The Nexus between Demographic Dividend and COVID-19 in Bangladesh: A Disappearing Opportunity

Md. Tanvir Alam, Sabrina Afrin Tonny

1 Department of Public Administration, Stamford University Bangladesh, Dhaka, Bangladesh
2 Research Assistant, Liberation War Museum, Dhaka, Bangladesh

E-mail: babu.taanvir@gmail.com, sabrinatonny09@gmail.com

Received: 25/09/2021
Accepted for publication: 26/01/2022
Published: 15/04/2022

Abstract

In common parlance demographic dividend means the economic growth caused by changes in the age structure of population of a country. Bangladesh entered the phase of demographic dividend in early 2007, considering the average timeline of this important phase which is 20-30 years; Bangladesh is currently passing the midway point of it. Amid this situation, sudden initiatives such as lockdown, closure of educational institutions, changes in the recruitment process, delayed employee selection process and declining trend of job posting caused by COVID-19 has created serious tension among the potential employee sector. The objective of this study is to find out the adverse impact of COVID-19 on demographic dividend, especially on the potential employee sector consists of tertiary level final year students, fresh graduates and job seekers. In doing so primary source of data is used; the data was collected using qualitative method followed by a semi-structured questionnaire. This is a cross-sectional study, for the data collection, non-probability convenience along with self-selection sampling technique is used due limited mobility induced by COVID-19 lockdown. After collecting, the data are analyzed using IBM SPSS software. The findings of this study revealed the adverse impact of COVID-19 on demographic dividend is taking place through potential employee sector.

Keywords: Demographic dividend; COVID-19; Employment; Job market; Potential employee sector.

1. Introduction

Since the COVID-19 induced closure of educational institutions, the tendency of suicide have multifolded in Bangladesh, a study identified lockdown, shutting down economic activities and social distancing as reason behind prevalent mental problem (Islam et al., 2020). A renowned daily news paper reported that “Covid triggered a rise in suicide ideation, with 10 students allegedly ending their own lives” (“Depression, Anxiety behind Rise in Suicide of DU Students,” 2021), these students are from the Dhaka University which is the most reputed university of the country and the news is from just one daily, let alone student from countryside normal educational institutions and numerous local news paper. The authors argue that this is not just an isolated incident of mental case, rather a serious loss of potential human capital which threatens the demographic dividend. This is a serious problem due to the large number of student enrolled in tertiary level education as estimated by University Grant commission (Mannan, 2017) and since Bangladesh's unemployment rate climbed to 5.30 percent in 2020, up from 4.20 percent in 2019 (Unemployment, Total (% of Total Labor Force) (Modeled ILO Estimate) - Bangladesh | Data, 2019), pertaining to their age group, which falls under the demographic dividend age division, this issue
posses a formidable threat for the nations entire demographic dividend. The objective of this study is to find out the adverse impact of COVID-19 on demographic dividend, by classifying the entire potential employee sector into three sections; tertiary level final year students, fresh graduates and job seekers. The study initially introduces the importance of the issue by stating the problem followed by the research objective, and then it moved to literature review section, thirdly the methodology section is described to ensure validity and reliability of the study. After that in the analysis section graphical illustrations is used for reader’s convenience, finally the findings are revealed prior to move to discussion part followed by the conclusions.

2. Literature Review

2.1 Demographic dividend and COVID-19 in Bangladesh

Demographic dividend is a life time window of opportunity for any country, especially for country like Bangladesh which is graduating from the category of Least Developed Country (LDC ), while coronavirus disease-19 or more popularly known as COVID-19 is a severe acute respiratory syndrome which succeeded at stopping the whole world from every dimensions range from social, economic to cultural and even political, and Bangladesh is not exception to that.

The significance of demographic dividend is unprecedented, as suggested by Urmanavicius, the demographic dividend can even cause changes in the structure of the society as the demographic factors are associated with skill composition (2021) Bangladeshis is currently going through both demographic dividend and COVID-19. The demographic dividend is the difference between the number of working-age people between the ages of 15 and 64 and the number of non-working-age people between the ages of 14 and 65. It is a demographic dividend if the number of working individuals is larger than the number of non-working individuals. A country’s demographic dividend era lasts no more than 20-30 years, in other words, by 2040, Bangladesh’s ability to generate rapid economic development by using the demographic dividend would begin to diminish (Chowdhury, 2020).

