

Public and Private University Education in Bangladesh: A Study on Comparative Costs

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Abstract: Social opportunity cost analyses of the university education in Bangladesh indicate that public universities are far costlier to the society than their counterparts in the private sector. This indication seems to contradict a general perception that the public universities provide lower cost education. For Dhaka University in particular, the opportunity cost of education is substantially higher than any of the private universities in the sample chosen for this study. In addition to opportunity cost analysis, arguments are also presented to show that full-time engagement in disruptive non-academic activities may be equilibrium behavior on the part of the students in Dhaka University under the present circumstances. Arguments are presented to explain why the externality arguments may not justify subsidizing university education, sacrificing primary education that has a much higher social rate of return. Our numerical exercise shows that, with the amount of implicit and explicit subsidy currently spent on Dhaka University in one year, the government could construct 13,565 primary schools accommodating 14.5 million children.

Introduction

In the post-independence years in Bangladesh, university education remained a state monopoly for some 20 years. It has since long been argued that education at the higher level, being a basic need of the people, has every reason to be subsidized by the government/taxpayers. Hence the government not only continued providing higher

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education almost free of charge, it also barred any participation from the private sector.

As the country experienced a gradual rise in the number of students passing from the higher secondary level each year, coupled with a steady decline in the international aid inflow, the government had to rethink its education policy. Severe fiscal constraint faced by the government forced it to look for alternate strategy to meet the needs of the society. It was almost impossible for the government to keep increasing the number of seats in the existing institutes of higher education or creating the new ones. Opening up the university education sector for private participation was an obvious choice. In the early 90s, following the policy adopted by the government, some enterprising individuals came up with private initiatives in the university level education. Today, 17 government recognized private universities are operating in the country. Although private universities have fulfilled many of the students' expectations of quality higher education, there were (still are) strong critics of private sector participation in this sector. The main contention of the critics is that higher education in the private sector is too costly. Besides this point these critics also hold a strong view that, when most public universities can provide higher education at a much lower cost and maintain reasonable quality, it does not make sense to allow private universities to let wealthier individuals purchase higher education leaving out the poor and the middle class.

First and foremost objective of this study is to critically examine whether universities in the public sector actually

provide higher education at a lower cost. Second, we will try to address the quality and relevance of education provided in a major public university. Third, will we discuss whether the externality argument holds good for subsidizing higher education in the current circumstances of Bangladesh. Finally, we show that low cost credit might be a better way to finance higher education instead of extensive government subsidy in higher education market.

While analyzing the true cost of a public university education, the study demonstrates the importance of taking account of the opportunity cost, i.e., the true cost of any activity, rather than the mere explicit cost or the accounting cost of a project. The element of opportunity cost, although the concept is taught at any principal level economics course, is surprisingly missing from many crucial public debates. Even a very recent study on the performance of privatized industries simply focused on explicit profits and losses.¹ Hopefully, this study will encourage others to include this crucial element of implicit costs in public debates.

Methodology

For the purpose of relevant comparison, we take one public sector university, the University of Dhaka², and two of the existing private sector universities, North South University and the East West University. We chose Dhaka University (DU) because of its prominence among all the public universities. The reason for choosing North South University (NSU) and East West University (EWU) is their preeminence among private sector universities along with

the fact that collection of data on these two universities was easier for us.

The social cost of private universities is defined to be the tuition and other fees paid by the students. We believe this represents true cost since private universities do not receive government subsidy in any form. Moreover, other than adding very little to the traffic jam at some of the places at their locations, private universities do not impose any other notable external cost on the society.

The social cost of education in a public university per student is defined to be the sum of annual total explicit and the annual total implicit costs divided by the number of students in a given year. The components of the true social cost of a public university are considered to include the following:

1. Explicit Costs:

- a. The tuition and other fees paid by the students.
- b. The amount of subsidy paid by the government.
- c. Cost of Policing the Campus.

2. Implicit Costs:

- a. Opportunity cost imputed in the land, building and other components of the infrastructure.
- b. Opportunity cost of time lost due to session jams.
- c. Imputed cost of the probable risk of injury and loss of business due to terrorist activities by the students.

