

URBAN YOUTH UNEMPLOYMENT AND HUMAN CAPITAL DEVELOPMENT IN IRAN

Nils Ivar Lahlum

Master thesis in Middle East and North Africa Studies

Spring 2007

Department for Cultural Studies and Oriental Languages

University of Oslo

Acknowledgements

I wish to thank the following persons for their invaluable help, advice, information and support during the research and writing of this thesis. My supervisor Bjørn Olav Utvik at the University of Oslo for much appreciated comments and insights before and during the process, and my co-supervisors Dr. Javad Mohammad Nateghpour and Dr. Hossein Imani Jajarmi at the Faculty of Social Sciences, University of Tehran, for counselling and very appreciated practical help. I am utterly thankful to the Office for International Affairs, University of Tehran, for making bureaucratic processes when in Iran much easier. Furthermore I am most grateful for the help of Knut Østby, Ali Farzin, and Amir Hossein Barmaki at the United Nations Development Programme in Tehran, Arash Faraz at Khaneye Kargar, Farshid Farzin, Ali Reza Omidvar, and Thomas Erdbrink for very useful help and for connecting me with important sources for this paper. I would also like to thank Ahmad Khodaverdi and the library at Zanjan Management and Planning Organisation for insights and unrestricted use of statistical sources and library facilities. More than everything I would like to thank Negar Mazhari for invaluable support, and also for all help with the student survey.

TABLE OF CONTENTS

1.0	Introduction	2
2.0	Defining unemployment and human capital investment	5
2.1	Defining and measuring unemployment	5
2.2	Approaches to unemployment	8
2.3	Urban youth unemployment in Iran	10
2.4	Why investment in human capital?	12
3.0	Education and urban youth employment in Iran	16
3.1	Statistical developments and education quality	16
3.2	Education and mismatching skills	22
3.3	Education level and the impact on unemployment	26
3.4	The challenge of directing human capital toward private sector	30
4.0	Labour market rigidities and human capital investment in private sector	36
4.1	State efforts to encourage private sector investment	37
4.2	Rigidities imposed upon the labour market	38
4.3	What effect do state initiatives and rigidities have on human capital investment?	40
5.0	Conclusion	43
	Appendix I: Results of multiple-choice survey, Free Islamic University of Zanjan	46
	Appendix II: Form for multiple-choice survey, Free Islamic University of Zanjan	49
	Personal interviews, February – June 2007	52
	Bibliography	53

1.0 INTRODUCTION

The Islamic Revolution in 1979 introduced a decade of population growth policy that has had serious effects on the demographic composition of Iranian society. There had been drastic demographic changes during the reign of the two Pahlavi kings, but during the eighties the a steep increase in population was experienced, and with an increase average of 2.8 % each year, the number of people born after the revolution had reached about half of the country's 60.5 million by 1995¹. According to the Central Bank of Iran, the total Iranian population had in the summer of 2006 reached 69,5 million², in comparison to 39 million in 1980³. Almost thirty years after the revolution and Ayatollah Khomeini's famous outcry to create an Islamic army of 20 million young Iranians the regime has literally been left holding the baby, and is now seeing the children born after the revolution entering into higher education and the national labour force. As a result Iran now possesses one of the youngest populations in the world, where approximately 40 % is under the age of 15, and where the youth population⁴ in 2003 constituted 33,7 % of the total population⁵. Because of the population's young age, it is prospected that the number of people seeking higher education and employment during the next five years will continue to increase, something that will sustain the challenge of providing jobs for the continuous stream of high school and university graduates. During the period 1996-2000 there was on average created 296,750 new jobs each year, in contrast to the 692,750 of new job seekers that were entering the labour market⁶. The Islamic Republic's Third Five-Year Development Plan for 1379-1383 (2000/2001-2004/2005) estimated that 760,000 new jobs had to be created each year in the prospected period in order to absorb the new job seekers. During these five years the Iranian economy has experienced considerable growth, and the real GDP per capita has increased by 28 %⁷. However, the High Employment Council, chaired by president Khatami, in 2004 published the employment numbers for the four first years, and it showed that the numbers were in deficit with jobs created each year

¹ Brumberg, Daniel: *Reinventing Khomeini: The Struggle for Reform in Iran*, The University of Chicago Press, Chicago, 2001, p. 188.

² Central Bank of Iran: *Economical Trends* No. 45 Second Quarter 1385 (2006/2007), p. 1.

³ Brumberg, Daniel: *Reinventing Khomeini*, p. 188.

⁴ Youth is in this paper defined as population aged 15 to 24 years. In official Iranian statistical sources the definition of youth varies from 15-24 years to 15-29 years. Where the latter definition is used this will be mentioned in the text.

⁵ National Youth Organisation: *Youth Employment in Islamic Republic of Iran*, Department of International Affairs, Tehran, 2004, p. 3.

⁶ Valadkhani, Abbas: *Unemployment Conundrum in Iran*, University of Wollgong Economic Working Paper Series, 2006, p.1.

⁷ Salehi-Isfahani, Djavad: *Human capital policy for Iran: toward integrated reform in education, labor market and social protection*, UNDP Tehran, May 2005, p. 11.

counting 431,000, 493,000, 690,000, and 700,000 respectively⁸. In somewhat contrast to these numbers official statistical sources are showing that there has been a reduction in the total national unemployment rate from 14.3 % in 1379 to 10.4 % in 1383. The reduction has especially been seen among worker from 30 to 64 years, where unemployment has decreased from 6 % in 1379 to 3.2 % in 1383. Women participation in the labour force is increasing for each year, and parallel to this, overall unemployment for women has increased slightly from 17.0 % to 18.3 % in the same period⁹. There has been an increase in the number of people defined as participating in the active labour force, from 37.2 % in 1379 to 38.4 % in 1383.

At the same time as the overall unemployment has decreased it has remained difficult for youth to find jobs, and high youth unemployment has persisted throughout the five years of strong economic growth. Although youth unemployment decreased from 34.2 % 1380 to 25.2 % in 1384, the national the rate for youth unemployment is still more than twice the overall rate, and according to statistics it is almost exclusively a larger problem in urban than rural areas

Table 1.1 Activity rate in total population and unemployment rate in total population, total youth population, and among urban youth, 1379-1383.

Year	Total activity rate	Total unemployment	Youth unemployment	Urban youth unemployment
1379	37.2 %	14.3 %	-	-
1380	37.2 %	14.8 %	34.2 %	37.4 %
1381	37.2 %	12.8 %	26.7 %	32.2 %
1382	38.1 %	11.8 %	25.5 %	30.5 %
1383	38.4 %	10.4 %	24.1 %	28.9 %
1384	-	11.0 %*	25.2 %	29.4 %

Sources: *Statistical Centre of Iran: Statistical Yearbook for Iran 1383*; *Statistical Centre of Iran: Statistical Collection of the Condition of Households, Bahman 1380, Mordad 1381, Mordad 1382, Spring 1383*.

* Source: *Central Bank of Iran: Economic Trends No. 44, First Quarter 1385 (2006/2007), p.1*.

This paper is a research on the main causes of sustained high urban youth unemployment in Iran. It considers the phenomenon based on structural and classical explanations to unemployment, and argues that based on these explanations the high unemployment rate among urban youth is based in human capital development deficiencies.

⁸ Amuzegar, Jahangir: *Iran's Unemployment Crisis*, in: Middle East Economic Survey, October 2004.

⁹ Salehi-Isfahani, Djavad: *Human capital policy for Iran*, p. 12.

The statistical data for unemployment, economy, and education developments will in this study be limited to a six-year period, from the start of the Iranian fiscal year 1379 to the end of the fiscal year 1384¹⁰. Statistics for 1385, and for the 1384 national statistical yearbook, were still under compilation and preparation at the completion of this paper, and not available for research. The research and writing process for this paper was done in Tehran, Rasht, and Zanzan, Iran, from the start of February to the beginning of June 2007. All appointed meetings with academics, analysts, and representatives of organisations and state offices are referred to by name, while student interviews and coincidental conversations are anonymous because they were held in unofficial circumstances.

¹⁰ The main year reference will in this study be the Persian year since most numbers that are referred to follow this calendar. The Persian year starts at 21 March and ends at the 20 March, so that for example the Persian year 1379 in the Gregorian calendar will answer to March 2000 to March 2001. 1384 answers to March 2005 to March 2006.

2.0 DEFINING UNEMPLOYMENT AND HUMAN CAPITAL INVESTMENT

2.1 Defining and measuring unemployment

The difficult employment situation in Iran has led to a variety of ways for people to economically support their lives. The obstacles to finding employment are often countered by the creation of private self-employment. This might be a good solution to saving oneself from unemployment, but is often a way into underemployment and hidden unemployment rather than creating an acceptable living. To what degree this self-employment really contributes to sustaining a respectable income is often hard to tell, and presenting reliable statistics that show the reality of Iranian unemployment is difficult because it is hard to determine who is really employed and who is really unemployed. Iranian statistical centres have been criticised for producing unemployment numbers that are significantly lower than what the reality shows. At the same time there do not exist any alternative statistical sources. All statistics in Iran are published by the Central Bank of Iran (CBI) or by the Statistical Centre of Iran (SCI), the latter whose data is compiled by the provincial branches of the Management and Planning Organisation (MPO). The CBI is oriented mainly toward economical developments, and is also because its close connection to the government often accused by both economists and state research centres in Iran of creating politically motivated numbers in their reports. The SCI is also a state institution but is more closely connected to the state apparatus rather than the government, and is therefore not under the same pressure of producing “good numbers”. Because the statistics gathered by the MPO and its provincial branches are very comprehensive and based in thorough compilation work, this organisation’s statistics will be this paper’s main source for developments in unemployment, economical, and educational rates. However, the criticism of statistical sources in Iran should be kept in mind.

As previously mentioned, the provincial branches of the MPO are responsible for obtaining the data used both in SCI’s statistical yearbook of the country, and also in a yearbook produced for each province. Every third month a selection of households, both rural and urban, is asked to participate in a public survey that eventually is used as the empirical base for producing annual statistics¹¹. Ahmad Khodaverdi, economist at Zanjan Management and Planning Organisation, says that it is expected that somewhere between 90 and 95 % of the answers given by the households are correct. If the MPO has suspicion that the participant

¹¹ In the province of Zanjan, where this information was obtained, the selection of households is 1000 among a total of approximately 20,000 households in the whole province.

has lied or distorted the truth, a representative returns to the household in order to do the survey all over again, or to confront the questioned with the answers that are suspected to be false¹². Every tenth year there is held a survey where all of the households in each province participate. The last of these was held in 1385 (2006), but the results were not published at the time of this paper's completion. A problem with statistics nationally and in some of the provinces is that, even though all of the provinces have their own branch of the MPO, to collect correct data might be difficult in some areas, and some of the branches might not always take the task of collecting the data as seriously as other branches¹³. For example, in rural areas it is required that each province has the resources to send employees to villages in order to stay there for a period up to one or two months and collect the needed statistical material¹⁴. This set aside, all the branches follow the same definitions of unemployment and employment in order to categorise the participants in the surveys. Thus, by the MPO a worker, i.e. a participant of the economically active population, is considered all household members aged 10 years and over who were employed or unemployed (seeking work) during the last seven days preceding the enumeration. The activity rate is defined as the economically active population, employed and unemployed, to the population aged 10 and over, multiplied by 100.

$$\text{Activity rate} = \frac{\text{Economically active population}}{\text{Total population aged 10 and over}} \cdot 100$$

The economically non-active population is considered all household member 10 years and over who were not employed or unemployed during the last seven days preceding the enumeration, and those classified as students, homemaker, income recipient, or “other groups”¹⁵.

Persons are by IMPO considered employed if they have worked during the last seven days before the enumeration, and if they have not worked during these days because of annual leave, maternity leave, leave without pay, or educational or training missions. They are also considered employed if they have not worked because of temporary closure of workplace by the employer according to the law, or because of mechanical defects, shortage of raw materials, or temporary closing without pay, and also if the leave is caused by personal

¹² Meeting with Ahmad Khodaverdi, 24 April 2007.

¹³ Meeting with Ahmad Khodaverdi, 24 April 2007.

¹⁴ Conversation with female employee at Zanjan Management and Planning Organisation.

¹⁵ Statistical Centre of Iran: Statistical Yearbook of Iran 1383.

disputes at the work place, bad weather, illness or injury, or participating in religious, social, or political activities. Employed are also those who are without a continuous job, but have worked at least two of the seven days before the enumeration, all persons that did not work in the same seven days because of the seasonal nature of their work (if they were not actively searching another job), all those doing military service, all persons attending educational institutions affiliated with the police and armed forces, unpaid family workers, all persons benefiting from government scholarships and that are committed to serve the government later while their education period is added to their years of service, permanent paid workers of Basij-e Mostazafan under the Revolutionary Guard Corpse, and those persons working as trainees during the last seven days, either in a field related to goods and services production or that they were paid in cash or kind¹⁶.

Persons are by IMPO considered unemployed if they in the seven days before the enumeration were either not in paid employment or self-employment, were available for paid employment or self-employment, or were taking specific steps to seek paid employment or self-employment. If persons in the seven days before the enumeration were without work because of the seasonal nature of their jobs, and at the same time seeking other work, they are considered unemployed¹⁷. The unemployment rate is calculated as the ratio of unemployed population aged 10 years and over to the economically active population, unemployed and employed, multiplied by 100.

$$\text{Unemployment rate} = \frac{\text{Unemployed population}}{\text{Economically active population}} \cdot 100$$

The International Labour Organisation's (ILO) definition of unemployment is quite general and gives countries an opportunity to operate within an individual interpretation. The ILO defines unemployed as "those people who have not worked more than one hour during the short reference period but who are available for and actively searching work."¹⁸ This brings about the question of whether to include such groups as students, armed forces, and paramilitary forces in the labour force. In Iran's case students are not included in the labour force whatsoever, but in a country such as Norway students are included if they are actively seeking work. In the latter those who are doing military service are not included in the labour

¹⁶ Statistical Centre of Iran: Statistical Yearbook of the Country 1383.

