6.1 Introduction

One of the main determinants of economic growth around the world since last four decades has been education. Education plays a key role in the ability of developing countries to absorb modern technology. The expansion of knowledge not only paves the way for the enlargement of human choices, but also provides better living conditions through greater access to employment opportunities and improved health. It helps in creating a more productive labor force and endowing it with increased knowledge and skills who called educated manpower or human capital. In fact, effective use of physical capital itself is dependent upon human capital.

The review of literature confirms the important role of educated manpower as a source of progress and economic growth. Investment in human capital is important because it can remove many of the weaknesses of the labour force that acts as obstacles to higher productivity, such as, poor health, illiteracy, unreceptiveness to new knowledge, resistance to change, lack of mobility to work hard. Improvements in the health, education and skill of the labour force invariably conduce to higher labour productivity. In fact, the human resources are solely responsible for transforming traditional economies into modern and industrial economies. The difference in the level of economic development of the country is largely a reflection of the differences in the quality of their human resources.

In Iran, education has a historical root but like other developing countries more attention to modern education started after Second World War. After Islamic Revolution, new government had paid great attention to expand education and so the rate of literacy and number of higher educated manpower increased in Iran.

A wide range of econometric studies indicates the positive effect of human capital on economic growth. In this study, researcher fined same result between human capital and economic growth in Iran. But, there are some problems for using available human capital in Iran. Researcher attempted to determine the causes of this disability.
6.2 Summary

As stated in Chapter One, researcher has explained the topic, importance of study, objectives, hypothesis, scope of the study and research methodology. In research methodology researcher described the model and variables. Model is Raymo’s (1995) \( Y = f(K, L, HC) \) has been used. The growth accounting function with human capital is dependent upon three input factors: labor, physical capital, and human capital. According to Reymo’s model, human capital have influence on the growth accounting function with two indices, number of higher educated employee and higher education and research expenditure. According to above, physical capital (K), labor (L), higher educated manpower (EL) and higher education and research expenditure (RC) are dependent variables and Gross Domestic Product (GDP) is independent variable.

Chapter Two contains the following aspects of review of literature studied from different angles:

1. Introduction
2. The concept of human capital
3. Importance of human capital for economic development
4. Comparison between human capital and physical capital
5. Human capital formation
6. Human capital indicators
7. Problems of human capital formation

Chapter Three, provides an overview of geography and economy of Iran, brings out many interesting findings. According to these findings, after one decade of high growth rate of population in Iran, it later decreased rapidly. The most important economic event of the last century in Iran is the transition from high to low fertility.
Not only in decreasing the population growth rate, but also in increasing the literacy rate Iran was successful. In last four decades, the literacy rate increased from 26.86 per cent to 84.61 per cent. Findings show the significant increase in the rate of women’s literacy compare with men in this period. The literacy rate for women rose from 17.42 per cent to 80.34 per cent, while the rate for men increased from 39.19 per cent to 88.74 per cent. Employment factors are some different. The participation rate decreased from 47.5 percent in 1956 to 35.3 per cent in 1996. Unemployment rate increased from 2.6 per cent to 14.2 per cent from 1956 to 1986, but it decreased in 1996 to 9.1 per cent. Human development index in Iran increased from 0.566 in 1975 to 0.746 in 2004. All HDI indices after suitable increasing rate from 1975 have low increasing rate since 1985 and Iran has hard way to join the high human development countries.

This Chapter is classified as:

1. Review of geography of Iran includes location, natural regions and natural resources.

2. Review of manpower in Iran includes population, education and employment.

3. Review of national account in Iran includes gross domestic product, national income, inflation, poverty and income distribution, public sector, foreign trade and investment and saving.

4. Review of human development in Iran.

In Chapter Four, researcher had a short study about the innovated methods in econometric related with subject of study (empirical models and econometric method). He used the unit root test for choice the best methods for estimation and Then with the help of the Two Steps Engle-Granger and Autoregressive Distributed Lag method he estimated models for testing the effect of human capital on the economic growth of Iran and interpreted results.
Chapter Five discusses the problems faced by Iran in using available educated manpower. For finding these problems researcher used questionnaire with 51 questions about the subject in four groups (Economical, Educational, Socio-cultural and Administrative).