Implicit costs are those costs for which money does not change hands but the costs are nevertheless borne by some individual or collective entity. For private universities we have already argued that there are no such implicit costs that need to be accounted for. For DU the implicit costs emanate from two sources: internal (i.e., part *a*) and external (i.e., parts *b* & *c*). The internal cost of Dhaka University that does not get counted is the rental of land. Because of the public ownership of land, the landed property appears to be free to a public university. Although Dhaka University does not pay for using the valuable land from its treasury, the nation is paying by keeping this prime real estate property in the heart of Dhaka City for the purpose of higher education. If this land was not given to Dhaka University, it could be rented out to others, or sold out. On the other hand, private universities in our sample operate on rented premises in Dhaka City and the tuition fees include the rent paid for the land and buildings.

We cannot get a direct estimate of the rent of the land area of Dhaka University in that land by itself is very rarely rented out. To estimate the opportunity cost of land we assume that the land is sold out today and the proceeds are deposited in an interest-earning bank account. We believe that the interest from the money deposited in a bank provides the lower bound of rent of land, because a land owner will have this option if he/she can't find a more productive use of his/her land.

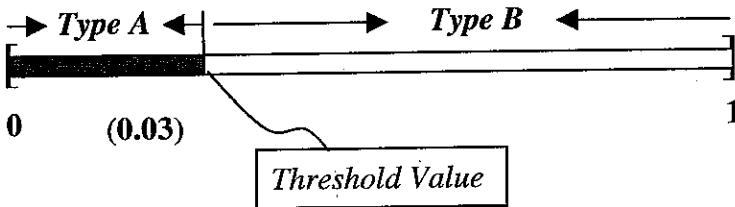
For other two components, “b” & “c”, the implicit cost does not get counted because these costs show up as negative externalities of education provided by Dhaka

University. The reason for including “b” & “c” in our estimate of the cost of education at of Dhaka University is that we believe these costs arise because of the internal nature of Dhaka University. In other words, we believe that the *negative externality imposing activities³ is equilibrium behavior in Public Universities such as* of Dhaka University. We explain this argument with the help of a simple model described below.

Let us have N students each with a valuation of education x . x is distributed uniformly on a continuum of values from 0 to 1. The students are arranged in ascending order of their valuation such that the N^{th} student has a valuation of 1 while the 1st student has a valuation of zero. There is a threshold value at which a student is indifferent between pursuing education seriously or pursuing non-academic activities, such as politics. Let us assume that the threshold value is equal to .03; i.e., 3% of the students consider education to be of so little value that they do not care whether they obtain a university degree in due time or at all. We assume that the other 97% of the students consider education to be of high value and are interested in pursuing education. The reasons for the 3% of students to have lower than the threshold value could be low job prospects or simply lack of interest in pursuing education. Since the cost of remaining enrolled in a public university, α , is less than zero, students choose to stay in the university.⁴ The choice of staying in a university would not be rational in the case of a private university where tuition fee β is much higher. Therefore, public universities have a pooling equilibrium (see figure 1) with both type A (whose valuation of education is higher than α) and type B students

(whose valuation of education is higher than β), while private universities have a separating equilibrium of type B students only.

Figure 1



Since type A students are rational, they will try to maximize their utility by engaging in non-academic activities. As long as the payoff from non-academic activities are higher than the cost of engaging in those activities, type A students will engage in those activities even if that means delayed completion of degree and even imposing negative externality on type B students. This is similar to the standard case of environmental pollution imposed by a few producers on numerous consumers who cannot escape from the effects of negative externality without protection from the state. Just as the air pollution is shown to be a result of not defining the property rights on air, pollution of university environment can also be shown to be a consequence of keeping it virtually free for the public. This analysis does not imply that non-academic activities cannot be stopped in a public university. It can be done by increasing the opportunity cost of non-academic activities. This opportunity cost can be increased either by increasing the reward for education (i.e., increasing job

prospects or offering only those subjects which have higher job prospects) or increasing punishment for non-academic activities.