¹⁷ Statistical Centre of Iran: Statistical Yearbook of the Country 1383.

¹⁸ O'Higgins, Niall: *The Challenge of Youth Unemployment*, International Labour Office, Geneva, 1997, p. 1.

force, while in Iran the armed forces and paid members of the paramilitary force Basij-e Mostazafan¹⁹ are included. It is difficult to say that it is wrong to include such groups, but it is quite unusual for such rates to include armed forces in the active labour force and to categorise them as employed. In Iran's case, because the armed forces are of a considerable size, this both increases the active labour force significantly and thus also makes the total unemployment rates decrease. It is also difficult to define the military service in Iran as paid labour since the service is close to unpaid, only providing the soldiers with IR 30,000 (approximately \$3) per day for a service that is mandatory and punishable if not undertaken²⁰. In the case of Norway, the students have become an active participator in the labour market at the same time as they are students, and it is therefore difficult to argue that it is wrong to include these in the labour force, in opposite to in Iran, where it is more unusual to work and study at the same time.

2.2 Approaches to unemployment

As in most countries all forms of unemployment can be found in Iran, but because of several factors unemployment in Iran differs from unemployment in several other countries. Bernstein Morris (1978) does in a work on unemployment in capitalist and socialist economies differ countries like the United States, Canada, Japan, and the states in Western Europe, which he characterises as capitalist regulated market economies, from what at that time constituted a block of socialist centrally planned economies. The ones that are characterised as capitalist regulated market economies, execute an economy where the means of production are mostly privately owned, where market forces chiefly determine the level of economic activity, the rate of growth, the composition of output, and the distribution of income, but where the government interferes in order to handle problems in the economy²¹. Iran does not answer directly to Morris' references to states with socialist centrally planned economies, i.e. the People's Republic of China, the USSR, and "most countries in Eastern Europe", but its economy has since the regime change in 1979 had strong similarities to these states. Morris argues that socialistic centrally planned economies are characterised by an economy where the means of production are mostly publicly owned, where the state chiefly

¹⁹ All active members, i.e. those who are not defined as reserves, of the Basij receive a small salary for participating in the organisations work.

²⁰ Conversation with military guard off duty in Rasht, 6 February 2007.

²¹ Bornstein, Morris: *Unemployment in Capitalist Regulated Market Economies and Socialist Centrally Planned Economies*, The American Economic Review Vol. 68 No. 2, 1978, p. 38.

determines the level of economic activity, the rate of growth, the composition of output, and the distribution of income, and hence where the government is held responsible and is expected to deal with problems in the economy²². The causes of unemployment in both groups are often connected to the type of economy chosen by the case studied, something which leads to a distinguishing between the types of unemployment recognised in the different countries. In the case of states such as those found in Western Europe unemployment is most often recognised by the following types: 1) *Seasonal unemployment*, where joblessness arises from regular seasonal fluctuations in the demand for labor force, 2) *frictional unemployment*, involving those seeking their first jobs and those between jobs after voluntarily quitting or being dismissed, 3) *structural unemployment*, which occurs when people are unable to find work because of lack of skills, a shortage of jobs in their particular market areas, or geographical misplacement although national demand might be high, and 4) *cyclical unemployment*, resulting from a general decline in business activity, with a subsequent recovery leading to reemployment²³.

In socialist centrally planned economies, identifiable with the economy in Iran, all of these types of unemployment are present, but the representation of some of these are marginal when looking at the main causes of unemployment. Such economies acknowledge seasonal unemployment as inevitable due to natural factors, such as agricultural production cycles and institutional arrangements, like the academic calendar. A certain amount of frictional unemployment is expected as long as new entrants to the labour market can choose their first jobs, workers are free to quit, or enterprise managers are permitted to dismiss unsatisfactory or surplus workers. However, although seasonal and frictional unemployment are contributors to the total rates of unemployment, this author argues that they are not the real problem in Iran. In socialist centrally planned economies, structural unemployment is regarded as deficiencies in planning that is supposed to balance the supply to and demand for labour through accurate estimates of the available labour force and correct decision on training programs, technological progress, location of new capacity, and real wages²⁴. As will be discussed later, this is one of the strongest characteristics of unemployment in Iran, and especially among urban youth. It should here be added to the above definition that structural unemployment does not necessarily only appear as a result of lack of skills, but is also recognised by the acquirement of “wrong” skills or skills that do not match the labour market

²² Bornstein, Morris: *Unemployment in Capitalist Regulated Market Economies*, p. 38.

²³ Ibid. p. 39.

²⁴ Ibid.

at the given time. This happens for example when the need for a specific educated workforce within an industry is no longer needed, or the supply of workforce is in surplus, and there is no short time prospects of business recovery leading to reemployment. It can also be a result of unbalanced planning and execution of training and education programmes, which in turn cause a mismatch of the labour force's skills to the demands of the labour market.

A second feature that distinguishes the Iranian demand for and supply to employment is the presence of classical unemployment in the labour market. As opposite to Keynesian unemployment, which is recognised as how "...notional product supply exceeds or falls short of market demand at the prevailing wage and price configuration, so that labor demand is [...] constrained and determined by the inverted production function"²⁵, classical unemployment arises from rigidities imposed on the labour market and is evident when "firms are on their notional product supply and labor demand functions but the real wage exceeds the Walrasian full-employment level"²⁶. Thus, in classical unemployment, labour demand depends entirely on the real wage, which, if it exceeds the employers capability to pay the expenses of keeping employees in full employment as a cause of those rigidities that are placed upon the firm, causes difficulties in employing new labour and therefore also decreases the total labour demand. The economical difficulties following classical features of the labour market also have a negative effect on skill development within in firms because there are no surpluses in budgets that can defend such investments.

2.3 Urban youth unemployment in Iran

A characteristic of youth unemployment in all of Iran's provinces is that it is almost exclusively higher in urban than in rural areas, only with the exception of Sistan & Baluchestan, which throughout all of the years subject to this study had higher rural youth unemployment than urban, and a few provinces that occasionally experienced slight shifts in the statistics (see numbers in bold type in table 2.3.1.). In contrast to rural areas, where the young and unemployed are typically semi-literate or illiterate and have dropped out from educational programmes before reaching higher education, urban unemployment is more a phenomenon of literate youth and a growing share of educated labour force. As seen previously, the national total unemployment rate has during the six-year period 1379-1384

²⁵ Coen, Robert M.; Hickman, Bert G.: *Is European Unemployment Classical or Keynesian?*, in: *The American Economic Review* Vol. 78 No. 2, 1988, p. 188.

²⁶ *Ibid.*

decreased from 14.3 % to 11.0 %. This positive development does not reflect to such a degree in the rates for youth, and especially not for urban youth. On a national level there was a decrease in youth unemployment from 34.2 % in 1380, to 25.2 % in 1384, while urban youth unemployment saw a decrease from 37.4 % in 1380 to 29.4 % in 1384. There was a decrease in most provinces in the 2-3 years after 1380, but in 1383 and 1384 the rates started to rise again, so that if a table for the development in all of the provinces was to be drawn it would in most provinces take form more or less like a U, with a slightly lower last point than starting point.

Table 2.3.1. Total and urban unemployment among youth aged 15-24 by province, 1380-1384 (%).

Province	1380		1381		1382		1383		1384	
	Total	Urban								
East	17.7	25.5	9.2	20.5	10.4	17.7	8.8	15.0	11.4	19.3
Azerbaijan										
West	27.5	34.6	22.1	28.1	13.1	20.5	15.5	23.2	14.9	22.7
Azerbaijan										
Ardabil	32.4	41.4	22.2	30.4	15.1	25.2	13.2	17.5	22.6	27.6
Esfahan	27.8	30.2	25.9	26.5	25.9	27.2	24.7	28.7	27.7	29.7
Ilam	61.4	64.0	35.9	44.6	39.6	47.3	32.8	43.2	35.2	43.5
Bushehr	32.1	34.0	20.4	25.5	25.6	28.8	18.9	20.0	21.4	24.6
Tehran	30.8	31.9	29.6	30.6	28.0	29.7	26.7	28.3	27.0	28.6
Chaharmahal & Bakhtiari	30.5	41.3	12.2	15.4	14.3	19.7	15.5	20.8	17.0	18.9
Khorasan	31.2	32.1	19.9	27.6	17.1	28.9	15.3	20.6	17.6	21.8
Khuzestan	40.0	47.8	41.3	51.1	47.4	49.7	42.2	45.5	39.9	41.5
Zanjan	23.0	38.5	19.2	34.0	14.8	25.8	19.6	29.8	18.6	29.0
Semnan	42.1	37.2	33.0	32.5	27.2	31.0	35.5	37.9	22.3	25.3
Sistan & Baluchestan	58.1	55.3	51.2	48.9	38.3	31.6	35.2	31.5	38.6	35.2
Fars	41.1	43.7	28.3	35.6	26.1	31.6	31.1	32.6	20.2	25.0
Qazvin	28.5	33.0	23.7	30.2	14.2	19.2	18.2	25.4	18.2	24.1
Qom	23.6	24.7	12.3	17.0	11.1	11.7	18.5	16.6	14.4	14.8
Kordestan	44.4	50.2	35.3	42.7	29.6	37.3	26.2	28.9	31.3	34.9
Kerman	33.8	35.4	32.3	32.3	35.1	40.1	23.0	29.6	31.2	37.8
Kermanshah	59.3	58.5	47.2	55.5	26.0	31.4	26.4	36.9	30.6	40.5
Kohgiluyeh & Boyer-Ahmad	51.7	62.0	40.0	47.6	31.9	41.3	37.8	52.5	33.4	44.7
Golestan	25.0	40.1	17.0	24.3	26.9	32.1	27.9	31.8	31.4	38.4
Gilan	39.5	47.1	29.2	42.5	27.0	33.7	19.8	31.1	25.0	37.3
Lorestan	56.3	63.3	33.4	38.1	45.1	53.0	47.2	56.3	52.6	53.3
Mazandaran	35.1	37.2	22.0	28.7	21.2	26.5	19.3	26.0	25.2	28.8
Markazi	29.7	37.3	21.8	30.3	15.8	23.2	16.7	26.0	18.5	26.0
Hormozgan	42.1	46.7	35.0	37.4	35.6	36.7	29.5	23.1	32.7	36.1
Hamedan	44.0	47.0	21.9	34.3	27.5	41.1	21.3	28.8	17.0	25.9
Yazd	35.1	35.4	33.4	33.3	30.2	31.1	37.1	37.7	30.3	31.5
Total Iran	34.2	37.4	26.7	32.2	25.5	30.5	24.1	28.9	25.2	29.4

Sources: Statistical Centre of Iran: Statistical Collection of the Employment and Unemployment Conditions of Households, Bahman 1380, Mordad 1381, Mordad 1382, spring 1383, Ordibehesht 1384.

Some of the provinces are struggling with higher unemployment than the rest, and are having extremely high rates for youth unemployment both in urban areas and totally. In 1380 Iran had 10 provinces where both the total and the urban youth unemployment was over 40 %, where the strongest affected were Ilam with 61.4 % total and 64.0 % urban unemployment, Sistan & Baluchestan with 58.1 % total and 55.3 % urban unemployment, Kermanshah with 59.3 % total and 58.5 % urban unemployment, and Lorestan with 56.3 % total and 63.3 % urban unemployment. In 1384 there was only Lorestan left among the provinces with over 40 % unemployment in both total and urban youth population, respectively 52.6 % and 53.3 %, with Ilam, Khuzestan, Kermanshah, and Kohgiluyeh & Boyer-Ahmad all having urban rates above 40 %. There are few provinces ever figuring with numbers lower than 20 % and those who have managed to stay below twenty during the four last years of the studied period are only East Azerbaijan and Qom. Table 2.3.1. presents provincial developments in total and urban unemployment among youth in the time period from 1380 to 1384, with a summary for the whole country at the bottom of the table.

2.4 Why invest in human capital?

Awareness of the importance of human capital investment has become a significant factor in sustaining economical development worldwide, but many countries, including Iran, still face a variety of obstacles in the process of initiating and taking advantage of such investments. In order for a state to develop a diversified and stable economy that can include the whole population, investment in human capital development is especially important for increasing private sector's significance in the economy. Human capital is by OECD defined generally as "education, skills, and ability"²⁷. The term can be traced back to the nineteenth century and Adam Smith, but first in the 1950s and 1960 was the economical term "capital" by economists like Theodore Schultz employed in order to explain the role of education and expertise in generating development and economical growth²⁸. The United States General Accounting Office (GAO) narrows the term down to the meaning of "people" as a foundation for further interpretation²⁹. GAO operates with two key principles that are central to the idea of human capital. The first is that "people are assets whose values can be enhanced through

²⁷ OECD Innsikt: *Menneskelig kapital: Hvordan kunnskapen former livet*, in: OECD Multilingual Summaries, 2007, p. 1. Author's translation.

²⁸ Ibid, p. 2.

