# Effect of the Retirement Policy in Degeneration of Employment Opportunities in Bangladesh

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Abstract: Bangladesh's unemployment crisis is a key source of concern. This study examines the role of early retirement on Bangladesh's unemployment crisis using both primary and secondary data. Primary data is gathered through field surveys, and secondary data is compiled from the government's Management Information System (MIS) department, the human resource departments of Sonali Bank, Janata Bank, Rupali Bank, Agrani Bank, and the administrative departments of the naval force, air force, and armed force. The World Bank (WB) and the Bangladesh Bureau of Statistics provided secondary data on population growth rates and industrialization (BBS). According to the study, retirement is expected to have a substantial impact on employment in Bangladesh. Industrialization, on the other hand, has little effect on employment. The population growth rate has a detrimental impact on employment. Furthermore, this study reveals that the tendency to engage in business is strong among retired personnel from the defense sector, at 75%, but only 30% in the banking sector and only 12.50 percent in the education sector. In the defense sector every year, a large number of people get employment with a high rate of retirement. But in the education and banking sector, there is no stability in the case of employment and retirement. These two sectors have high employment levels in some years, but low employment levels in the majority of years due to the low retirement rate. However, there is a positive association between employment and retirement in all of the sectors studied. The regression result reveals a positive association between employment and retirement, indicating that if retirement is increased by one unit, employment will increase by .929 units.

#### Introduction

Unemployment refers to a situation, when persons of working age i.e., belong to the workforce, are seeking but not getting any work at prevailing market wage during a specified period. This concept of unemployment in Bangladesh is supplemented by the concepts of visible and invisible underemployment. The total civilian labor force of the country in 2009-2010 is 53.7million; of which 2.7 million are unemployed (BBS report 2010). Unemployment among educated youths is one of Bangladesh's significant issues. Bangladesh is the world's eighth most populous country (Bangladesh Economic Review 2011), but there aren't enough work opportunities to meet demand. Bangladesh, like other developing countries, suffers from large-scale disguised unemployment in the sense that a considerable portion of the population engaged in agriculture could be eliminated without hurting agricultural productivity if agricultural techniques remained unaltered. Hidden unemployment exists in huge industries, offices, and organizations, particularly in the public sector, in addition to agriculture.

In Bangladesh, unemployment is a major concern. Hundreds of thousands of students graduate from college and university every year. Despite the fact that providing work for

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the young generation is one of the government's key obligations, the government has failed to meet the demand for jobs among the large population. Different government institutions and private organizations manage only a small portion of the total unemployed, while the majority stay unemployed. For a long time, British government was the primary source of this issue. When the British arrived in the Subcontinent (India, Pakistan, and Bangladesh) they began to do commerce and exploit the region. Despite the fact that certain industries were founded, they were all located in Indian Territory. As a result, the British disregarded the Bangladesh region. Pakistan adopted the same role after the end of British control in 1947, establishing all types of industry in West Pakistan rather than East Pakistan. East Pakistani faced a freedom fighting war in 1971 as a result of Pakistani monopoly rule, and after nine months of continuous struggle, Bangladesh became an independent state. However, Bangladesh has been mired in a political crisis since 1971. As a result, no government will be able to take a long-term, major action to address the grave unemployment crisis.

No nation can expect a robust economic base or a solution to the unemployment crisis without Industrialization. However, for an economy to industrialize, it must have a large amount of savings and investment. However, according to Bangladesh's 2011 economic report, per capita income is only \$818 (BBS 2011), and most households cannot satisfy their daily necessities with this money. As a result, Bangladesh's savings and investment are low. There is now another alternative for Bangladesh's industrialization called as foreign direct investment. But in order to attract foreign direct investment, Bangladesh needs to assure political stability and developed a transport and communication system and other related facilities. But as a developing country, it is not possible to satisfy all the matters within a few years. Furthermore, due to a lack of liquidity in the bank, every growth initiative must rely on foreign loans and aid, which come with stringent terms and conditions that are detrimental to Bangladesh's economy. It is noteworthy that the world is currently experiencing a severe economic downturn, and industrialized countries are unable to invest in our country.

Bangladesh must adopt a new policy to address the unemployment problem in a chronological manner. Among the several policy alternatives, early retirement is the most pressing concern. The retirement age for government employees in Bangladesh is 59 years (index Mundi 2011), whereas the autonomous body retirement age varies from institution to institution, ranging from 60 to 65 years (Statistical pocket yearbook 2009). Bangladesh's armed forces have a separate retirement age system. According to the 2011 Bangladeshi population data, the average life expectancy is only 65.8 years, and those who work after the age of 60 become physically handicapped (field survey 2011) and are unable to conduct work spontaneously.

A younger person, on the other hand, can provide better service than an older person. Furthermore, if the retirement age is 55, a person who retires at that age can work elsewhere and use his retirement advantages, such as money and a pension. This will assist Bangladesh in regenerating its currency. However, the retirement age has been raised from 57 to 59 years, owing to the fact that Bangladesh's average lifespan has climbed to 67.2 years (Bangladesh economic survey 2011). There is a reality gap here. Infant mortality and maternal mortality rates are, in fact, the most powerful causes of increased longevity. This does not imply that the old employee's strength has been increased. Rather, this expansion of the elderly's service has obstructed the entry of

educated youth into the labor market. If the old employees are fathers, and the educated and uneducated youths are sons and daughters, it can be said that the aged father is happily breathing in the fresh air under the open sky while sitting and blocking the exit of the vicious circle of unemployment within which his son is suffocating in the poisonous gas and agony of unemployment. The father will benefit from the job opportunity for only a few years, but his son's service age will have passed, and he will no longer have the possibility to work. Now is the moment to consider what is good and what is terrible from both an economic and humanitarian standpoint. In the current situation, there is no other good and quick way to tackle Bangladesh's unemployment crisis but to implement an early retirement system. It's also possible that the idea of early retirement provides a ray of hope for Bangladesh's severe unemployment situation.

#### **Background of the study**

#### Study objectives

Bangladesh's unemployment problem is a major issue. It is to blame for the emergence of other serious issues in Bangladesh, such as social instability, inflation, reliance on foreign aid, and so on. Bangladesh's significant challenge is the creation of job opportunities. However, when the economy does not support the emergence of new jobs through industrialization or other initiatives, early retirement plans might benefit the economy by providing job opportunities for the unemployed labor force.

## **General Objective**

The overall goal of this research is to look into the impact of early retirement in Bangladesh's unemployment problem. Following specific objectives is critical for achieving the overall goal.