The data for NSU and EWU were provided to us from their registrar office. Data on total land area, government subsidies, operating expenses, number of total students and total number of teachers, et cetera, for Dhaka University were taken from the *Annual Report of University Grants Commission* (UGC).⁵ Data on expenditure on policing the campus and annual estimate of amount collected by students in the form of rent from the businessmen and commercial establishments in the neighborhood of university areas (Shahbagh, Aziz Super Market etc.) has been provided by police department on the condition of anonymity. Figures concerning deaths, injuries and material loss in the form of, say, cars broken, have been collected from the print media reports.⁶

Data and Results

Explicit Costs

The opportunity costs of education at the private universities were Tk. 137,000 for NSU and Tk. 79,000 EWU per year in 1997. Assuming that the private cost of books and supplies, room and board are same in both types of universities, in the case of private universities the private opportunity cost is equal to the social opportunity cost for reasons discussed earlier. In contrast, the social opportunity cost of public university education is orthogonal (zero correlation) to the private cost of obtaining education. However the explicit costs detailed below include both

published and unpublished expenditure on Dhaka University.

a. Tuition and Other Fees and Subsidies

The published figures include the first two items from the list above: the amount of tuition and other fees paid by the students and the clearly separated and earmarked subsidy paid by the government to DU. This clearly separated part of the explicit cost is published in the Annual Report of the DU, which in the year 1997 (the latest year's data available) was Tk. 28,942 per student only.⁷

b. Cost of Policing the Campus

The unpublished expenditure includes cost of policing the campus and administrative cost as the other component of the explicit cost. There is a sizeable police force stationed in the Dhaka University campus, which has to be monitored by higher authorities in the home ministry. This cost of security is not a part of the published university budget. The education ministry and even the Prime Ministers office has to allocate some of their resources for the purpose of administering or at least monitoring the public universities, Dhaka University in particular.⁸

Estimated Administrative Expense: One deputy commissioner (DC), one assistant deputy commissioner (ADC), two assistant commissioners (AC) are engaged just to maintain law and order situation in the DU campus. The associated annual administrative cost is at least equal to Tk. 4,69,980. For details, see **appendix-A**.

Expenditure Behind Deployed Forces: 5 inspectors of police, 4 sub-inspectors (SI), 7 sergeants, 28 subedars (TSI)

and 1 assistant sub-inspector (ASI) are stationed in the campus almost permanently. On an average, 492 policemen remained deployed over each of the last 5 years on the average. The Nilkhet Police Station with 1 sergeant, 2 head constables and 20 constables also serves the university campus. Eight police trucks remain deployed on the campus on a daily basis. It involves an average of Tk. 236,18347 per year to deploy these forces. Details of the estimate are explained in the **appendix-A**.

Cost of Raids: The average recovery of cocktail is estimated to be between 120 to 125. Annual cost of raids turns out to be Tk. 78,750. See the **appendix-A** for further details.

Adding the estimated administrative cost, cost of deployment of forces and costs associated with raids to recover arms, we find the total cost of policing in DU to be equal to Tk. 2,77,81,981 per year. Distributing it over the 19374 students of the university, per capita annual expenditure becomes Tk. 1433.

Implicit Costs

a. Opportunity Cost of Land

Total land area of DU is 260.5 acres, which comes to 15,760.25 katha of land in the heart of Dhaka City. Even with a conservative estimate the market price of this land in 1997 would have been no less than Tk. 18,00,000 per katha. Thus the total value of this land area is Tk. 28,368,450,000. Assuming a conservative 10% interest rate we find that the yearly opportunity cost of using this huge amount of land is 2,836,845,000. Netting out the rental income from land,⁹

the net total opportunity cost of land becomes Tk. 2,828,713,000. Dividing the net opportunity cost by the number of students we find the net opportunity cost of land per student to be equal to Tk. 1,46,005. The net opportunity cost of land per student alone exceeds the total cost of education in one of the two private universities included in our sample.

b. Imputed Cost of Time Lost Due to Session Jam

While in the private universities in our sample there has been no session jam so far, the public universities are notorious for session jams. Average time taken by a student to finish a four-year degree program in Dhaka University is no less than six years.¹⁰ If we assume that a University Graduate would earn Tk. 5,000 per month on average, the opportunity cost of two years lost is Tk. 114,545.5.¹² Distributing this cost into the four-year period (the standard time for graduation) comes to extra Tk. 28,636 per year.

c. The Imputed Cost of Physical Injury & Violence

Education at the public universities has some well known social costs prevalent in the form of negative externalities that are not properly taken into account. On campus violence is a common phenomenon. The present form of student politics is characterized by active use of firearms. It costs the society in two major ways, i.e., physical injuries and other extortion.