²⁹ United States General Accounting Office: *Human Capital – A Self-Assessment Checklist for Agency Leaders*, United States, 2000, p. 1.

investment”, where it shows that through individual development and increase in personal value the performance quality of the organisation performing the investment also increases, and thus is of more value to clients and other stakeholders³⁰. The second principle argues that, “an organization’s human capital policies must be aligned to support the organization’s “shared vision””, something that includes its “mission, its vision for the future, core values, goals and objectives, and strategies by which the organization has defined its direction and its expectations for itself and its people.”³¹.

This paper’s main argument, that the high urban youth unemployment rate is caused by a lack of human capital investment, is based in the framework of two theories that fundamentally connect economical development to investment in human capital. The works of Rodney Ramcharan and Merih Sevilir share a view that investment in human capital is crucial for sustained economical development, but they provide two different approaches to how to develop this capital.

Rodney Ramcharan (2004) states that, generally “no country has achieved sustained economic development without substantial investment in human capital”, and analyses how different kinds of education, mainly secondary and tertiary, are compatible factors in creating economic growth³². This author argues that there exist countries that have achieved sustained economic development without a large investment in domestic human capital, referring especially to rentier economies where both labour force and engineering staff often to a large degree are imported from outside the country and where a very small part of the population is involved in the generation of oil revenues and economic growth, but Ramcharan’s approach to human capital investment and its role in economical growth is important. He distances his view from a homogenous concept of human capital, and emphasises the importance of how different types of education shape the overall development process. He is assuming that each skill form developed in the education system performs a specific but complementary function within the production process in the skilled sector, and that the ideas developed by the highly skilled are assumed to be non-rival but excludable, creating demand linkages between the education types that are external to the firm³³. However, the main argument is that the “confluence of demand and supply forces creates a circularity between educational investment across the various skill categories and demonstrates how the composition - not the level – of

³⁰ United States General Accounting Office: *Human Capital*, p.1.

³¹ Ibid. p. 2.

³² Ramcharan, Rodney: *Higher or Basic Education? The Composition of Human Capital and Economic Development*, in: IMF Staff Papers Vol. 51 No. 2, International Monetary Fund, 2004, p. 309-310.

³³ Ibid. p. 310.

the human capital stock determines the long-run steady-state level of development”³⁴. Therefore, investment in education should be carefully planned in order not to prove wasteful, and this investment should be heaviest in the initial period of both secondary and tertiary education in order to have a positive development.

Merih Sevilir (2007) presents a quite different approach to gaining economical development through investment in human capital. She argues that through the development of human capital, established firms represent an important source of entrepreneurs and new entrepreneurial ventures in the economy³⁵. Referring to Bhide (1994), she finds that 71 % of entrepreneurs in the United States found their ventures by replicating or modifying an idea they encountered at their previous workplace³⁶. In opposite to firms that are established by a mother company, referred to as *spin-offs*, firms that are started by a former employee at an established firm, but do no longer have a direct link to a parental company, are referred to as *spin-outs*. Such spin-outs are one of the most important sources of entrepreneurial start-ups, especially in high-tech and human capital-intensive sectors, and they make up for the majority of total revenues generated by the group of recently established firms in the United States³⁷. Some important questions to this method of investing in human capital should be raised, especially because it concerns how and why an economy should invest in such projects. One is why established firms invest in the human capital of employees and promote entrepreneurship if it results in the employees’ departure from the firm with the aim of starting an independent company. Another concerns what factors affect firms’ willingness to encourage entrepreneurship and to supply entrepreneurs to the economy.

As a proposed answer to the first question, Sevilir argues that the emergence of entrepreneurs out of established firms is a by-product of these firms’ effort to motivate innovation and to improve firm profitability, and that the two latter are considered desired to such a degree that the risk of losing employees to entrepreneurship has to be taken in order to gain the advances of innovation and profit. Thus, even though human capital investment is costly for the firm since it increases the probability that an employee will create an innovation that is non-firm specific, and thereby move on to found its own venture, it increases the probability that the employees in the long run will create innovations that are to the profit of the company. The decision of firms to invest in human capital is by Sevilir seen as a result of

³⁴ Ramcharan, Rodney: *Higher or Basic Education?*, p. 310.

³⁵ Sevilir, Merih: *Human Capital Investment, Entrepreneurship and New Firm Creation*, University of North Carolina, 2007, p. 1

³⁶ Ibid.

³⁷ Ibid.

a wish to strengthen the employees' incentives to exert higher effort, which translates into not only non-firm specific innovations but also firm specific innovations³⁸. The short run costs for the firm are high since there is a considerable risk of losing difficultly replaceable employees to entrepreneurial ventures. However, if this cost can be taken the probability of the investment being profitable in the long run is high.

The approaches of Ramcharan and Sevilir are not particularly concerned with private sector, and especially Sevilir gives many examples of public companies that have been able to undertake significant economical development as a result of investment in human capital. However, in Iran's case, where there is a general understanding that in order to create a more diversified and stable economy developments in private sector have to take place, considerations of how to invest in and take use of human capital should be related to the two approaches above. The next chapter searches to what degree the education system in Iran is contributing to the development of human capital and how this matches the labour market, while to what degree rigidities on the labour market affect human capital investment in private sector will be considered in the chapter thereafter.

³⁸ Sevilir, Merih: *Human Capital Investment*, p. 2.

3.0 EDUCATION AND URBAN YOUTH UNEMPLOYMENT IN IRAN

In Iran the supply to and demand for employment is in unbalance. This has close connections to the planning and execution of training programmes, and how these answer to the demands of technical and economical development. The governments led by Mohammad Khatami between 1997 and 2005 emphasised developing an education system that could handle the large pressure on higher education institutions, initially caused by the extraordinary population growth of close to 25 million that was seen between 1980 and 1995, and that has continued in a much more relaxed pace toward 2007. Capacity problems in the educational system has been present since the middle of the 1980s when the increase in population started to show, and there was an immediate need to attain to the children's need for education. Firstly, a need for expansions in primary education was given attention, thereafter, as the young population grew older, the problem moved over to secondary school. From the end of the 1990s and into the 2000s a serious need for expansion in higher education manifested as the young population started to reach university level. The governments have responded to this by opening and expanding universities all over the country, and the universities have to a certain extent been able to meet the challenge and facilitate the stream of youth wishing to attend higher education. However, the institutions of higher education have not been able to create an effective system that can give the students prospects of a safe future based in the possibility of finding a job that answers to their expectations, in fact to a job whatsoever. Suggestions why the education system does not produce a labour force that can help develop the economy has been numerous. However, the main discussion is on whether the different kinds of universities are fulfilling their task as effective education institutions, or if they only are helping people to get a diploma and then to push them into unemployment.

3.1 Statistical developments and educational quality

There has been a considerable growth in university students during the last ten years, both because of the government's policy on expanding possibilities for higher education and because of the continuous growth in high school students that want to continue their studies on university level. As a result there has from the school year of 1379-1380 to 1383-1384

been an increase of 33.3 % in students that are admitted each year to state universities³⁹, while there in the private Free Islamic Universities (FIU)⁴⁰ has been an increase of 37.6 %. This has led to that in 1383-1384, the FIU for the first time in four years admitted more students nationally than the state universities, and for the first time admitted more male students than female. The latter development is opposite to what is seen in state universities, where the number of admitted female students throughout the five last years have been higher than that of male students, and the difference has actually increased, so that in comparison to the school year of 1379-1380, where 49.5 % of the admitted students were male and 50.5 % were female, there in 1383-1384 was a distribution of 46.3 % being male and 53.7 % being female. Totally, Iranian institutions of higher education did in 1383-1384 admit 35.6 % more students than they did in 1379-1380, increasing the total number of admitted students from 363,341 to 564,107.

Table 3.1.1 Students admitted to Free Islamic Universities and state universities, 1379-1380 – 1383-1384.

Year	Free Islamic Universities			State universities		
	Total	Male	Female	Total	Male	Female
1379-1380	185686	90796	94890	177655	87863	89802
1380-1381	172810	86241	86569	205026	98589	106437
1381-1382	182009	87164	94845	221006	104079	116927
1382-1383	257793	126292	131501	261401	120399	141002
1383-1384	297637	154325	143312	266470	123503	142967
Increase	111951	63529	48422	88805	35642	53165
1379-1384*	(37.6 %)	(41.2 %)	(33.4 %)	(33.3 %)	(28.9 %)	(37.2 %)

Source: Statistical Centre of Iran: Statistical Yearbook for Iran 1383

* Author's calculations

As a result of the increasing number of admitted students the total number of students in the universities has also in the five-year period increased significantly. As shown in table 3.1.2, the FIU have had a national increase from 836,249 students in 1379-1380 to 1,098,491 students in 1383-1384, something that shows an increase of 23.9 % in the five-year period. In the same period the state universities had an increase from 733,527 students in 1379-1380 to 1,018,980 in 1383-1384, making the total number of students increase 28.0 %. An interesting

³⁹ State universities in this paper refers to all state run universities and institutions of higher education, i.e. all institutions of higher education except the Free Islamic Universities (FIU).

⁴⁰ The Free Islamic University is a direct translation from the Persian name, Daneshgah-e Azad-e Eslami (دانشگاه آزاد اسلامی)

observation is the high increase of female students in comparison to male students in both state universities and FIU. This has made females a majority in the state universities, while it has almost equalled out the rates in the FIU.

Table 3.1.2 Students at Free Islamic Universities and state universities, all degrees, 1379-1380 – 1383-1384

Year	FIU			State		
	Total	Male	Female	Total	Male	Female
1379-1380	836249	438640	397609	733527	387185	346342
1380-1381	806639	416571	390068	759870	381505	378365
1381-1382	864190	428755	435435	809567	396719	412848
1382-1383	968206	486616	481590	923913	430493	493420
1383-1384	1098491	568498	529993	1018980	469410	549570
Increase	262242	129858	132384	285453	82225	203228
1379-1384⁴¹	(23.9 %)	(22.8 %)	(25.0 %)	(28.0 %)	(17.5 %)	(37.0 %)

Source: Statistical Centre of Iran: *Statistical Yearbook for Iran 1383*

As with admission rates, this increase in students is expected to continue in the coming years. There lies a great challenge in creating jobs for the continuing increase in graduates, something that will continue to be difficult if the Iranian labour market is not reformed and training programmes are not adapted to the labour market's requirements and needs. At the same the increase in university graduates constitutes a large potential for development in Iranian economy if the resources are used with concern for the future and given a proper educational background to be able to participate in the process toward a healthy economy.

It is important for the development of human capital through educational training that there is not only undertaken an increase in capacity, but that this quantitative expansion also is followed up by an equally comprehensive policy on education quality. An interesting development parallel to the increase in students at the different universities is the dynamics of education staff employment in higher education. Theoretically, one of the most important indicators to education quality is found by looking at the number of students to educational staff⁴². Table 3.1.3 shows a radical difference in teaching capacities between the FIU and the state universities. The state universities had a good development during the five-year period

⁴¹ Author's calculations

⁴² National Youth Organisation: *National Youth Report*, Department of International Affairs, Tehran, 2004, p. 73.

with a significant increase in educational staff as an answer to the increase in students. In fact, there has been a decrease in students per staff from 15.7 in the school year of 1379-1380 to 12.9 in 1383-1384, something that should mean that the general quality of education in state universities has increased during these five years. The FIU have also had a positive development, but from a more negative starting point. In contrast to the 15.7 students per educational staff member in state universities in 1379-1380, students of FIU were in the same year provided with one lecturer per 37.6 students. From that time on, the development has been positive for the FIU, only experiencing a setback to 38.9 in the school year of 1382-1383, but then coming down to 30.2 in 1383-1384. Still, this indicates that, if this theory is accountable, the quality of education is generally far better in the state universities than in the FIU.

Table 3.1.3 Students to educational staff in FIU and state universities, 1379-1380 –1383-1384.

Year	Free Islamic Universities			State universities		
	Students	Educational staff	Students per staff*	Students	Educational staff	Students per staff*
1379-1380	836249	22227	37.6	733527	46747	15.7
1380-1381	806639	24266	33.2	759870	54969	13.8
1381-1382	864190	24916	34.7	809567	59763	13.5
1382-1383	968206	34423	38.9	923913	67775	13.6
1383-1384	1098491	36348	30.2	1018980	78889	12.9

Source: Statistical Centre of Iran: Statistical Yearbook for Iran 1383

* *Author's calculations*

There are some weaknesses with this theory, and also by using the national numbers for the universities. It does for example not help to have small classes if the teachers have unsatisfying qualities of teaching, and vice versa - an inspiring and good professor with a large class can have excellent results with his or her students. It does not have to show the complete truth for either the state universities or the FIU since some provinces may have excellent results while other do not have the same progress. However, these factors are more probable to be exceptions rather than the general rule, and so it should be possible to use these numbers to say something about the quality of education in Iranian higher education institutions. In an interview with Ahmad Khodaverdi, both economist at Zanjan Management and Planning Organisation and lecturer at Zanjan Free Islamic University, he confirms this difference between the FIU and the state university in Zanjan. He explains that classes are in

most cases around 30 persons or more at the Free Islamic University while the classes in the same subject might be taught to 10-12 students in Zanjan's state university. He also remarks that the students' results are generally much better at the state university something that both has a basis in the size of the classes, the strict education programme, and the motivation of the students⁴³.

