

With 95 percent urbanization, the Province of Ghom has the highest urban population according to the 2006 and 2011 censuses (Figure 21 and Figure 22). Then come the provinces of Tehran, Alborz, Isfahan, and Yazd. The lowest rate of urbanization as per the 2006 census was in Hormozgan and later Sistan and Baloochestan in 2011. In addition to these two provinces, Kohkilooyeh and Boyerahmad, North Khorassan, and Golestan accommodated low urbanization rates compared to the other provinces in the 2006 and 2011 censuses.

There is a direct relationship between the degree of these provinces' level of urbanization and development.[1] For example, the higher a province's developmental level is, the higher the urbanization rate is. Conversely, the lower the developmental degree of a province, the lower the urbanization rate is. To this end, urbanization is regularly considered as one of the indicators and factors of the level of development in an area.

[1] Based on the findings of the study conducted by Roshan-Sangachin et al. (2013), the level of the development of provinces could be stated as the following:
- Developed provinces: Markazi, Isfahan, Semnan, Yazd, Tehran, Ghom, Ghazvin, and Alborz.
- Mid-Developed provinces: Gilan, Mazandaran, East Azerbaijan, Kermanshah, Khoozestan, Fars, Khorassan Razavi, Hamedan, Booshehr, and Zanjan.
- Disadvantaged provinces: West Azerbaijan, Kerman, Sistan and Baloochestan. Kurdistan, Chaharmahal and Bakhtiari, Lorestan, Ilam, Kohkilooyeh and Boyerahmad, Hormozgan, Ardebil, Golestan, North Khorassan, and South Khorassan.

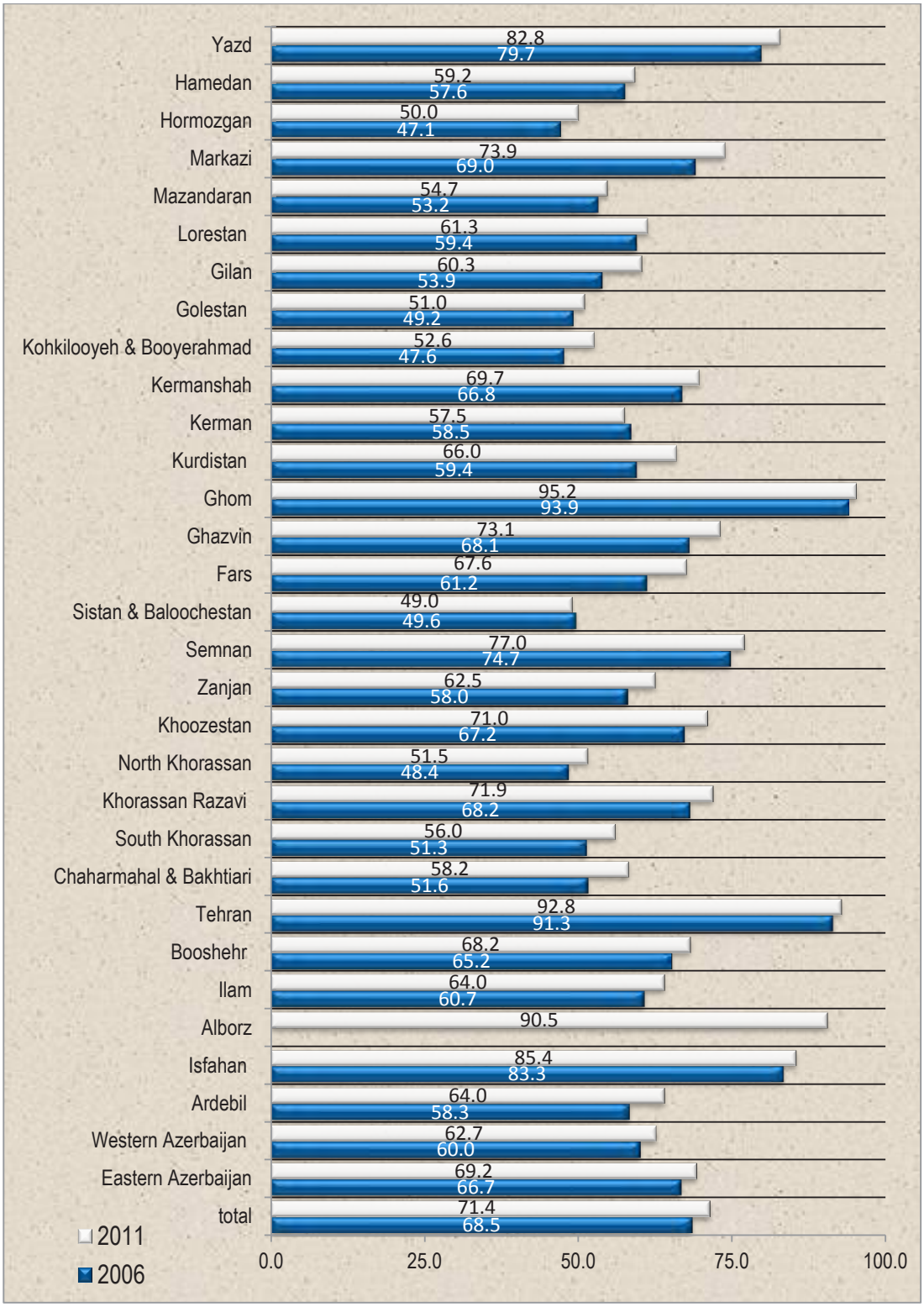

Figure 21 – Urbanization Rate of Iran's Provinces in 2006 and 2011

3.2. Number and Mean Annual Growth of Urban Population

In Figure 22, the mean annual growth of the total population, rural population, and urban population has been presented in percentage throughout the censuses from 1956 and 2011. The annual average growth rate of urban populations in the two periods of 1956-1966 and 1966-1976 stood at five percent going up by half percent in the 1976-1986 period. Despite the last two periods in which the stabilization of the growth rate of urban populations was together with a decline in the growth of the rural population, the latter enjoyed a rising trend in the 1976-1986 period compared to the first two periods. Hence, the sharp increase in the country's population in this period took place in both urban and rural areas. Since this period onwards, the annual growth rate of the urban (and rural) population acquired a downward slope falling to 2.1 percent in 2011.

The important point is the gap between the annual growth rate of urban and rural areas in the periods of study. As the figure shows, the peak of the gap was in the 1956-1966 census (with a discrepancy of 3.8) followed by the gap (3.2) in 1996-2006. A number of factors should be taken into consideration in the process of analyzing these significant gaps and discrepancies.

First and foremost is the natural population growth of the two areas. An analysis of births and deaths of urban and rural areas demonstrates that the level of these two factors in urban areas has consistently been lower compared to rural areas. Thenceforth, natural growth has never been an effective factor in the increase of the urban population. Indeed, it may actually have borne a negative impact on urban population growth. Naturally, a safer analysis would require attention to the two factors of the migrations having occurred between the two geographic areas of city and village and also the change in the definition of these two areas between the two censuses. Hence, the factors of rural-urban migrations, transformation of villages into cities, and the inclusion of villages in cities can be considered important in establishing the gap between the average growth rate of urban and rural populations. These factors have always served contributory to the population change of the two geographic areas over time; yet, their importance and influence has been different in these periods.

In the 1966-1976 period and as a result of the Land Reform Act and its socioeconomic outcomes, a sizeable number of rural inhabitants headed for cities with this rural-urban migration continuing in the next periods. As displayed in Figure 22, the 1976-1986 period witnessed 14 percent urban-rural migrations and 32 percent rural-urban migrations. Therefore, a difference of 18 percent in favor of the rural-urban migration trend is clear. This difference falls to three percent, however, in the next two censuses. In the recent 2006-2011 census, the direction of rural and urban migrations have been towards rural areas as urban-rural migrations are two percent higher than rural-urban migrations. As a result, up to the 1986 census, the significant factor of migration can be viewed as an influential cause of the rise and fall of urban and rural populations, respectively, alongside the two factors of the transformation and inclusion of villages into cities.

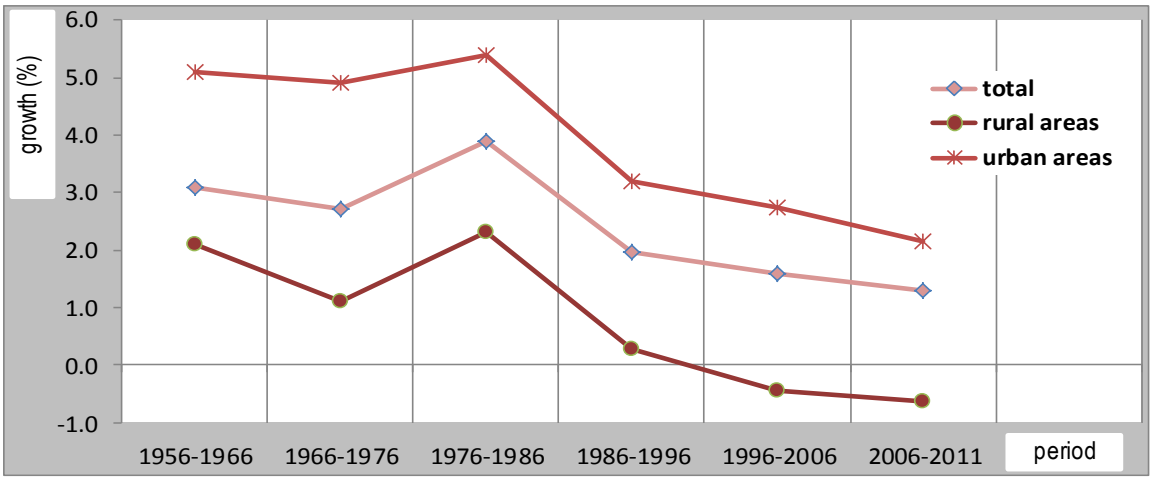

Figure 22 – Annual Mean Growth of Iran's Total, Urban, and Rural Population 1956-2011

Following the 1986 census, the two factors of the transformation and inclusion of rural into urban areas must be highlighted in the quantitative increase of urban population. This is particularly true about the transformation of rural into urban areas since a huge number of villages were instantaneously redefined as cities. Obviously, within this change of definition, the villages with large populations and infrastructural and welfare amenities were established as cities. Therefore, urbanization in Iran is in a sense a form of urbanism. The quintessential nature of modern cities is not similar to cities which change from villages into cities as a corollary of the development of livelihood (industrial and service), economic, social, cultural, and even political infrastructure. As noted earlier, the decline in rural-urban migration leads to the furtherance of other factors' share in the rise of urban population. In the 1996-2006 time period, the share of migration in population growth was only 15 percent while the share of the natural growth of urban population, transformation of villages into cities, and their inclusion stood at 58, 23, and three percent, respectively (Kazemipoor, 2012).

Iran's urban population stood in the neighborhood of 54 million people in 2011 which grew by 11, 46, and 100 percent compared to 2006, 1996, and 1986. A comparison of the urban population of provinces in the 2006 and 2011 censuses (Table 12) demonstrates that the highest increase is pertinent to the provinces of Booshehr, Hormozgan, and Chaharmahal and Bakhtiari while the lowest is in Sistan and Baloochestan, Lorestan, and Hamedan. This increase had caused the highest and lowest annual mean population growth in the 2011 census to be within those provinces, respectively (Table 13). The comparative analysis of the urban population growth rate of the provinces with the kind of migrations with rural and urban origins and destinations in them reveal that there is no rational and systematic relationship between the urban population growth rate and the percentage of rural-urban and urban-rural migrations. Therefore, other factors should be taken into consideration.

3.3. Number of Cities

The number of cities is another essential theme in studies of urbanization. Accordingly, the main focus in this context are the villages which have become cities – as already discussed – and thus contributed to the rise in urban population. The majority of the newly emerging cities were categorized as villages in previous censuses. In the first ever census of Iran, 201 cities were registered and the number of cities in 1976, 1996, and 2011 were 373, 612, and 1139, respectively. In the 1956-2011 period, the number of cities grew somewhat 5.5 times as much. Of course the percentage of the growth of urban areas has been different during different censuses with the least being for the 1986-1996 period while the highest marking the 1996-2006 period. The annual growth of the number of cities in Iran between 2006-2011 was approximately 2.4 percent.

Table 12 – Population of Iran's Urban Areas and Its Changes Disaggregated by Province 1986-2011

Province	Year of Census				Percentage of Change of Population in 2011 Compared to		
	1986	1996	2006	2011	1986	1996	2006
Nationwide	26844561	36817789	48259964	53646661	99.8	45.7	11.2
Eastern Azerbaijan	1586189	2004484	2402539	2579178	62.6	28.7	7.4
Western Azerbaijan	902999	1315161	1724954	1932544	114.0	46.9	12.0
Ardebil	412620	568448	715597	798942	93.6	40.5	11.6
Isfahan	2112061	2914874	3798728	4168219	97.4	43.0	9.7
Alborz	765762	1233688	1859307	2184371	185.3	77.1	17.5
Ilam	156658	259687	331231	356896	127.8	37.4	7.7
Booshehr	306075	394489	577465	704393	130.1	78.6	22.0
Tehran	6816963	8342208	10553181	11305832	65.8	35.5	7.1
Chaharmahal & Bakhtiari	229471	342905	442298	521071	127.1	52.0	17.8
South Khorassan	148830	219103	326695	371054	149.3	69.4	13.6
Khorassan Razavi	2193982	2883563	3811900	4311210	96.5	49.5	13.1
North Khorassan	191308	293549	392458	446872	133.6	52.2	13.9
Khoozestan	1485356	2342514	2873564	3218451	116.7	37.4	12.0
Zanjan	317113	429013	559340	634809	100.2	48.0	13.5
Semnan	244832	342455	440559	486345	98.6	42.0	10.4
Sistan & Baloochestan	487709	794528	1193198	1243079	154.9	56.5	4.2
Fars	1609261	2163119	2652947	3106732	93.1	43.6	17.1
Ghazvin	365641	552928	777975	878241	140.2	58.8	12.9
Ghom	543139	777677	983094	1095871	101.8	40.9	11.5
Kurdistan	428213	705715	855819	985874	130.2	39.7	15.2
Kerman	698755	1060075	1552519	1689842	141.8	59.4	8.8
Kermanshah	821766	1098282	1255319	1355094	64.9	23.4	7.9
Kohkilooyeh & Booyerahmad	111308	213563	302192	346621	211.4	62.3	14.7
Golestan	422193	588985	795126	906182	114.6	53.9	14.0
Gilan	784173	1049980	1295751	1497170	90.9	42.6	15.5
Lorestan	639038	850016	1020150	1075951	68.4	26.6	5.5
Mazandaran	893023	1194233	1554143	1682152	88.4	40.9	8.2
Markazi	476127	701547	932073	1045001	119.5	49.0	12.1
Hormozgan	308199	443970	661325	788471	155.8	77.6	19.2
Hamedan	563316	810640	980771	1040605	84.7	28.4	6.1
Yazd	412193	589955	789803	889583	115.8	50.8	12.6

Table 13 – Annual Mean Population Growth of the Total, Urban, and Rural Areas Disaggregated by Province between 1986-2011