Imputed Cost of Physical Injury: There have been 24 deaths, 375 injuries along with damage of 131 cars and

burning of at least 30 rooms in the residential halls in the last three years.¹³ Table-4 presents the information. The cost of such deaths and injuries are not very high in monetary terms according to standard practice; i.e., if we estimate the value of life by the amount of lost potential income in the lifetime of the dead student and the cost of injury by the cost of treatment. However, from a psychological and social point of view the cost of such incidents is substantial.

Imputed Cost of Extortion: In addition to such costs we should also take into account of the amount of lost output and business activities lost due to extortion, robbery, theft, perpetrated by the various gangs in¹³ and around the campus. It is obvious that, while the concentration of university students has been the main cause behind the growth of certain types of businesses around the campus area, the normal business of the same types of businesses seem to have been constrained by such 'concentration' as well. To finance terrorist acts, tolls are frequently collected from shops and business enterprises in the neighborhood (for example, Nilkhet, Katabon, Elephant Road). The annual estimate of tolls collected by Dhaka University students stands roughly around Tk. 20,00,000. Dividing the total amount by the number of students we find the cost per student to be equal to Tk. 103.

Total Economic Cost of Education at Dhaka University

Adding the published part of the explicit cost (TK 28,942) with the unpublished one (i.e. Tk. 1433) and the

easily estimable part of the implicit cost (TK. 1,46,005 for land + TK. 28,636 for lost time + TK. 103 criminal activities) as well, we find the total cost of education in Dhaka University to be equal to Tk. 205,119 per year. Dividing this total amount by the number of students, we derive the per capita cost of education at Dhaka University. Although this amount ignores several components of the true cost, it exceeds the cost of education in the most expensive private university of the country by a large margin (almost 50%). Per capita cost of education is only Tk. 1740 in Dhaka University when measured in terms of tuition fees. However, with inclusion of social opportunity cost, it shoots up to Tk. 205,119. This information is summarized in the table below.

Table 1: Estimates of Costs of Education at Private and Public Universities

<i>Name of the University</i>	<i>Average Tuition and Fees per Student</i>	<i>Total Explicit cost of education per student</i>	<i>Total subsidy per student</i>	<i>True social cost of education per student</i>
Dhaka University	0.017	0.303	2.034	2.051
North South University	1.375	1.375	1.375	1.375
East West University	0.7925	0.7925	0.7925	0.7925

Note: (1) Subtracting the amount of tuition from the total cost figure we arrive at the amount of explicit plus implicit subsidy paid by the government or the society each year for a Dhaka University student.

(2) All the figures are in lac taka.

Quality and Relevance of Education Provided

Higher cost of an output does not necessarily imply that the production process is inefficient. If a higher priced product is of higher quality and more useful, we need not worry about the costs. In keeping with the usual practice of evaluating quality of a university, the *US News and World Report* and *Goreman Report* in particular are reported to have probed the quality of the faculty in terms of their degrees and research publications, students performances in standardized examinations such as SAT, and so on. In the case of Bangladesh's universities using these criteria seem to pose a rather difficult problem. For example, we find that public universities have better teacher student ratio and higher number of PhD holders among their faculties (see table-3). However, it by no means implies that the students somehow benefit from the large number of teachers. Since the problems of extended leave and unattended classes are non-existent in the private universities included in the sample, private universities extract greater output from their teachers.

Because of the difficulty in evaluation of quality through traditional methods,¹⁴ we have decided to focus on the relevance of education. At both NSU and EWU, we find bulk of the students studying for a degree in Business, Computer Science, Economics and English. There is little doubt about the relevance or the utility of degrees in these disciplines. For Dhaka University, we have students in basic sciences like Mathematics, Physics and Chemistry, which seems to fulfill some social demand. However, one may question the demand or social utility for as many as

236 students in PALI and Sanskrit, 102 in Urdu, 365 in Islamic History, 427 in Islamic Studies, 945 in Political Science.¹⁵ Even if some justification may be found for spending Tk. 2.03 lac every year to produce a soil science graduate, it is hard to justify spending so much money for so many Sanskrit graduates in this resource-poor country with 70% illiteracy.

Externality Argument of Subsidizing Public Universities

University education is subsidized on the ground that the benefits a society receives from a university educated person is greater than the benefits or the income received by the individual himself, i.e., there are positive spill over effects of providing higher education. Although one may agree fully with the statement that there is positive externality of university education, one may point to a wide range of studies done both in the context of developing as well developed countries which seem to show that the net marginal benefit of education after primary level declines sharply and it becomes close to zero in the post-secondary level.