The FIU have been criticised for not providing satisfying results and, as shown in the previous, much of this criticism is likely to have roots in reality. But then why do students choose the FIU and not the state universities when there is public awareness of the differences in quality and additionally, that students have to pay approximately IR 10 million each term at the FIU, while the state universities are wholly or partly free of charge? There are two suggested characteristics of the Iranian education system that are important factors in explaining in which university the students end up. The first is the overwhelming focus on the *concour*, the annual test that determines if a student gets accepted to a university or not. Selection of students is exclusively based on a multiple choice test which does not take into consideration either the student's grades from high school or eventual recommendations. The test has two parts, one general that is based on knowledge on Persian and English language acquired in high school, Islam, and random questions on the ideology and life of Ayatollah Khomeini. The second part has specific questions on the subject each student is applying for, and is therefore unique for each field of study⁴⁴. These tests are not standardised and vary in difficulty each year, so that you can be lucky and apply for higher education one year that the test is easier, or you could see less qualified students being admitted to the course you failed in last year because the difficulty level of the questions has been revised. Admission to the state universities demands that the student finishes among the top 10 % in the national test, which is taken by 1.5 million students every year^{45 46}. A similar test, but generally considered to be easier than the one in the state universities, allows for 10 % of those who have not passed the test for state universities to get admission into the FIU⁴⁷. The national tests have an impact on pre-university education, both in the one-year preparation school for the *concour*, and in high school. Especially private schools are experiencing strong pressure from parents to prepare the children for "the big test" instead of giving the students a general education⁴⁸.

⁴³ Interview with Ahmad Khodaverdi, 24 April 2007.

⁴⁴ Conversation with student at Zanjan Free Islamic University, 14 May 2007.

⁴⁵ Salehi-Isfahani, Djavad: *Human capital policy for Iran*, p. 9.

⁴⁶ The 10 % mentioned by Salehi-Isfahani is not a number that is defined, and it varies from year to year how many students are accepted.

⁴⁷ Salehi-Isfahani, Djavad: *Human capital policy for Iran*, p. 9.

⁴⁸ *Ibid.* p. 10.

Salehi-Isfahani (2005) proposes a second characteristic that makes youth choose to continue their studies into tertiary education, which is based in the pressure both socially and from the government in obtaining a diploma from higher education⁴⁹. This is not exclusively a negative feature of the education system since it is desirable that the young population is acquiring knowledge in universities, but the general focus in Iran is supposedly on getting the diploma itself, not an education that will lead the student into employment. The importance of the diploma has two main explanations. The first is the positive social connotations of having obtained a university degree opposite to not having one, and the second is how having a university diploma will have an effect on wage level, especially if the graduate is employed in public sector. State employment and wage in Iran is regulated by level of education, and not personal skills or effort, something that makes it important to have as high an education as possible – also if the subject that the worker chooses does not relate to the job applied for. Because the *concour* lays limitations on who are accepted to the state universities, the FIU becomes an alternative choices for students who want to enter into higher education, and at the same time are able to get accepted in the latter's *concour*. This will provide the student with the diploma that is socially important, and when, or if, the possibility of employment comes the wage level can be expected to be higher than if there was no diploma to show to.

In a survey made with students reading engineering or technological studies at the Free Islamic University in Zanjan, which will be further referred to later in this paper, this author confronted the participants with the question of whether obtaining a university degree is more important when attending higher education, or if personal interest is a more crucial factor. As a quite interesting result, eight of the students answered that personal interest in the subject was more important, while two had chosen getting a diploma as more important. The participants were also asked why they chose the subject they are reading, being able to choose between personal interest, the possibility of getting a job, the availability of the subject in the university, and social causes. The majority, six participants, answered that they had chosen a subject that they expected to give a possibility of getting a job, while four referred to personal interest as the cause. The two other options were left unmarked. These results are differing significantly from the arguments of Salehi-Isfahani, where it was argued that obtaining a diploma is more important among Iranian students than choosing a subject that will land them a job. In the survey the participants were not considering the diploma as important, with only two students choosing this as the motivation for the studies, while a majority had the

⁴⁹ Salehi-Isfahani, Djavad: *Human capital policy for Iran*, p. 4.

possibility of getting a job in mind when choosing their subject. What was most common for the participants was that personal interest had influenced their choice in a large degree.

This survey will be considered more closely in section 3.2, but as pointed out later on, this survey can because of various factors not be taken as a conclusion, but should rather be considered a supplement and a counterweight to the arguments set forth by Salehi-Isfahani.

3.2 Education and mismatching skills

Structural unemployment is caused by that there are jobs available in the labour market, but the job seekers do not have the skills to get these jobs, or their skills do not match the labour market's demands. Both of these explanations are largely present in Iran, and it is the latter that affects urban youth employment the most. In several Middle East countries that are troubled with high unemployment rates, such as Saudi Arabia, it is common that students are choosing studies that will not enable them to take part in the economical activity and development in the country. This has also shown to be the case in Iran, where a major share of the students in higher education are reading subjects within humanities, such as history, social sciences, and religious studies, while the government's plan for increasing employment emphasises an effort in strengthening knowledge especially within engineering and information technology (IT). However, although the numbers for students in subjects classified as humanities is very high indeed and the total number of student within this field is increasing every year, there are some positive developments. This is seen in the statistical dynamics of choice of subject, where the share of students reading humanities has fallen from 48.7 % of the total number of students in 1379-1380 to 45.5 % in 1383-1384. Additionally, the share of those reading technical and engineering subjects has increased from 22.4 % in 1379-1380 to 27.4 % in 1383-1384. The sum of students in both subject groups has increased significantly during the five-period, and even though the growth both in quantity and percent is larger with the group for technical and engineering studies, the numbers for humanities are not promising if the choice of these subjects lead a large share of the graduates into unemployment. All groups except medicine, which has fallen with approximately 20,000 students from 1379-1380 to 1383-1384, have increased in number of students for each year, and it is only humanities and arts that are having a negative development measured in percent.

Table 3.2.1 Students by field of study. Both FIU and state universities.

Subject	1379-1380	1380-1381	1381-1382	1382-1383	1383-1384
Medicine	143201	131687	131934	137058	132840
Humanities	765820	753259	777024	864969	964429
Basic Sciences	164582	165688	181281	209086	232396
Technical and Engineering	352742	358856	419237	459837	580136
Agriculture and veterinary	100392	105644	111003	131519	142856
Arts	46585	51345	53278	89560	64814
Total	1573322	1566479	1673757	1892029	2117471

Sources: Statistical Centre of Iran, Statistical Yearbook of the Country, 1379, 1380, 1381, 1382 and 1383.

Note: These numbers are taken from each specific yearbook. However, the Statistical Centre of Iran has slightly changed references to numbers from previous years in the 1383 yearbook. They therefore vary insignificantly between the sources.

Table 3.2.2 Students at FIU and state universities by fields of study

Subject	1379-1380	1380-1381	1381-1382	1382-1383	1383-1384
Medicine	9.1	8.4	7.9	7.2	6.3
Humanities	48.7	48.1	46.4	45.7	45.5
Basic Sciences	10.5	10.6	10.8	11.1	11.0
Technical and Engineering	22.4	22.9	25.0	24.3	27.4
Agriculture and veterinary	6.4	6.7	6.6	7.0	6.7
Arts	3.0	3.3	3.2	4.7	3.1
Total	≈ 100	100	≈ 100	100	100

Sources: Statistical Centre of Iran, Statistical Yearbook of the Country, 1379, 1380, 1381, 1382 and 1383.

Note: These numbers are taken from each specific yearbook. However, the Statistical Centre of Iran has slightly changed references to numbers from previous years in the 1383 yearbook. They therefore vary insignificantly between the sources.

In interviews conducted for this paper there has been a wide perception among both academics and state officials that the FIU to a great extent are to blame for producing the wrong skills, and that the quality of many FIU is not what it should be in order to develop the human capital needed to reduce unemployment rates. It has previously been shown that the quality of the education is most probable to be better in state universities than in FIU because of the number of students to each educational staff. This does not automatically mean that the FIU is providing more students with “wrong” skills than the state universities, and neither that it is sending more students out into unemployment, but studying the rates of subject

distribution gives a closer understanding to the situation. Tables 3.2.3 and 3.2.4 show that the state universities in the school year 1379-1380 had almost 150,000 students less in humanities than FIU, but that during the following five years the gap has narrowed down to approximately 30,000. The numbers of humanities students in state universities have increased from 312,854 in 1379-1380 to 465,690 in 1383-1384, an increase of 32.2 %, while in FIU there has been an increase from 452,966 in 1379-1380 to 498,739 in 1383-1384, which comes to an increase of 9.2 %. This shows that the tendency of students choosing subjects that are thought not to help the unemployment situation is actually stronger in state universities than in FIU. The FIU have during the last years also been leading in educating students within technical and engineering subjects and there has been a larger growth in this field in FIU than in state universities. In 1379-1380, FIU had a national total of 198,552 students in these studies while the state universities had 154,190, a difference of approximately 45,000 students. This did in the five following years increase to 352,437 students in FIU and 277,699 in state universities, an increase of 43.7 % and 32.3 % respectively. This development suggests that the FIU statistically are closer to undertaking the wanted development toward a more technically oriented education than the state universities.

Table 3.2.3 Students at Free Islamic Universities by fields of study

Subject	1379-1380	1380-1381	1381-1382	1382-1383	1383-1384
Medicine	42375	37840	38902	45264	41528
Humanities	452966	423575	430479	454177	498739
Basic Sciences	73304	68593	80786	87577	95473
Technical and Engineering	198552	203911	236003	255636	352437
Agriculture and veterinary	52895	56908	57163	73174	80786
Arts	16157	15802	20857	52378	29528
Total	836249	806639	864190	968206	1098491

Source: Statistical Centre of Iran: Statistical Yearbook for Iran 1383

Table 3.2.4 Students at state universities by fields of study

Subject	1379-1380	1380-1381	1381-1382	1382-1383	1383-1384
Medicine	100826	93487	93032	91794	91312
Humanities	312854	329684	346545	410792	465690
Basic Sciences	91278	97095	100495	121509	136923
Technical and Engineering	154190	154945	183234	204291	227699
Agriculture and veterinary	47947	48736	53840	58345	62070
Arts	30428	35543	32421	37182	35286
Total	733527	759870	809567	923913	1018980

Source: Statistical Centre of Iran: Statistical Yearbook for Iran 1383

The developments described above should theoretically indicate a slight strengthening in diversifying the composition of human capital acquired from education, and thereby support Ramcharan's approach to human capital investment as being more profitable when the composition of capital is more important than a high level of education. But in addition to there still being a problematically high share of students reading subjects within humanities, there is a general problem of keeping a general satisfactory quality level in the education. We have seen above that especially the Free Islamic Universities are having problems with a large amount of students per educational staff, but there is also a problem of financing and offering technical facilities to support the instruction in classes. This problem is especially evident in Free Islamic Universities, and to exemplify the present situation the branch in Zanjan will be considered. The branch is considered one of the better because it was recently established, it lies in a province that has had relatively good economical development, and the teaching staff has generally good qualifications⁵⁰. The university gives an impression of being of good quality from the outside with a large well-held compound and large building complexes. On the inside however most classrooms are only provided with plastic chairs and a board, otherwise the rooms are empty⁵¹. This means that everyone that are reading subjects like information technology, computer science, and other technical subjects that require computers and instruments in the learning process are left without such offers. There is a small room with computers, but since this is supposed to be shared by a large amount of students there is only a few that can use the facilities. In a subject such as IT engineering none of the classes include the use of computers, and the fewest of the students can afford buying their own so

⁵⁰ Interview with Ahmad Khodaverdi, 24 April 2007.

⁵¹ Author's observations at the Free Islamic University of Zanjan, February 2007.

that the education is restricted to studying books and delivering projects written either by hand or by waiting in line at the computer room⁵².

Mohammad Zarifi at the Ministry of Labour describes this as a general problem with Free Islamic Universities throughout the country. He says that in the last years it has become an easy way of gaining popularity for province governors or other politicians running for election to promise erection of new universities. In most of the cases the universities are built, but since the financial means do not allow for much more than the establishment of a building with empty classrooms the education is in most cases restricted to subjects where technical equipment is not needed, such as humanities and arts, or the classes in technical and science subjects have to manage with a marginal access to such facilities as computers, science equipment, and laboratories⁵³.

3.3 Education level and the impact on unemployment

Salehi-Isfahani (2005) argues that there are three distinctive features of youth unemployment in Iran: “it is very severe among the educated, has persisted despite five years of rising GDP, and entails a longer waiting time than general unemployment”⁵⁴. The level of education recognised with unemployment can be of importance when searching to identify causes to the problem and to see how these can be approached. When a distinct feature of youth unemployment is that it is especially severe among those with tertiary education, this further emphasises the problem of mismatching skill production in the universities as a structural problem for urban youth employment.

When considering the rate of unemployment in labour force with tertiary education it is not sensationally high compared to the national total rate. Actually, where the national total rate in 1380 was 14.8 %, the rate of unemployment among those with tertiary education was 10.1 %, accordingly 4.7 % lower than the total rate. The rate for the latter did increase to 16.9 % in 1383, but then fell down to 13.3 % in 1384. Compared to the total unemployment rate among youth, which decreased from 34.2 % in 1380 to 25.2 % in 1384, the rate of those with higher education is far lower. There are some provinces that are having bigger continuous troubles in offering jobs to the highly educated than the others, such as Mazandaran, Gilan, and especially Tehran, but these are more of exceptions than representable references to this

⁵² Conversations with students in IT engineering at the Free Islamic University of Zanjan, April-May 2007.

⁵³ Interview with Mohammad Zarifi, 1 May 2007.