## **Specific Objectives**

The specific objectives of this research provided are many folds:

To reveal the recent unemployment status of Bangladesh.

To examine the correlation between employment and retirement.

To disclose the effect of age on employment generation and money regeneration.

To derive policy recommendations for enhancing early retirement schemes in the economy by removing the problems associated with it.

Here, early retirement does not indicate retirement at the age of 45 years or 50 years. Mainly here early retirement indicates retirement at the age of 55 years when a person can work in another place or has an enthusiasm to take the risk by investing money in another sector. But if a person is retired at the age of 60 years or 65 years he or she becomes physically disable. So, a large amount of money he or she gets at the time of retirement remains in the bank idly or is utilized for household purposes. As a result, the economy does not get any benefit. But if he uses the money for productive purposes then the economy can gather benefit in two ways firstly total productivity of the economy is increased; secondly the employment opportunity is created in the economy. Such as if that money is utilized in establishing a firm at those times some people are employed at that job.

In Bangladesh, the retirement age has been increased from 57 years to 59 years (The Daily Jugantor, 27 December 2011). Here government argues that the average longevity of life has been increased from 50 years to 65 years (The Daily Jugantor, 27 December 2011). But if the retirement age is increased then few numbers of people will be retired in these two years. As a result, the young section of the society whose age has been 28 years, will not get a chance of getting a government job so his life will fall into a depression. Here it can be mentioned that every year thousands of students are passing from public, private, and national universities. All the students are talented and they have the right to get a suitable job. But when they enter the job market, they face a different environment. Here for one post thousands of students compete. So only a few students get a chance to avail themselves of the job. Moreover, when there are few posts, there is a high possibility of corruption. Here it can be seen that only the candidates who have the capability of giving bribes can get the job. But we know that most of the students of our country come from middle-class and lower middle-class families. So, they cannot get the job. As a result, their family has to fall into a problem and they have to lead a miserable life. So, with the increase of unemployment, if an employment opportunity is not created at that time mismanagement will be created. But as Bangladesh is a developing country so it is not possible to create job opportunities for all the unemployed persons. So, in this case, early retirement is very important to decrease the excessive pressure of unemployment.

If a person is engaged in more time in a job, he becomes efficient at that job. But it is not true for all the persons. Some people become physically disabled. On the other hand, some people think that he is the senior person in his sector, so no one will complain against him. As a result, he will give less service than a younger employee. But if there is a contractual employment system in the sense that one person who will give more service will be employed after his retirement otherwise, he will be bound to retire from his job. At that time the person will competitively give more service. As a result, the GDP growth rate of Bangladesh will increase.

Maybe that by late retirement government becomes beneficial because when retirement age is increased government has not to bear excessive pension or other facilities that have to be paid to the retired person. But the government does not count that how much loss he has to face for late retirement. Such as if a person is retired a new person will be employed in that job and he can give more service than the oldest person. This can remove the unemployment problem of a country. Moreover, if the government makes a rule that pension will be given in three installments at that time the government will not have to bear excessive pressure. On the other hand, it is known to all that, there is a budget for every employee. So, if the person is retired government can give him a pension from that budget.

When a person remains in a profession for a long period, he becomes experienced about how to happens corruption. So, if the retirement age is increased, the service holder can get more opportunities for corruption because his experience may make him cunning and greedy to commit greater corruption. But it is very difficult for a new employee who had been employed a few years ago. Moreover, the new employee will give more service than the older.

When there is early retirement in a country at that time the opportunity of getting rank is increased for the assistant employees. As a result, the work efficiency of the people increases. On the other hand, for retirement, more employment opportunities will be created for the unemployed person. If this happens at that time father will get the opportunity of taking leisure and the unemployed son will get the opportunity of work in his age bindings.

In Bangladesh, there are a large number of an educated unemployed people. So, if the retirement age is late at that time this educated unemployed person will not get a job within their age bindings. So, they will not marry at a specific age. This will create depression, generation gap, crime, etc. But if there is early retirement, then these unemployed persons will get a job and social stability will be established.

In the reduction of corruption early retirement keeps a great role. When more vacancy is created more people will get the opportunity in entering the job. But when posts are few, at that time without money no person can get a job. In this case, the general people cannot come forward.

In removing income inequality early retirement can keep a great role. The mass student of our country has come from a middle-class family. So, when he does not get a job, he becomes poor. Because of the lack of collateral, he does not get any loan from the bank. Moreover, for the lack of money, he cannot give bribes. So, he does not get a job. But the people who remain in the job become rich day by day. This increases social inequality.

After 2012 Bangladesh will get the highest number of productivity and a smaller number of dependent persons. This type of opportunity gets a nation for one time. This time is called bonus time of population i.e., most of the people age is between the age of 15 years to 64 years. The number of people within this age is 59.26% which is the highest in the history of Bangladesh. Now it is the highest time to utilize this population. But if this time is over then the country will not be developed with expectation. It is said here that India is covering the middle time of utilizing efficient labor (Daily ittefaq, 28 December 2011).

The unemployed problem is solved when the private sector is developed. But for the development of the private sector private investment is very important. But there is a liquidity problem for the bank. The government takes more loans to meet the cost and use the money in the unproductive sector, which makes the liquidity problem more. But if the government uses the money in the productive sector employment opportunity can be created. For liquidity problems, the private investor does not get money for investment. At present interest rate for the productive loan is 18%, which is too high. For the high rate of interest private investor or does not come forward to invest money. Moreover, for using more money in the unproductive sector inflation is increasing day by day. Now inflation rate is 11.42%. To remove inflation Bangladesh bank is taking the step of contractionary monetary policy. But for contractionary monetary policy, if the central bank takes 100 TK from the market, it creates the effect of 453 tk (The Daily Ittefaq 5 December 2011). Now import is more than he exports. To meet the excessive import demand foreign reserve ratio is decreasing day by day. Moreover, the value of money is falling day by day against the dollar. On the other hand, for the international instability, foreign remittance is decreasing day by day. It creates a great problem for the country.

Now the government should take another policy such as an early retirement scheme to solve the unemployment problem of Bangladesh. If the government does not create job opportunities for the unemployed person, at that time the nation will be suffered from many problems. In the case of foreign investment, the same case has happened last year foreign investment was 21crore 64 lac, but this year it is only 8 crore 54 thousand dollars (The daily Ittefaq8 December 2011). So, in this, there is no opportunity to create more employment. So, to solve unemployment early retirement is very important which can solve the unemployment problem to some extent.