The argument that one crucial benefit, i.e., a positive externality of higher education, which we cannot afford to lose is that it grooms people with democratic values who are essential for building a democratic society. Unfortunately however, the reality is that it is the universities that are providing the atmosphere for gunfights among rival student groups, sexual harassment and all other sorts of undemocratic behavior. One would find almost no trace of such behavior among elementary school or even

secondary school students. One may well argue that government is subsidizing violence by providing the huge amount of subsidy for university education.

There are negative effects of providing virtually free university education as well. One may point out that a university degree may develop a sense of false aspiration and make one averse to taking up a menial work, despite the fact that there may not be any better opportunity. Had the university education not been provided free, many of the students would have rather concentrated on developing skills for more productive menial trades than crowding at public universities.

Another argument for subsidizing higher education may be the presence of credit constraints. The argument here is that, although the net present value of future income may justify an individual to obtain university education, the cost of private option would be so high that most students would have to ask for loans. Since our credit markets are far from perfect, the government must therefore come forward to provide higher education. We believe that in the presence of credit-constraints the government should try to remove the credit market imperfections, if it should do anything at all, before it attempts to distort the market for higher education. If the government believes that university education is so beneficial for the society, it should perforce create a special fund to give soft loans for financing higher education.

If the government intends to focus on maximizing social gains by producing maximum external benefits, the subsidy could be spent on primary education for higher

rates of return. Estimates of social rates of return by Mahbubul Haq in his Human Development Report indicate that 'primary education' has the highest rate of return (18 per cent) compared to 'tertiary education', such as university education (only 12 per cent).¹⁵ If externality argument is to be used in allocation of subsidy, even then it is apparent that primary education outweighs university education. In a country where 29 million children are out of primary school, situation could dramatically change if the pattern of educational spending (which takes the form of government subsidy) is made efficient. Apart from efficiency arguments, the case for emphasizing primary education is further strengthened by equity arguments. It is evident that the group which will be hurt, if free university education is discontinued, is much more well off compared to the section of the population who are currently being deprived of primary education.

Many of the primary school-aged children could be provided the much-needed education by simply diverting the flow of subsidy from the public sector universities. To realise the goals outlined in the declaration of "Primary Education for All", apart from the existing 45,000 schools, additional requirement is 27,000 schools. Assuming an average construction cost of Tk. 2.5¹⁶ lac for every primary school as per low cost school construction plan, as many as 13,565 (50 per cent of the required number) primary schools could be constructed using Tk. 339,14,96,196,¹⁸ the amount of implicit and the explicit subsidy the government is currently spending on Dhaka University alone in a year. This result implies that every year the students of Dhaka University are subsidized at the expense of keeping 14.5

poor kids out of school who could be provided primary education at 13,565 schools.

Conclusion

The results of the study nullify many of the popular beliefs about public and private educational institutes. The calculation of opportunity cost of time and land totally alters the common belief that cost of education in the state universities is lower than their counterparts in the private sector. As our findings indicate, economic cost of education in Dhaka University is not even equal but is significantly higher than that of the private universities. We have also shown that the externality argument of subsidizing university education is easily dismissable, if one tries to find out who really bears the opportunity cost of the huge subsidy on public universities.

A major goal of the study is to bring the aspect of implicit subsidy in the forefront of discussion. A policy implication of the study is that the need for channeling subsidies away from university education to primary education. We have pointed out that, if the government considers university education to be extremely important, it should perhaps focus more on easing credit constraints rather than getting involved in the production of higher education by itself.

Table 2 : Data on Private & Public Universities (Year 1997)

Name of the university	Total number of students	Total number of teachers	Total number of Ph.d. holders	Total number of western Ph.d. holders	Total number of computers for students	Per capita tuition & other fees per annum.	Operating expenditures of the university (in lac)	Total number of teachers on leave
Dhaka University	19374	1247	560(3)	299(3)	36(2)	1,745.99	4845.46	200
North South University	1800	44	30	21	83	1,37,500.00	-	0
East West University	350	16	5	4	30	79,250.00(1)	-	0

Note:

- (1) In the East West University it requires Tk. 3,23,000, Tk. 3,30,000 and Tk. 2,98,000 to study respectively BBA, B.Sc. and BSS.
 - (2) Since there is no available figure on the total number of computer in DU, let alone the ones meant for the student use, we have, as proxy taken into consideration the number of computers in the computer center to which only Ph.D., M.Phil. And postgraduate students have access.
 - (3) Western Ph.D. is categorized as Ph.D. obtained from countries other than Asian, Australian countries and Soviet Russia. The aggregate figure has been estimated from Annual Report for the year 1996-97.
- Source: University Grants Commission and individual university authorities.