Province	1986-1996 (%)			1996-2006 (%)			2006-2011 (%)		
	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural
Total	1.96	3.21	0.28	1.62	2.74	–0.44	1.29	2.14	–0.63
Eastern Azerbaijan	0.78	2.37	–1.21	0.81	1.83	–0.95	0.66	1.43	–0.94
Western Azerbaijan	2.39	3.83	1.01	1.42	2.75	–0.28	1.4	2.3	–0.01
Ardebil	1.2	3.26	–0.39	0.5	2.33	–1.56	.33	2.3	–2.58
Isfahan	1.76	3.27	–1.58	1.51	2.68	–2.78	1.37	2.87	–1.3
Alborz	4.4	4.88	1.18	4.13	4.19	3.71	3.04	3.46	–.55
Ilam	2.47	5.18	0.12	1.13	2.46	–0.61	0.43	1.5	–1.1
Booshehr	1.96	2.57	1.33	1.77	3.88	–1.22	3.11	4.05	1.45
Tehran	2.21	2.04	4.94	2.39	2.38	2.54	1.44	1.65	–1.1
Chaharmahal & Bakhtiari	1.89	4.1	0.4	1.2	2.58	–0.06	0.86	3.33	–2.11
South Khorassan	–0.43	3.94	–2.56	1.74	4.08	–0.21	0.81	2.58	–1.12
Khorassan Razavi	1.45	2.77	–0.3	1.71	2.83	–0.3	1.4	2.49	–1.12
North Khorassan	2.24	4.37	1.04	1.03	2.95	–0.46	1.35	2.63	0.23
Khoozestan	3.4	4.66	1.61	1.33	2.06	–0.02	1.17	2.29	–1.22
Zanjan	1.41	3.07	0.13	0.69	2.69	–1.51	1.04	2.56	–1.23
Semnan	1.86	3.41	–0.8	1.64	2.55	–0.63	1.37	2	–0.58
Sistan & Baloochestan	3.71	5	2.72	3.4	4.15	2.71	1.05	0.82	1.32
Fars	1.8	3	0.43	1.28	2.06	0.18	1.17	3.21	–2.22
Ghazvin	1.86	4.22	–0.57	1.67	3.47	–1.28	1	2.45	–2.44
Ghom	3.29	3.65	0.21	2.07	2.37	–1.68	1.93	2.2	–2.6
Kurdistan	2.24	5.12	–0.15	0.68	1.95	–0.92	0.73	2.87	–2.77
Kerman	2.13	4.26	0.21	2.84	3.89	1.54	2.07	1.71	2.66
Kermanshah	1.97	2.94	0.59	0.55	1.35	–0.86	0.69	1.54	–1.06
Kohkilooyeh & Booyerahmad	2.83	6.73	0.96	1.54	3.53	0.04	0.76	2.78	–1.2
Golestan	2.22	3.39	1.48	1.26	3.05	–0.18	1.9	2.65	1.2
Gilan	0.75	2.96	–0.84	0.7	2.13	–0.72	0.62	2.93	–2.37
Lorestan	1.49	2.89	0.09	0.8	1.84	–0.53	0.44	1.07	–0.41
Mazandaran	1.36	2.95	0.19	1.17	2.67	–0.28	1.02	1.6	0.34
Markazi	1.28	3.95	–1.38	0.95	2.88	–2.27	0.91	2.31	–2.52
Hormozgan	3.37	3.72	3.13	2.83	4.07	1.85	2.37	3.58	1.21
Hamedan	1.09	3.71	–0.83	0.15	1.92	–1.81	0.64	1.19	–0.13
Yazd	2.68	3.65	0.48	2.03	2.96	–0.92	1.63	2.41	–1.66

There are different percentages for the number of cities. In the 1996-2006 period, which marked the highest rate of urban population growth in Iran, the Province of Isfahan contained 92 urban areas or nine percent of all the country's cities followed by the provinces of Fars, Khorassan Razavi, East Azerbaijan, Kerman, Tehran, Mazandaran, and Gilan (Table 14). These eight provinces together hold 50 percent of Iran's urban areas. On the opposite side of the spectrum, Ghom has only five cities and thus 0.5 percent of the country's cities; this province added to Kohkilooyeh and Boyerahmad, North Khorassan, Semnan, Zanjan, Ilam, and South Khorassan comprise 10 percent of Iran's cities. Some 31 percent of Iran's cities in 2006 had a population below 5000 while 55 percent were cities under 10,000. These figures were 33 and 57, respectively, in 2011 (Table 15).

The is clear that most Iranian cities house a small population as a considerable number of them are newly emerging cities. In contrast, the number of highly populated cities is lower. According to the 2006 census, six cities were homes to populations above 1,000,000 while seven were in the 500,000-1,000,000 range. The same pattern remained in 2011 too with the only difference of one city being added to the 500,000-1,000,000 range (a total of eight such cities).

According to the 2011 census (Table 15), 14 out of the total 1139 cities had a population above half a million which hosted 45 percent of the urban population of the country. Tehran is the most populated city in Iran followed by Mashad, Isfahan, Karaj, Tabriz, Shiraz, Ahvaz, and Ghom, all of which are above one million in population.

Table 14 – Distribution of Iran's Cities Based on the Number of Population Disaggregated by Province, 2006

Province	Total	Number of Population								
		Less than 5000	5000 – 10,000	10,000 – 25,000	25,000 – 50,000	50,000 – 100,000	100,000 – 250,000	250,000 – 500,000	500,000 – 1,000,000	1,000,000 and above
Nationwide	1012	311	241	210	100	70	54	13	7	6
Eastern Azerbaijan	57	22	13	12	4	3	2	0	0	1
Western Azerbaijan	36	11	9	3	5	3	4	0	1	0
Ardebil	21	8	6	2	2	2	0	1	0	0
Isfahan	92	24	23	26	8	5	4	1	0	1
Ilam	19	9	3	4	2	0	1	0	0	0
Booshehr	29	8	9	8	1	2	1	0	0	0
Tehran	51	5	6	13	8	8	8	1	0	2
Chaharmahal & Bakhtiari	26	4	8	10	3	0	1	0	0	0
South Khorassan	20	9	5	4	1	0	1	0	0	0
Khorassan Razavi	66	24	22	7	6	2	4	0	0	1
North Khorassan	15	8	1	2	1	2	1	0	0	0
Khoozestan	47	8	9	13	3	5	8	0	1	0
Zanjan	16	6	4	2	2	1	0	1	0	0
Semnan	16	5	5	2	1	1	2	0	0	0
Sistan & Baloochestan	32	13	4	8	1	3	2	0	1	0
Fars	73	14	24	21	3	8	2	0	0	1
Ghazvin	24	8	5	5	3	2	0	1	0	0
Ghom	5	2	2	0	0	0	0	0	1	0
Kurdistan	23	12	2	2	2	3	1	1	0	0
Kerman	57	18	20	9	4	3	2	0	1	0
Kermanshah	28	14	2	4	5	2	0	0	1	0
Kohkilooyeh & Booyerahmad	13	4	3	3	0	2	1	0	0	0
Golestan	24	2	6	7	7	0	1	1	0	0
Gilan	49	15	12	12	6	2	1	0	1	0
Lorestan	23	12	2	1	2	3	2	1	0	0
Mazandaran	51	13	15	8	9	2	3	1	0	0
Markazi	27	8	8	6	2	1	1	1	0	0
Hormozgan	22	7	4	6	3	1	0	1	0	0
Hamedan	27	11	5	5	2	2	1	1	0	0
Yazd	23	7	4	5	4	2	0	1	0	0

Table 15 – Distribution of Iran's Cities Based on the Number of Population Disaggregated by Province, 2011

Province	Total	Number of Population								
		Less than 5000	5000 – 10,000	10,000 – 25,000	25,000 – 50,000	50,000 – 100,000	100,000 – 250,000	250,000 – 500,000	500,000 – 1,000,000	1,000,000 and above
Total	1139	371	277	222	103	81	57	15	6	8
Eastern Azerbaijan	58	19	17	10	6	3	2	0	0	1
Western Azerbaijan	42	15	10	4	5	3	4	0	1	0
Ardebil	24	12	5	2	2	2	0	1	0	0
Isfahan	101	29	27	26	6	7	4	1	0	1
Alborz	16	3	2	4	0	3	3	0	0	1
Ilam	21	11	2	5	2	0	1	0	0	0
Booshehr	32	8	9	10	1	3	1	0	0	0
Tehran	39	4	2	9	8	6	5	4	0	1
Chaharmahal & Bakhtiari	31	7	10	9	3	1	1	0	0	0
South Khorassan	25	14	5	3	2	0	1	0	0	0
Khorassan Razavi	72	25	24	8	7	3	4	0	0	1
North Khorassan	18	9	2	4	0	2	1	0	0	0
Khoozestan	61	14	15	14	3	5	9	0	0	1
Zanjan	18	6	6	2	1	2	0	1	0	0
Semnan	17	5	6	2	1	1	2	0	0	0
Sistan & Baloochestan	37	13	8	9	1	4	1	0	1	0
Fars	93	29	27	17	9	7	3	0	0	1
Ghazvin	25	5	8	6	1	4	0	1	0	0
Ghom	6	3	2	0	0	0	0	0	0	1
Kurdistan	25	13	2	2	2	3	2	1	0	0
Kerman	64	22	20	12	4	1	4	0	1	0
Kermanshah	29	14	2	5	4	3	0	0	1	0
Kohkilooyeh & Booyerahmad	16	6	3	4	0	2	1	0	0	0
Golestan	25	2	7	7	7	0	1	1	0	0
Gilan	51	16	10	15	5	3	1	0	1	0
Lorestan	25	12	4	0	3	4	1	1	0	0
Mazandaran	53	14	15	9	8	3	3	1	0	0
Markazi	32	11	10	5	3	1	1	1	0	0
Hormozgan	32	13	8	6	3	1	0	1	0	0
Hamedan	27	11	4	6	2	2	1	0	1	0
Yazd	24	6	5	6	4	2	0	1	0	0

The rising trend of the population of the 14 densely populated cities of Iran from the very first census until that of 2011 appears in Table 16 where the figures demonstrate that the

population of these cities have increased dramatically since 1956. Before 1976, it was only the city of Tehran which housed a population above half a million and thus, for the first time, the three cities of Mashad, Isfahan, and Tabriz were added to Tehran in 1976 as cities with populations above half a million. Then came the cities of Shiraz, Ahvaz, Ghom, and Kermanshah in 1986. Later on in 2006, Oroomieh, Zahedan, Rasht, Kerman, and Hamedan joined the list of highly populated cities. A point worth noting here is the population changes of the city of Karaj: this city went from 15,000 in 1956 to 1,615,000 in 2011. It is clear that adjacency to the capital has borne an important impact on the population growth of this city.

Table 16 – Population of Major Cities 1956-2011 (in thousands)

City	1956	1966	1976	1986	1996	2006	2011
Tehran	1512	2720	4530	6034	6759	7705	8154
Mashad	242	410	668	1464	1887	2427	2749
Isfahan	255	424	662	987	1266	1600	1756
Karaj	15	44	138	275	941	1377	1615
Tabriz	290	403	598	971	1191	1400	1495
Shiraz	171	270	426	848	1053	1227	1461
Ahvaz	120	206	334	580	805	970	1112
Ghom	100	134	247	543	778	952	1074
Kermanshah	125	188	291	561	693	785	851
Oroomieh	68	111	164	301	435	577	668
Zahedan	17	40	94	282	420	553	561
Rasht	109	144	189	291	418	551	640
Kerman	62	85	141	257	385	497	534
Hamedan	100	124	166	273	401	473	526
Total	**3186**	**5303**	**8648**	**13676**	**17432**	**21094**	**231196**

3.4. Determinants of Migration to Urban Areas

One of the most important issues which could establish a rational link among the trends of internal migration and urbanization growth is the amount of migrations to urban areas. Through the investigation and analysis of this kind of migration, the factors affecting urban population growth can be identified with respect to the available data.

The multivariate analysis based on individual data (Appendix XVI) delineates that the level of the development of origin is the most important identifier of the probability of migration to urban areas in Iran. Migrants from developed areas mostly tend to opt for urban areas as their destination such that the likelihood of migration to urban areas by migrants from origins with low and mid development levels is much less compared to migrants from developed origins. The next variable which ranks similarly in importance to the level of development in the area of origin is the educational degree of the migrants. The chances of individuals' migration to urban areas among the migrants with secondary education and higher education are 1.5 and almost four times as much as those with primary education, respectively.

The number of migrations from smaller cities to urban areas is two times as high as migrations between smaller cities. This underscores that in migrations between smaller cities,

urban areas are mostly preferred by migrants while rural areas are more commonly opted for when it comes to migrations inside townships. The likelihood of migration from urban areas to cities is 1.5 times as much that of such migrations from rural areas. With respect to the ever-increasing expansion of urbanization in Iran and the selection of urban destinations by migrants, urban-urban migrations are more dominant to other migration modalities. Young migrants aged 16-30 and middle-aged ones (31-45) choose cities as migration destinations less than individuals under 16. In addition to the impact of age, the prediction of the sex of migrants in the kind of migrations with urban and rural destinations is also noteworthy. The probability of women's migrations to cities in Iran is 30 percent more than that of men. These are some of the results which can be traced in the age pyramid of rural-urban migrations with respect to the relative dominance of women.

3.5 Outcomes of Urbanization

The intensity of the urban population growth and the number of cities may bring about a multitude of outcomes at the societal level. These outcomes may be both positive and negative. For instance, peri-urbanism is a significant social issue for most populous cities and peri-urban dwellers create various problems both for themselves and the urban population not residing in peri-urban areas. Air pollution is another negative repercussion of urbanization. At the same time, further access to health and educational services and elevated life expectancy are among the positive consequences of urbanization (as opposed to living in rural areas). The section below elaborates on some of these outcomes for the country's urban population as compared to the rural population.

3.5.1. Peri-Urbanism

Following World War II, one of the most prominent social issues of developing countries is the accelerated and heterogeneous growth and development of urbanization. Evidently, precarious and unleashed urban sprawl and peri-urbanism as its inevitable aftermath is the outcome of continuous internal rural-urban migrations with their economic, social, and physical consequences being the emergence of peri-urban groups and communities in the different parts of megalopolises and in different modalities such as shanty towns, skid rows, etc. (Hosseinzadeh-Dalir, 1991). From a social standpoint, peri-urban dwellers often live in extended families and are unskilled and low-literate with incomes failing to make ends meet.

The formation of peri-urbanism in Iran has its roots in exogenous development and the over-expedited pace of urbanization, the commencement of which was almost around the 1920s. The beginning of the expansion of capitalist economic paradigms which induced changes in the means of production and the subsequent changes in the urban and rural network marked the emergence of a number of megalopolises in the country as centers where all the focus on the new industrial wave was laid (Parssapajooh, 1982; Hessamian et al., 1984). The peak of these activities is in the period 1956-1976, marking the huge influx of rural people to cities.

A number of comprehensive studies have been conducted on peri-urbanism in Iran. It could be stated that the majority of studies have focused on the underlying roots and history of peri-urbanism and its impacts on urban areas (Appendix XVII). In these studies, the peri-urban dwellers of the cities of Hamedan, Ahvaz, Gahzvin, Isfahan, and Karaj have been discussed. Over 80 percent of the studies have attended to rural-urban migrations and most have

reviewed cities in terms of social pathologies. To this end, the studies have not focused much on the physical and architectural features of cities, population changes, economic crises, and the crimes insinuated by peri-urbanism. Furthermore, certain guidelines such as the empowering peri-urban dwellers, optimizing peri-urban areas, family planning, reducing and adjusting urban-rural migrations, strengthening midway cities, and decentralization have been raised to alleviate the problems engendered by peri-urbanism.