⁵⁴ Salehi-Isfahani, Djavad: *Human capital policy for Iran*, p. 11.

group of unemployed. On the other hand there are some provinces that are showing remarkably low unemployment rates among the higher educated, such as Sistan & Baluchestan which has had a development from 1.8 % in 1380 to 2.7 % in 1384, and Hormozegan with 3.6 % in 1380 and 2.9 % in 1384. As with the three provinces with high rates referred to previously, Sistan & Baluchestan and Hormuzegan are rather exceptions than representable for the whole group, but they show that it is difficult to generalise youth unemployment in Iran to being a distinct higher education problem. Thus, even though the unemployment rates for youth with higher education according to international standards nationally still are alarmingly high, constitute a difficult problem for university graduates, and a challenge for the government, they are not an especially distinct feature of youth unemployment in Iran.

Instead, there is another faction of the population that is showing much more worrying numbers among the young. When all students graduate from high school they have the offer of continuing into a one-year pre-university school whose sole purpose is to prepare them for the university *concours*. Although most high school graduates add this year to their studies, either in the free public schools or private schools that charge for the course, the majority of these are not accepted to universities even though the pre-university exam is passed. Some continue reading in hope of being accepted when the universities accept new students, but since the universities still have an admittance restriction of between ten and twenty percent of the applicants many are forced to seek work instead of entering tertiary education. The youth that have a high school or pre-university school diploma are facing a hard time in both being admitted to universities and getting a job if not being enrolled into higher education, and statistically it is this group that creates a distinct feature of youth unemployment. Since rural youth unemployment is largely a problem affecting the illiterate and semi-literate population, the unemployed with high school and pre-university school diplomas are more importantly a distinct feature of urban youth unemployment. As can be observed in table 3.3.1, in 1380 the province with the lowest unemployment rate in this group was Sistan & Baluchestan with 20.4 %, while Kerman and Golestan were sharing the position as worst affected with 44.3 %. The total for the whole country in the same year was 30.1 %. In the years toward 1384 the total rate for this group increased dramatically to 36.1 %, an opposite development to the national total rate that fell to 11.0 %. In 1384 Sistan & Baluchestan was still the province with the lowest rate, figuring at 17.8 %, while Kerman kept its position at the top of the statistics,

but with a significant increase to 55.5 %, closely followed by Kohgiluyeh & Boyer-Ahmad with 54.5 % and Ilam with 53.7 %.

Table 3.3.1 Unemployed youth⁵⁵ with tertiary education (T.E.) and with high school diploma or pre-university school (D/PU) (%), 1380-1384.

Province	1380		1381		1382		1383		1384	
	T.E.	D/PU								
East Azerbaijan	12.2	35.6	18.3	35.1	20.5	37.5	32.2	36.6	15.3	34.9
West Azerbaijan	8.3	25.0	9.3	28.2	15.1	34.0	14.0	31.1	17.9	26.7
Ardabil	13.0	32.1	14.8	43.8	24.9	40.2	22.4	29.1	16.3	44.4
Esfahan	15.4	30.6	16.3	30.5	18.4	31.3	14.6	35.9	14.6	32.2
Ilam	10.3	44.0	13.5	45.3	13.4	55.8	24.0	42.5	17.6	53.7
Bushehr	10.0	33.3	8.9	33.3	10.1	32.4	10.7	33.6	7.5	37.0
Tehran	26.1	35.9	28.2	34.5	24.9	43.3	27.5	39.6	16.0	34.7
Chaharmahal & Bakhtiari	8.0	23.5	24.9	26.4	27.7	32.4	15.6	23.8	25.7	28.6
Khorasan	7.9	24.1	12.4	31.5	14.4	36.3	15.6	28.7	9.9	26.7
Khuzestan	8.4	32.1	6.8	32.5	8.8	41.6	10.0	32.9	8.9	30.3
Zanjan	8.7	34.9	14.0	37.0	13.7	45.6	14.6	45.4	17.6	41.0
Semnan	10.2	31.2	15.7	43.9	19.2	43.3	20.3	33.4	16.5	43.7
Sistan & Baluchestan	1.8	20.4	2.7	22.4	3.0	14.8	4.3	27.8	2.7	17.8
Fars	8.1	24.6	11.8	33.8	15.9	29.9	16.2	32.2	17.7	36.7
Qazvin	7.3	28.8	12.9	34.3	20.9	33.4	12.0	34.2	16.1	31.7
Qom	6.7	25.8	6.1	21.3	11.1	22.8	14.3	27.5	10.3	28.1
Kordestan	3.6	22.4	7.7	31.8	7.4	37.5	11.1	28.3	7.3	31.9
Kerman	13.7	44.3	12.7	45.1	10.5	45.1	22.8	49.2	11.4	55.5
Kermanshah	7.7	25.9	7.9	38.2	12.0	27.1	15.7	34.2	13.2	34.8
Kohgiluyeh & Boyer-Ahmad	12.5	42.5	10.5	45.7	14.8	54.0	16.1	47.1	11.9	54.5
Golestan	11.1	44.3	14.1	31.9	12.2	38.3	15.6	29.7	9.8	32.0
Gilan	10.7	35.3	17.2	41.2	21.2	38.0	26.8	39.2	17.3	41.6
Lorestan	9.5	38.5	13.5	32.5	11.5	43.3	12.2	44.9	7.7	34.9
Mazandaran	22.3	40.1	30.3	39.4	31.4	38.8	29.7	47.3	26.3	41.3
Markazi	7.8	35.2	13.1	37.9	14.5	32.4	14.7	31.6	11.5	38.6
Hormozgan	3.6	27.4	3.7	24.0	3.6	28.5	9.7	25.3	2.9	30.4
Hamedan	5.5	24.1	15.2	33.2	11.5	35.4	12.7	29.9	11.2	33.6
Yazd	9.8	29.9	10.8	33.9	13.4	29.5	17.7	40.6	12.2	32.7
Total Iran	10.1	30.1	12.9	34.6	15.2	36.5	16.9	35.1	13.3	36.1

Sources: Statistical Centre of Iran: Statistical Collection of the Employment and Unemployment Conditions of Households, Bahman 1380, Mordad 1381, Mordad 1382, spring 1383, Ordibehesht 1384.

The previous shows that the problem of urban youth unemployment does not only concern the part of the population with tertiary education, but is also strongly present among those who possess a diploma from secondary schooling. Both the quality of secondary

⁵⁵ Youth here is population aged 15-29 years, following the definition of the Statistical Centre of Iran where the statistics are taken from.

education and the process of admittance to universities are important factors in sustaining unemployment in the latter category. But what is maybe more important is how human capital should be composed in order to create economical development, as introduced by Ramcharan (2004). Ramcharan argues that, while the highly educated, such as scientist and technicians, appear to have an advance in understanding and adapting new or existing ideas into a production process, some minimum level of education is also required to successfully execute the production steps⁵⁶. Thus, in Ramcharan's view, successful economical growth depends on not everyone succeeding or being interested in attending higher education because the economy needs labour force to execute the plans for development created by the highly educated. Every society has active labour force that do not possess diplomas from higher education, but a problem in Iran is that this part of the population is very large and because of the lack of economical development at the present time, over one third of youth with high school or pre-university diplomas are struggling to find jobs. This economical development will most probably not come as an initiative from the holders of high school or pre-university diplomas, but will be depending on the quality and developments in higher education, and, as we will see later, on the opportunities to invest and develop this human capital in private sector. Ramcharan's view on human capital composition as an important factor to growth lacks further definitions on how such a composition should be balanced, and how large the part of tertiary educated should be to the secondary educated. In many western countries the development of what is often referred to as "knowledge based economy", where the focus is less on industrial production and more on the administration and production of data and information, has become dominant in the economy. How this has an effect on the composition of the employed labour force can be demonstrated by looking at the OECD countries, where there has been a continued growth during the last ten years, and where the composition has been from 28 % of the employees being employed in the industrial sector and 63 % in the service sector in 1995, to 25 % in industrial sector and 69 % in the service sector ten years after⁵⁷. This indicates that the development and implementation of human capital in growing economies has become more important than the labour force's participation in industry and manufacture, and that this development has contributed to further growth in the economies. There are differences between the economies of the OECD countries and Iran, but in an attempt to develop small and medium enterprises in private sector that to a large degree is

⁵⁶ Ramcharan, Rodney: *Higher or Basic Education?*, p. 310.

⁵⁷ OECD Innsikt: *Menneskelig kapital*, p. 2. Author's translation.

knowledge based, investment in human capital on a higher educational level is important in order to obtain results.

3.4 The challenge of directing human capital toward private sector

Structural unemployment has in the previous been referred to as a lack or mismatch of skills presented to the labour market. In this section an additional interpretation of structural unemployment is presented in order to explain to what degree youth with tertiary education are attracted to investing their skills in private sector. This unemployment originates in labour force barriers to take certain jobs because the job does not fit certain requirements that the worker may have. This usually takes form as geographical barriers, such as if there is a vacant position as an engineer in one city but the applicant is living in another city and chooses not to take the job because of either the distance in travelling or because he or she is not willing to move to another city in order to get the job. An example to such geographical barriers to employment was seen during the research for this paper, as this author had a conversation with a graduate student in accounting that had been offered a job in the southern part of Tehran, but did not accept it because the applicant lived in the northern part of the city and the travel distance in the enormous city would be too far for the job to be interesting enough⁵⁸. The perception of a job as not fitting personal requirements also has a form where the requirement is caused by socially affected barriers rather than geographical (although geographical barriers also can be caused by social factors). Thus the person who is searching for a job is selective in choosing employment as a result of socially formed personal connotations with the job that is available. Mohammad Zarifi at the Ministry of Labour, and Jaafar Satvati at the National Youth Organisation both argue that there is a general attitude among Iranians, and especially among the young, that causes a preference for employment in public sector instead of private sector⁵⁹. As a consequence, this attitude makes it difficult to attract human capital to private sector, and as a result of this, to develop the economy in a direction that creates employment.

Although the percent of active labour force employed in private sector in Ordibehesht 1383 was 75.8 % compared to 24.0 % in public sector (the remaining 0.2 % being employed in cooperatives), public sector is today by far the largest employer of workers with higher education in Iran. In 1380 64 % of men and 84 % of women with tertiary education were

⁵⁸ Conversation with graduate in accounting, Tehran, April 2007.

⁵⁹ Interviews with Jaafar Satvati, 1 May 2007, and Mohammad Zarifi, 1 May 2007.

employed within public sector⁶⁰. While the total number of state employees decreased marginally with 0,6 % over the period from 1378 to 1383, there has been a 17,3 % increase in employees with diplomas from higher education. At the same time there has been a 17,7 % decrease in employees without higher education, something that has resulted in more employees of public sector having higher education than not.

Table 3.4.1 Employees in public sector by education

Year	Total	Higher education	No higher education
1378	2256625	987489	1265136
1380	2328655	1123166	1205489
1382	2285264	1112962	1172302
1383	2269735	1194462	1075273

Source: Statistical Centre of Iran: Statistical Yearbook for Iran 1383. Author's calculations.

According to Zarifi and Satvaty the most important motive for educated youth to search employment in state institutions is that it provides job security, especially for male workers who in order to be able to support a wife, and sooner or later a family, are in need of having economic security. The argument of Zarifi and Satvaty can be supported by that there are certain features of state employment that are profitable for the employee⁶¹. If an applicant gets through the employment process for a state job there are microscopic chances for one to lose one's job and there applies a fixed minimum wage that is regulated after which educational diploma the worker has obtained. The Civil Service Employment Code, which restricts a manager's ability to determine the pay and layoff, regulates public sector employment in Iran, and it places a high premium on formal schooling instead of the manager's personal evaluation of the employee in pay determination⁶². It also applies to the benefit of public sector that the average annual wages are almost exclusively higher in public sector than in private on all levels of education⁶³. There has been a steady increase in public sector wages from the mid 1990s, something that is important for the rising attractiveness of state employment as a whole. To the economical benefits are also added bonus arrangements, and the Labour Law states that "all employers in enterprises included in the labour law are bound to pay each of its employees in the proportion of one year [i.e. those who have been

⁶⁰ Salehi-Isfahani, Djavad: *Human capital policy for Iran*, p. 16.

⁶¹ Ibid. p. 17.

⁶² Ibid. p. 16.

⁶³ Ibid. p. 18.

employed for at least one year] of work equivalent to the sixty latest days of wage as holiday bonus or reward.”, and for workers that have worked less than one year it adds that “the sum of payment to workers who have worked less than one year in the enterprise must be calculated on the basis of sixty days of paid work and in proportion of the time worked in the year. The sum of payment must on this account for each month not exceed one twelfth of the decided ceiling in the single article [i.e. the article cited above] of this law.”⁶⁴ This bonus is received at occasions like the Prophet Mohammad’s birthday and the New Year’s holiday (*‘eid-e nouruz*). This law is regulative for both public and private sector since the Labour Law includes “all employers, employees of enterprises, [and] producing, industrial, service, and agriculture establishments are by nature bound to this law”⁶⁵, but since there are fixed wages in public sector the bonuses are easier to calculate, more secure, and close to fixed when getting the job.