For the development of a county, technological development is very important. But in this case, it can be seen that the present generation are technologically more efficient than the eldest person. So, if a country emphasizes early retirement in that case more enthusiastic person will come in the job. At that time more GDP will be increased and ultimately unemployment problem will be solved to a great extent.

#### Literature review

The literature support provided by secondary sources was not adequate and even in some cases irrelevant with this study. Very few publications were found containing specific chapters and discussions about early retirement. However, some secondary sources such as various reports, working papers, discussion papers, articles were carefully gone through for this purpose. Some of the glimpses are furnished in the following paragraphs for the orientation on the issue.

Arie et al. (2010) found in their study that early retirement can be considered as a win-win solution. The older people who had worked hard during the reconstruction period after World War II could take up a well-deserved early retirement pension, while the young who were at risk of becoming a "lost generation" could take their places in the labor market. So the desire for an early retirement scheme was to create and preserve job opportunities for the young at that period. Burkhauser (1979), Gordon and Blinder (1980), Mitchell and Fields (1982), Burtless (1986), Gustman and Steinmeier (1986) pointed out an important prediction from their research that if both public or private sector old-age benefits are increased, early retirement will be more attractive for the individual. Moreover, when retirement is delayed present value of lifetime pension benefits falls. Blöndal and Scarpetta (1998) and Duval (2003) confirmed that early retirement is more prevalent in those countries where early retirement regulations are more generous. The two indicators used for the generosity of early retirement provisions are the old-age pension replacement rate which measures the expected pension income as a fraction of the earnings just before retirement and the decrease in accumulated pension wealth accrual when postponing retirement.• Gruber and Wise (1999) showed that for various countries retirement tends to take place around the age when early retirement benefits can be claimed. While it is typically assumed that generous public early retirement provisions increase the incidence of early retirement because more workers choose to retire early ('voluntary' early retirement). • Patrick Purcell (2009) found in his research that labor force participation among persons aged 55 is influenced by general economic conditions, eligibility for Social Security benefits, the availability of health insurance, and the prevalence and design of employer-sponsored pensions. For example, labor

force participation among people 55 and older may increase due to the trend away from defined benefit pension plans that offer a monthly annuity for life. The health insurance also may result in more people continuing to work until they are eligible for Medicare at 65.

- Romain Duval (2009) confirmed that old-age pension systems and other social transfer programmers are high in most Continental European Countries, compared with Japan, Korea, English-speaking, and Nordic countries. There is also a wide dispersion in implicit tax rates across the OECD countries. Simple cross-country correlations suggest that such taxes induce older male workers to anticipate their retirement decision. This indicates that old-age pension and other retirement schemes have a major impact on the retirement decision.
- Conde-Ruiz & Galasso (2004) told that early retirement has negative, long-lasting effects on the growth of the economy and it increases the tax bill of all future workers. If more people retire early, there are fewer people to pay the bill. As a result, there is a steep increase in taxes to pay for this retirement which can have devastating effects on the economy. This may create distorting effects on incentives to work and lowered available income for consumption. They argued that providing early retirement schemes reduces the incentives to accumulate human capital and shifts part of the increase in the tax burden on future generations. This leads to lower economic growth both now and in the future.
- Hakola and Uusitalo (2005) confirmed that firms react to public early retirement provisions by encouraging retirement. But after the pension reform was introduced which eliminated the subsidization of workforce reduction, early exits of older workers significantly decreased.
- Hutchens (1999) illustrated this idea with an implicit contract model of early retirement where a risk-neutral firm contracts with a risk-averse worker. The worker's risk aversion and the desire for consumption smoothing assure that the firm will enter into a three-period contract with the worker and thereby raising its profits. Under the contract, the worker is employed in the first period, either employed or early retired in the second period, and unemployed in the third period. Employment status is hence only uncertain in the second period where an early retirement can take place.
- Lazear (1979), Sala-I-Martin (1996) found that pensions could be beneficial for economic growth based on certain assumptions. The most important assumption is to remove a less productive workforce with more productive workers.
- Lazear (1979) found that the presence of a diversity of productivity depends on the diversity of talent. Different levels of productivity can be found in all cohorts. If this is the case, one could potentially make the economy more efficient by removing the least efficient from the workforce before mandatory retirement age. For instance, through an early retirement scheme. Combined with the findings of Bratberg et al. (2004) and Røed& Haugen (2003) who claimed that half and two-thirds of the retirees respectively would have stayed in full employment until age 67, this could be a negative force on economic growth.
- Ahituv&Zeira (2000) showed older workers may face problems due to entering new technology in the market. But technological development is often used as a black-box

term for explaining continuous economic growth. In growth models, it is often just set as a parameter, without any further explanation. However, for development purposes, this technological development has a very concrete significance. But for entering new technology a country needs more efficient machines, computerization of processes, and access to advanced tools requiring a high degree of training.

- Lindbeck (2003) argued that the generous welfare state cannot afford to maintain a
  costly pension scheme through unfavorable shocks such as demographic changes or
  slower productivity growth. A widening of the pension base and a shrinking of the
  tax base may have a degrading effect on economic growth.
- James & Brooks (2003) argued that the political compromises, a government has to
  make to come to or stay in power and is directly linked with the willingness to
  promote pension reforms. The political body takes incentives to change the past
  system and reforms the pension system. But they do not think whether it is good for
  the economy or not.
- Thus, there is a gap in the literature on the linkage between early retirement and employment generation and the determination of the effect of early retirement on employment generation. In the literature, there is also a gap in the determination of the effect of age on money regeneration. Such analysis becomes particularly important in the current context where the rate of employment needs to be accelerated and all possible means need to be found to make the economy of Bangladesh free from the unemployment problem. The primary motivation behind the present paper is to contribute to filling the gap in the literature mentioned above by analyzing the phenomenon of late retirement of some selected sectors of the economy.

#### Methodology

This research is mainly based on primary and secondary surveys. Thus, it is survey-based exploratory as well as explanatory research. To conduct the primary survey a two-stage sampling technique was applied. In the first stage, out of seven divisions of Bangladesh Khulna division was selected purposively. At the second stage from the whole Khulna division, one hundred and twenty persons who have been retired from the selected three sectors were selected purposively. The secondary data used for this study are mainly time-series data from 2001 to 2010 and have been collected from the Management Information System (MIS) department of government primary and secondary school, human resource department of Sonali bank, Janata bank, Rupali Bank, and Agrani bank and administrative department of naval force, air force and armed force. Secondary data such as population growth rate and rate of industrialization from 2001 to 2010 of Bangladesh also have been collected from the World Bank (WB) and Bangladesh Bureau of Statistics (BBS). The primary data used for this study have been collected from a field survey.