Table 3 : Student-Teacher ratio, Adjusted Student-Teacher ratio,¹⁹ Students per Teacher with PhD degrees, no. of Teachers with Western PhD & total no. of PhD holders and Students per computer

Name of the university	No. of Students per Teacher	Adjusted Students-Teacher ratio	Total number of students per Teacher with a PhD	Western PhD Holders to total no. of PhD holders	No. of Students per computer
Dhaka University	15.536	18.50	35.71	0.53	107.63 ²⁰
North South University	41.66	41.66	62.50	0.70	21.68
East West University	22.22	22.22	71.42	0.80	11.66

Table 4: Number of deaths, injury and damage of cars in the university campus

<i>Name of the university</i>	<i>No of deaths On campus due to political violence</i>										<i>No. of injuries in the campus per year</i>			<i>No. of cars broken by the students in and around campus</i>		
	98	97	96	95	94	93	92	91	98	97	96	95	98	97	96	95
Year																
Dhaka University	1	2	2	4	3	2	8	7	54	92	217	-	40	33	101	-
North South University	Nil								Nil				Nil			
East West University	Nil								Nil				Nil			

Source: Newspaper reports

Appendix A

Estimation of Cost of Policing the Campus

1. Estimation of Administrative Expense

One deputy commissioner (DC), one assistant deputy commissioner (ADC), two assistant commissioners (AC) are engaged just to maintain law and order situation in the Dhaka University campus. Basic salary of every AC, ADC and DC is respectively Tk. 4800, 7200 and 9500. Adding to it house rent which is 45% of the basic and Tk.150 medical allowance the gross salary boils down to Tk. 7100, 10590 and 14375 respectively. Then the associated annual administrative cost is at least equal to Tk. 4,69,980.

2. Expenditure Behind Deployed Forces

No additional payment is made for being deployed at Dhaka University. Nevertheless the associated social cost can be easily worked out by calculating the total wage paid to these police personnel at the government scale. 20% of the basic salary is given as house rent along with other perks, although this has been increased to 40% from 14 September 1996.

In addition, 5 inspectors of police (I), 4 sub-inspectors (SI), 7 sergeants (SGT), 28 subedars (TSI) and 1 assistant sub-inspector (ASI) are stationed in the campus almost permanently. Monthly basic salary of ASI, SI, I, SGT and TSI is respectively Tk. 2848, Tk. 3498, Tk. 5021, Tk. 3973 and Tk. 3890.

The expenditure that might incur in deploying the above-mentioned police officials is estimated to be Tk. 30,01,704.¹ To add to the list, as many as 492 policemen (which is a weighted average of Habildar and Constable) remained deployed over each of the last 5 years on the average. Basic salary of each Constable and Habildar is Tk. 2477 and 2788, respectively. With 40% of the basic paid as house rent the gross salary along with some other benefits, it becomes Tk. 3822 and 4258, respectively. Assuming that all of them are of the rank of Constable, the annual expenditure on 492 policemen stands out to be Tk. 2,25,69,811 (2 crore 25 lac 69 thousand eight hundred eleven). The Nilkhet Police Station with 1 sergeant, 2 head constables and 20 constables also serves the university campus and involves an annual cost of Tk. 10,48,536. Eight police trucks remain deployed on the campus on a daily basis. Even if each truck burns 10-liter fuel a day, annual fuel cost associated with them turn out to be Tk. 6,13,200. The average number of policemen injured has been 42. Six trucks were slightly damaged and one motor cycle has been fully burned.

3. Cost of Raids

The average number of raids carried out on the campus is 25. Each raid by the police again involves 15 trucks. Average fuel consumption per truck is 10 liter. Annual cost of raids measured in terms of fuel consumption turn out to be Tk. 78,750.