Zarifi argues that a more abstract and non-measurable feature with public sector is the widespread opinion that a position in a state institution brings more executive power than a private sector worker has, and also that state employees are more trustable than those employed in private sector⁶⁶. The latter is a result of the variety of introducing tests that an applicant to a state position has to go through in order to be accepted for a job, such as health tests and checks on drug abuse and alcoholism, all which give state employees a status as reliable persons. As an anecdote to the general trust to state employees, Zarifi says that it is for example much easier to buy on the tick if you can show that you are a state employee than if you are employed in private sector, where there are no standardised security checks as in public sector⁶⁷. Two additional factors contribute to the preference of employment in public sector. The first is the apprehension that when you first are employed in public sector, because the possibility of loosing your job is minimal, the job itself and amount of work will be “comfortable” (*kar-e rahati*). The second is that the work not will be too challenging⁶⁸. These two are closely connected to both the problem of a large and bureaucratic public sector, and the Labour Law’s restrictions on removing employees from their jobs.

If youth with tertiary education generally prefer state employment instead of employment in private sector this is an important problem that causes two developments that

⁶⁴ Kamalan, Seyyed Mehdi (Ed.): *Labour Law and Unemployment Insurance Law*, Kamalan Publications, Tehran, 2006 (Second Print 2007), p. 364. Author’s translation.

⁶⁵ Kamalan, Seyyed Mehdi (Ed.): *Labour Law and Unemployment Insurance Law*, p. 13. Author’s translation.

⁶⁶ Interview with Mohammad Zarifi, Ministry of Labour, 1 May 2007.

⁶⁷ Interview with Mohammad Zarifi, Ministry of Labour, 1 May 2007.

⁶⁸ Interview with Mohammad Zarifi, Ministry of Labour, 1 May 2007.

are not favourable for the development of human capital investment in private sector. The first is that the pressure on public sector to create more jobs for university graduates increases. Public sector such as it exists today is in most segments strongly overmanned, resulting in inefficiency and a heavy and expensive bureaucracy. For entrepreneurs searching to establish private companies this becomes a marathon of patience and frustration because it has to go through a demanding registration and licence process with state institutions. Since Ali Akbar Hashemi Rafsanjani became president in 1989 all governments have tried to expand private sector through the privatisation of public sector assets, and thereby also to reduce the state labour force⁶⁹. This has neither had much effect on the economy or the manpower situation. As earlier indicated, at the same time as the total number of state employees has been decreasing slightly since 1378, and thereby giving an impression of a positive development in reducing the number of employees in public sector, the rate of people with higher education in public sector has actually increased. The second problem is that with this increase, human capital needed for entrepreneurship and economical growth in private sector is being channelled and tied up to public sector, and as long as human capital stays within a general conception of public sector as the preferred secure employer, human capital investment in private sector will remain limited.

As a supplementary to the arguments of Zarifi and Satvaty this author provided a multiple-choice survey with students at the Free Islamic University of Zanjan. Today's students are those who will enter the labour market in few years, and even though this survey cannot be representable for nationwide opinions, it assists in providing a more comprehensive view to the arguments above⁷⁰. The survey was conducted with ten students reading technical and engineering studies at bachelor (BA) level with a general age of 21.2 years, where the lowest age was 19 and the highest 26 years, and with a median age of 21 years. 50 % of the participants were women and 50 % were men, and none of the participants were married at the time of the survey.

Concerning the first of the previous arguments, where it is suggested that Iranians are seeking towards employment in public sector because of job security, the survey gives an interesting result. The participants were asked what is more important in the event of accepting a job, job security, personal satisfaction with the job, or a good salary. While two chose good salary, the same number chose job security as more important. The rest, 7 participants (one of these marked at both good salary and personal satisfaction), chose

⁶⁹ Brumberg, Daniel: *Reinventing Khomeini*, p. 155.

⁷⁰ See appendix for a collected result of the survey

personal satisfaction as more important when accepting a job. This result is quite opposite of what was argued by Zarifi and Satvaty, and what is maybe quite as interesting is that the two choosing job security as more important were women. This means that none of the men included in the survey saw job security as more important than personal satisfaction with the job or good salary, something that does not coincide with the argument of wishing to secure a steady income in order to for example support a marriage and a future family. As a more general question, the students were asked, if they could choose, would they rather be employed in public or private sector. A similar result as in the first question was experienced, where seven of the asked students answered that they would prefer to be employed in private sector, as opposite to three who were more attracted to public sector. Of the latter two were women, something that also resembles the result from the first question, where those who were more concerned with job security were women. Not coinciding with prior expectations is that the two choosing job security as more important when accepting a job would rather be working for private sector than public sector, and the ones that preferred to work for public sector chose personal satisfaction with their future job as more important than job security.

Moving on to the question of yearly bonuses, the students were asked whether the sum of such bonuses are important for their choice of employer or not. In this case there was only two answering that this was not important, while eight found it important. Furthermore, six of the participants felt private sector to be a better alternative when concerning the yearly bonuses, while four expected public sector to give better bonuses. According to the Labour Law there should be no fundamental differences in yearly bonuses between public and private sector, or at least these differences should follow regulations in wage and not the nature of sector. Thus, even though the results were quite even in the latter question, this could be taken as a sign that there is a perception of private sector economically being a good alternative to public sector, and that acceptable bonuses are not something that is exclusively associated with public sector.

The students were also confronted with what I previously have referred to as the more abstract comprehensions of power and trust connected to employees in the two sectors. Initially they were asked if the power a job gives is important, whereof six saw this as important, one as not important, and three left the question unanswered. Thereafter, the participants were asked to specify whether public or private sector gives more power, or if none of them give particularly more power than the other. Four of the students replied that public sector employment gives more power, five chose private sector, and one was of the

conviction that none of them would give more power. Thereafter the students were asked whether they have more trust in a public or private sector employee, as of which four answered private and four public, and two saw neither private or public sector to provide more trustworthiness. These results are most remarkable in the way that they do not single out any of the sectors as providing whether more power or trustworthiness. As in the previous results, this differs from the assertions of Zarifi and Satvaty, where the arguments were a generally stronger association of trustworthiness and power with public employees than private. This survey indicates that there is a preference for private sector on all areas, even though this might not always be in strong favour of public sector. The last multiple choice question of the survey is maybe the most promising for future development. In this the participants were asked if they are not employed anywhere after their studies are finished, would they consider establishing a private company? As a respond to this seven answered that this would be an alternative, three did not know, while none excluded the idea for the benefit of continuing the search for employment.

There are many variables that have to be taken into considerations both in the interviews with Zarifi and Satvaty, and in the survey done at the Free Islamic University of Zanzan. The former do not have primary research or surveys to refer to, but their opinions are based upon experiences from work in institutions concerned with employment, labour, and youth. The student survey done by this author has its weaknesses in the low quantity of participants, and it is possible that had someone else – for example from another subject, another university, state or Free Islamic, and on another degree level been subjected to the same questions, the results would have looked different. However, even though none of the sources can be considered to exclude or confirm the other, both are valuable insights into social barriers or possibilities toward the labour market.

Zarifi and Satvaty present a general positive view among Iranians on employment in public sector, and are thereby outlining a situation that makes directing human capital toward private sector difficult. What the survey this author has conducted shows is a more multifaceted view, provided by students at the Free Islamic University of Zanzan, that is much more positive towards private sector than presented by Zarifi and Satvaty.

4.0 LABOUR MARKET RIGIDITIES HUMAN CAPITAL INVESTMENT IN PRIVATE SECTOR

The argument of this chapter is that classical unemployment is enduring among youth in Iran because there exist certain rigidities imposed upon the labour market, understood here as legal regulations, which cause low interest in and possibilities for human capital investment in private sector. As a result of this, the development of new firms and the expansion of existing companies remain at a low pace and the demand for labour force is sustained at a low level. Sevilir (2007) argues that investment in human capital in already established firms will over time both provide the mother company with new innovations, and it will create entrepreneurs that eventually will develop non-firm specific innovations that lead to the establishment of new firms, independent from the parental company (see chapter 2). However, because the risk of losing valuable employees to entrepreneurship in the initial phase is considerable, such investment is considered very expensive, and it demands that the firm is economically capable of running an investment project over some time in order to gain from the project.

In Iran the size of private sector is considerable, and especially small and medium private enterprises, so-called SMEs, have a strong potential in becoming a major source of employment generation and diversification of the economy. In fact, an overwhelming majority of private business in Iran today belongs to such firms. In 2004 there were about 345,000 officially registered small industries, excluding the trade and service sectors, of which a large majority are small or micro enterprises with 10 or less workers⁷¹. Most trade and service enterprises, as well as micro level workshops, are registered under various guilds of the Ministry of Commerce. The registered firms count somewhere between 400,000 and 500,000, and trade businesses dominate the guilds. The service sector has a weaker representation, but is by the ILO seen as having a great deal of employment potential⁷². The share of medium enterprises (50-99 employees) is very small in comparison to the small and micro-scale firms, something that is part of the reason why Iranian private sector has remained peripheral to the total economy, and also has had a modest effect on large scale employment.

⁷¹ International Labor Organisation: *An Employment Strategy for Iran*, 2004, p. 23.

⁷² Ibid.

4.1 State efforts to encourage private sector investment

The Iranian governments have during the last years recognised the importance of a strong development of growth in small private enterprises, something that can be traced and recognised in the country's development plans. Iran's Third Economic Plan (1999-2004) aims at supporting promotion of self-employment and entrepreneurial activities, particularly among women, and the Fourth Five Year Development Plan (2005-2009) emphasises a further development of the private sector by a continued transfer, liquidation, and merging of public corporations⁷³. The government has repeatedly encouraged investment in the private sector in order to diversify the economy and to cause an increase in employment. In order to increase private investment the government has also implemented economical support mechanisms. The Budget Law of 1385 approves a state monetary policy where the state is bound to pay a certain amount to the banking system in order to "support investments done by private and cooperative sectors for job creating projects"⁷⁴. There is also allowed an increase up to IR 1.8 trillion in the outstanding of directed banking facilities in the same year, where the share of the public sector shall be 25 % and cooperative and private sector 75 %, and where a minimum of 65 % of the cooperative and private sector's share is bound to be distributed among provinces in order to extend job creation in less developed regions⁷⁵. There are several ministries engaged in promoting investment in SMEs. The Ministry of Industry and Mines in 2002 set up a scheme where it provides a loan of up till IR 55 million without collateral for each new worker employed, of which it claimed to have generated 26,000 new jobs in 10 months⁷⁶. Likewise, the Ministry of Labour and Social Welfare in 1380 started a support initiative where entrepreneurs can apply for IR 30 million loans for each recruited worker at a subsidised 6 percent interest rate⁷⁷. The Management and Planning Organisation (MPO) also has wanted to help funding the establishment of small enterprises by offering a loan of up till IR 30 million to educated youth who intend to start their own business⁷⁸.

⁷³ Central Bank of Iran: Economic Trends No. 45 Second Quarter 1385 (2006-2007), p.28.

⁷⁴ Ibid.

⁷⁵ Ibid.

⁷⁶ International Labor Organisation: *An Employment Strategy for Iran*, 2004, p.24.

⁷⁷ Ibid.

⁷⁸ Ibid.

4.2 Rigidities imposed upon the labour market

In Iran, all legal regulations on the economy and the labour market are introduced from state level instead from an interaction between the state and independent labour organisations. As a result of this, although there exist a variety of labor unions, private sector does not have any real influence on decisions concerning legal regulations, and the conditions of enterprise establishment and management are entirely controlled by state organs. Because some rigidities placed upon the labour market particularly affect private actors in the economy, this has created hardship in developing a sector that dares to investment in human capital, and by this also a sector that is not able to take advantage of the existing human resources. Iranian public sector is subject to relatively the same regulations as private sector, but since the state is actually trying to decrease its total number of employees it is not this sector that is in dire need of reforms to increase growth and employment capacity. Thus, those who are experiencing hardship when being subjected to these rigidities are mainly micro (1-5 employees), small (6-10 employees and 10-49 employees) and medium (50-99 employees) enterprises in private sector, where the economical balance is most vulnerable.

All workers in private sector fall under the Labour Law of 1990, a law that in comparison to the prior law of 1956 has increased job security and is more rigorously enforced⁷⁹. The law's attempt to legislate job security has also become its most difficult problem. The right of having a job and not being subject to losing it has been a feature of the Islamic Republic's ideology since the revolution, and Article 46 of the constitution states that "...no person can because of ownership regarding his own business and labour deprive another person his possibility to business and labour"⁸⁰. This article is mirrored in the Labour Law, which does not recognise poor performance as ground for dismissal, and after the one-month test-period for unskilled workers, and three-month period for skilled workers, makes it close to impossible to fire an employee. A dismissal permit on the ground of unsatisfying performance can be obtained through applying to a government-appointed labour council⁸¹. This council consists of three members representing employers, employees, and the Ministry of Labour. If the complaint is found justifiable the employer can be subjected to fines and also to reinstate the worker. The employer is in case of final dismissal of the worker enforced to pay a severance pay to the dismissed that equals to one month's wage for each year of

⁷⁹ Salehi-Isfahani, Djavad: *Labor and the Challenge of Economic Restructuring in Iran*, in: Middle East Report No. 210, Reform or Reaction? Dilemmas of Economic Development in the Middle East, Spring 1999, p.36.

⁸⁰ Constitution of the Islamic Republic of Iran, Douran Publications, Tehran, 1989 (2007), p. 49. Author's translation.