3.5.2. Environmental Pollution

The growth of urban population leads to the destruction of many arable lands every year due to urban and industrial installations; furthermore, the air, water, and soil will be polluted. According to a World Health Organization (2013) report, Iran ranks eighth in terms of air pollution. The report names Ahvaz the most polluted city of the world because of the suspended particles in its air. The cities of Sanandaj, Kermanshah, Yassooj, Oroomieh, Ghom, Tehran, and Arak are also among most polluted cities of the world. The main reasons behind the pollution of these cities are the low standards of automobiles and their fuels and also the pollutants produced by industrial plants.

According to the Iran Environment News Agency (2013), Tehran's noise pollution has gone beyond the alarming level to the emergency level holding the first rank in the country in terms of noise pollution. Based on the most recent assessments of the Iran Department of Environment, the central areas with dense traffic and southern congested areas are the most contaminated parts of Tehran. Motorcycles are responsible for 49 percent of the noise pollution of the capital.

The Province of Alborz Department of Environment (2013) has identified the environmental problems of the city of Karaj:

- The low level of the green area per capita vis-à-vis the population and industries existing in the city.
- The pollution of water resources including the Karaj River as a result of dumping human wastewater and the sewage of the service-reception units of the peripheries of the Karaj River and also the lack of the correct management of the waste on Chaloos Road.
- Unauthorized constructions within the South Alborz protected area which leads to the deterioration of the ecosystem of the protected area.
- Air pollution caused by motor vehicles, pollutant industries, dust, and particles in certain seasons of the year.
- Changing the functionality of agricultural lands and orchards and deteriorating urban green spaces especially the Jahan-Nama Green Park and Sibeh Mehr Gardens.
- Scattered and unorganized intrusive urban units such as metal plating and metallurgical units and lack of correct management of urban syndicates.
- Trucks commuting inside the city of Karaj during daytime which cause air and noise pollution while in most megalopolises, trucks are not allowed to commute during daytime.

- Transfer of the water of the Karaj River from the site of the regulated dam lake through a tunnel to Tehran which decreases extremely the river current in the downstream of the lake and the change of the river ecosystem and the deterioration of the green areas around the river and the increase of the concentration of the pollutants together with the decrease of the genetically valuable reserves of the river.

- Not completing the network of collecting wastewater of Karaj and its satellite cities have caused the wastewater to flow in some of the passages and canals and their interference with surface waters and agricultural water resources which have brought about health and environmental problems.

It is clear that most of these environmental problems are in populous cities and the fountainhead of the majority of these problems is the over-accumulation of the population. Population growth and its subsequent increase of motor vehicles, change of the functionality of arable lands into housing, industrial, and commercial units, and expansion of plants and industrial jobs are among the impacts of the growth of urbanization on environmental pollutants.

3.5.3. Changes within Urban and Rural Populations

As indicated above, the rate of the urban population growth is significantly more than that of rural areas. Albeit cities and villages have always had different features, the ever-increasing urban population growth has borne an important effect on the difference of the nature of cities and rural areas. Table 17 portrays some of the main features of Iran's urban and rural areas in 2011.

Demographically speaking, the percentage of the above-65 population in rural areas (6.5) was larger than the percentage in cities (5.5). Accordingly, the ratio of the dependency of the population in rural areas (48.4) was higher than that of urban areas (38.3). Urban dwellers had a higher mean age of marriage compared to rural inhabitants. The mean age of the marriage of men and women in urban areas in 2011 is 27.6 and 23.3, respectively. The corresponding figures for rural areas are 26.3 and 21.8. In the same year, the ratio of divorce to marriage in cities (19.2) is over two times as much as the similar ratio for villages. With respect to the higher mean age of marriage in cities, the rate of total fertility in urban population (1.7) in 2011 is lower than this rate for the rural population (2.3). The rate of the prevalence of contraceptives is more in cities (79.0) compared to villages (73.8). Also, cities have lower death rates and higher life expectancy compared to villages.

Table 17 – Demographic, Economic, and Social Features of Urban and Rural Areas, 2011

Features	Urban Areas	Rural Areas
Percentage of Above-65 Population	5.5	6.5
Dependency Ratio	38.3	48.4
Mean Age of Marriage for Men*	27.6	26.3
Mean Age of Marriage for Women*	23.3	21.8
Ratio of Divorce to Marriage*	19.2	8.9
Total Fertility Rate	1.7	2.3
Rate of Contraceptive Prevalence (Married Women 15-49)**	79.0	73.8
Under-1 Mortality Rate**	16.9	26.3
Men's Life Expectancy (2006)	70.2	68.9
Women's Life Expectancy (2006)	72.8	71.0
Literacy Rate of Above 6	88.6	75.1
Economic Activities of Males Above 10	62.6	69.4
Economic Activities of Women above 10	12.3	9.0
Unemployment among Men above 10	13.5	12.2
Unemployment among Women above 10	26.7	15.1
Household Expenses in 2012 (IRR million)	164.2	108.2
Percentage of Household's Non-Food Items in 2013	75.3	60.8
Percentage of Residential Units with Metal and Concrete Skeleton	20.6	52.4

* Based on data from Civil Registration Organization
** Based on IDHS (2010) data
Sources: 2011 census; Rashidian et al. (2012); Statistical Center of Iran (2013a); Statistic Center of Iran (2013b); Mahmoudian et al. (2012).

As anticipated, the literacy rate of cities (88.6) is higher than the rate in villages (75.1). The rate of men's activities is higher in villages (69.4 percent) compared to cities (62.6 percent) but the likelihood of rural women's economic activities (9.0) is less than that of urban women (12.3). Both urban men and women suffer from a higher rate of unemployment compared to their rural counterparts. Nevertheless, the annual expenditure of a household in urban areas is around 52 percent higher than expenses in rural areas. People in rural areas spent a higher portion of their income on food, and urban housing was more resilient compared to rural housing.

Generally, the different circumstances in cities and villages are mainly due to the difference in the degree of development. Therefore, a lower death rate, higher life expectancy, higher literacy, and resilient residential units are more prevalent in urban areas. Nevertheless, the difference in the demographic and socioeconomic structure of cities and villages which are mainly the product of migration have per se created differences. For instance, the elderly age structure of the rural population has heightened the dependency ratio. On the other hand, the younger age structure in urban areas means lower economic activities as they are mostly engaged in education. Altogether, the socioeconomic condition is better among urban dwellers.

4. Migration and Urbanization Policies and Programs[1]

Migration policies comprise the set of measures which are applied to migrants and not non-migrants and are thus very readily discernible (Zanjani, 2001). With reference to internal migration, one could conclude that migration policies are the collection of interventions regarding rural-urban migration and, in certain cases, from townships to densely populated provincial capitals especially the capital (Ghassemi-Ardahaee, 2007). Some of the goals of internal migration policies comprise the following:

- Population relocation from highly populated areas
- Controlling the extensive growth and size of main cities
- Developing growth poles or secondary and average cities
- Preventing rural-urban migration
- Providing employment for rural residence and rural building programs
- Changing the ethnic or occupational composition of an area (Lucas & Meyer, 1994)

Generally, the policies which influence the migration and relocation of population can be dichotomized accordingly: direct policies which are designed openly for the change of the process of migration and indirect policies with their impact on migration at the second stage and following the basic goals of those policies. Direct policies regulate and systematize the models of residence and replacement. This process comprises establishing barriers in the process of migration to cities, traveling restrictions, and resettlement plans. The general objective of indirect policies is the enhancement of the status quo in the origin or creating different places of migration such as border areas or midway cities. The goal is that through creating more attractive areas, the power of large cities in drawing in large populations would be decreased. Examples of indirect policies are providing general welfare services and facilities in rural areas, industrial and administrative decentralization, land reforms, rural development programs, supporting the price of agricultural produce to raise rural revenues, income policies to prevent the rise in the level of urban wages, and extending education and many urban development policies which are implemented with the goal of helping migrants and enhancing living conditions in urban areas which also bear indirect and inadvertent effects on migration (Sanayi, 1996).

In Iran up to the Islamic Revolution, a direct policy of migration – in general – and a direct rural-urban migration policy – in particular – had not been implemented. Following the Islamic Revolution, specific rules and regulations were formulated and enforced for the housing and employment of people in Tehran and large cities. At that time, purchasing a residential unit, authorizing employment, and even matriculating children at school became possible through submitting a special ID card for receiving various basic commodities which was specific to that city or region. Through this policy, planners were after preventing the precarious expansion of Tehran and a number of the large cities. Since a large portion of these migrants to megalopolises was comprised of rural inhabitants, this policy could be

[1] In writing certain parts of this section, Ghassemi-Ardahaee (2007) was used.

envisaged as the first direct policy enforced in the context of rural-urban migration, in general, and rural areas to Tehran or other cities to Tehran, in particular.

Among other policies in this regard was transferring civil servants from Tehran to other cities which was first discussed in 2007 but was only effected in practice since March 2010 with the announcement of the estimated damages of probable earthquakes in Tehran. The first institution which implemented the directive with its own staff was the Department of Tourism, Cultural Heritage, and Handicraft deploying three of its deputies to cities like Isfahan and Shiraz. In 2011, however, the relocated staff were returned to Tehran. The inefficiency of this plan was demonstrated so vividly that the previous directives were annulled by the same government which issued them and the initiative to transfer civil servants to megalopolises was officially ceased.

The change in the direction of migration from growth poles to smaller cities and, in other words, establishing satellite cities around megalopolises is one of the indirect policies of controlling migration. Fundamental investments, taxation policies, and the like are motives which facilitate the grounds for the transfer of industries to small urban centers. Japan, China, India, South Korea, Cuba, Brazil, and most developing countries in which megalopolises are growing rapidly have adopted the policy of establishing satellite cities (or townships) in order to prevent the ever-increasing growth of megalopolises. Hence, one of the major reasons for the establishment of new cities in the world is controlling large cities.

In Iran, determining the 120-kilometer zone around Tehran in which heavy and pollutant industries are forbidden did result indirectly in the decrease of the capital's population load thereby bringing about new industrial townships and strengthening the existing densely populated cities beyond the zone (ibid.). According to the approval of the Iran Supreme Council of Urban Development and Architecture dated March 15, 1990, six new cities were anticipated up to 2011 which include Hashtgerd, Parand, Pardiss, Andisheh, Eshtehard, and Zavieh (Shahabian, 2004). An appropriate and regulated distribution of the population in Tehran through housing the surplus population of this megalopolis in the new cities was among the main goals of establishing these cities. The findings of Zebardast and Jahanshahloo (2007) demonstrate that half of the households residing in the new city of Hashtgerd are the surplus population of Tehran and Karaj; one of the major factors underlying the migration of households to the new city of Hashtgerd is the cheap price of housing in this new city.

Another indirect policy of rural-urban migration control is rural development programs. The main goal of rural development plan is lessening the migration of rural inhabitants to cities. In the process of formulating these plans, there is the assumption that the majority of rural inhabitants migrate due to the lack of an appropriate occupation or adequate income. Therefore, increasing agricultural and nonagricultural job opportunities and raising the income of people residing in rural areas may decelerate rural-urban migration. The main goal of rural development plans is reconstruction and harmonization of rural lifestyle with the routine lifestyle through providing infrastructural facilities in rural areas. The most prominent incentive of rural-urban migrants is not just income and occupation but having a better life and access to educational and other welfare and health amenities existing in cities. Among these rural development plans is land reforms, providing infrastructural credits, employing technology in agriculture, improving rural health and housing, raising nonagricultural job opportunities in rural areas, and protection policies at the national level. In this regard, effective measures were put in place in Iran too going back to the Land Reform Act of 1963 following with the post-Revolution extended rural development plans (for instance those of

the Ministry of Agricultural Jihad). Some examples in recent years are providing insurance for rural inhabitants, optimizing and renovating rural homes, and also providing facilities and loans for the above goals.

In mid-2010, the MPs reviewed Article 174 of the Fifth National Development Plan Bill under the title of rural development and thus obliged the government to formulate incentives for reverse migration (urban-rural) and relative stabilization of the rural population until the end of the first year of the Fifth National Development Plan. Some examples are promoting rural development indices and providing modern services and producing a program for prioritizing rural services with respect to regional and local circumstances.

The general observation is that three categories of policies (direct and indirect) exist concerning internal migration, in general, and urbanization (rural-urban migration), in particular:

a. Rural development and changing the kind of economic activity in rural areas with the goal of reducing urban migration in the long run.

b. The policy of restricting the growth of large cities through controlling migration, especially rural migration.

c. Decreasing the growth of large cities through changing the direction of the migrants' movement from those cities to small and midway cities.

The Third National Development Plan stipulated two general policies regarding rural-urban migration in Iran:

I. Control, including

- Expanding and furthering supplementary agricultural activities such as handicraft, silkworm breeding, etc.

- Improving the means of employing resources and promoting modern means of irrigation and genetically modified flora.

- Unifying small lands and establishing irrigation networks and drainage systems.

- Expanding and developing rural production cooperatives and providing and monitoring microloans to these cooperatives.

II. Guidance, including

- Implementing development plans in wastelands which are potentially appropriate for growth and development.

- Strengthening industrial cities and townships and guiding rural migrants once they have acquired the technical and production skills necessary for these cities and townships (Statistical Center of Iran, 2003).

The studies conducted on the direct policies of rural-urban migration demonstrate that only a few states including China and Poland have managed somewhat to decrease rural-urban migration through authorizing legal restrictions and residence. In other places such as the

African countries of Congo, Niger, Zaire (now the DRC), etc., these policies failed due to their weakness in enforcement, the huge rate of fraud in documentation, and the easy return of those expelled through active migration networks (friends, relatives, fellow citizens, etc.).

Since the late 1950s, China began adopting a household registration system through which, any individual wishing to migrate should primarily gain a permit in the place of origin and destination. One could not obtain a job or buy food outside this system. Life, under such circumstances, for a rural migrant in a city would be difficult and, consequently, the Chinese household registration system turned into a major deterrent for rural-urban migration. Prior to the annexation of Hong Kong to China in 1997, the term "one country and two systems" was employed to refer to China (Wang, 1997). Although the registration system officials had realized that the precise implementation of the system was almost impossible and thus the system faced failure. One of the reasons for the failure was that the cereals rationing system was eliminated and replaced by access to free market economy. This transition at the time transformed the industrial structure of the city and more recruitment opportunities were gradually established in the nongovernmental economic sectors. The rapid growth of private jobs created a huge demand for workers. Through this nongovernmental economic organization, they could secure migrant workers with temporary urban residence sheets. Gaining these temporary sheets was no challenge at all, particularly for the temporary migrants who worked in the urban economic organization. These migrant workers could work for the newly established organization for a period of five years under this temporary residence deal. Even when their temporary residence was annulled, they would easily find a new job and accordingly, the temporary work residence would continue. Even if some individuals failed to gain the temporary household registration cards, they could receive support from the migrants network to gain their jobs (Liang, 2001).

Due to the complications caused by the household registration system, a blue chip household registration system was adopted for specific migrants in a number of cities such as Beijing, Shanghai, and Shenzhen. For instance, the migrants who could manage macro-investments and/or migrants who had specific vocational skills would be provided this blue registration system thus allowing them to receive a permanent household registration after five years (Wong & Huen, 1998). In October 1998, a new set of guidelines for changing the household registration system was provided.

Another direct Chinese rural-urban migration policy is population redistribution. The overarching goal of these programs is mobilizing the development of rural areas, increasing agricultural produce and preventing or reducing unemployment in the cities.

In the 1960s, Chinese leaders realized that their agricultural products may suffice the cereals required for perhaps only 20 percent of the urban population (130 million in 1960). To thus reduce the urban population, they sent 24 million urban workers – a huge number whom had migrated from rural areas – to suburban areas (Liang, 2001). This trend allowed the country officials to curb urban poverty and unemployment although this condition is mostly through institutionalizing administrative rules and regulations (which restrict freedom of movement).