Demographic dividend comes with many advantages, but the proper utilization is only possible when the active functional youth engagement is ensured. Coronavirus disease 2019 (COVID-19) is a contagious illness caused by the coronavirus 2 that causes severe acute respiratory illness. In December of this year, the first known case was discovered in Wuhan, China (Page et al., 2021). Since then, the disease has spread worldwide, resulting in a pandemic. through spillover infection, the virus is considered to be natural and of animal origin. There are numerous ideas as to where the initial case (also known as patient zero) came from. The impact of COVID-19 caused serious distress around the world, and Bangladesh is no exception, on the contrary comparing other countries Bangladesh is facing greater risk because of COVID-91 as Bangladesh is yet to be a developing country and currently passing through the period of demographic dividend

2.2 COVID-19 and Student

The impact of COVID-19 has serious ramification all over the country, especially for student. Students as are passing through their tenure of learning, amid this situation their overall curriculum system turned upside down overnight, which subsequently affected their pathway for graduation. A study by Rahman et al (2021) on COVID-19 responses among university students of Bangladesh shows that the majority of the students that took part in the study had a significant impact (61.48 percent). Due to the epidemic, they were also extremely concerned about their mental health (47.84 percent). Online classes have become the only alternative option. Students in Dhaka, the capital city, reported more dangerous present locations than students outside of Dhaka. While online class has been a viable option for only private university, public university and the students of public university is suffering from long term discontinuity from their academic study, Begum et al (2020) in their study by covering a massive sample around eleven hundreds student find out some major barriers to students, which ranged from self bearing online learning cost to part time job through nearby COVID-19 patient, income reduction, financial problem associated with lost job, overpriced internet access etcetera, these problems manifested into physiological challenges and threatens the continuity of the study of students, the article concludes by recommending to provide financial subsidy to disadvantages students, another study supports the previous claim by focusing on socio-psychological impact of COVID-19 on student, the study identified numerous psychological concerns among university students and suggested to build awareness for the mental health of students (Far Abid Hossain
et al., 2021). A prominent study by (Faisal et al., 2021) revealed that Anxiety, depressive symptoms, and mental health status are common symptom among university students in Bangladesh during his lockdown period. In total, 40% of the subjects experienced moderate to severe anxiety, 72% experienced depressive symptoms, and 53% had a moderate to poor mental health condition. There is no denying that such harsh condition can be overburden for any students to complete their academic journey and be prepared to enter the job market, many student have faced delayed graduation due to COVID-19 ((Maimuna, 2020)) and facing an uncertain future.

2.3 COVID-19 and Fresh Graduate

Besides running students, who are yet to complete their education, fresh graduate also suffers from COVID-19 induced challenges. These fresh graduates were about to enter the job market and start their cornerstone for their career, unfortunately as lockdown and associated closing initiatives were introduced by respective authority they couldn’t enter the desired job market. Earlier studies from Khan (2020) shows that many organizations delimit their working personnel restrict their operations, shut down their projects to survive in the market, resulting less opening for fresh graduate to enter the job market thus proving the adverse impact of COVID-19 on fresh graduate. Another study by Shahriar et al (2021, p 1) supports the previous argument by stating that “the rate of graduate unemployment increased from 47% to 58% in 2020 with an expected annual loss estimated at $53 million”. The opening entrance in job market is hampered by COVID-19 induced challenges does not remains in the boundary of private sector, even public sector is greatly under influence, for example the 43rd Bangladesh Civil Service Examination’s Viva has been postponed for indefinite period (“42nd BCS Viva Postponed Indefinitely,” 2021) . The actual scenario remains as volatile and fragile as ever in Bangladesh, while more students are entering job market without any experience even without the experience of an internship, as reported in news paper column , “With the Covid-19 pandemic and predicted economic recession, youths are warned that their career path and work-life settlement will not come easy” (Maimuna, 2021).