⁸¹ Salehi-Isfahani, Djavad: *Labor and the Challenge of Economic Restructuring in Iran*, p. 36.

employment⁸². This opportunity for the worker causes economical hardship both if it is ruled against and for the employer, and an even bigger problem is that it always creates an uncertainty of the economical costs in advance of a dismissal. The Labour Law also sets a minimum wage that is according to the schooling of the employee, but it does not specify an upper limit⁸³. Thus, if an enterprise is looking for other qualities than the education of the employee, such as creativity, effectivity, and teamwork, it will face a dilemma when hiring new work force. The minimum wage prevents educated workers to offer their labour at a lower wage to demonstrate their less observable skills. The potentially high cost of dismissing an employee also makes the employers weary of taking the risk of hiring someone, because if someone is employed at one wage level, this person could later reveal to have a higher degree and therefore ask for an increase in wage.

Of the most progressive achievements with the law are the employers' economical responsibilities to their employees. Women are entitled to up to ninety days of paid maternity leave (Article 76), and stipulates that until the child of a woman is three two years old, the woman is entitled to half an hour of feeding break every three hours, and the employer is bound to facilitate a place for the children to be taken care of while the mother is working (Article 78)⁸⁴. The law also requires major employers to provide workers such welfare offers as housing, sport facilities, and training⁸⁵. In addition to the Labour Law, Iran has a provision for a very comprehensive social security system based mainly on payroll levy financing, and it intends for it to pay support for retirement, disability, healthcare, and some unemployment redundancy protection. One of the plans, the Unemployment Insurance Act, was implemented in 1990, after three years of testing. This Act has because of its way of collecting revenues become an issue in the discussion on private sector's possibilities and willingness to employ new labour force. Depending on the durability of employment and membership in the insurance fund, the unemployed receives 55 % of the average salary paid out during the last year of service, and the employee is entitled to support for a half to four years⁸⁶. In many countries the source of unemployment insurance is a shared initiative between the employer, the worker, and the state. Iran is one of several countries that differ from this with the whole responsibility being left on the shoulders of the employer. As long as the enterprise is a

⁸² Salehi-Isfahani, Djavad: *Human capital policy for Iran*, p. 26.

⁸³ Ibid. p. 17.

⁸⁴ Kamalan, Seyyed Mehdi (Ed.): *Labour Law and Unemployment Insurance Law*, Kamalan Publications, Tehran, 2006, p. 37-38. Author's translation.

⁸⁵ Salehi-Isfahani, Djavad: *Labor and the Challenge of Economic Restructuring in Iran*, p. 36

⁸⁶ Sadr, Kazem: *Technical Report on Policies to Extend and Strengthen the Scope and Institutions of Social Protection in Iran*, p. 36.

registered member of the Social Security Organisation (SSO) the employer has to pay a fixed rate of 3 % of the wage fund. The worker and the state have no role in supplying the revenues of the unemployment fund⁸⁷. In 1380 6,374,568 persons and their families were covered by the SSO, comprising altogether almost 40 % of the total population⁸⁸. A variety of other social organisations exist, but these all draw their revenues from other sources than the employer, and in most cases from other sources than the employee as well. The increase in wages during the last years has made it harder for firms to be able to pay the fee, something that has led to many private workshops not reporting the correct wages paid and putting down minimum possible figures by making an agreement between the employer and the employee⁸⁹.

The legal regulations in the Labour Law concern all established private companies, but there are also challenges that face entrepreneurs that wish to invest in a new firm. The total expenses of creating a job in micro or small manufacturing firms is estimated to be approximately IR 150 million⁹⁰, a sum which consists mostly of the compliance costs, such as taxes, registration fees, cost of establishment, industrial certificates, import duties, and municipality charges. The enterprise will also be faced with a myriad of legislations, both when starting up the business and when hiring new workers⁹¹. Eventually, in order to be legally permitted to establish an enterprise there has to be obtained certain certificates, registrations, and licences, who at the present time are being issued by dividing the work between four different ministries.

4.3 What effect do state initiatives and rigidities have on human capital investment?

For already established companies the rigidities imposed through the Labour Law and in social security systems are a problem for both employing labour force, and for being able to invest in human capital. The Labour Law's provision to provide workers with job security, and its transfer of the economical burden of welfare from the employee to the employer increases labour costs significantly and discourages employment⁹². Also, if a company was to implement all the demands of the Labour Law's welfare arrangements, the real wage would in

⁸⁷ Ibid.

⁸⁸ Sadr, Technical Report, p. 13.

⁸⁹ Ibid. p. 38.

⁹⁰ International Labor Organisation: *An Employment Strategy for Iran*, 2004, p.24.

⁹¹ International Labor Organisation: *An Employment Strategy for Iran*, 2004, p.25.

⁹² Salehi-Isfahani, Djavad: *Labor and the Challenge of Economic Restructuring in Iran*, p. 36.

most cases rise to well above full employment level, and it would both deter investors and restrict own material and human capital investments.

As a cause of the difficulties of investing in human capital in established firms, the development of entrepreneurs that will leave the mother company in order to establish a new firm will remain restricted. The state initiatives referred to above are positive in the way that they show that there is interest in supporting private sector development, and the ministries are referring to a certain degree of success with the programs. But the sums of the loans are not enough even to start a micro size enterprise, the loaning criteria are not uniform for all firms, collateral requirements are difficult to meet, and the interest rates of the loans offered are usually high, altogether causing demands for good results from the very beginning of business. The problems meet new firms already before the business is up and running with a heavy process of obtaining licenses, certificates, and registrations through the bureaucracy of four ministries. After having been able to employ more than five employees the demands of the Labour Law also becomes a large challenge in order to balance the economy.

What should invite to a certain degree of interest in establishing at least micro size enterprises, is that firms with less than six employees are altogether exempt from the Labour Law, and therefore also not subjected to the welfare and job security measures that are taken in the law⁹³. Also, firms with 10 employees or less are permitted to dismiss workers much more freely than those with 11 or more, so that it is the small establishments of 11 to 49 employees, and the medium establishments of 50-99 employees that are regulated by the Labour Law⁹⁴. However, the largest part of highly educated in private sector is employed in firms with 11 employees or more. Thus barriers to investment in and development of human capital are affecting those firms that have the capability strongest. Sevilir (2007) argued that human capital investment in already established firms would lead to increased innovativity and improved results for the company, but also that it would create a by-effect of entrepreneurship, where some of the individuals that had been invested in would leave the mother company in order to establish new firms, so called spin-outs, based on the knowledge and inspiration from the parental firm. As a result of the rigidities placed upon the labour market as presented above, the real wage exceeds full employment level at a point where the firm is in need of product and staff supply, such activity becomes difficult to execute in Iran. Those firms that are already established, and should theoretically be able to initiate human capital investments, are facing economical hardship and insecurity when employing new

⁹³ Salehi-Isfahani, Djavad: *Human capital policy for Iran*, p. 18.

⁹⁴ Interview with Arash Faraz, Worker's House, 18 April 2007.

labour force. These difficulties are making it a large risk to invest in human capital, something that is expected to be very expensive in the initial phase and then to bring profitable results after some time. Iranian companies can under such circumstances either be successful through a very careful calculation of expenditures, or the firm could risk bankruptcy because of expensive legal trials, such as in the case of firing an employee. The effect of this uncertainty is that entrepreneurs are not created through human capital investment, and spin-outs, that in other countries are showing to have an important role in the economy, do not have the possibility of being established or to take advantage of a large knowledge base such as spin-outs in other countries. Consequently, when investment in human capital is to such a degree restricted it results in making economical development in private sector difficult, and employment possibilities remain limited.

From these difficulties and obstacles connected to management of established companies and entrepreneurship it would be assumed that the interest for human capital investment in private sector is very low. What is somewhat a contradictory view to this assumption are the results from the student survey presented in chapter 3. A majority of the participants generally preferred private sector as their future employers, and also had good connotations with private sector employment. A majority was also considering establishing their own company if they could not be employed somewhere directly after their studies have ended. An important feature with the survey is that all of the participants were students of engineering and technological subjects, and that students within these subjects, which are both by the government and economists considered important in the countries economical growth, are generally positive to private sector employment and entrepreneurship.

5.0 CONCLUSION

This paper has been a research on the main causes of sustained high urban youth unemployment in Iran. It has considered the phenomenon based on structural and classical explanations to unemployment, and through empirical findings obtained through statistical sources in English and Persian, and interviews with economists, academics, state employees, and university students, considered whether the argument that the high unemployment rate among urban youth in Iran is based in human capital development deficiencies can be verified. There have been used two approaches to human capital development and human capital investment in order to create a theoretical framework for the empirical research. The first is Rodney Ramcharan's view on human capital development and investment in education, where especially tertiary education has been emphasised in this study. The second is Merih Sevilir's approach considering human capital development and investment in established firms. Both of these argue that investment in human capital development is crucial to sustained economical growth.

Deficiency in higher education is generally one of the key factors that are used for explaining the unemployment problem in Iran. All the literary sources for this paper are arguing that the education system produces a labour force with skills that are not matching the labour market's demands, thereby sustaining structural unemployment. In interviews with employees in the National Youth Organisation and the Ministry of Labour a common argument was presented, considering it a general attitude among Iranians, especially youth, that they prefer employment in public sector before private sector in a concern for job security and because of more positive connotations with state employment. This study has indicated that the arguments of the literary sources to a large extent are verifiable, especially through statistical sources. The universities are having problems with facilitating the constantly increasing number of applicants to higher education, and the acceptance of applicants is low compared to the total number who tries to get into tertiary education each year. Those who are accepted have passed the much discussed test for higher education that does not consider earlier education, and even though skills are needed for the tests, who gets accepted into universities is more a random choice than based in the student's knowledge. As one student expressed in a conversation: "it is much more important to know on which date Khomeini was born than knowing anything about your studies".

In this study education quality has been considered on the basis of the literary sources' argument that this is not satisfying in today's education system. This paper has found that comparing the Free Islamic Universities and state universities, it shows that the former is provided with far less educational staff than the latter, thus indicating that education in Free Islamic Universities theoretically is not as good in state universities. However, it has also been shown that both university categories have had positive developments during the period studied. Further comparing Free Islamic Universities and state universities, the developments in certain subjects assumed to be producing mismatching skills in the labour market has been considered. This paper has shown that students reading subjects that are considered not to contribute to employment, such as humanities and arts, are increasing in numbers, but that these subjects' total shares compared to other studies are slowly decreasing. It also shows that the Free Islamic Universities are having the most positive developments within students' choice of subject, where the share reading humanities is slowly decreasing, at the same time as students reading engineering and technical subjects are growing steeply in numbers. The state universities are having a positive development as well, but with a much slower pace, and with an increase in humanities students that is much steeper than in the Free Islamic Universities.

As a counterweight to the arguments put forth in the previously mentioned interviews, this author conducted a survey among a group of university students. As opposite to the supposed general view of public sector as a more attractive employer than private sector, the participants through a variety of questions indicated that private sector is actually *more* preferred than public sector. Both the survey and the interviews have certain weaknesses and strengths, but what this survey could conclude was that state employment is not so exclusively preferred, and that the view of private sector employment is more positively viewed than assumed.

These empirical findings on employment suggest that there still exist severe obstacles to a development in human capital that can be complimentary to the labour market, and that the inequalities in education quality are leaving a high number of students with an unsatisfying education background. However, what is new with this study is its indications that developments during the years considered, and the results obtained in this paper, are generally more positive than in other studies and in interviews conducted for this thesis.

This study has also searched to see whether legal rigidities imposed by the state are having an effect on the interest and possibilities for private establishments to invest in human

capital development. This paper has shown that, even though state institutions are taking positive initiatives to create investment interest, the financial support is not at a satisfying level, and is also surrounded by criteria that make it difficult for the entrepreneur to take advantage of this support. It has also been shown that the Labour Law and social security planning are strongly affecting the economy of private companies through comprehensive efforts in creating job security and a progressive welfare offer. Even though micro size firms are exempt from many of these regulations, and could therefore be assumed to take a role in expanding private sector, such firms are not able to undertake expensive investments in human capital development. If they would expand their business they would also soon fall under the regulations for larger companies, and would be affected by the same rigidities as larger companies. Thus, because there exist labour market regulations that affect the economy of establishments severely, the companies who are the largest employers of educated labour force face a large risk when investing in human capital development. Because the rigidities are economically demanding it is also difficult for a firm to afford such an investment in the first place. Sevilir argued that the entrepreneurship created through investment in human capital is one of the main factors to sustained economic growth in the United States. Such entrepreneurship is difficult to create without an already established firm's possibilities to make investments in human capital. Thus, as long as such rigidities constitute a problem for private sector firms in Iran, such development will be difficult to undertake, and the labour demand will remain limited.

However, what is also important is that there is interest among the highly educated to use their efforts in private sector. The literary sources to this study suppose that the difficulties facing private sector development today also restrict the willingness to undertake such investments. Though this is to some extent verified through the low level of economical development in companies that are expected to take most advantage of human capital today, the survey conducted in chapter 3 shows a more positive attitude toward both private sector employment and entrepreneurship. Most importantly, the survey shows that human capital not necessarily is bound up to state institutions, and that if the conditions for economical growth in private sector were improved, the employment potential in private sector would increase significantly.

Appendix 1: Results of multiple-choice survey, Free Islamic University of Zanjan

PERSONAL INFORMATION

5 men	0 married	General age: 21.2	Lowest age: 19
5 women	10 unmarried	Median age: 21	Highest age: 26

UNIVERSITY

All study at the Free Islamic University in Zanjan

IF YOU ARE STUDYING AT A FREE ISLAMIC UNIVERSITY, WHY DID YOU CHOOSE THIS UNIVERSITY?