In Indonesia in 1970, the Governor of Jakarta adopted a legislation to restrict influx into Jakarta. Under this legislation, migrants wishing to go to Jakarta must apply for a temporary visit card and pay a deposit which was two times as much as the cost of traveling to Jakarta. Should they demonstrate within six months of their entrance into Jakarta that they had gained a job and accommodation, they would be reimbursed and receive a permanent identity card

which would serve as a Jakarta citizenship card. Should they fail to gain a job and accommodation, they would receive a one-way ticket to their origin to return (Oberai, 1987).

The first direct migration policy in Iran was only enforced in a limited time span. At the time, purchasing residential property in Tehran required a specific economic rationing ID card and so migrants to Tehran had to resort to residing in townships and villages on the outskirts of the capital; the result was the growth of those villages and townships – technically outside the specific zone of Tehran – instead of the rise in the population of the city of Tehran. To this end, within the first five-year period of the 1976-1986 decade, the share of migration in the rise of the population of the city of Tehran compared to the previous 10 years increased going from 1.19 to 2.24 percent per annum; this trend acquired a negative trend from 1981 and, for the first time in the previous centennial period, the trend of Tehran's population growth decreased its natural growth rate (Zanjani, 1989). This policy would lead to absorbing the migrants of the city of Tehran by the cities around it and, as a corollary of this migration policy in the previous decades, the cities in the peripheries of Tehran enjoyed an excessive population growth. For instance, cities such as Rajayishahr, Mehrshahr, Gharchak, Islamshahr, and Robatkarim which are on the outskirts of the city enjoyed an annual population growth rate of 30.3, 30, 18, 15.6, and 15.2 percent, respectively, throughout the 1976 and 1986 censuses (when migration policies in Tehran were being implemented). Albeit the goal behind the establishment of these cities was indeed the above, assessments revealed that migrants first entered these cities (townships) and subsequent to their financial betterment and acquaintance with the urban and megalopolitan environment intend to migrate to Tehran.

Concerning rural development, many such plans have contributed to the migration of rural inhabitants. The land reforms conducted in Iran – an example of rural development plans – have expedited the mechanization and commercialization of agriculture and thus created rural workers who would earn daily wages. Large landowners expelled farmers and used daily workers at an extended rate. Rather than improvements in the lives of farmers, their lives thus actually got worse and for many farmers, migration was the last remaining resort.

Establishing schools in the rural areas of many countries deters the youth from migration because of education but develops this demand and power among students to seek jobs in cities. Furthermore, building roads increases the contact between rural areas and remote townships and cities thereby facilitating migration. A research conducted in India illustrates that initiatives to develop the small-scale cottage industries development in the rural areas alongside rural development may augment rural-urban migration as these industries have enhanced the skills of rural inhabitants thereby giving them more acceptance in the urban labor market. Chan (as cited in Oberai, 1987) concluded in his study in Malaysia that regional development and also rural development prompt stage-by-stage migration (i.e. from rural areas to small cities and subsequently to regional centers) and thence to hubs in cities.

The elaboration so far on migration policies (direct and indirect) and the experiences of countries regarding the formulation of rural-urban migration would lead to the following principles:

- Preventing any measure that detriments the principle of individuals' free relocation in the process of selecting their habitat: the right stipulated in the Universal Declaration of Human Rights and other international instruments (Zanjani, 2001). Therefore, the direct policies of rural-urban migration must be flexible and adjustable and variable in accordance with the spatiotemporal context.

- Attending to social and environmental perspectives alongside development ones in development planning, especially in terms of establishing industrial and social services and facilities (ibid.): A village is an environment (at least in Iran) sustaining its livelihood from the agricultural and livestock sectors. Therefore, any decision-making for the development of rural communities in the country must emphasize agriculture and livestock. The study conducted by Ghassemi-Ardahaee and Rostamalizadeh (2012) on the impact of rural housing loans in changing rural life depicts that despite the fact that nationwide development plans have laid further emphasis on providing housing and rural housing, in particular, throughout the last few decades, the point worth noting is that the dominant approach and attention has been directed towards the problems and deficiencies of urban housing with little focus on the quality and circumstances housing in circumstances in rural areas and the pertinent bottlenecks. Generally speaking, the approach towards rural housing in these years was no different from the one sought in urban housing. In securing rural housing, mainly the quantitative nature and ideally resilience against natural disasters have been highlighted with little attention to the principles and criteria of rural housing plans and their quality. The special plan on optimizing and renovating rural housing conducted by the Islamic Revolution Housing Foundation and the new accommodations which are being constructed within the framework of this very plan are unfortunately entangled with this fundamental problem with considerable deficiencies being observed in this regard. In the new houses, structural resilience and durability are the sole themes with total negligence of rural architecture, culture, lifestyle, and means of livelihood. This has in turn borne negative effects galore on the lives of rural inhabitants, among them the following: 1) the change in the lives of rural dwellers from a self-reliant livelihood and economy to a consumer economy, 2) emergence of contradiction between an indigenous culture and modernity, and 3) a shift away from a simple lifestyle among rural dwellers to luxury. In the long run, the policy which was propelled towards rural development ended up being away from it through its indirect impacts.

- Focusing on the typology, etiology, and eventuality of the outcomes of migration: Migration may be temporary, permanent, or for return to the origin. The reason of migration for some may be finding jobs, education, etc. while others are simply tied migrants. For different kinds of migrations with different reasons, formulating different policies is recommended.

- Harmony and mutual coverage of the different migration policies with other government policies: For example, in the early years of the Islamic Revolution, the direct and indirect policies adopted sought to decrease the migration of rural dwellers to cities while, on the other hand, providing various coupons to urban dwellers motivated this kind of migration.

5. Conclusion

Migration is among the important demographic behaviors which play a decisive role at the regional and national levels and also the composition of rural and urban regions. In addition to the quantitative effects of population growth, there have been significant qualitative effects on the population of the origin and destination areas. Throughout the last years in Iran, an average of one million people moved within the country per annum.

The only source of information in calculating the numbers, levels, and models of internal migration in Iran is the nationwide censuses through which the condition of migration of individuals is elucidated. Therefore, much of the information on the origin of migration, the cause of the original migration, duration of residence, the original destination, etc. about migrants who have migrated more than once during the two censuses is lost. The intensity of these movements can affect the migration patterns of provinces and cities, as well as the direction of migration processes with rural-urban origins and destinations. This case and also the incompatibility of the population growth rate of some of the provinces with the net numbers, births, and deaths in the two censuses lead to take more caution in applying migration data from censuses and the subsequent inferences.

In terms of population movement and the net number of inter-provincial migrations, the developmental level of each province is a key factor. Provinces with high development rates are always in-migration hubs while those with low development indices are provinces from which people emigrate. In addition, movements have been mostly from disadvantaged provinces to developed and half-developed ones. The findings of Moshfegh's study (2010) also portray that during the 1976-2006 period in the country, the provinces which are more developed draw in immigrants while less developed ones serve as out-migration points. Hence, the factor of development has overcome geographical and cultural factors and serves as the prime factor in the majority of inter-provincial movements.

With respect to the effectiveness of the level of development of the origin and destination in orienting inter-provincial population movements, economic roots are observed in the causes of migration. In both censuses, tied migrations are the cause for almost 50 percent of the cases followed by the causes related to education, work, military service, and access to more appropriate housing. For household heads, economic factors (seeking jobs, seeking better jobs, job transfers, and access to more appropriate housing) are the first and foremost reasons for migration while tied migrations are the major factor for non-heads of households. The results from the studies conducted by Ghafari and Torki-Harchegani (2010) reveal a significant relationship between the rate of migration and seeking jobs (employment), enjoying job security, income, and a better occupation, access to sports and recreation facilities, and enjoying the myriad and diversity of educational facilities and amenities in the cities. One must note that classification as the cause of migration was very general in the census questionnaires thus not allowing the understanding of the detailed aspects of the causes for migration. The causes of migration are different for rural and urban migrants, male and female migrants, and migrants in different age groups.

The factors of doing and ending the military conscription and also graduation (involuntary factors) were more influential in urban-rural migration while seeking jobs, seeking better jobs, job transfers, and education (voluntary factors) were more at work in rural-urban migrations. The relative supremacy of voluntary reasons in rural-urban migrations reveal the

disparities between cities and villages in minimal welfare and basic services such as education, and employment.

The highest proportion of migrations occurs in the 20-34 age group – the age of economic activities, education, marriage, and military service. The sex ratio of migrants (especially in inter-provincial migrants) is higher than that of the total population of the country. The dominance of the sex ratio and age cohort is higher in urban-rural migrations compared to other migrations, especially rural-urban ones. Rural-urban migrants engage in migration mostly because of work and education (to improve their socioeconomic stance) while urban-rural migrants are mostly rural dwellers who return to their origin by force (doing and ending military service and graduation).

The lowest rate of females' migration is in urban-rural movements with the highest of course being in rural-urban migrations. These differences delineate that with all the needs which emerge for them, women engage in the processes of internal migrations. Relating women's migrations with the causes of their migrations proves that women migrants engage firstly in tied migration followed by education. In certain provinces of the country, a major difference prevails in the pattern of out-migration and in-migration of men and women. Due to better job opportunities and more social and cultural freedoms for women in Tehran (Mahmoudian et al., 2009), more female migrants have ended up in this province. Furthermore, the discrepancy between the net migration of women and men can be assessed vis-à-vis the level of the development of provinces (which itself is a representation of economic, social, and cultural disparities). The provinces of Ilam, North Khorassan, and Zanjan with a medium to low development rate have not succeeded to draw in more women compared to the number of women who have left. This is entirely congruent with the values expectancy theory in migration through which women intend to maximize their net interest and mental benefits via this demographic behavior.

The high increase of the percentage of urbanization in Iran is mostly through transforming villages to cities and the inclusion of rural into urban areas. The highest demographic movements occurred between urban spots and the percentage of urban-urban and urban-rural migrations was raised. In the demographic history of Iran and in the 2011 census, the percentage of urban-rural migrations exceeded that of rural-urban ones for the first time. One must note that these migrants are different from rural migrants in terms of desires, needs, and other aspects. The degree of the development of the origin is the most important determiner of the likelihood of migration to urban spots in Iran: migrants from developed areas mostly opted for urban centers as the target of their migrations. The very same reason has caused the provinces with high development ranks to stand at high urbanization rates too.

Through migration policies and more focus on highly-populated destinations, the rate of population growth in populous cities could be somewhat balanced. In these migration policymaking, the areas desired by migrants, the model of migration, and the cause of their migration are assessed accurately. The experiences achieved in Iran and also other countries favor the application of the multifaceted development methodology of rural and low-population areas which is a kind of indirect migration policy. Through this method, one could expect increased reverse migrations due to the socioeconomic circumstances of migrants and peri-urban dwellers in large cities.

6. Proposed Policies advice

The following policy advice is suggested for migration and urbanization in Iran in order to planning and implementation:

- The existing data on internal migration in Iran which is mainly extracted from nationwide censuses do not illustrate the rate, process, and causes of internal migrations accurately. Consolidating registration data for registering all the demographic movements and the periodical implementation of national surveys for better understanding of the causes of these movements can contribute to the identification of internal migrations and formulate the necessary policies and programs.

- The different development ranks of the regions and provinces in Iran are the main cause of internal migration in the country. Further attention to less developed regions place population movements and redistributions in terms of reducing regional disparities at a more appropriate rank.

- The betterment of the economic conditions (in the framework of finding jobs and improving life) is the prime factor behind voluntary migration. Implementing appropriate employment policies both in out-migration areas (in order to reduce out-migration) and in in-migration areas (in order to ensure migrants' further adaptability with the destination) coordinate population movements with individual and governmental welfare strategies.

- With respect to the nature of migration which is selective, the majority of migrants are young and middle-aged (20-40). The relatively high volume of these individuals in Iran's current population guarantees the continuity of the noteworthy rate of migration in the near future. Removing the important concerns of this group of people (appropriate marriage, job, and education) may ensure the optimal and appropriate distribution of the population.

- The role of women as the main decision-makers of migration compared to men is much less significant. As the stance of women is rising (further education and empowerment), it is anticipated that their involvement in the process of decision-making for migration would be raised too. Establishing the necessary arrangements in order to increase the socioeconomic participation of women would reinforce their stance in an informed and creative migration.

- A fall in rural population and the departure of many young and competent youths has jeopardized the socioeconomic position of rural areas. Under such circumstances, the vulnerability of rural women and elderly who are in a lower position compared to others would be lower. Providing the necessary protection guidelines to ensure the socioeconomic security of the residents of rural areas, especially the aforementioned individuals, is necessary.

- A more precise definition of urban and rural areas in the context of demographic, economic, social, and environmental features would manifest the more real differences of urban and rural areas. Such a tangible and concrete disaggregation would further contribute to the planning necessary for the sustainable development

of these areas. Many urban areas with low populations (villages which have been transformed into cities) do not enjoy necessary urban facilities. The improvement of rural areas and even smaller cities would not only induce a drop in rural-urban and urban-rural migrations but also provide necessary incentives for return migrations.

- Population density and lack of the necessary urban infrastructure would bring about environmental (such as air pollution, deficiency of sweet water, etc.), social (peri-urbanism, reduction of social consensus, etc.), and economic (increased unemployment) risks. Providing the necessary policies for the sustainable development of urban areas would cause a drop in a large portion of these risks.