2.4 COVID-19 and Job Seekers

In addition to the tertiary level student and fresh graduate, an third group emerged as job seekers with the advent of COVID-19 period, who once was employed. It all began when to tackle to infection government of Bangladesh took preventive measures including lockdown, as a result most of the business and organization were shut down, and the employed person used their savings to live in one of the most expensive city of the world (“Dhaka One of the Most Expensive Cities in the World,” 2020). As the situation remained unchanged for longer period of time, eventually many employed person went unemployed and lost their job, according to a World Bank report, around 68 percent of those who were forced to cease working due to the epidemic in Dhaka and Chattogram have lost their jobs (Byron, 2020). Another study by world bank portrayed “provides early insights into the labor market impacts of the ongoing Coronavirus 2019 crisis in Bangladesh. The findings point to substantial uncertainty about job prospects for many people” (Genoni, et al, 2020). Besides these one of the most revenue earning sector of Bangladesh which is Ready garments sector (RMG) also suffered from COVID-19 challenges, resulting less productivity, emotional health, fewer job posting and even loss of employment (Kabir et al., 2020). Another study by Hossain (2021) initially revealed that many people have experienced declining income and lost job due to COVID-19, followed by the limitation of unfavorable economic policy, and finally suggested to adopt employment-oriented economic policies. Besides individual research, institutional study from organizations likes Asian Development Bank by Hayashi & Matsuda (2020) provided key insight of COVID-19 impact on Job portal, stating that Since the COVID-19 outbreak, job listings on the main online job matching sites in Bangladesh and Sri Lanka have decreased significantly. All industries saw a large drop in new job ads including Bangladesh’s textile sector, portrayed by another study, the link between employment and demographic factors is high (Urmanaviciene & Arachchi, 2020)

The above discussion shows that both COVID-19 and government response to tackle the infection rate created an unfavorable situation for potential employee sector which comprised of tertiary level students, fresh graduate and job seeker; which in ultimately threatens the demographic dividend of Bangladesh, despite of the significance of the issue no study has been done to explore the adverse impact of COVID-19 on demographic dividend.
3.0 Methodology

The study is about the demographic dividend of Bangladesh which is experiencing adverse impact by COVID-19. As the study deals with sensitive issue the methodology of this study is carefully formatted. The objective of this study is to find out the adverse impact of COVID-19 on demographic dividend, especially on the potential employee sector consists of three groups namely; tertiary level final year students, fresh graduates and job seekers. In doing so primary sources of data is used; the data will be collected using qualitative method followed by a semi-structured questionnaire, the questionnaire is delivered by mail-survey questionnaire and Google form. This will be a cross-sectional study, so for the data collection, non-probability convenience along with self-selection sampling technique will be used due limited mobility induced by COVID-19 lockdown. The population of potential employees sector is huge as the population of entire city is around 18.2 million (Swapan et al., 2017), among them 4.81 percent people are unemployed (DataLEADS, 2017), which makes around 0.9 million people jobless, among them majority are students, fresh graduate and job seekers, and to maintain the consistency respondents from only social science background were suggested to participate, as subjects like Pharmacy and C.S.E have different modalities for academic activates like Lab class, field study etcetera. A total of 150 respondents have be taken as sample, where each groups will have 50 respondents. After collecting, the data is analyzed using IBM SPSS software and the results will be demonstrated using graphical illustration like figure, chart, bar etcetera.

<table>
<thead>
<tr>
<th>Data type</th>
<th>Data collection method</th>
<th>Sampling style</th>
<th>Data source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>Qualitative</td>
<td>Convenience &amp; self-selection</td>
<td>Final year student (50), Fresh Graduate (50), Job seeker (50)</td>
</tr>
</tbody>
</table>

4.0 Analysis

The analysis part can be organized under three broader categories, analysis of student, and analysis of fresh graduate and analysis of Job seekers

4.1 Analysis of data from final year university students

The collected data from final year university students were analyzed using IBM SPSS software, and then illustrated in figures, bar, pie chart etc. the analysis is given below following.