- 4: I wanted to study at the Free Islamic University
- 5: I was not accepted at the state university
- 1: The subject I wanted to study was not available at a state university

SUBJECT OF STUDY

- 10: Technology and engineering

DEGREE

- 10: Bachelor (all are studying for the bachelor's degree)

WHAT IS MORE IMPORTANT

- 2: To have a university degree
- 8: To study something that is in your own interest

WHY DID YOU CHOOSE THIS SUBJECT?

- 4: Personal interest
- 6: The possibility of getting a job
- 0: The availability of this subject in the university
- 0: Social causes

HAVE YOU HAD A JOB DURING THE STUDYING PERIOD?

- 3: Yes (3 men)
- 7: No (5 women, 2 men)

IF YOU ARE OFFERED A JOB THAT IS NOT CONNECTED TO THE SUBJECT OF YOUR STUDIES, DO YOU ACCEPT THIS JOB?

5: Yes (2 women, 3 men)

4: No (3 women, 1 man)

One unanswered

IN THE EVENT OF ACCEPTING A JOB, WHAT IS MORE IMPORTANT?

2: Job security (2 women)

7: Personal satisfaction (3 women, 4 men)

2: Good salary (2 men, one has double crossed with personal satisfaction)

0: Other

WHICH ONE GIVES MORE POWER (IN THE MEANING OF AUTHORITY)?

4: Public sector (2 women, 2 men)

5: Private sector (3 women, 2 men)

1: None (1 man)

IF YOU CHOSE PRIVATE OR PUBLIC SECTOR, WHY DID YOU FIND THIS TO GIVE MORE POWER?

WILL THE POWER A JOB GIVES BE IMPORTANT FOR YOU?

6: Yes (4 women, 2 men)

1: No (1 man)

3: Unanswered (1 woman, 2 men)

DO YOU HAVE MORE CONFIDENCE IN AN EMPLOYEE FROM PUBLIC OR PRIVATE SECTOR?

4: Public sector (3 women, 1 man)

4: Private sector (4 men)

2: None (2 women)

IF YOU CHOSE PUBLIC OR PRIVATE SECTOR, WHY DO YOU HAVE MORE CONFIDENCE IN THIS SECTOR?

IN THE EVENT OF ACCEPTING A JOB, IS THE FIXED SUM OF HOLIDAY OR REWARD BONUS PAID BY THE EMPLOYER IMPORTANT (BONUSES)?

7: Yes (4 women, 3 men)

2: No (1 woman, 1 man)

1: Unanswered (1 man)

WHICH IN THE CASE OF HOLIDAY OR REWARD BONUS DO YOU MEAN IS BETTER?

- 2: Pr. sector (1-5 empl.) (2 women)
- 1: Pr. sector (6-10 empl.) (1 man)
- 0: Pr. sector (11-49 empl.)
- 2: Pr. sector (50-99 empl.) (1 woman, 1 man)
- 4: Public sector (2 women, 2 men)
- 1: Unanswered (1 man)

IF YOU COULD CHOOSE, IN WHAT SECTOR WOULD YOU PREFER TO WORK?

- 7: Private sector (3 women, 4 men)
- 3: Public sector (2 women, 1 man)

IF YOU ARE NOT EMPLOYED ANYWHERE AFTER YOUR STUDIES HAVE FINISHED, WOULD YOU CONSIDER ESTABLISHING A PRIVATE COMPANY?

- 7: Yes (2 women, 5 men)
- 0: No, I continue searching
- 3: Don't know (3 women)

7.2 Appendix 2: Form for multiple-choice survey, Free Islamic University of Zanjan

اطلاعات شخصی

- مرد متاهل سن:
- زن مجرد شهر محل تحصیل:

دانشگاه تحصیلی

- دانشگاه آزاد اسلامی
- دانشگاه دولتی
- دیگر (لطفاً تصریح کنید):

اگر در دانشگاه آزاد اسلامی تحصیل بکنید چرا این دانشگاه را انتخاب کردید؟

- مایل بودم در دانشگاه آزاد اسلامی درس بخوانم
- در دانشگاه دولتی قبول نشدم
- رشته های مورد علاقه ام در دانشگاه دولتی موجود نبودند

رشته تحصیلی

- پزشکی
- علوم انسانی
- علوم پایه
- فنی و مهندسی
- کشاورزی و دام پزشکی
- هنر
- دیگر (لطفاً تصریح کنید):

مدرک تحصیلی

- دیپلم
- کارشناسی
- کارشناسی ارشد
- دکترا
- دیگر (لطفاً تصریح کنید):

کدام مهمتر است؟

- مدرک تحصیلی داشتن
- تحصیل در رشته مورد علاقه

چرا این رشته را انتخاب کردید؟

- علاقه شخصی
- امکانات گرفتن کار
- دست رسی این رشته در دانشگاه
- نفوذ اجتماعی
- دیگر (لطفاً تصریح کنید):

در طول مدت تحصیلی شاغل بوده اید

- بلی
- خیر

اگر کاری به شما پیشنهاد شود که مربوط به رشته تحصیلی تان نباشد آن را قبول می کنید؟

- بلی
- خیر

در هنگام قبول یک شغل چه چیز برایتان مهمتر است؟

- امنیت کار
- رضایت فردی
- حقوق خوب
- دیگر (لطفاً تصریح کنید):

.....

کدام را قدرتبخش تر می دانید؟

- بخش دولتی
- بخش خصوصی
- هیچ کدام

اگر بخش خصوصی یا دولتی را انتخاب کردید چرا این را قدرتبخش تر یافتید؟

.....

آیا قدرتی که کاری می دهد برای شما مهم تر خواهد بود؟

- بلی (لطفاً مشخص کنید):
- نخیر (لطفاً مشخص کنید):

.....

شما به یک کارمند بخش خصوصی بیشتر اعتماد می کنید یا بخش دولتی؟

- بخش خصوصی
- بخش دولتی
- هیچ کدام

اگر بخش خصوصی یا دولتی را انتخاب کردید چرا به این بخش بیشتر اعتماد دارید؟

.....

در هنگام قبول یک شغل تعیین مبلغ عیدی و پاداش کارفرما مهم است؟

- بلی
- نخیر

کدام را در مورد تعیین عیدی و پاداش بهتر می دانید؟

- بخش خصوصی
- شرکت های میکرو (۵-۱ تا کارگر)
- شرکت های کوچک (۱۰-۶ تا کارگر)
- شرکت های کوچک (۴۹-۱۱ تا کارگر)
- شرکت های متوسط (۹۹-۵۰ تا کارگر)
- بخش دولتی

اگر می‌توانستید انتخاب کنید در کدام بخش می‌خواستید کار کنید؟

- بخش خصوصی
- بخش دولتی

اگر بعد از اتمام تحصیلات جایی استخدام نشوید آیا به تأسیس یک شرکت خصوصی فکر می‌کنید؟

- بلی
- نخیر بیشتر دنبال کار می‌گردم
- نمی‌دانم

به نظر شما چرا ایران با مشکل بیکاری مواجه است؟

.....

.....

Personal interviews, February – June 2007

10 students at Zanzan Free Islamic University

Barmaki, Amir Hossein: Coordination Analyst, UNDP Tehran

Erdbrink, Thomas: Middle East journalist for Dutch news agency

Faraz, Arash: Worker's House (خانه کارگر)

Farzin, Ali: Programme Specialist and Head of Human Development Department, UNDP Tehran.

Farzin, Farshid: Earlier analyst at Atieh Bahar (private business consulting company).

Imani, Hossein: Assistant Professor at Faculty of Social Sciences, University of Tehran.

Khaleghy, Arman: Head of Iran House of Industry and Mines.

Khodaverdi, Ahmad: Economist at Zanzan Management and Planning Organisation

Military guard, Rasht

Omidvar, Ali Reza: Independent consultant. Earlier analyst at Atieh Bahar (private business consulting company).

Satvaty, Jaafar: Director, Department of International Affairs, National Youth Organisation.

Students in IT engineering at Zanzan Free Islamic University

Unemployed accountant, Tehran.

Zarifi, Mohammad: Ministry of Labour.

Bibliography

Amuzegar, Jahangir: *Iran's Unemployment Crisis*, in: Middle East Economic Survey, October 2004.

Bornstein, Morris: *Unemployment in Capitalist Regulated Market Economies and Socialist Centrally Planned Economies*, The American Economic Review, Vol. 68 No. 2, 1978.

Brumberg, Daniel: *Reinventing Khomeini: The Struggle for Reform in Iran*, The University of Chicago Press, Chicago, 2001.

Central Bank of Iran: *Economic Trends No. 44, First Quarter 1385 (2006/2007)*, Tehran, 2006.

Coen, Robert M.; Hickman, Bert G.: *Is European Unemployment Classical or Keynesian?*, in: The American Economic Review Vol. 78 No. 2, 1988

Constitution of the Islamic Republic of Iran, Douran Publications, Tehran, 1989 (2007).

(قانون اساسی جمهوری اسلامی ایران. نشر دوران. تهران. ۱۳۶۸ (۱۳۸۶))

Haynes, Stephen E.; Jacobs, David: *Macroeconomics, Economic Stratification, and Partisanship: A Longitudinal Analysis of Contingent Shifts in Political Identification*, in: The American Journal of Sociology Vol. 100 No. 1, 1994.

International Labor Organisation: *An Employment Strategy for Iran*, 2004.

Iran Daily Online: www.iran-daily.com

Kamalan, Seyyed Mehdi (Ed.): *Labour Law and Unemployment Insurance Law*, Kamalan Publications, Tehran, 2006 (Second Print 2007).

(کمالان، سید مهدی (تدوین): قانون کار و قانون بیمه بیکاری، انتشارات کمالان، تهران، ۱۳۸۵ (چاپ دوم ۱۳۸۶))

Minford, Patric; Naraidoo, Ruthira: *Vicious and Virtuous Circles – The Political Economy of Unemployment*, Cardiff Business School, Cardiff, 2006.

National Youth Organisation: *Youth Employment in Islamic Republic of Iran*, Department of International Affairs, Tehran, 2004.

OECD Innsikt: *Menneskelig kapital: Hvordan kunnskapen former livet*, in: OECD Multilingual Summaries, 2007.

O'Higgins, Niall: *The Challenge of Youth Unemployment*, International Labour Office, Geneva, 1997.

Phelps, Edmund S.: *The Structuralist Theory of Unemployment*, AEA Papers and Proceedings Vol. 85 No. 2, 1995.

Ramcharan, Rodney: *Higher or Basic Education? The Composition of Human Capital and Economic Development*, in: IMF Staff Papers Vol. 51 No. 2, International Monetary Fund, 2004.

Sadr, Kazem: *Technical Report on Policies to Extend and Strengthen the Scope and Institutions of Social Protection in Iran*.

Salehi-Isfahani, Djavad: *Labor and the Challenge of Economic Restructuring in Iran*, in: Middle East Report No. 210 Reform or Reaction? Dilemmas of Economic Development in the Middle East, Spring 1999.

Salehi-Isfahani, Djavad: *Human capital policy for Iran: toward integrated reform in education, labor market and social protection*, UNDP Tehran, May 2005.

Sevilir, Merih: *Human Capital Investment, Entrepreneurship and New Firm Creation*, University of North Carolina, 2007.

Statistical Centre of Iran: *Statistical Yearbook 1383 (March 2004 – March 2005)*. CD ROM.

(مرکز آمار ایران: سالنامه آمار کشور ۱۳۸۳)

Statistical Centre of Iran: *Statistical Yearbook 1382 (March 2003 – March 2004)*.

(مرکز آمار ایران: سالنامه آمار کشور ۱۳۸۲)

Statistical Centre of Iran: *Statistical Yearbook 1381 (March 2002 – March 2003)*.

(مرکز آمار ایران: سالنامه آمار کشور ۱۳۸۱)

Statistical Centre of Iran: *Statistical Yearbook 1380 (March 2001 – March 2002)*.

(مرکز آمار ایران: سالنامه آمار کشور ۱۳۸۰)

Statistical Centre of Iran: *Statistical Yearbook 1379 (March 2000 – March 2001)*.

(مرکز آمار ایران: سالنامه آمار کشور ۱۳۸۹)

Statistical Centre of Iran: *Statistical Collection of the Employment and Unemployment Conditions of Households, Bahman 1380*.

(مرکز آمار ایران: آمارگیری از ویژگی های اشتغال و بیکاری خانوار. بهمن ۱۳۸۰)

Statistical Centre of Iran: *Statistical Collection of the Employment and Unemployment Conditions of Households, Mordad 1381.*

(مرکز آمار ایران: آمارگیری از ویژگی های اشتغال و بیکاری خانوار. مرداد ۱۳۸۱)

Statistical Centre of Iran: *Statistical Collection of the Employment and Unemployment Conditions of Households, Mordad 1382.*

(مرکز آمار ایران: آمارگیری از ویژگی های اشتغال و بیکاری خانوار. مرداد ۱۳۸۲)

Statistical Centre of Iran: *Statistical Collection of the Employment and Unemployment Conditions of Households, spring 1383.*

(مرکز آمار ایران: آمارگیری از ویژگی های اشتغال و بیکاری خانوار. بهار ۱۳۸۳)

Statistical Centre of Iran: *Statistical Collection of the Employment and Unemployment Conditions of Households, Ordibehesht 1384.*

(مرکز آمار ایران: آمارگیری از ویژگی های اشتغال و بیکاری خانوار. اردیبهشت ۱۳۸۴)

United States General Accounting Office: *Human Capital – A Self-Assessment Checklist for Agency Leaders*, United States, 2000.

Valadkhani, Abbas: *Unemployment Conundrum in Iran*, University of Wollgong Economic Working Paper Series, 2006.