In the first part of this Chapter, researcher had reviewed unemployment of higher educated manpower and causes of this problem in Iran. The main points are:

1. The study of the process of unemployment of Higher Educated Manpower (HEM) in Iran.
2. The distribution of the higher educated employed ones in different economic sector.
3. The unemployment of HEM.
4. Higher education expenditure in Iran.
5. The reasons for unemployment of the HEM in Iran.

In the second part, researcher analyzed the result of questionnaire for determine and priority of effective factors on unemployment of higher educated manpower. These results are supported by statistical techniques. The main points are:

1. Testing hypothesis
2. Results
3. Conclusion

6.3 Findings

The major findings of the study are as follows:
1. By estimating the models through the Autoregressive Distributed Lag (ARDL) method and the obtained results, the positive effect of the HEM
human capital) on the real gross domestic product clarified. Thus, the HEM (human capital) is positively effective on economic growth of Iran.

2. According to our samples opinion, all 14 economical factors have effect on unemployment of HEM. The first effective economical factor is the prolific dealership and trading activity compared with the productive activities.

3. According to our samples opinion, all ten educational factors have effect on unemployment of HEM. The first effective educational factor is the absence of effective relationship between universities and different economic section.

4. According to our samples opinion, from ten cultural and social factors, nine factors have effect on unemployment of HEM and one factor is no effective. The first effective factor is the absence of entrepreneurship and entrepreneurs and the no effective factor is the absence of women employment in various economic sections.

5. According to our samples opinion, all 17 administrative factors have effect on unemployment of HEM. The first effective factor is the assignment of the unqualified individuals at the head of executive management of organizations.

6. The priority of effective factors on unemployment of HEM is administrative, educational, economical and socio-cultural respectively.

6.4 Policy Implications

Based on the findings of the study, the following policy implications are made.

1. Assignment of the qualified individuals at the head of executive management of organizations.
2. To establish sufficient situation for attendance of entrepreneurs in economic activities.

3. Governmental support of knowledge based firms.

4. To establish industrial clusters.

5. To establish stability in the economic and trading schedules and regulations.

6. Omission of the governmental Monopolies and semi-monopolies.

7. Decrease the tax rate of productive activities.

8. Increase the tax rate of dealership and trading activity.

9. Concentration on the scientific opinions in decision makings.

10. Taking effective policy regarding HEM employment.

11. To establish effective relationship between universities and different economic sections.

12. Reconsideration on the subject and content of university courses.

13. To make proper linkage between the capacities of university admission in various fields and job market needs.

### 6.5 Suggestions for Policy Makers

1. To make information centers to present information about job market needs.

2. To determine of compiled principles in meritocracy.

3. Revision on the structure of administrative system for increasing efficiency of governmental organization specially which are related to employment of HEM.
4. To expand the work training for private sector managers to believe in scientific and practical abilities of the HEM.

5. New appointments have to be according to educational qualifications.

6. Revision in the employment rules according to current needs.

7. To expand new courses such as Information Technology (IT) that leads to establish new jobs.

8. To expand the work training for university staff for new teaching methods and job market needs.

9. Revision on the evaluation of student’s educational progress which leads them to knowledge and understanding.

10. To expand the scientific-practical training according to job market needs.

11. Revision and stabilization on the regulations concerning the economic activities.

12. Distribution equal facilities for establishment of productive firms in all provinces.

6.5 Suggestions for Future Study

The effect of human capital on economic growth in Iran can be re-estimated with new data. In fact, researchers can estimate these models after publishing new result of general census of population and housing in 2006.

This study estimated the effect of human capital on economic growth for Iranian economy. Next studies can be estimate the effect of human capital on economic growth in each economic sector such as, agricultural, industrial and services separately.
Researcher in this study used Raymo’s model, which it is used to estimation the effect of human capital on economic growth in Japan. Researchers in next studies can be using other models to estimate the effect of human capital on economic growth in Iran and compare the new results with present study.

In the resent development of economic literature, the importance of social capital is conformed. The survey of social capital was behind the scope of this study. But, other studies can be considered the relationship between social capital and human capital.