Data were collected from primary and secondary sources. The primary data were collected by using a questionnaire. The questionnaire was pretested before finalizing. The

questionnaire was fulfilled by each respondent. Multistage, purposive, and random sampling techniques were applied to collect both qualitative and quantitative data. To address the stated objectives both descriptive and econometric techniques are employed. The empirical model used in this study is-

$$E = f (Re, PGr, In)....(1)$$

Where E = Employment generation

Re=Retirement

PGr=Population growth rate

In=Industrialization

Econometric estimation of the linkage among employment generation and retirement, Population growth rate, Industrialization can be explained with the help of a multiple linear regression model. The above mathematical model can be postulated as:

$$E = bo + b1 Re + b2PGr + b3 In + ui....(2)$$

Where, E = Employment generation

Re=Retirement

ui = Stochastic error term

Validation of the structural equations of the model is tested individually by the goodness of fit (R2), individual significance of variables (t-values).

In this study, the relationship between employment and retirement is shown through graphs. Here for three sectors, three graphs are drawn. Average consumption, precautionary savings, asset building, and bank savings of the retired person of Education, banking, and defense sector is shown through a table in this study. After this, the respondent's involvement in business is described by a figure where the percentage of respondent's involvement in business is shown. In this study respondents' view towards early retirement is described through a matrix table where three views of the respondents are considered such as in favor, disfavor, and neutral view.

#### Hypothesis of the Study

- The study will examine the following hypothesis:
- $H_0$ :  $\mu$  = Retirement does not significantly influence employment of Bangladesh.

#### Overview on employment and unemployment condition of Bangladesh

## Measurement of unemployment and real unemployment

 New liberalism supported by World Bank and IMF has not reduced the unemployment problem of Bangladesh rather than after introducing these reform activities the unemployment problem of Bangladesh has been increased. There are a large number of arguments about the counting system of unemployment in Bangladesh. Here in case of enumerating unemployment, it is asked that whether he has done any work in the last month for earning money, if not whether he wants to do work in the current wage rate, or is he searching any job, if he would search, he will be counted as an unemployed (The Daily Ittefaq 5 December 2011).

- Mainly this concept is appropriate for developed countries but not for third world countries like Bangladesh. In many industrialized countries there is an allowance for the unemployed labor force. But like other underdeveloped countries, there is no unemployed allowance in Bangladesh. As a result, the active person does various unsuitable works or shares the household work among the household members. For this reason, a large number of workers remain unutilized but they are not included in the unemployed labor force.
- In the underdeveloped country though there is a large number of the unemployed labor force as the labor market is not organized so they do not search for work by following any hard and fast rule. As a result, it can be seen that by doing work one day, two days, or one week they are not being included in the unemployed labor force list. For this reason, there may not be a single unemployed person in a village. In rural areas, labor forces are employed temporarily. As a result, they get a chance to do work for some days in a month. But this does not mean that they are not unemployed. But at the time of unemployment enumeration, these persons are not being counted.
- Like other underdeveloped countries, Bangladesh also has to face a great problem in the case of measuring unemployment among women. In this case, it can be seen that most of the adult women do the household work. Since they are engaged in household work so they are not included in the unemployed labor force. But who can say that if they get suitable facilities, they will not want to do work? The men and women who work in various offices also do household work. So, by deducting a large portion of the unemployed population from the unemployed labor force list, the real picture of unemployment cannot be found.
- Despite following the incorrect method of measuring unemployment, the unemployment rate of Bangladesh is increasing day by day. In table 1, it can be seen that in 1961 where the unemployment rate was 0.5%, after introducing new liberalized reform in 1983-1984 unemployment rate was increased to 1.8%. In 1999-2000, the unemployment rate was increased to 4.3% and up to the last labor force survey introduced in 2005-06, this rate remained constant. But if the population is considered from 1961-2011, it is seen that the population of Bangladesh has been doubled but the unemployment rate has been increased to near at five times despite following the incorrect method of enumeration. On the other hand, if the correct method is followed unemployment rate will be increased.

Table 1: Unemployment rate among the active person of 15 years or more in various times in Bangladesh

Year	Unemployment rate (%)
1961	0.5
1983-1984	1.8
1990-1991	1.9
1995-1996	3.5
1999-2000	4.3
2002-2003	4.3
2005-2006	4.3

Source: Compiled data from BBS,2010

The number of the disguised unemployment rate is increasing which means the people who work less than 35 hours in a week. In table 2, it can be seen that the present unemployment rate is 24.53%. In 1999-2000 this rate was 16.6%. This unemployment rate will be increased if household labor is considered.

Table 2: Partial unemployment rate among 15 years or more persons in various times in Bangladesh (In percentage)

Year	Partial unemployment rate(working time less than 35 hours in a week)
1989	43.4%
1990-91	42.8%
1999-2000	16.6%
2002-2003	34.2%
2005-2006	24.53%

Source: Compiled data from BBS,2010

In order to know the employment opportunity by introducing new liberalized economic reform activities in Bangladesh we have to consider those people who are being considered as employed in different occupations. In this case a disappointed picture can be found from the table-3.

Table 3: Employed persons 15 years and over by status (in percentage)

Status in Employment	1983-84	1990-91	1995-96	1999-2000	2002-2003	2005-06
Paid employee	17.4	11.7	11.9	12.6	13.7	13.87
Employer	-	11.4	0.3	0.2	0.4	0.27
Self	38.8	15.4	32.2	35.1	44.8	41.9

Status in Employment	1983-84	1990-91	1995-96	1999-2000	2002-2003	2005-06
employed						
Domestic worker	15.9	47.2	37.7	33.8	18.4	21.68
Day labor	27	13.9	17.9	18.3	20	18.19

Source: Compiled data from BBS, 2010

From the table-3, it can be seen that among the total population the number of populations is engaged in an institutional job is too low. Here the number of self-employed populations is high. This rate was 39% in 1983-84 but this rate has been increased to 41.9% in 2005-06. But those who are employed in work do not get any salary and they will be considered as unemployed. This rate has increased from 16% in 1983-84 to 22% in 2005-06. Another portion of workers is day labor which rate has also been increased from 13.9% to 18.19% in 2006.