Notes

1. See Binayak Sen : *Whither Privatization: Results of an Exploratory Survey of the Disinvested Industries in Bangladesh*, Ministry of Finance, 1997.
2. We do not include institutions like the Dhaka Medical College which awards degree under Dhaka University but is financially a separate entity.
3. This includes politics and other activities which are undesirable in an educational institution.
4. Zero here is used as a starting point of the distribution. It is not zero in conventional sense.
5. See *Brochure of University Grants Commission*, 1997. Also see *Dhaka University Annual Report (1996-97)*.
6. See "Campus and Terrorism: A review" *Ajker Kagoj*, 10 May, 1998. Also see "Bishwa Biddalay Campus" (a Weekly Magazine), March 1998; "of Dhaka University Campus: Safe Crime Zone for Terrorists" *The Daily Ajker Kagoj* (Dhaka), 24 April, 1998; "Moinul Hasan Investigation Committee Report" *The Daily Jana Kantho* (Dhaka), 28 April, 1997; "60 Notices Served, 50 Investigation Committees but No Outcome" *The Daily Jana Kantho* (Dhaka), 27 April, 1998; "Political Parties Must Stop Patronizing Armed Cadres", *The Daily Star*, 9 August, 1998.
7. This figure was derived by dividing the amount of government grants and the tuition fees received, by number of students. Tk 526.9 million was received as grant from the University Grants Commission (UGC) whereas Tk. 33.827 million was received as tuition fees from the students by Dhaka University in 1997. Comparing costs of other years, 1997 was found to be a usual year in terms of expenses per student.
8. For example, a new residential hall for Dhaka University will be constructed with a budget of 22 crore taka very soon. Some people in the government administration outside Dhaka University had to put their valuable time and energy in arriving at this decision. Directorate General of Forces Intelligence (DGFI) and other government agencies get involved in student politics and other affairs involving Dhaka University.

9. Dhaka University earned Tk. 8.132 million by renting out some of its land area and buildings in the year 1997.
10. While most private universities allow students to begin university education right after they have appeared in their HSC examinations, Dhaka University takes almost a full year before the HSC passed students can begin their classes.
11. The potential income lost for the second year is discounted by an interest rate of 10% to convert the future value of lost potential income into present value.
12. The death statistics corresponds to those that occurred in the period of 1991 to 1996. On campus death encompasses deaths due to political violence and rivalry. Figures include deaths of students as well as outsiders. The figures on injury, cars broken and rooms damaged refer to those of 1996, 1997 and May 1998.
13. It is well known that student leaders have a constant share in any type of construction work that takes place within the campus. In the last known case of the kind, as per the press report 2% of a construction work worth Tk. 2.21 crore in Dhaka University was collected in the form of *Bokhra*. Then the collected amount was distributed in the ratio of 60:40 in between BCL and JCD respectively. For details see, *The Daily Sangbad* (Dhaka), 15 January, 1997
14. Here we may note that even in the US, there is a lot of debate on the criteria of judging the quality of universities and colleges. For instance, the criteria used by *Goreman Report* are very different from the criteria used by *US News* and *World Report*. See also "Asia's Search for Excellence", *Asia Week*, 23 May, 1997.
15. We do not mean that these disciplines are totally unproductive. We question the justification for so many students in these disciplines while so many other students are denied seats in more demanded disciplines.
16. Mahbubul Haq's ("*Human Development in South Asia; 1997*") estimates are for South Asia and we are assuming that Bangladesh's conditions are not significantly different from the South Asian average.

17. See Report of the Task Force on Bangladesh Development Strategies for the 1990's, V-1, UPL, Dhaka, 1991. See also "Public Expenditure in the Provision of Social Services in Bangladesh and Nepal", UN/ESCAP, 1996.
18. This figure is derived by adding the grants received from UGC to the total cost of policing and opportunity cost of land.
19. This ratio is estimated by deducting the no of teachers on leave from total number of teachers and then dividing the figure by total no. of teachers
20. The figure of per capita computer assumes that 20% of total Dhaka University students are in postgraduate & higher studies.
21. Figures exclude faculty members on leave and part timers.
22. Passed out students whose results are yet to be out, are ignored. Also students who are appearing in final exams are excluded.
23. *Annual Report* of Dhaka University did not mention total number of students in the department of Journalism. Similarly, it just stated that in Institute of Business Administration, respectively 75 and 150 students were admitted into BBA and MBA program. Our estimate is based on this information.