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Appendices

Appendix I

Studies Conducted on Migration in Iran with Respect to Their General Specifications

Subject	Focus	Theoretical Issues	Suggested Guidelines
Identifying the factors affecting rural-urban migration: A case study of the Province of Ghazvin	-	Ecological – normative – economic – psychological	-
The role of industrial areas in employment and reducing urban migrations	Industrial activities in villages	Industrial and development theories	Developing job opportunities through small workshop industries
An assessment of the personality of migrants studied	Tendency to instability and lack of independence seeking among migrants	-	-
A review of the motives for the migration of rural dwellers and nomads to the city of Ilam	-	-	-
The factors affecting rural-urban migration: A case study of youths' out-migration from Abyaneh Village	-	-	-
The geographic analysis of migration in the Province of Khoozestan	-	-	-
Globalization and the migration of the elite: A study of the Iranian context	-	-	-
An assessment of rural migrations in the Province of Hamedan	-	-	-
The effects of increasing agricultural productivity on rural migrations in Iran	Income gap between cities and villages	-	Rural development and investment in agriculture
Demographic and social effects of migrations during the Iran-Iraq war	Contradiction with local residents	Cultural transfer – Parsons' functional model	Sustaining population in rural areas
Migration in the Province of Khoozestan during 1986-1996 and return migration	Return migration, stage-by-stage	-	-
Youths, globalization, and international migrations: A research among the elite	Individualism and seeking identity	Bordieu's social and cultural capital	-
Factors affecting the return of Afghan migrants: A study of the residents of Golshahr in Mashad	-	Functionalism – dependence – push and pull factor	-
Review of migration theories	-	Theories on migration	-
Tendency for rural-urban migration and the factors affecting it	-	-	Adjusting migration or decreasing the pull factor of cities and removing the push factor of cities
Role of migrants in the kinds of crimes committed in the city of Tehran	Role of migrants' cultural stance on committing crimes	-	Monitoring terminals in city entries and exits
Causes and outcomes of rural migrations: A study of the Province of Sistan and Baloochestan	One-way dominance of cities over villages and population increase	Economic theory	Investment in production and agriculture sectors – infrastructural services
Methods preventing the migration of skilled human resources in disadvantaged areas: The views of specialists in Khoozestan	Means of managing skilled human resources	Push and pull factor – endogenous and exogenous factors	Providing housing and recreation amenities, correcting the organizational climate, and increasing the level of social security
Social capital and settlement in large cities: A study of Tabriz	Significant differences in migrants' motives during four periods (before the Revolution, the 1980s, the 1990s, and the	Analysis of kinship network	--

	newly arriving		
Residence experience and tendency towards migration in Tehran	Human resources management and attending to the negative effects of migration in origin and destination	-	Decentralization of academic centers and establishing scientific and research centers in smaller cities
Quantitative analysis of migration and population growth in the Province of Sistan and Baloochestan in relation to the changes in the labor market during 1986-2006	In-migration to the province and analysis of migration and population growth in the province in relation to the indicators of the labor market	Economic theories	-
Outcomes of youths' rural-urban migration	Socioeconomic outcomes of migration	Functionalism – dependency and Everett Lee's intermediate factors	Establishing industries in rural areas to create jobs
Determining the relation of intra-family factors and migration of the members of the households of the rural areas of the city of Marand to cities in 2004	Role of the household head in migration	Systemic and economic theories	Importance of livestock next to agriculture and facilities for developing rural services
Factors affecting the out-migration of the workforce	Relationship of the amount of foreign trade and out-migration of Iranian workforce	Migration push factor model	Skilled human resources management and infrastructural reform in economy
Factors affecting the migration of rural dwellers to cities in Iran: A met-analysis of theses and dissertations (1980-2004)	Different aspects of migration and its outcomes	Everett Lee, Lewis, FI Rayys dependence	Youth employment, educational facilities, organizing migration waves
Urban-rural migration: A study of Kazemabad in the city of Robatkarim	Employers' investment sector in this village	Ravenstein – Lee – other spatial differences	Implementing the amalgamation plan, housing, and small workplaces for migrants
Causes of migration from the rural areas of the Province of Tehran during 1976-1986	-	-	Coordinating rural development sectors and establishing small industrial workplaces
Socioeconomic aspects of rural migrations in Gachsaran: A study of Babooyi village during 1996-2006	Out-migration and in-migration causes (pull and push factors)	Economic views – Ravenstein – Lee – human capital – network – functionalism and dependency	Understanding rural potentials and establishing workshop industries, security in villages and protecting rural economy
Comparing the socioeconomic and demographic characteristics of migrants with the local population (using the data of survey on household socioeconomic characteristics in 2001)	Effect of an area's development on individuals' socioeconomic status	Socioeconomic and systemic views – functionalism – Ravenstein – Lewis	-
Assessing the extent of tendency to migration among 15-29 men of the city of Lar to Persian Gulf states and the socioeconomic factors	-	Economic views – functionalism – Lee – relative deprivation – human capital and push theories	-
Factors affecting youths' rural-urban migration: A study of Sadeghabad village in Saman County in the Province of Kohkilooyeh and Boyerahmad	Youths employment	Dependency – modernization and classification	Securing socioeconomic infrastructures and creating development and sustainable job opportunities
Structure of human relations in families and tendency to migrate	Structural inefficiency of the society at the kinship level	Functionalism – sociological and demographic theories – social gap	Securing socioeconomic infrastructures, and creating and developing sustainable job opportunities
Income generation process and its role in rural-urban migrations in Sabzevar	Family migrations	Political, systemic, and socioeconomic theories	Controlling population growth and increasing employment, establishing NGOs, and recognizing proprietorship
Factors affecting rural youths' migration to cities: A study of the villages in the	-	Functionalism – Ravenstein's push and	Acceptance of rural culture by the government, loans to support

central area of the city of Marvdasht		pull – Lee – Arthur Lewis – Todaro	industries
Factors affecting rural-urban migration	Mechanization of agriculture	Harris-Todaro	Promoting literacy, using machinery to optimize agriculture
Some factors behind the tendency to emigrate to the city of Ahvaz	Waves of migration among educated individuals and better human resources from Khoozestan	Dependency – relative deprivation	-
Factors prompting the tendency for international migration among the 18-30 youths of the cities of Shiraz and Arssanjan	-	Lee's push-pull factor and globalization	-
Analyzing migration in relation with the development of provinces using planning techniques	Unbalanced population movements in provinces and the relationship of development and migration	Development theories	Importance of the classification of the degree of enjoying the benefits of development and addressing the push-pull factor
Impact of out-migration on the population structure of rural areas: A study of the city of Birjand	Disruption of the spatial balance between cities and villages, urbanism and growth of urbanization	-	Importance of maintaining resilient natural, military, political, and cultural bases in villages, link between higher education and socioeconomic development processes
Unbalanced development of higher education: Unemployment of the educated and migration of the elite	Mass higher education and addressing balanced and unbalanced development, organization of academic management and the grounds for education and research	Unbalanced development of higher education	Link between higher education and socioeconomic development processes
Degree of tendency towards migration and its causes among Iranian doctors	Negative impact of migration on the health and economic structure of countries of origin	-	-
Globalization, migration, and poverty	Foreign citizens (Afghan and Iraqi), peri-urbanism in Iran, growth of poverty	-	Expediting the establishment of data banks and documentation
Attitude of literate rural women on the impediments of development and the factors prompting migration	Addressing the role of women in agricultural development in villages	Psychological and social views	Human resources management, organizing the structures of rural societies, and establishing appropriate job facilities
Ageing of the population employed in the agricultural sector: Reasons and outcomes	Introducing rural-urban migration as a factor behind ageing	Psychological, demographic, and sociological	Investment in the agricultural sector, development and expansion of transformative industries, long-term and low-interest loans to youths
Analysis of the factors affecting rural-urban population	Further elaboration of new and traditional theories, addressing the process of migrants' decision-making based on different classes	Functionalism – dependency – systemic – livelihood	-
Role of natural and geographic factors in unsustainability and rural migrations in the Province of Zanjan	Emphasizing the weakest and most unsustainable villages based on their stance and role in the province	Todaro-Friedman's core-periphery model	-
Geographic distribution of cultural products and their role in youths' rural migration: A study in the Province of Ghazvin	Kinds of cultural products used (electronic and print)	Sociological (extremism) – psychological – geography (the cultural space sector)	-
Analysis of internal migration and its socioeconomic outcomes	Highlighting rural-urban migrations and their inevitability	-	Cooperative and services networks, rural industries development, preventing the rise in prices, and non-settlement of

			nomads
Internal migrations in Iran during 1986-1996	Assessing the origin and destination of migrants in each in-migration province (Tehran, Isfahan, Yazd, and Shiraz), the stage-by-stage nature of migration in this decade	-	-
Causes of migration of the elite following the Iran-Iraq war	Deficiency of scientific and research structures	Neoclassic economic theories – globalization – Everett Lee – needs and motivation	Using migrants' competencies through establishing research centers and migrants' networks
Ethnic migrations and the change in the social structure of Iranian cities	Transition from state cities to ethnic cities, peri-urbanism, and informal settlement	-	Fundamental guidelines for urban planning and urban management
Reasons of migration and social and demographic characteristics: A comparative study of urban-rural and rural-urban migration during 1996-2006	Significant difference between rural-urban and urban-rural migrants	-	Importance of assessing the unique characteristics of migration
Migrants' social networks and regenerating the culture of migration in rural areas: A qualitative study of the migration processes from East Azerbaijan to Tehran	Information rotation and the push factor of Tehran and continuity of the culture of migration in rural origins	Migration theories at the macro, mid, and micro levels	Strengthening the ties and links of migrants with their place of origin through using local, national, and religious tools
Policies of rural-urban migration and its importance: A study of the Iranian context	Cause of the failure of rural-urban migration policies	-	Changes in the policies of rural-urban migration, rural development
Rural-urban migrations: A mainly demographic issue	Migration as the main index of population dynamism	Theories of migration	Using basic social and demographic theories of migration
Internal migration in Iran during 1996-2006	Kinds and causes of migrations, direction of migrations from intra-provincial to inter-provincial	Ravenstein, push-pull	Migrants' characteristics disaggregated by the waves of migration (urban-rural and rural-urban)
Selected characteristics of internal migrants in Iran during 1996-2006	Age and sex composition of migrants – number of persons in a family – economic activities of migrants – duration of migrants' residence and duration of migration	Selective nature of migration and life cycle	Distinguishing the causes of migration in more aspects, importance of conducting other studies regarding the selected characteristics of migrants disaggregated by the kind of migration
Factors affecting the residence of youths in rural areas: A study of the rural areas in the city of Ahar	Most important models of elaborating the grounds for the residence of youths in villages	Neoclassic economic theories, push-pull	Multifaceted rural development (economic, social, and cultural)
Characteristics of internal migrants in Iran during 1976-2011	Changes in rural-urban and urban-rural migrations	-	-
Rural-urban migrations in Iran during 1996-2006	Relationship between migration and urbanization, migrants' characteristics and reviewing the kind of migration	-	-
Migration, inequality, and their outcomes	Impact of migration on occupational, welfare, sexual, and educational structures	Classic theories of migration	-
Strategies to confront rural-urban migrations through a special software: A study of the Koohssar district in the township of Hashtrood	Identifying the fortes and weaknesses, threats and opportunities of the village	Todaro – structural inconsistency	Supporting domestic products, ensuring the procurement of agricultural produce, and establishing domestic and international sales market for them
Geographic analysis of the process of migration in the Province of East	Tabriz as the highest out-migration hub in the last 50	-	Family planning in the province, preventing technologies which

Azerbaijan during 1986-2006	years and determining the targets of migrants		consume capital and human resources, understanding the realities and the economic and production talents of the province
Educated migrant women in Tehran	Opportunities and threats facing women migrants in Tehran	Feminist theories – human capital – Todaro – push-pull	Decentralization of educational and research amenities and informing families on the changes happening in society
Process of in-migration and out-migration in the cities of Iran in the last two decades	Identifying in-migration and out-migration cities (first and second development rank)	Dependency – Everett Lee – Ravenstein – economic	Appropriate policies in adjusting in-migration and out-migration in cities

Source: Mahmoudian and Ghassemi-Ardehayi, 2012

Appendix II

Studies Conducted on Urbanization in Iran with Respect to Their General Specifications

Subject	Issues Addressed	Focus	Suggested Guidelines
Changes of urbanization in Iran during 1956-1966	Growth of the city of Tehran and providing an image of the future	City of Tehran – demography	-
Fast-paced and heterogeneous urbanization	Housing as a socioeconomic issue	Cities – biological and social	Attending to sanitation and removing harms
Assessing the role and stance of the model for sustainable development within the structure of urbanization	Disharmony in labor division and disharmony between cities and villages	Cities – biological	Expansion of sustainable urban development and urban management
Fast-paced and incongruent urbanization: Shanty towns in Tehran	Morphological and economic characteristics of shanty towns	City of Tehran – architecture	-
Urbanization from a historical and sociological perspective	Origins of urbanization and different kinds of urban life and communities	Iran	-
Cities and urbanization (principles and concepts)	Specifications of cities, new cities, and townships and their differences	Tehran	Comparative study of new townships and cities
Fast-paced and incongruent urbanization: Abnormal housing 2	Social, economic, and political issues derived from urbanization	Cities – problem of housing architecture	-
Fast-paced and incongruent urbanization: Shanty towns in Tehran	Rise in shanty towns in Tehran	Tehran – architecture	-
Fast-paced and incongruent urbanization: Abnormal housing 3	Iran's economic dependency	Tehran – architecture	Addressing the disorderly condition of housing in Tehran
Indicators of urban population distribution and the process of urbanization in Iran	Growing urban population	Iranian cities – demographic	
Traffic culture: The forgotten phenomenon of urbanization	Transport and commuting means	Megalopolises	
Ebneh Khaldoon and urbanization	Moral characteristics of citizens	Cities – social relation	-
Future of the city	Rise of urbanization in Iran, an outcome of rural-urban migration	-	Urban development in terms of fundamental changes in lifestyle
Theoretical views on the sociology of cities and urbanization	Political factors (power), social management and organization	Life in cities	Addressing the role of ideology and cultural institutions in human life, conducting empirical research
Trend of urbanization and issues of large cities	Constant growth of urban population and the harms	Cities – social and demographic	Trying to reduce natural growth and migration
Attitude towards cities and urbanization	Motives and raison d'etre of the emergence of cities	Cities – social and cultural	Highlighting the cultural view and urban planning
Urban development and social pathologies in Iran	Social pathology of cities from the perspective of urban space pathology	City of Tehran – social	Organizing the space of the city and guiding it towards a rational order
Analysis of urbanization and the stance of new cities in Iran	Rapid growth of urbanization in Iran	City life and architecture	Importance of establishing new townships and revising the management system to fill the identity vacuum of these cities
Increasing reciprocal effects of population and urbanization in Iran	Rise in the rate of urbanization, relationship between population and urbanization and rise in rural-urban migrations	City – demographic	Providing appeal for staying in rural areas and fundamental measures to understand situations of mega cities
Rapid urbanization: Trends and outcomes	Rise in urbanization and the prominence of socioeconomic anomalies	World – pathology and rise of poverty	-
Urbanization in Iran's geographical context	Studying the cities of Iran and focusing on rural-urban migration	City life and welfare	Assessing urban issues within the framework of local

			geography and providing the results to urban planners
Growth of urbanization and its outcomes: The Iranian context	Socioeconomic and cultural crises resulting from a rise in urbanization	City – socioeconomic problems	-
Towards urbanization	Globalization and the structural difference between cities and villages	City – economic, social, and cultural	-
Review of cities and urbanization	Addressing the motives of the emergence of cities and link between cities and urban dwellers	City	Addressing urban shortcomings from a cultural and urban planning perspective
Excessive urbanization and its outcomes in Iran	Growth of urban population	Iran, social, economic, and cultural	-
Future of urbanization in Iran	Identifying the indicators of a city	Iranian cities	Reforming the management system of urban development and encouraging public participation in it
Negative outcomes and the exponential growth of population and urbanization in Iran	Exponential population growth and family planning	City of Tehran – demographic	Informing people about the real growth of population and its adverse effects
Population growth and the process of urbanization: A study of Birjand	Socioeconomic changes	City of Birjand	Decentralizing the competencies of development in metropolises
Comparison of urbanization in the north and south of Iran	Role of migration in the rate of urbanization	Gilan and Sistan and Baloochestan	Attending to the special talents of the region and security issues
Rapid and incongruent urbanization 10: Shanty towns in Tehran	Peri-urbanism and shanty towns	Tehran and architecture	Formulating long-term strategic endogenous development planning and fundamental change in the economic structure of the society
Effect of urbanization on the social behaviors of individuals: The Lewis model	Relationship between population density and heterogeneity and problems of urbanization	Individual – social	-
Impact of creating new cities in the trend of urbanization	Intensifying the problems of urbanization	Iranian cities (Tehran, Isfahan, Shiraz, Yazd) – population density	Socioeconomic development at the national level, establishing new cities, and adopting urban development policies
Pathology of urbanization in Iran	Grounds for social pathologies (poverty)	City – social, economic	Removing health disparities and the rural-urban gap, strengthening the family and community control system
Crisis of urbanization in Iran	Migration and natural growth of population as the two main factors of population growth	City – demographic	Implementing development plans and creating amenities in rural areas
Urbanization and urbanism during 1901-1921	Initiation of changes of urbanization and urban development	City – architecture	-
Trend of urban studies and the stance of urban geography in Iran	Spatial crisis in locating cities and the spatial crisis governing inner city zones	City – space and architecture	Establishing order and logic in the precise human management of environment with the help of specialists in geography
Urban dynamics or the propelling force of cities: A new approach to development and urban expansion	Lack of balance and connectedness in urban space and disorder in the process of urban civilization and culture	City – architecture and culture	Economic development and consistent urban planning
Process of urban management in post-war Tehran	Growth of urbanization in Tehran and understanding the factors affecting urban management	Tehran – management	Formulating appropriate guidelines to reduce urban issues and problems
Role of policymaking elements in urban development: A study of Mahabad	Rise of unsustainability in cities and peripheral areas	Mahabad – peri-urbanism	-
Assessing the changes in primate city in Iran	Considering population decentralization policies	City of Tehran – demographic	Facilitating the guidance of investments to low-density

			regions and gaining more balance in the urban system
Size of city and quality of social relations	Optimal size or population of the city and issues and problems arising from the rapid development of the size or the inefficiency of formulated policies	City – social relations	Facilitating the grounds for dialogue and interaction (urban space) and protecting the formation of NGOs
Subsidy distribution system and urbanization development in Iran: 1971-1991	Rural-urban migration, rapid growth of cities and urbanization	City and village – economic and physical	-