It will be more reasonable if institutional sectors are considered for the measurement of the unemployment problem in Bangladesh because employment does not mean only earning money but also the environment, security, various social and economic facilities, status, etc. also related to it. If any person gets this type of facility from any job at that time that employment level gets its fulfillment. This type of facility can be got only from the institutional job. But after introducing new liberalized reform activities employment opportunities in the institutional sector have been reduced at an alarming rate. In 1983-84 employment in the institutional sector was near about 18% but this rate decreased to 12% in 1995-96. But in 2005-06 this rate decreased to 14% in table -3.

On the other hand, a large portion of people among the self-employed and day labor are mainly unemployed who work less than 35 hours. Most of them are economically insolvent. This insolvency will be cleared from the given income structure in table-4.

Table 4: Income structure among the self-employed day labor work force (in percentage)

Year (type of employment)	1-500 tk	1-1000 tk	1-3000 tk	3000 or more	10000 or more
2002- 2003(self- employed)	1	14.2	75.8	24.2	1.2
2005-2006(Day labor)	52.55	93.47	-	-	-

Source: Compiled data from BBS, 2010

Here almost 94% of day labor earns 1000 tk. in a month and 76% of the self-employed worker earns 3000 or less. At present this situation has not been changed. Moreover, for the high inflation rate, this situation has been degraded more.

Year Wage rate in Consumer's Real wage current price cost 1973 155 168 73.80 1977 270 419 51.55 1985 941 560 47.60 1992 950 1449 52.45 2000 950 1973 38.52

Table 5: Minimum wage rate in various levels in Bangladesh

Source: Wage commission report,1992, GOB,2001, quoted from Anu Mahammad

On the other hand, wage has been increased in current price but real wage has been decreased. In table-5, it can be seen that in 1973 real wage rate was 73.80 but in 2000 this rate decreased to 38.52. So, it is cleared that new liberalized reform activities have increased the unemployment problem. For the pressure of reform activities in Bangladesh a large number of industries have been closed which has increased the unemployment problem. This is the real picture in the case of the employment situation in the economy of Bangladesh.

#### Present unemployment situation in Bangladesh

The unemployment problem is becoming severe day by day. The severity of the unemployment problem can be imagined if we see the data of labor force statistics. In table 6, It can be seen that the total labor force of Bangladesh was 46.3 million in 2002-2003, 49.5 million in 2005-06, and this rate was increased to 53.7 million in 2009-2010 of which 40.2 million were male and 13.5 million were female.

It also can be seen from Table 6 that the employment rate of the labor force has increased from 39.0 in 1999-2000 to 51.0 in 2009-2010. But at the same time, the unemployed population has increased from 1.8 million in 1999-2000 to 2.7 million in 2009-2010. This increase in unemployed indicates that with the increase in the labor force, employment opportunity has not been flourished.

Characteristics **LFS LFS LFS LFS** 1999-2000 2005-2006 2009-2010 2002-2003 Labor force (million) (15+) Both sex 40.7 46.3 49.5 53.7 Male 32.2 36.0 37.4 40.2 Female 8.5 10.3 12.1 13.5 **Employed Population (million)** 39.0 47.4 Both sex 44.3 51.0 31.1 34.5 Male 36.1 38.5

Table 6: Labor force statistics

Characteristics	LFS	LFS	LFS	LFS
	1999-2000	2002-2003	2005-2006	2009-2010
Female	7.9	9.8	11.3	12.5
Une				
Both sex	1.8	2.0	2.1	2.7
Male	1.1	1.5	1.2	1.7
Female	0.7	0.5	0.9	1.0

Source: Compiled data from BBS,2010

In table 7, comparative statistics of HSC, ALIM, and HSC (BM) examinations from 2007 to 2011 (Male & Female) are shown. Here it can be seen that in 2007, 349749 students were passed among the appeared 533158 students. But in 20011, the number of passing students has increased to 574261 among the 764828 appeared students. This increasing rate indicates that the number of the educated labor force is increasing day by day but the level of employment is not enlarging at an increasing rate. As a result, the number of an educated unemployed people is also augmenting day by day.

Table 7: Comparative statistics of HSC, ALIM and HSC (BM) examination from 2007 to 2011 (Male & Female)

Year	Total no. of appeared students	No. of passing students
2007	533158	349749
2008	612381	466570
2009	607872	442389
2010	718084	533369
2011	764828	574261

Source: Dhaka education Board Bangladesh

Now, in table 8, total number of students passed from different universities in the last three years is shown. It can be seen from this table that, total number of higher educated students has been enhanced from 13, 99,843 in 2007 to 11,76,969 in 2008 and 13,82,216 in 2009. The recent announcement of the prime minister of Bangladesh indicates that only 4 lack labor force both educated and uneducated has been employed in 2010(annual announcement of prime minister 2011). This employment level indicates that only a tiny fraction of labor force has got unemployment in 2010. If this scenario of employment is happened in every year in that case it can easily be guessed how much the unemployment problem will be severed after some years.

Table 8: Total number of students passed from different universities in the last three years

Year	2007	2008	2009
<b>Total student</b>	13,99,843	11,76,969	13,82,216

Source: 36th UGC annual report, 2009

The unemployment rate by level of education (2006-2007) can be shown in table 9. This table shows that the rate of unemployment among uneducated labor forces is 4.99 in 2006-2007. But the rate of unemployment is high among the educated labor force. Such as the rate is 6.00 in 2006-2007 among the labor force who has completed only the education level from class I-V,17.81 among HSC & equivalent, and 16.99 among engineering/medical completed labor force.

Table 9: Unemployment rate by level of education (2006-2007)

Level of education	Total unemployment rate in Bangladesh
No education	4.99
Class I-V	6.00
Class VI-VII	9.72
Class IX-X	13.37
SSC,Equip	12.73
HSC &Equip	17.81
Degree and above	11.37
Masters	10.31
Engineering/Medical	16.99
Technical/Vocation	6.56
Others	15.76

Source: Compiled data from BBS, 2010

At last, it can be said that with the passes of time, the population of Bangladesh is increasing and the rate of education is also augmenting. As literacy rate in 2009 was 54.8% and in 2011 this rate increased to 56.7% (Bangladesh economic review 2011). Now, the total number of populations above 15 years is 84.6 million (BBS 2009). This number indicates that this is the time of the bumper population. For the development of the country, it is very important to utilize the bumper population. But in Bangladesh, the level of employment generation rate is very low than the increase in the number of the active labor force. As a result, the unemployment rate is augmenting day by day. Now, to get an instant solution to the unemployment problem early retirement is a crucial factor in Bangladesh. Because those factors are important for creating new employment opportunities are not available at this time.