First the degree of depression of the respondent (final year students) is measured using Zung Depression scale, which is a popular public domain scale and free to use as self rating depression scale. n=50.
Figure 1: Figure 1 shows that among the 50 respondents, 5 respondents show normal symptoms hence scoring below 44 in Zung Depression scale, while 8 students show symptoms of mild depression, the degree of depression reach on the highest scale by 20 students who experience moderate depression, and 17 students scored 70+ thus being severely depressed. 38 among 50 students who are suffering types of depression, says they are losing interest to study.

Secondly, the degree of knowledge of the respondent (final year students) is measured using Staple scale, where n=50. The rationale of using staple scale is that as staple scale does not support neutral value it is appropriate to measure the degree of knowledge of the students because being a student there is no point of neutrality in terms of gaining knowledge.

Figure 2: Figure 2 shows the degree of learning of the final year students using staple scale. the graph shows that among the respondents 13 students think that the degree of learning is worse, while 18 students think it is bad, on the contrary 12 students think that the degree of learning is moderate and 07 students thinks it is good. The total
number of students who think the degree of learning is on negative is 33. Among the 50 students, 38 students believe that the knowledge they are receiving through online classes is inadequate to enter the job market.

Finally for the issue of delayed graduation of students is addressed, the respondents (n=50) reflected their perception towards the reason for delayed graduation and associated impact of it.

**Figure 3:** Figure 3 shows the reason behind delayed graduation of students induced by COVID-19. The most prevalent reason identified by the majority of student (18) is the closure of educational institutions, followed by the second biggest reason financial problem of family induced by COVID-19 which is identified by 15 students. The third biggest reason behind delayed graduation is identified by 13 students as the tuition fee problem, and only 4 students identified several other reasons including lack of study environment, absence of teachers company etcetera. 42 out of 50 students think that they will not be able to complete their study if the situation remains unchanged, thus they will be fall below the margin of human capital without education.

4.2 **Analysis of data from Fresh Graduate**

First the degree of depression of the respondent (fresh graduate) is measured using Zung Depression scale, which is a popular public domain scale and free to use as self rating depression scale, where the n=50.

**Figure 4:** Figure 4 shows that among the 50 respondents, 7 respondents shows normal symptoms hence scoring below 44 in Zung Depression scale, and 7 fresh graduate shows symptoms of mild depression, the degree of depression reach on the moderate scale by 16 students who experience moderate depressions, and 20 students
scored 70+ thus being severely depressed. 32 among 50 fresh graduates who are suffering types of depressions, says they are losing hope for bright career.

And for analysis of the major problems to enter the job market faced by fresh graduate which induced by COVID-19, is given below, where n=50

**Figure 5**: Figure 5 shows that, among the problems induced by COVID-19 to enter the job market three problems are most prevalent. Among the respondents, 22 fresh graduates hold the absence of internship experience as a major challenge to enter the job market, the second major problem identified by 13 fresh gradates is the changed hiring policy of organization induced by COVID-19 which discourage to recruit fresh graduate, finally 9 students experienced the responsibility to look after COVID-19 relative fallen onto their shoulder. While only 6 students mentioned about other problems like low job posting, delayed recruitment process etcetera.

4.3 **Analysis of data from Job seekers**

As mentioned earlier, Job seekers mean the individual respondents who have prior job experiences. First the degree of depression of the respondent (Job seekers) is measured using Zung Depression scale, which is a popular public domain scale and free to use as self rating depression scale, where the n=50.

**Degree of Depression among Job Seekers**
Figure 6: Figure 6 shows that among the 50 respondents, only 2 respondents show normal symptoms by scoring below 44 in Zung Depression scale, and 9 job seekers show symptoms of mild depression (scoring 45-59), the degree of depression reach the moderate scale by 17 job seekers who experience moderate depressions, and 23 respondents show symptom of severely depressed by scoring above 70+. Among the 50 respondents, 40 respondents who are suffering moderate and severe types of depressions, says they are being compelled to lose interest for job opportunity.