Source: Mahmoudian and Ghassemi-Ardehayi, 2012

Appendix III

Inter-Provincial Out-migrants and In-migrants and the Net Migration of the Province of East Azerbaijan during 1996-2011

Province	1996-2006					Province	2006-2011				
	In-migrants		Out-migrants		Net Migration		In-migrants		Out-migrants		Net Migration
	Number	%	Number	%			Number	%	Number	%	
Total	158424	100.0	302157	100.0	-143733	Total	64330	100.0	71728	100.0	-7398
Kurdistan	8249	5.2	4652	1.5	3597	West Azerbaijan	17870	27.8	12282	17.11	5588
Khoozestan	5774	3.6	2423	0.8	3351	Ardebil	5170	8.0	3842	5.4	1328
Kermanshah	3986	2.5	1490	0.5	2496	Kurdistan	3014	4.7	1968	2.7	1046
Sistan & Baloochestan	1875	1.2	1358	0.4	517	Khoozestan	1628	2.5	1016	1.4	612
Ilam	971	0.6	680	0.2	291	Hamedan	950	1.5	730	1.0	220
Lorestan	913	0.6	630	0.2	283	Lorestan	400	0.6	183	0.3	217
Fars	3249	2.1	3061	1.0	188	Sistan & Baloochestan	546	0.8	407	0.6	139
Khorassan Razavi	4124	2.6	3980	1.3	144	Chaharmahal & Bakhtiari	124	0.2	57	0.1	67
South Khorassan	309	0.2	190	0.1	119	Ilam84	272	0.4	215	0.3	57
Chaharmahal & Bakhtiari	323	0.2	246	0.1	77	Kermanshah	1145	1.8	1089	1.5	56
Kohkilooyeh & Boyerahmad	146	0.1	177	0.1	–31	South Khorassan	122	0.2	203	0.3	38
Hamedan	1805	1.1	1941	0.6	–136	Kohkilooyeh & Boyerahmad	68	0.1	49	0.1	19
Semnan	666	0.4	812	0.3	–146	Golestan	595	0.9	593	0.8	2
Isfahan	2788	1.8	2970	1.0	–182	Kerman	369	0.6	392	0.5	–23
North Khorassan	233	0.1	465	0.2	–232	Fars	1077	1.7	1122	1.6	–45
Kerman	1446	0.9	1893	0.6	–447	North Khorassan	104	0.2	203	0.3	–99
West Azerbaijan	43678	27.6	44255	14.6	–577	Mazandaran	904	1.4	1024	1.4	–120
Yazd	567	0.4	1220	0.4	–653	Semnan	195	0.3	329	0.5	–134
Markazi	811	0.5	1641	0.5	–830	Khorassan Razavi	1288	2.0	1452	2.0	–164
Mazandaran	2376	1.5	3337	1.1	–961	Gilan	1623	2.5	1793	2.5	–170
Golestan	846	0.5	1945	0.6	–1099	Hormozgan	822	1.3	1068	1.5	–246
Booshehr	1251	0.8	2403	0.8	–1152	Markazi	436	0.7	696	1.0	–260
Hormozgan	1405	0.9	2638	0.9	–1233	Yazd	200	0.3	499	0.7	–299
Zanjan	4083	2.6	7282	2.4	–3199	Isfahan	1144	1.8	1571	2.2	–427
Ghazvin	2279	1.4	6061	2.0	–3782	Ghazvin	985	1.5	1441	2.0	–456
Gilan	4244	2.7	8076	2.7	–3832	Booshehr	458	0.7	1161	1.6	–703
Ardebil	9912	6.3	14993	5.0	–5081	Ghom	1135	1.8	1865	2.6	–730
Ghom	3215	2.0	8709	2.9	–5494	Zanjan	1246	1.9	2432	3.4	–1186
Tehran	46900	29.6	172629	57.1	–125729	Alborz	3008	4.7	7276	10.1	–4268
						Tehran	17432	27.1	24889	34.7	–7457

Appendix IV

Inter-Provincial Out-migrants and In-migrants and the Net Migration of the Province of Isfahan during 1996-2011

Province	1996-2006					Province	2006-2011				
	In-migrants		Out-migrants		Net Migration		In-migrants		Out-migrants		Net Migration
	Number	%	Number	%			Number	%	Number	%	
Total	299943	100.0	231320	100.0	68623	Total	139368	100.0	92656	100.0	46712
Khoozestan	62780	20.9	20607	8.9	42173	Khoozestan	29286	21.0	86.5	9.3	20681
Chaharmahal & Bakhtiari	37142	12.4	18565	8.0	18577	Chaharmahal & Bakhtiari	17134	12.3	6723	7.3	10411
Fars	22025	7.3	15136	6.5	6889	Lorestan	6687	4.8	2003	2.2	4684
Lorestan	12058	4.0	5623	2.4	6435	Tehran	24380	17.5	19865	21.4	4515
Kerman	8641	2.9	4771	2.1	3870	Fars	10369	7.4	7202	7.8	3167
Kermanshah	7282	2.4	3658	1.6	3624	Sistan &Baloochestan	3581	2.6	1099	1.2	2482
Kohkilooyeh & Boyerahmad	5654	1.9	2604	1.1	3050	Kermanshah	3264	2.3	1362	1.5	1902
Sistan & Baloochestan	4591	1.5	1838	0.8	2753	Kohkilooyeh & Boyerahmad	2366	1.7	1235	1.3	1131
Hormozgan	7510	2.5	5061	2.2	2449	Kerman	3189	2.3	2340	2.5	849
Kurdistan	2209	0.7	1060	0.5	1149	Hamedan	2107	1.5	1473	1.6	634
Ghom	9548	3.2	8497	3.7	1051	East Azerbaijan	1571	1.1	1144	1.2	427
Booshehr	7054	2.4	6340	2.7	714	Kurdistan	1086	0.8	688	0.7	398
Hamedan	3263	1.1	2721	1.2	542	Ghom	4654	3.3	4265	4.6	389
Khorassan Razavi	9935	3.3	9420	4.1	515	Markazi	3867	2.8	3480	3.8	387
South Khorassan	850	0.3	538	0.2	312	West Azerbaijan	1139	0.8	764	0.8	375
West Azerbaijan	2829	0.9	2621	1.1	208	Ilam	863	0.6	587	0.6	276
East Azerbaijan	2970	1.0	2788	1.2	182	Ghazvin	848	0.6	700	0.8	148
Semnan	1429	0.5	1553	0.7	−124	Hormozgan	3048	2.2	2900	3.1	148
North Khorassan	501	0.2	632	0.3	−131	Ardebil	420	0.3	336	0.4	84
Ilam	1069	0.4	1258	0.5	−189	North Khorassan	419	0.3	383	0.4	36
Ghazvin	1485	0.5	1717	0.7	−232	South Khorassan	544	0.4	601	0.6	−57
Ardebil	678	0.2	1031	0.4	−353	Zanjan	368	0.3	438	0.5	−70
Zanjan	677	0.2	1280	0.6	−603	Khorassan Razavi	3887	2.8	4001	4.3	−114
Golestan	1354	0.5	2402	1.0	−1048	Mazandaran	2001	1.4	2320	2.5	−319
Mazandaran	3994	1.3	5543	2.4	−1549	Gilan	1717	1.2	2102	2.3	−385
Gilan	3349	1.1	5209	2.3	−1860	Booshehr	2984	2.1	3371	3.6	−387
Markazi	6941	2.3	9160	4.0	−2219	Semnan	543	0.4	967	1.0	−424
Yazd	6380	2.1	9891	4.3	−3511	Golestan	889	0.6	1353	1.5	−464
Tehran	65745	21.9	79796	34.5	−14051	Alborz	3052	2.2	3880	4.2	−828
						Yazd	3105	2.2	6469	7.0	5564

Appendix V

Inter-Provincial Out-migrants and In-migrants and the Net Migration of the Province of Tehran during 1996-2011

Province	1996-2006					Province	2006-2011				
	In-migrants		Out-migrants		Net Migration		In-migrants		Out-migrants		Net Migration
	Number	%	Number	%			Number	%	Number	%	
Total	1438406	100.0	823379	100.0	615027	Total	379158	100.0	400821	100.0	–21663
East Azerbaijan	172629	12.0	46900	5.7	125729	Kermanshah	22029	5.8	6928	1.7	15101
Hamedan	122415	8.5	37387	4.5	85028	Hamedan	25552	6.7	12303	3.1	13249
Kermanshah	77489	5.4	19570	2.4	57919	Lorestan	19008	5.0	5889	1.5	13119
Ardebil	80499	5.6	30351	3.7	50148	Khoozestan	14326	3.8	6635	1.7	7691
Lorestan	61519	4.3	18931	2.3	42588	East Azerbaijan	24889	6.6	17432	4.3	7457
Khoozestan	58252	4.0	25706	3.1	32546	Ardebil	16337	4.3	10214	2.5	6123
Markazi	80675	5.6	49199	6.0	31476	Kurdistan	11414	3.0	7195	1.8	4219
Zanjan	57428	4.0	30399	3.7	27029	Sistan& Baloochestan	4761	1.3	2042	0.5	2719
Kurdistan	40328	2.8	16064	2.0	24264	Ghazvin	11220	3.0	8507	2.1	2713
Khorassan Razavi	102304	7.1	78640	9.6	23664	Fars	10766	2.8	8197	2.0	2569
Gilan	93560	6.5	77671	9.4	15889	Ilam	3387	1.2	2471	0.6	2016
Ghazvin	48603	3.4	33417	4.1	15186	Markazi	17998	4.7	16177	4.0	1821
Fars	36008	2.5	21576	2.6	14432	West Azerbaijan	9002	2.4	7279	1.8	1723
Isfahan	79796	5.5	65745	8.0	14051	North Khorassan	7422	2.0	6523	1.6	899
West Azerbaijan	37920	2.6	24761	3.0	13159	Khorassan Razavi	28761	7.6	27912	7.0	849
North Khorassan	21566	1.5	10310	1.3	11256	Chaharmahal & Bakhtiari	1520	0.4	1018	0.3	502
Ghom	39910	2.8	30857	3.7	9053	Kohkilooyeh & Boyerahmad	973	0.3	517	0.1	456
Kerman	19595	1.4	10818	1.3	8777	Kerman	4721	1.2	4432	1.1	289
Ilam	12742	0.9	6369	0.8	6373	Zanjan	8661	2.3	8909	2.2	–248
Sistan & Baloochestan	11432	0.8	5886	0.7	5546	Ghom	10518	2.8	11006	2.7	–488
Hormozgan	16106	1.1	12919	1.6	3187	Booshehr	2473	0.7	3411	0.9	–938
South Khorassan	6992	0.5	3966	0.5	3026	South Khorassan	1623	0.4	2577	0.6	–954
Golestan	30905	2.1	28490	3.5	2415	Hormozgan	4622	1.2	5983	1.5	–1361
Kohkilooyeh & Boyerahmad	3397	0.2	1915	0.2	1482	Yazd	4421	1.2	7100	1.8	–2679
Booshehr	9645	0.7	8585	1.0	1060	Golestan	9567	2.5	12589	3.1	–3022
Chaharmahal & Bakhtiari	4753	0.3	4890	0.6	–137	Isfahan	19865	5.2	24380	6.1	–4515
Semnan	21804	1.5	23946	2.9	–2142	Semnan	5708	1.5	13814	3.4	–8106
Mazandaran	73418	5.1	76209	9.3	–2791	Gilan	19349	5.1	13814	8.5	–14722
Yazd	16716	1.2	21902	2.7	–5186	Mazandaran	15549	4.1	30367	7.6	–14818
						Alborz	41616	11.0	94943	23.7	–53327

Appendix VI

Inter-Provincial Out-migrants and In-migrants and the Net Migration of the Province of Alborz during 2006-2011

Province	2006-2011				
	In-migrants		Out-migrants		Net Migration
	Number	%	Number	%	
Total	**190341**	**100.0**	**97799**	**100.0**	**92542**
Tehran	94943	49.9	41616	42.6	53327
Kermanshah	11436	6.0	2692	2.8	8744
Khoozestan	7016	3.7	2039	2.1	4977
Hamedan	7652	4.0	2868	2.9	4784
East Azerbaijan	7276	3.8	3008	3.1	4268
Lorestan	4468	2.3	1165	1.2	3303
Ghazvin	6916	3.6	4055	4.1	2861
Kurdistan	3934	2.1	1510	1.5	2424
Ardebil	3379	1.8	1175	1.2	2204
Khorassan Razavi	4720	2.5	2991	3.1	1729
Zanjan	5076	2.7	3569	3.6	1507
Markazi	3723	2.0	2534	2.6	1189
West Azerbaijan	2381	1.3	1223	1.3	1158
Isfahan	3880	2.0	3052	3.1	828
Fars	1921	1.0	1224	1.3	697
Sistan and Baloochestan	994	0.5	407	0.4	587
Kerman	1200	0.6	740	0.8	460
Ilam	780	0.4	331	0.3	449
Ghom	2301	1.2	1888	1.9	413
Hormozgan	1244	0.7	856	0.9	413
Kohkilooyeh and Boyerahmad	233	0.1	98	0.1	135
North Khorassan	869	0.5	755	0.8	114
Booshehr	591	0.3	492	0.5	99
Chaharmahal and Bakhtiari	225	0.1	136	0.1	89
Golestan	1141	0.6	1243	1.3	-102
South Khorassan	204	0.1	355	0.4	-151
Semnan	824	0.4	1431	1.5	-607
Yazd	1092	0.6	1710	1.7	-618
Mazandaran	3501	1.8	4801	4.9	-1300
Gilan	6421	3.4	7835	8.0	-1414

Appendix VII

Inter-Provincial Out-migrants and In-migrants and the Net Migration of the Province of South Khorassan during 1996-2011