## Data analysis Empirical Analysis

The goodness of fit R square is known as the coefficient of determination and is the most commonly used measure of verifying the fitness of a regression line. Verbally, R2 measures the percentage of the total variation in Y can be explained by the regression model. Here, in table 11, the summary of regression analysis shows that the value of R2 is 0. 994. This value of R2 indicates that the regression model is fit and the result is spurious at this level.

Dependent variable: Emp	Number	of observat	ions =120	
Variables (independent)	Value of $\beta_s$	Standard Error (se)	t – value	p – value
Intercept term	8806.832	4407.889	1.998	.093
Retirement	.929	.047	22.316	0.000
Population growth rate	102	2508.087	-2.313	.060
Industrialization	.057	.040	1.651	.150
$R^2 = .994$	Adjusted $R^2$ =	= 0.991 F value	e = 341.331	

Table-10: Summary of Regression Result

Source: Field survey, December, 2011, BBS & World Bank data

In the above table, the impact of explanatory variables retirement, population growth rate, and industrialization on dependent variable employment has been shown.

From the summary of regression result, it can be said that there is a positive relationship between employment and retirement i.e. if retirement is increased by 1 unit employment will be increased by .929 units. But there is a negative relationship between employment and population growth rate. Such as if the population growth rate is increased by 1 unit at that time employment will be decreased by -.102 units. From table 11 it can also see that industrialization does not keep a significant role in employment in Bangladesh.

Now in the case of the F test, we find that at 5% level of significance the value of F from F table, F0.05 =2.96 where Fc>Ft i.e.,341.331>2.96. So, we reject the null hypothesis that retirement does not significantly influence the employment of Bangladesh.

However, the estimated equation form of the derived regression model is:

$$E = 8806.832 + .929 \text{ Re} - .102 \text{ PGr} + 0.057 \text{ In} + \text{ui}$$

Here, the regression model suggests that retirement has a positive impact on the employment generation. But population growth rate hurts the employment generation.

## Relation between employment and retirement

The employment and retirement data obtained from the selected three sectors show that there is a positive relationship between employment and retirement. When retirement increases employment also increases. But the fluctuation of employment and retirement is not the same among the three sectors. The data show that in the education sector in some years employment is too much low and, in some years, employment is too much high. In the banking sector, the same case mainly happens. This scenario mainly occurs for the late retirement of the employee. If the employees are retired early at that time more vacancy is being created and more people get employment. For this type of retirement and employment, these two sectors cannot bring benefits for the unemployed person. Though there is fluctuation in the education and banking sector, there is also a positive relationship between employment and retirement i.e.in which year retirement is high in that year employment is also high.

To solve the unemployment problem recruitment of unemployed persons is important every year. If an unemployed person does not get employment every year at that time

unemployment problem cannot be solved. Because if a new employment opportunity is not created, many unemployed laborers force will miss their opportunity of being employed for the age bindings. So, to solve the unemployment problem that type of sector is more important in which sector a large number of employees gets retirement in every year and a large of unemployed labor force gets recruitment in every year. This type of recruitment and retirement system is followed by the defense sector. In the defense sector, the fluctuation of employment and retirement is too low. Here in every year, a large number of employment opportunities are created with the same level of retirement. So, it can be predicted that though the fluctuation of employment and retirement is not the same among the three sectors, there is a positive relationship between employment and retirement.

The below charts will show the employment and retirement level of the selected three sectors over ten years.

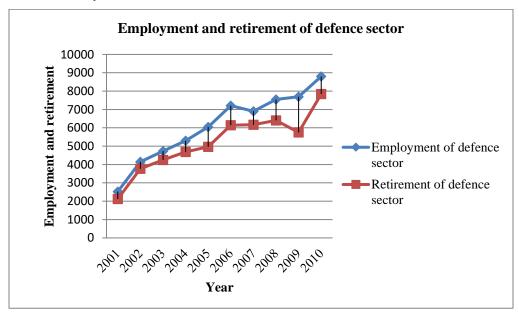


Figure 1: Employment and retirement level of defense sector in different years Source: Field survey, December, 2011

In chart1 it can be seen that when the number of retirements in the defense sector was low at that time number of employments was also too low and when the number of retirements start to increase at that time employment level also start to increase in the same way. Such as in the year 2001 the retirement level was low and the employment level was also low. After 2001, employment increase at an increasing rate with the increase in retirement. But in the year 2009 employment level decrease with the decrease in retirement. In the chart, it can also be seen that after 2009 employment increase with the increase in retirement. So, there is a positive relationship between employment and retirement.

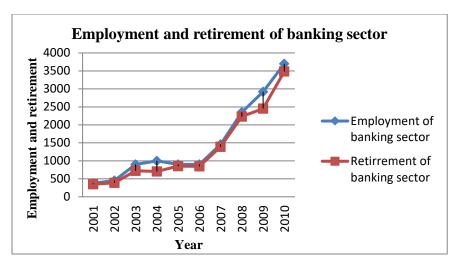


Figure 2: Employment and retirement level of banking sector in different years Source: Field survey, December, 2011

The above chart shows that there is a positive relationship between employment and retirement. Here it can be seen that when retirement increases employment also increases. But the level of employment is too low because the level of retirement is not so high. Here it can be seen, up to the year 2007 the level of employment remains below 2500. After 2007 employment level crosses 2500 because at that period retirement level also crosses 2500. So in banking sector employment is being created with the retirement.

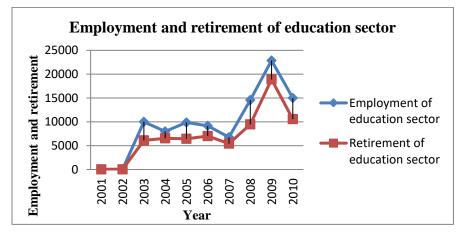


Figure 3: Employment and retirement level of education sector in different years
Source: Field survey, December, 2011

In the above chart, it can be found that in the education sector employment level increase with the increase in retirement. Here it can be seen that in 2001-2002 there was no employment. After 2002 employment increases when retirement increases. But up to the year 2007 level of employment remains below 10000 because in this year retirement level remains below 10000. After 2007 employment level crosses 20000 because in this period retirement was also near about 20000. So in the education sector, there is also a positive relationship between employment and retirement.