And finally for analysis of the major challenges induced by COVID-19 for Job seekers to enter the job market is given below, where n=50

<table>
<thead>
<tr>
<th>COVID-19 Induced Problems for Job Seekers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age out for Government Job</td>
</tr>
<tr>
<td>14%</td>
</tr>
</tbody>
</table>

Figure 7: Figure 7 shows that, among the challenges induced by COVID-19 to enter the job market three problems are most prevalent. Among the respondents, 19 job seekers fears the age out for public job, 14 respondents finding it hard for them to switch job industry, and 10 respondents find the stalled recruitment as disruptive challenge for their career. Only 7 respondents identified challenges like maintain hygiene, long distance and family restrictions.

4.4 Analysis of data from student, fresh graduate and Job seekers

The reflection of students, fresh graduate and Job seekers on the adverse impact of COVID-19 on demographic divided is given below:
Figure 8: The figure 8 shows the perception of entire respondents towards the impact of COVID-19 on demographic dividend of Bangladesh. Among the 150 respondents none could identify any positive indication of COVID-19 on demographic dividend, where 21 respondents find it neutral by claiming that the higher degree usage of technological devices equalizes the negative impact, on the contrary 66 respondents find the impact of COVID-19 on demographic dividend has adverse impact and 63 respondents labeled the impact as highly adverse.

5.0 Summary of main results

Drawing the key insight from each analysis sagements, it can be said that the COVID-19 and associated initiatives are taking a toll on the potential employments sector of Bangladesh. The findings of the study are given below;

- Serious depression is prevalent among students, fresh graduate and Job seekers, resulting them less active and emotionally unstable for active functionality. Among the three classes, The severe degree of depression is more prevalent among fresh graduate comparatively than students, and subsequently more prevalent among job seekers than fresh graduate.

- Most of the student is affected by delayed graduation caused by COVID-19, and their are afraid that the learning modalities or quality during COVID-19 period will not help them to complete in the job market

- Fresh graduates are suffering from experience gap as well as changed hiring policy of market and responsibility for family member diagnosed with COVID-19; all problems are induced by COVID-19.

- Majority of job seeker are already lost their job due to first wave of COVID-19, and still struggling to get into the market before their age runs out, in addition to that switching job industry is pretty had during this time and stalled recruitment caused by COVID-19 added another layer of challenges for them.

6.0 Discussion

The above results indicate a serious situation forthcoming for Bangladesh. Both COVID-19 and unsophisticated absent mined government action is responsible for such situation. The results of this study imply the uncertain future for Bangladesh’s potential employment sector due to COVID-19, which subsequently will threaten the demographic dividend of this country. As Bangladesh is on the midway of this life time opportunity named demographic dividend, and the Government of Bangladesh could not took appropriate measure to secure the
smooth work flow of working people, there is high possibly that this window of opportunity will disappear soon unless required initiatives are taken.

7.0 Conclusions
The study deals with a crucial subject which is responsible for Bangladesh’s decade long success and achievement that is demographic dividend. The aim of this study was to reveal the adverse impact of COVID-19 on Bangladesh’s demographic dividend by identifying the key affected area of potential employee sector, this study shows how the COVID-19 created waves of challenges for this sector thus threading the flow of demographic dividend. In spite of declaring stimulus packages to handle this issue and make a favorable environment for the potential employee sector, budget 2021-22 proposed 15% tax on private universities.Report, 2021 which has created concern among all stakeholders and made the situation volatile and fragile than ever.

7.1 Limitation of the study
The study was done during the peak devastating hour of employment sector caused by Covid-19, hence the sample may represent a portion of margion of error as the sample style was selfe selection, on top of that the study was conducted only on 150 samples, leaving the majority out of equation. Finally the qualitative data collection method may not reveal the actual scenario of the respondents.

Regardless of the limitations, considering the toll taken by Covid-19, the study was successful and all set-out objectives achieved. Furthermore, the following areas needs further attention;

- dynamic between population management and demographic divided during Covid-19 time
- Use of ICT to mitigate the impact of Covid-19 and utilize demographic divided
- Siginificance of stress or depression mitigation into public health concern

References


Dhaka one of the most expensive cities in the world. (2020, June 16). Dhaka Tribune. https://www.dhakatribune.com/bangladesh/dhaka/2020/06/16/mercer-survey-dhaka-26th-most-expensive-city-for-expatriates-