Province	1996-2006					Province	2006-2011				
	In-migrants		Out-migrants		Net Migration		In-migrants		Out-migrants		Net Migration
	Number	%	Number	%			Number	%	Number	%	
Total	50244	100.0	60449	100.0	−10205	Total	31201	100.0	17499	100.0	13702
Sistan and Baloochestan	10626	21.1	7510	12.4	3116	Khorassan Razavi	15766	50.5	8651	49.4	7115
North Khorassan	1986	4.0	1557	2.6	429	Sistan and Baloochestan	5959	19.1	1879	10.7	4080
Fars	560	1.1	222	0.4	338	Tehran	2577	8.3	1623	9.3	954
Kermanshah	354	0.7	78	0.1	276	North Khorassan	983	3.2	668	3.8	315
Khoozestan	666	1.3	410	0.7	256	Fars	565	1.8	292	1.7	273
Ghom	416	0.8	199	0.3	217	Kerman	807	2.6	551	3.1	256
Kurdistan	240	0.5	115	0.2	125	Khoozestan	344	1.1	124	0.7	220
Lorestan	178	0.4	122	0.2	56	Alborz	355	1.1	204	1.2	151
Chaharmahal &Bakhtiari	138	0.3	103	0.2	35	Lorestan	135	0.4	31	0.2	104
Kohkilooyeh & Boyerahmad	24	0.0	10	0.0	14	Yazd	909	2.9	811	4.6	98
Markazi	225	0.4	244	0.4	−19	Isfahan	601	1.9	544	3.1	57
Hamedan	208	0.4	230	0.4	−22	Kermanshah	103	0.3	48	0.3	55
Booshehr	109	0.2	137	0.2	−28	Chaharmahal & Bakhtiari	77	0.2	24	0.1	53
Hormozgan	251	0.5	287	0.5	−36	West Azerbaijan	80	0.3	30	0.2	50
West Azerbaijan	133	0.3	185	0.3	−52	Kohkilooyeh & Boyerahmad	52	0.2	12	0.1	40
Ilam	65	0.1	125	0.2	−60	Golestan	634	2.0	599	3.4	35
Ardebil	143	0.3	210	0.3	−67	Hamedan	74	0.2	41	0.2	33
Zanjan	138	0.3	210	0.3	−72	Markazi	75	0.2	59	0.3	16
Ghazvin	125	0.2	234	0.4	−109	Hormozgan	133	0.4	124	0.7	9
East Azerbaijan	190	0.4	309	0.5	−119	Ilam	27	0.1	33	0.2	5
Semnan	591	1.2	788	1.3	−197	Kurdistan	37	0.1	33	0.2	4
Isfahan	538	1.1	850	1.4	−312	Ardebil	64	0.2	62	0.4	2
Yazd	1549	3.1	1941	3.2	−392	Booshehr	47	0.2	45	0.3	2
Kerman	1111	2.2	1569	2.6	−458	Ghom	154	0.5	153	0.9	1
Gilan	298	0.6	902	1.5	−604	Zanjan	39	0.1	46	0.3	−7
Mazandaran	1098	2.2	1978	3.3	−880	Gilan	111	0.4	119	0.7	−8
Golestan	1522	3.0	2462	4.1	−940	Ghazvin	52	0.2	62	0.4	−10
Tehran	3966	7.9	6992	11.6	−3026	East Azerbaijan	84	0.3	122	0.7	−38
Khorassan Razavi	22796	45.4	30470	50.4	−7674	Mazandaran	189	0.6	269	1.5	−80
						Semnan	168	0.5	251	1.4	−83

Appendix VIII

Inter-Provincial Out-migrants and In-migrants and the Net Migration of the Province of Semnan during 1996-2011

Province	1996-2006					Province	2006-2011				
	In-migrants		Out-migrants		Net Migration		In-migrants		Out-migrants		Net Migration
	Number	%	Number	%			Number	%	Number	%	
Total	71778	100.0	63715	100.0	8063	Total	41506	100.0	23256	100.0	18250
Tehran	23946	33.4	21804	34.2	2142	Tehran	13814	33.3	5708	24.5	8106
Mazandaran	10236	14.3	8102	12.7	2134	Khorassan Razavi	6944	16.7	3744	16.1	3200
Khorassan Razavi	9836	13.7	8038	12.6	1798	Mazandaran	4015	9.7	2687	11.6	1328
Fars	1048	1.5	312	0.5	736	Sistan & Baloochestan	1041	2.5	158	0.7	883
Khoozestan	1110	1.5	429	0.7	681	Alborz	1431	3.4	824	3.5	607
Kurdistan	786	1.1	161	0.3	625	Golestan	5138	12.4	4593	19.7	545
Sistan& Baloochestan	1069	1.5	446	0.7	623	Fars	792	1.9	258	1.1	534
Hamedan	935	1.3	316	0.5	619	Isfahan	967	2.3	543	2.3	424
Kermanshah	599	0.8	313	0.5	286	Khoozestan	537	1.3	188	0.8	349
Ghazvin	546	0.8	344	0.5	202	Ghazvin	439	1.1	141	0.6	298
Kerman	444	0.6	247	0.4	197	Kermanshah	346	0.8	126	0.5	220
South Khorassan	788	1.1	591	0.9	197	Hamedan	406	1.0	192	0.8	214
Ardebil	372	0.5	216	0.3	156	Lorestan	311	0.7	100	0.4	211
Kohkilooyeh & Boyerahmad	186	0.3	35	0.1	151	Ghom	698	1.7	523	2.2	175
East Azerbaijan	812	1.1	666	1.0	146	Kerman	274	0.7	106	0.5	168
West Azerbaijan	642	0.9	515	0.8	127	North Khorassan	1227	3.0	1068	4.6	159
Isfahan	1553	2.2	1429	2.2	124	East Azerbaijan	329	0.8	195	0.8	134
Hormozgan	396	0.6	274	0.4	122	Chaharmahal & Bakhtiari	161	0.4	42	0.2	119
Yazd	467	0.7	379	0.6	88	South Khorassan	251	0.6	168	0.7	83
Ghom	971	1.4	887	1.4	84	Ilam	115	0.3	33	0.1	82
North Khorassan	1791	2.5	1731	2.7	60	Markazi	312	0.8	334	1.0	78
Chaharmahal & Bakhtiari	266	0.4	238	0.4	28	Zanjan	217	0.5	151	0.6	66
Zanjan	223	0.3	219	0.3	4	West Azerbaijan	285	0.7	222	1.0	63
Ilam	179	0.2	222	0.3	–43	Kurdistan	245	0.6	183	0.8	62
Lorestan	375	0.5	440	0.7	–65	Yazd	273	0.7	214	0.9	59
Gilan	1133	1.6	1242	1.9	–109	Hormozgan	182	0.4	124	0.5	58
Booshehr	123	0.2	244	0.4	–121	Kohkilooyeh & Boyerahmad	58	0.1	17	0.1	41
Markazi	578	0.8	879	1.4	–301	Ardebil	163	0.4	126	0.5	37
Golestan	10368	14.4	12996	20.4	–2628	Booshehr	113	0.3	118	0.5	–5
						Gilan	422	1.0	470	2.0	–48

Appendix IX

Inter-Provincial Out-migrants and In-migrants and the Net Migration of the Province of Ghom during 1996-2011

Province	1996-2006					Province	2006-2011				
	In-migrants		Out-migrants		Net Migration		In-migrants		Out-migrants		Net Migration
	Number	%	Number	%			Number	%	Number	%	
Total	120688	100.0	97282	100.0	23406	Total	45644	100..0	40930	100.0	4714
Hamedan	12695	10.5	4545	4.7	8150	Hamedan	2935	6.4	1543	3.8	1392
East Azerbaijan	8709	7.2	3215	3.3	5494	Khoozestan	2186	4.8	1043	2.5	1143
Zanjan	6153	5.1	2979	3.1	3174	Lorestan	1514	3.3	504	1.2	1010
Khoozestan	4342	3.6	2022	2.1	2320	East Azerbaijan	1865	4.1	1135	2.8	730
Markazi	11903	9.9	9894	10.2	2009	Fars	1775	3.9	1120	2.7	655
Mazandaran	4406	3.7	2586	2.7	1820	Tehran	11006	24.1	10518	25.7	488
Khorassan Razavi	5870	4.9	4078	4.2	1792	Kerman	1264	2.8	801	2.0	463
Lorestan	3024	2.5	1426	1.5	1598	Zanjan	1524	3.3	1067	2.6	457
Kermanshah	2466	2.0	878	0.9	1588	Kermanshah	946	2.1	525	1.3	421
Kurdistan	1500	1.2	355	0.4	1145	Sistan and Baloochestan	525	1.2	247	0.6	278
Ghazvin	1776	1.5	931	1.0	845	Chaharmahal &Bakhtiari	404	0.9	230	0.6	174
Kerman	2244	1.9	1468	1.5	776	Kohkilooyeh & Boyerahmad	317	0.7	195	0.5	122
Ardebil	1490	1.2	792	0.8	698	Booshehr	565	1.2	450	1.1	115
Fars	2471	2.0	1810	1.9	661	North Khorassan	316	0.7	219	0.5	97
Golestan	1349	1.1	842	0.9	507	Kurdistan	399	0.9	320	0.8	79
West Azerbaijan	1605	1.3	1161	1.2	444	Hormozgan	400	0.9	323	0.8	77
Hormozgan	878	0.7	526	0.5	352	Ilam	274	0.6	202	0.5	72
Chaharmahal &Bakhtiari	759	0.6	483	0.5	276	West Azerbaijan	639	1.4	590	1.4	49
Kohkilooyeh & Boyerahmad	408	0.3	229	0.2	179	Ardebil	306	0.7	266	0.6	40
Ilam	568	0.5	397	0.4	171	Khorassan Razavi	1875	4.1	1861	4.5	14
North Khorassan	399	0.3	326	0.3	73	South Khorassan	153	0.3	154	0.4	−1
Yazd	1829	1.5	1761	1.8	68	Mazandaran	1416	3.1	1428	3.5	−12
Booshehr	592	0.5	663	0.7	−71	Ghazvin	739	1.6	758	1.9	−19
Semnan	887	0.7	971	1.0	−84	Semnan	523	1.1	698	1.7	−175
Sistan and Baloochestan	391	0.3	519	0.5	−128	Yazd	841	1.8	1051	2.6	−210
Gilan	2421	2.0	2551	2.6	−130	Golestan	470	1.0	729	1.8	−259
South Khorassan	199	0.2	416	0.4	−217	Isfahan	4265	9.3	4654	11.4	−389
Isfahan	8497	7.0	9548	9.8	−1051	Alborz	1888	4.1	2301	5.6	−413
Tehran	30857	25.6	39910	41.0	−9053	Gilan	889	1.9	1417	3.5	−528
						Markazi	3425	7.5	4581	11.2	−1156

Appendix X

Inter-Provincial Out-migrants and In-migrants and the Net Migration of the Province of Kermanshah during 1996-2011

Province	1996-2006					Province	2006-2011				
	In-migrants		Out-migrants		Net Migration		In-migrants		Out-migrants		Net Migration
	Number	%	Number	%			Number	%	Number	%	
Total	80819	100.0	199947	100.0	−119128	Total	39020	100.0	77131	100.0	−38111
Sistan and Baloochestan	668	0.8	688	0.3	−20	Lorestan	2261	5.8	1443	1.9	818
Fars	1940	2.4	2118	1.1	−178	West Azerbaijan	1425	3.7	1298	1.7	127
Kohkilooyeh & Boyerahmad	63	0.1	246	0.1	−183	Khoozestan	2725	7.0	2619	3.4	106
Chaharmahal &Bakhtiari	322	0.4	516	0.3	−194	Sistan &Baloochestan	305	0.8	243	0.3	62
South Khorassan	78	0.1	354	0.2	−276	Fars	1034	2.6	975	1.3	59
Semnan	313	0.4	599	0.3	−286	Chaharmahal & Bakhtiari	217	0.6	165	0.2	52
Lorestan	5060	6.3	5351	2.7	−291	Kohkilooyeh & Boyerahmad	86	0.2	126	0.2	−40
Kerman	967	1.2	1392	0.7	−425	South Khorassan	48	0.1	103	0.1	−55
North Khorassan	188	0.2	742	0.4	−554	East Azerbaijan	1089	2.8	1145	1.5	−56
Yazd	320	0.4	904	0.5	−584	Kerman	345	0.9	456	0.6	−111
Khoozestan	7075	8.8	7815	3.9	−740	North Khorassan	86	0.2	214	0.3	−128
Booshehr	836	1.0	2128	1.1	−1292	Ardebil	221	0.6	394	0.5	−173
Hormozgan	1266	1.6	2842	1.4	−1576	Semnan	126	0.3	346	0.4	−220
Ghom	878	1.1	2466	1.2	−1588	Zanjan	404	1.0	672	0.9	−268
Ardebil	190	0.2	1912	1.0	−1722	Yazd	198	0.5	530	0.7	−332
Mazandaran	1530	1.9	3825	1.9	−2295	Ghom	525	1.3	946	1.2	−421
Ilam	6777	8.4	9075	4.5	−2298	Ilam	2518	6.5	2942	3.8	−424
Golestan	249	0.3	2606	1.3	−2357	Booshehr	270	0.7	743	1.0	−473
East Azerbaijan	1490	1.8	3986	2.0	−2496	Golestan	243	0.6	795	1.0	−552
Zanjan	520	0.6	3071	1.5	−2551	Khorassan Razavi	685	1.8	1250	1.6	−565
Gilan	1037	1.3	3802	1.9	−2765	Gilan	486	1.2	1193	1.5	−707
Ghazvin	1197	1.5	4363	2.2	−3166	Mazandaran	480	1.2	1505	2.0	−1025
Isfahan	3658	4.5	7282	3.6	−3624	Hormozgan	665	1.7	1695	2.2	−1030
Khorassan Razavi	2166	2.7	6558	3.3	−4392	Ghazvin	539	1.4	1703	2.2	−1164
West Azerbaijan	2094	2.6	7146	3.6	−5052	Kurdistan	6470	16.6	7735	10.0	−1265
Hamedan	8051	10.0	13618	6.8	−5567	Markazi	1394	3.6	3144	4.1	−1750
Kurdistan	10526	13.0	17119	8.6	−6593	Isfahan	1362	3.5	3264	4.2	−1902
Markazi	1790	2.2	9934	5.0	−8144	Hamedan	3193	8.2	6022	7.8	−2829
Tehran	19570	24.2	77489	38.8	−57919	Alborz	2692	6.9	11436	14.8	−8744
						Tehran	6928	17.8	22029	28.6	−15101

Appendix XI

Inter-Provincial Out-migrants and In-migrants and the Net Migration of the Province of Lorestan during 1996-2011