Finally, it can be said that though there is a positive relationship between employment and retirement but the rate of fluctuation between retirement and employment is too high in the banking and education sector over the years. Such as in the education sector before 2007 employment and retirement were not so much. But after 2007 a large number of labor forces have been employed because a large number of employees were retired after this period. But after 2009 the level of employment starts to decrease. If a new employment sector is not created then after two years the level of employment will reach about below 2000. The same case will happen in the case of the banking sector. The rate of new employment generation is very low in Bangladesh for various reasons which have been discussed before. But in every year a large number of unemployed labor forces will come out from various education sectors. So, this type of fluctuation is not good for an economy. On the other hand, in the defense sector every year a large number of employees get retirement. The rate of fluctuation is too low in this sector. So, if all the sectors of the economy follow this retirement policy in that case the economy can get a release from the unemployment problem to some extent. Since there is a positive relationship between employment and retirement, to solve the unemployment problem early retirement is very important.

## Respondent's involvement in business

This study includes 120 respondents and all of these respondents are retired. Among these 120 respondents 40 respondents were involved in the defense sector, 40 were in the banking sector, and the rests 40 were in the education sector who were retired in different ages. Data collected from the three sectors indicate that the retired persons were involved in various professions do various works after their retirement. The data collected from the field survey also show that the persons who work in the defense sector retired early than the other selected two sectors of the economy.

It also can be found that the person involved in commissioner rank in the defense sector continued their job for 31 years or more and the persons who were involved in non-commissioner rank continued their job for 20 years. As a result, the retirement age for the defense sector is 55 years or less than 55 years. So, all of the retired persons who retired less than 55 remain physically strong and after their retirement, they involve themselves in various works. So, it can be seen that the huge amount of money that the retired person of the defense sector gets after retirement is being used for production activities in the economy. This type of performance helps to develop the economy by regenerating money. Moreover, for early retirement, the job vacancy is created in the economy which helps to join the unemployed person in the work.

This retirement helps to remove the unemployment problem of Bangladesh where the new employment generation rate is too low. On the other hand, data collected from the field survey also indicate that the other two government sectors such as the banking sector and education sector follow other rules in case of retirement. Here, people retired at the age of 57 years old. Generally, it can be seen that they become physically disabled after retirement. Though they are not fully physically disabled for doing the job for a long period they become dispassionate to do other work. As a result, without doing any business most of the retired persons of these two sectors keep their money in the bank or utilize their money for household purposes. This type of activity cannot bring any benefit

to the economy. Moreover, it increases unemployment. But early retirement at that time creates a new room for a job in the economy. The below chart shows the percentage of retired persons in the selected three sectors who have involved themselves in business-related work

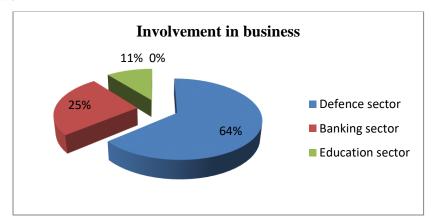


Figure 4: The percentage of retired person's involvement in business- related work.

Source: Field survey, December, 2011

Table12: Average consumption, savings and investment of the retired person in different sectors

Sectors	Time	Consumption (tk)	Precautionary Savings monthly(tk)	Asset building (tk)	Bank Savings(tk )
Education	Before retirement	20900	5992.5	641250	762500
sector	After retirement	13975	1500	491250	
Banking	Before retirement	33725	8237.5	1855000	1015000
sector	After retirement	29350	6975	950000	
Defense	Before retirement	49800	14800	1362500	840000
sector	After retirement	53100	24300	3470000	

Source: Field survey, December, 2011

In the above chart, it is seen that 75% of retired persons in the defense sector involve themselves in business after their retirement. This percentage for the banking sector is only 30%. But in the case of the education sector, only 12.50% of the retired persons involve them in business.

## Retirement and financial condition

The economic state of the retired person of the selected three sectors is not the same between the two periods such as before retirement and after retirement. The data obtained from the field survey show that the person who retired early with a large amount of pension remains in a better position in society than the person who retired in old age.

Because a person who retired early can utilize his money for other purposes such as he can invest money in different firms or can start a business jointly. This type of activity helps to keep the consumption, precautionary savings, and asset building of the retired person in a good position after retirement. On the other hand, when a person starts a business or builds up a firm, he can create employment opportunities for some unemployed labor force in his business sectors. This type of activity can create new employment opportunities in a country.

Table 12 shows that in education and banking sector average consumption, precautionary savings and asset building of the retired person of the 66.67% respondents decrease after retirement. But in case of defense sector this scenario is different. The average consumption, precautionary savings and asset building of the retired person of the 33.33% respondents of the defense sector do not decrease after retirement. This case mainly happens because most of the retired person of the defense sector invests their money in productive purposes after their retirement. For this type of investment their income increases after their retirement which increases their average consumption, precautionary savings and asset building. From table 12 it can be seen that average consumption, precautionary savings and asset building of the retired person of defense sector have been increased though average consumption, precautionary savings and asset building of the retired person of education and banking sector have been decreased after retirement. On the other hand, table 12 also shows that bank savings of the retired person of defense sector is low than the bank savings of the retired person of education and banking sector. The cause behind the low bank savings is that most of the retired person of the defense sector wants to invest their money without keeping money in bank idly. If they were also retired at the old age, they also can not invest their money like teacher and banker. In that case their bank savings becomes high.

#### Respondents view about early retirement

This study includes 120 respondents and all of the respondents are retired. These respondents give various views about early retirement. From the field survey, it can be seen that most of the retired people in the defense sector are satisfied with their retirement. For this reason, early retirement is supported by most of the retired people in the defense sector. But in the case of the education sector, some retired teachers are satisfied with their retirement and some are not satisfied. As a result, early retirement is not supported by most of the teacher. On the other hand, in the case of the banking sector, it can be seen that early retirement is supported by the retired person if there are job facilities for the retired person.