Province	1996-2006					Province	2006-2011				
	In-migrants		Out-migrants		Net Migration		In-migrants		Out-migrants		Net Migration
	Number	%	Number	%			Number	%	Number	%	
Total	75131	100.0	143921	100.0	–68790	Total	24991	100.0	60735	100.0	–35744
Kermanshah	5351	7.1	5060	3.5	291	Sistan& Baloochestan	320	1.3	251	0.4	69
Sistan& Baloochestan	1066	1.4	837	0.6	229	Fars	1071	4.3	1032	1.7	39
Semnan	440	0.6	375	0.3	65	Chaharmahal & Bakhtiari	156	0.6	194	0.3	–38
Chaharmahal & Bakhtiari	573	0.8	517	0.4	56	Kohkilooyeh & Boyerahmad	107	0.4	146	0.2	–39
North Khorassan	116	0.2	89	0.1	27	North Khorassan	44	0.2	107	0.2	–63
Kohkilooyeh & Boyerahmad	237	0.3	215	0.1	22	Ardebil	31	0.1	96	0.2	–65
Kurdistan	2673	3.6	2728	1.9	–55	Zanjan	46	0.2	144	0.2	–98
South Khorassan	122	0.2	178	0.1	–56	South Khorassan	31	0.1	135	0.2	–104
Ardebil	117	0.2	208	0.1	–91	Kerman	224	0.9	392	0.6	–168
Ilam	2601	3.5	2739	1.9	–138	West Azerbaijan	199	0.8	390	0.6	–191
Ghazvin	559	0.7	758	0.5	–199	Semnan	100	0.4	311	0.5	–211
Gilan	526	0.7	755	0.5	–229	East Azerbaijan	183	0.7	400	0.7	–217
Yazd	576	0.8	856	0.6	–280	Golestan	40	0.2	279	0.5	–239
East Azerbaijan	630	0.8	913	0.6	–283	Ghazvin	119	0.5	395	0.7	–276
Zanjan	139	0.2	609	0.4	–470	Khorassan Razavi	442	1.8	770	1.3	–328
Kerman	821	1.1	1306	0.9	–485	Gilan	112	0.4	472	0.8	–360
Hormozgan	1620	2.2	2107	1.5	–487	Yazd	127	0.5	720	1.2	–593
Booshehr	793	1.1	1321	0.9	–528	Hormozgan	382	1.5	1055	1.7	–673
West Azerbaijan	882	1.2	1417	1.0	–535	Mazandaran	216	0.9	910	1.5	–694
Golestan	200	0.3	736	0.5	–536	Kurdistan	1009	4.0	1742	2.9	–733
Hamedan	4420	5.9	5259	3.7	–839	Booshehr	119	0.5	897	1.5	–778
Khorassan Razavi	1321	1.8	2162	1.5	–841	Kermanshah	1443	5.8	2261	3.7	–818
Fars	1627	2.2	2639	1.8	–1012	Hamedan	1152	4.6	1980	3.3	–828
Mazandaran	837	1.1	1997	1.4	–1160	Ilam	859	3.4	1831	3.0	–972
Ghom	1426	1.9	3024	2.1	–1598	Ghom	504	2.0	1514	2.5	–1010
Khoozestan	17468	23.3	22136	15.4	–4668	Markazi	1256	5.0	3764	6.2	–2508
Markazi	3436	4.6	9403	6.5	–5967	Khoozestan	5642	22.6	8384	13.8	–2742
Isfahan	5623	7.5	12058	8.4	–6435	Alborz	1165	4.7	4468	7.4	–3303
Tehran	18931	25.2	61519	42.7	–42588	Isfahan	2003	8.0	6687	11.0	–4684
						Tehran	5889	23.6	19008	31.3	-13119

Appendix XII

Inter-Provincial Out-migrants and In-migrants and the Net Migration of the Province of Hamedan during 1996-2011

Province	1996-2006					Province	2006-2011				
	In-migrants		Out-migrants		Net Migration		In-migrants		Out-migrants		Net Migration
	Number	%	Number	%			Number	%	Number	%	
Total	108342	100.0	197846	100.0	−89504	Total	45512	100.0	63724	100.0	−18212
Kurdistan	13694	12.6	5110	2.6	8584	Kermanshah	6022	13.2	3193	5.0	2829
Kermanshah	13618	12.6	8051	4.1	5567	Kurdistan	5982	13.1	3356	5.3	2626
Khoozestan	6585	6.1	4753	2.4	1832	Lorestan	1980	4.4	1152	1.8	828
Lorestan	5259	4.9	4420	2.2	839	Ilam	828	1.8	563	0.9	265
West Azerbaijan	2504	2.3	1854	0.9	650	Sistan and Baloochestan	490	1.1	235	0.4	255
Sistan and Baloochestan	1422	1.3	832	0.4	590	Khoozestan	2338	5.1	2098	3.3	240
Ilam	1683	1.6	1259	0.6	424	Chaharmahal &Bakhtiari	174	0.4	80	0.1	94
Hormozgan	1925	1.8	1692	0.9	233	West Azerbaijan	964	2.1	972	1.5	−8
East Azerbaijan	1941	1.8	1805	0.9	136	North Khorassan	61	0.1	86	0.1	−25
Chaharmahal &Bakhtiari	191	0.2	148	0.1	43	South Khorassan	41	0.1	74	0.1	−33
South Khorassan	230	0.2	208	0.1	22	Ardebil	144	0.3	198	0.3	−54
North Khorassan	80	0.1	114	0.1	−34	Kerman	267	0.6	340	0.5	−73
Kohkilooyeh & Boyerahmad	162	0.1	341	0.2	−179	Kohkilooyeh & Boyerahmad	86	0.2	175	0.3	−89
Kerman	671	0.6	864	0.4	−193	Ghazvin	922	2.0	1015	1.6	−93
Yazd	250	0.2	503	0.3	−253	Hormozgan	654	1.4	762	1.2	−108
Golestan	333	0.3	668	0.3	−335	Golestan	141	0.3	250	0.4	−109
Ardebil	307	0.3	646	0.3	−339	Zanjan	440	1.0	607	1.0	−167
Khorassan Razavi	1352	1.2	1732	0.9	−380	Fars	1006	2.2	1213	1.9	−207
Booshehr	1456	1.3	1874	0.9	−418	Semnan	192	0.4	406	0.6	−214
Zanjan	1014	0.9	1551	0.8	−537	Yazd	136	0.3	355	0.6	−219
Isfahan	2721	2.5	3263	1.6	−542	East Azerbaijan	730	1.6	950	1.5	−220
Semnan	316	0.3	935	0.5	−619	Khorassan Razavi	442	1.0	666	1.0	−224
Fars	2064	1.9	2898	1.5	−834	Gilan	539	1.2	1043	1.6	−504
Gilan	1278	1.2	2439	1.2	−1161	Mazandaran	437	1.0	972	1.5	−535
Ghazvin	1604	1.5	2765	1.4	−1161	Booshehr	539	1.2	1111	1.7	−572
Mazandaran	888	0.8	2100	1.1	−1212	Isfahan	1473	3.2	2107	3.3	−634
Markazi	2862	2.6	9911	5.0	−7049	Ghom	1543	3.4	2935	4.6	−1392
Ghom	4545	4.2	12695	6.4	−8150	Markazi	1770	3.9	3606	5.7	−1836
Tehran	37387	34.5	122415	61.9	−85028	Alborz	2868	6.3	7652	12.0	−4784
						Tehran	12303	27.0	25552	40.1	−13249

Appendix XIII

Inter-Provincial Out-migrants and In-migrants and the Net Migration of the Province of Yazd during 1996-2011

Province	1996-2006					Province	2006-2011				
	In-migrants		Out-migrants		Net Migration		In-migrants		Out-migrants		Net Migration
	Number	%	Number	%			Number	%	Number	%	
Total	99782	100.0	60428	100.0	39354	Total	50490	100.0	24559	100.0	25931
Kerman	14895	14.9	5683	9.4	9212	Fars	7011	13.9	2449	10.0	4562
Sistan and Baloochestan	6914	6.9	922	1.5	5992	Sistan and Baloochestan	4280	8.5	513	2.1	3767
Tehran	21902	21.9	16716	27.7	5186	Kerman	6864	12.8	3032	12.3	3452
Fars	10717	10.7	6868	11.4	3849	Isfahan	6469	12.8	3105	12.6	3364
Isfahan	9891	9.9	6380	10.6	3511	Tehran	7100	14.1	4421	18.0	2679
Khoozestan	3525	3.5	987	1.6	2538	Khoozestan	2052	4.1	581	2.4	1471
Khorassan Razavi	9795	9.8	7634	12.6	2161	Chaharmahal & Bakhtiari	1419	2.8	252	1.0	1167
Hormozgan	4315	4.3	2969	4.9	1346	Hormozgan	1979	3.9	950	3.9	1029
Booshehr	1146	1.1	295	0.5	851	Khorassan Razavi	3822	7.6	3142	12.8	680
East Azerbaijan	1220	1.2	567	0.9	653	Alborz	1710	3.4	1092	4.4	618
Ardebil	1034	1.0	391	0.6	643	Lorestan	720	1.4	127	0.5	593
Chaharmahal & Bakhtiari	1229	1.2	589	1.0	640	Kermanshah	530	1.0	198	0.8	332
Kermanshah	904	0.9	320	0.5	584	East Azerbaijan	499	1.0	200	0.8	299
Kurdistan	620	0.6	196	0.3	424	Ardebil	398	0.8	146	0.6	252
South Khorassan	1941	1.9	1549	2.6	392	Hamedan	355	0.7	136	0.6	219
West Azerbaijan	762	0.8	390	0.6	372	Booshehr	429	0.8	211	0.9	218
Kohkilooyeh & Boyerahmad	449	0.4	88	0.1	361	Golestan	595	1.2	378	1.5	217
Gilan	1208	1.2	922	1.5	286	Ghom	1051	2.1	841	3.4	210
Lorestan	856	0.9	576	1.0	280	Kohkilooyeh & Boyerahmad	301	0.6	103	0.4	198
Hamedan	503	0.5	250	0.4	253	Zanjan	231	0.5	69	0.3	162
Golestan	956	1.0	807	1.3	149	West Azerbaijan	250	0.5	124	0.5	126
Ghazvin	386	0.4	270	0.4	116	Ghazvin	204	0.4	94	0.4	110
North Khorassan	378	0.4	296	0.5	82	Mazandaran	443	0.9	343	1.4	101
Mazandaran	1214	1.2	1175	1.9	39	Kurdistan	196	0.4	108	0.4	88
Ilam	239	0.2	278	0.5	−39	Gilan	372	0.7	316	1.3	56
Ghom	1761	1.8	1829	3.0	−68	Markazi	273	0.5	225	0.9	48
Zanjan	184	0.2	254	0.4	−70	Ilam	112	0.2	70	0.3	42
Semnan	379	0.4	467	0.8	−88	North Khorassan	180	0.4	152	0.6	28
Markazi	459	0.5	760	1.3	−301	Semnan	214	0.4	273	1.1	−59
						South Khorassan	811	1.6	909	3.7	−98

Appendix XIV

Predictors of the Probability of the Economic Migrations of Household Heads, 2011

Variables	Values	Odds Ratio (Exp B)				
		Model 1	Model 2	Model 3	Model 4	Model 5
Sex	Men Women (ref)	4.0**	3.8**	3.8**	3.8**	3.8**
Age at the time of migration	Under 30 30-45 Above 45 (ref)		1.6** 2.4**	1.7** 2.5**	1.7** 2.5**	1.7** 2.5**
Education	Primary Secondary Tertiary (ref)			1.8** 1.6**	1.7** 1.5**	1.7** 1.5**
Migration pattern	Intra-city Inter-city (ref)				1.5*	1.5*
Development level of destination	Developed Mid-developed Disadvantaged (ref)					1.2** 0.97
Nagelkerke R Square		0.13	0.19	0.23	0.25	0.26

* P<0.05
** P<0.01

Appendix XV

Predictors of the Probability of the tied Migrations of Non-Heads of Households, 2011

Variables	Values	Odds Ratio (Exp B)				
		Model 1	Model 2	Model 3	Model 4	Model 5
Sex	Men Women (ref)	2.7**	4.4**	4.3**	4.3**	4.2**
Age at the time of migration	Under 16 (ref) 16-30 31-45 Above 45		0.2** 0.24** 0.17**	0.27** 0.30** 0.19**	0.28** 0.30** 0.19**	0.28** 0.30** 0.19**
Education	Primary Secondary Tertiary (ref)			2.6** 1.8**	2.6** 1.8**	2.6** 1.8**
Migration pattern	Intra-city Inter-city (ref)				1.2**	1.2**
Kind of migration	rural-rural rural-urban urban-rural urban-urban (ref)					1.09 0.96 0.81**
Nagelkerke R Square		0.19	0.45	0.50	0.52	0.53

** P<0.01

Appendix XVI

Predictors of the Probability of Urban Migrations in Iran, 2011

Variables	Values	Odds Ratio (Exp B)						
		Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Development level of destination	Developed (ref) Mid-developed Disadvantaged	 0.35** 0.32**	 0.34** 0.31**	 0.35** 0.33**	 0.36** 0.34**	 0.37** 0.36**	 0.37** 0.36**	 0.37** 0.36**
Education	Primary (ref) Secondary Tertiary		 1.4** 3.6**	 1.4** 3.3**	 1.6** 4.2**	 1.6** 3.9**	 1.6** 4.0**	 1.6** 4.0**
Migration pattern	Intra-city (ref) Inter-city			 1.9**	 2.0**	 1.8**	 1.8**	 1.8**
Age at the time of migration	Under 16 (ref) 16-30 31-45 Above 45				 0.58** 0.93* 1.6**	 0.59** 0.93* 1.5**	 0.58** 0.93* 1.5**	 0.53** 0.79** 1.3**
Origin	Urban (ref) Rural					 1.5**	 1.5**	 1.5**
Sex	Men (ref) Women						 1.2**	 1.3**
Heading a household	Head (ref) Non-head							 0.75**
Nagelkerke R Square		0.16	0.30	0.38	0.43	0.45	0.46	0.47

* P<0.05
** P<0.01

Appendix XVII

Studies Conducted on Peri-Urbanism in Iran with Respect to General Characteristics

Topic	Issues Focused	Guidelines Provided
Peri-urbanism in the city of Hamedan	Peri-urbanism as an outcome of rural-urban migration and urbanization	Accepting city outskirts as an indivisible part of the city, management and promotion of lifestyle in these areas
An intrinsic analysis of peri-urbanism: A study of Islamabad in Karaj	Peri-urbanism as an outcome of rural-urban migration	Adopting participatory policies based upon empowerment
Causes of the formation of peri-urban areas in the city of Isfahan: A study of Arzanan and Darak	Economic factors (push-pull), ethnicity, kind of occupation	Recognizing peri-urban dwellers and encouraging their participation in urban issues, establishing new cities in the peripheries
Economic pathology of peri-urban areas and their relationship with crimes in Eghbalieh, Poobindar, and Khayrabad in Ghazvin	Formation of peri-urbanism with migration (fundamental issue)	Planning towards development through promoting balance between the status quo and standard indicators
Emergence of the physical evolution and socioeconomic circumstances of peri-urbanism: A study of the district of Ayneh 2 in Ahvaz	Peri-urbanism through creating industrial poles, war, and migration	Preventing peri-urbanism
Factors affecting the formation of peri-urbanism and its social outcomes in the city of Ahvaz	Rural migrations as the main cause of the growth of peri-urbanism	Developing peri-urban areas and preventing the growth of peri-urbanism
Spontaneous settlements and social security: A study of Pakdasht	Rural migrations, the low level of living standards, and the decline in government control over spontaneous settlements	Creating and distributing job opportunities nationwide and improving the livelihood of current residents
Role of peri-urbanism in insecurity and behaviors threatening social security: A study of the Province of Khorassan Razavi in general and the city of Mashad in particular	Natural growth of population and migration	Adopting participatory policies based upon empowerment
Peri-urbanism, urban anomalies, and guidelines to adjust them: A study of Karimabad in Zahedan	Precarious physical expansion of the city	Family planning, reducing and adjusting rural-urban migrations, strengthening midway cities, urban management, and recognizing the rights of peri-urban dwellers
Migration and urbanization in Iran	Lack of health, welfare, and other facilities in rural areas	Equal distribution of development facilities to prevent rural-urban migrations
Internal migrations and urbanization in the Asian and African continents: A case study of Iran	Mitigation of living standards and increase in socioeconomic problems	Controlling rural migrations alongside improving the quality of life of rural dwellers, preventing the disproportionate growth of urban population
Urbanization and migration in Iran	Rural-urban migrations	Political decentralization, appropriate policymaking in large cities and liberating financial markets

Source: Mahmoudian and Ghassemi-Ardehayi, 2012

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