View	Percentage of respondents	Opinion
In favor	37.5%	1. It is possible to utilize the ability to another work.
		<ul><li>2. Large amount of pension money can be utilized for other purposes.</li><li>3. Physical disability is being created after the age of 53 years and colleague's help become essential.</li></ul>
		4. Rest is important after the age of 55 years.
		5. Early retirement is good if large amount of

View	Percentage of respondents	Opinion
		retirement pension is given at a time.
		6. After early retirement it is possible to do something for the social people.
		7. If anyone retired early, at that time an unemployed person get employment at that place which helps to solve the unemployment problem.
		8. If a large amount of money is used for business purposes it will be more profitable than job.
Disfavor	33.33%	1.Though there is physically strength, for retirement unemployed is being created
		2. More money could be gathered if job is continued for more years.
		3. After retirement an idle life has to lead.
		4. Life becomes too much miserable after retirement for engaging into field cultivation work.
		5. There are no available job facilities for the retired person.
		6. If job is continued for more years, then no problem is being created for educating the son and daughter.
Neutral	29.16%	1. No comment

Source: Field survey, December, 2011

#### Conclusion

#### Findings of the study

In a developing country like Bangladesh, the employment level depend on retirement. If retirement is high employment will also be high. Here industrialization does not keep a significant role in the case of employment generation. Because, for the deficit of savings in the bank, lack of foreign direct investment, underdeveloped communication system, and for the shortage of electricity, the rate of industrialization is lower than the high rate of unemployment

In Bangladesh, the population growth rate affects negatively i.e., if the growth rate of the population is high, the rate of employment will be below. Because of the high growth rate of the population, employment opportunities will not be so high in a developing country like Bangladesh.

This study shows that most retired people of the defense sector involved them in business. But this rate is too low in the case of the retired person of banking and education sectors. This case mainly happens because of the difference in the retirement age among the three sectors. Most of the retired person of the banking and education sectors becomes physically disabled after their retirement so they cannot start a business or cannot invest their money in another purpose' the retired person of the defense sector remains physically strong and can take the risk to do another work.

As the retired person of the defense sector can utilize his money for other purposes the economic condition of the retired person of the defense sector is better than the economic condition of the retired person of banking and education sector. As a result, it can be found that the consumption, precautionary savings, and asset building of the retired person of the defense sector remain in a good position after retirement.

There is a positive relationship between employment and retirement i.e. when the rate of retirement increases at that time rate of employment also increases.

#### Recommendations

The unemployment problem is a burning issue in our country. Not only that, investigation shows that it is increasing day-by-day and it is the root cause of many miss haps; such as terrorism, robbery, snatching, theft, corruption, killing, political unrest, and many other peach breaking activities in our country. The man provided with an honest way of earning will not go under risky and hated way of earning. So, the unemployment problem must be solved for the sake of the welfare of the country.

But how to solve it? Statistics show that the employment generation fails to keep pace with the increasing rate of unemployed educated youths. Every year a large number of educated young people coming out of various educational institutions find no job. In a developing country like ours, there is a consecutive chain or cycle of happening that is-

No sufficient employment no sufficient income no savings no investment no production no employment.

This is the worst vicious circle within which unemployment is trapped. Now, this vicious circle must be broken at a weak and possible area and that is making posts vacant by early retirement.

There is no scope of rapid and large investment for rapid industrialization for creating a large job market. Even there is no good possibility of sufficient foreign investment and aid in this present situation of economic depression in the developed countries. So, this country herself must find out an effective way to solve the unemployment problem and early retirement which can go a long way to solve the problem.

This can be done in two ways—

- (a). Retirement after a certain age (near about 55 years)
- (b). Retirement after a certain length of service (around 25 years of service)

In the second system, early employment will make early retirement creating a vacancy for the unemployed. Both the way together will do much to solve the problem.

Now the question is, will the old employees enjoy more two- or five-year job benefits at the cost of the loss of the chance of the service of the young unemployed forever? It is a matter of great sorrow that in the present system of the age limitation for service. The age of many unemployed young will be barred within the last or extended period of service of the old employees. Here, the father will only enjoy job benefits only for two or five years when the son will bear the agony of unemployment throughout his whole life.

Youth is the best time of human life. It is the most energetic and productive time of a worker. Our country is being deprived continuously of this valuable service of the educated young people due to the unemployment vicious circle. This may discourage the education of the new and future generations.

In the present situation of the depression in the world economics, external help from the developed countries is not up to expectation. Moreover, our export goods fail to find an expanded market due to the economic depression. So, something must be done to provide the increasing unemployed youths with jobs.

There is a lack of energy, inspiration, innovative and productive activities in the person retired in the old age. They pass their time in idleness or at least, they spent their money on developing their homes and social festivals. They contribute a little productive sphere of economics. On the other hand, an early retired person comes out of the fixed activities of the service, and in this stage of his life, he gets sufficient energy in the body, inspiration in mind, and intelligence in the brain. So, he is still fit for hard work and facing challenges that are very essential for successful economic productive activities. He can invest his money in both savings and retirement facilities for more productive purposes.

At this age, generally, he gets strong inspiration to earn much more through selfemployment than a fixed service salary. Thus, he can set up a poultry farm, dairy farm, agricultural farm, orchard, fruit processing farm, garment factory, fish cultivation, and so on. Thus, will create more employment, more employment will create more earning, more earning will create more savings, and more savings will create more capital, more capital will create more investment, more investment will create more employment. This creative circle will drive the economy of the country ahead.

All possible measures should be taken to solve the unemployment problem of our country. But early retirement is a new hope of solving the unemployment problem of our country.

#### **Concluding remarks**

The above analysis has important implications for development strategies and policies for reducing the unemployment problem of Bangladesh. The study attempts to identify how early retirement can keep a role in solving the unemployment problem of Bangladesh. In this study from the analysis of the primary and secondary data, it can be found that in the case of solving the unemployment problem of Bangladesh retirement keeps a great role. Here it is seen that in which sector retirement level is high in that sector employment level is also high and those who are retired early by getting a huge amount of pension, they remain in a better position in society than others who have been retired at the age of 57 years. Moreover, the person who retired early, invest money for business purposes and helps to create employment for the other unemployed people by giving employment in that business. So here the unemployment problem is solved in two ways, firstly for retirement, an unemployed person get employment in that post, secondly, for investing money in business new employment opportunity is created by the retired person. But in case of late retirement the person who has retired at the age of 57 years, in that case, it can be seen that they are now in a bad position than the early retired person. Most of the

retired person who has been retired at the age of 57 years keep their money either in the bank or utilize it for consumption purposes. So, they do not bring any benefit to the country. In Bangladesh, the unemployment problem is great and for solving the unemployment problem the other facilities are not available at this time. But for the unemployment problem, various problems are created in the country such as crime, social instability, etc. Now to solve these social problems it is very important to solve the unemployment problem of Bangladesh. To solve the unemployment problem early retirement is very important at present time. If early retirement exists in the country at that time younger and more energetic people will come into the job which will help to increase the productivity of the country and indirectly will help to solve the unemployment problem of Bangladesh.

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