

## **Educated Unemployed in Pakistan: Estimates of Imbalances in the Current Flows**

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### **1. INTRODUCTION**

The existence of unemployment among educated person in Pakistan, is a cause of serious concern. This phenomenon, besides indicating gross wastages of both men and material *inter alia* is an undue drain on the economy, as well as having potential for serious socio-political repercussions. The problems in Karachi, in fact, can also be attributed to a growing unemployment particularly among the educated youth.

The problem of educated unemployed, essentially arises due to the malfunctioning of the education and training system. This system is virtually working in isolation, ignoring the requirement of the labour force. In addition to this, other contributing factors can be identified as (i) aspirations of the educated for white collar jobs particularly in the government sector, (ii) poor quality of education, and (iii) absence of an effective labour market information system.<sup>1</sup>

An interesting thing to observe from the official statistics, particularly the LFSs is the lower unemployment rate – total stock of educated unemployed in 1987-88 was given as less than 200 thousand.<sup>2</sup> Surprisingly, the estimates of educated unemployed range from 5 percent to over 30 percent in different studies of the subject. This renders it almost impossible to have meaningful comparisons and understanding of the issue. The limitations of most of these investigative works are largely due to (i) samples drawn were small and unrepresentative, (ii) sample surveys were mainly based on mailing procedures where a small response level affected the validity of estimates, and (iii) some of the studies were based on data generated by employment exchanges – well known for their limitations.<sup>3</sup>

The purpose of this paper is to estimate the unemployment in current flows of the educated labour force by different levels of education i.e., separately for the matriculates, intermediates, graduates, post-graduates and others. The attempt to

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<sup>1</sup>For a further study [see Ghayur (1989a) and Government of Pakistan (1989)].

<sup>2</sup>Source: LFS 1987-88.

<sup>3</sup>For a review of existing sources and literature, [see Anwar (1973); Government of Pakistan (1984) and Ghayur (1989)].

concentrate on the flows was made on the consideration that: (i) unemployment is not a long-term phenomenon, as in a country where there is no social security system, a few can afford to remain unemployed for a long period. This may, however, lead to mis-match and/or underemployment, (ii) availability of adequate data on flows, and (iii) importantly, reliability of data on stock composition of the educated labour force was far from satisfactory. Such an exercise, however, can only serve the purpose of giving an indication of emerging imbalances.

The plan of this paper is as follows: The methodology of the paper is discussed in Section 2. Supply and demand flows are constructed in Sections 3 and 4 respectively. The imbalances are discussed in Section 5. While Section 6 presents the conclusions.

## 2. METHODOLOGY

It is normal practice to use matriculation as a dividing line between the educated and uneducated portion of the work force. The labour market also discriminates between personnel having these two types of education. Hence, our subsequent discussions would take matriculates and above as educated.

Secondary data have been used for constructing the supply and demand flows.

### Potential Supply Flows

The difference between output at Matric and above and enrollments at post-Matric level in 1986-87 is taken as those leaving/completing studies. To them is added the output of terminal examinations e.g., post-graduates, etc. This is the first stream of the potential supply flow.

A significant number of students fail in the examinations. Available sources of data are silent on the nature of their preferences and activities. Their possible activities can be identified as: (i) reappearing in the following examination, (ii) becoming housewives/doing house work (for girl students), and (iii) start participating in the labour market — some of them may be already in the work force. This is a second stream of potential supply flows.

### Actual Supply Flows

The application of specific participation rates to potential streams would give the actual supply flows. For the first stream, we have used two participation rates giving low and high scenarios of labour supply namely: (i) .70, .70, .77, .94 and .94, and (ii) .77, .77, .94, .94 and 1.0 for matriculates, intermediates, graduates, post-graduates and others respectively. The lower participation rates have been used in many studies and projection exercises. For example, the exercises done for the

Sixth Five-Year Plan by the Manpower Division<sup>4</sup> and Cohen's work for the Planning Commission<sup>5</sup> have used them. Similarly, the National Manpower Commission (NMC) has also used the same rates.<sup>6</sup> However, the fact that over the years the participation of educated persons in the labour market is increasing, necessitated us to use the higher rates of participation. This has been done to indicate the extent to which the educated labour force can affect the labour market in the short and medium run.

For the second stream again we have used two participation rates for the failed candidates in the examinations at the intermediate, graduates and higher levels. These rates are (i) .15 and .40 for the low scenario, and (ii) .20 and .50 for the higher supply scenario for the failed candidates at intermediate-graduate and higher levels of examination respectively.<sup>7</sup>

### Demand Flows

We have taken the difference between the employment level of the educated persons during 1986-87 and 1982-83 as given by the respective LFSs, as the mid-term employment generated in the economy. Its average has been used to indicate the approximate annual demand being generated in the economy for the educated work force.<sup>8</sup> The mid-term average has been used to avoid seasonal and temporary fluctuations.

### 3. SUPPLY OF EDUCATED PEOPLE

The education system in the country from which the supply of educated persons originates is turning out, as may be seen from Table 1, more than half a million students yearly. A large number of these passed out, particularly at the Matric and Intermediate level, are enrolled in higher education.<sup>9</sup> The balance along with the output of terminal examinations are the potential entrants in the labour market.

Higher failure rates in our examination system are very much visible from

<sup>4</sup>For details [see Government of Pakistan (1985)].

<sup>5</sup>For details [see Cohen (1983)].

<sup>6</sup>For details [see Government of Pakistan (1989)].

<sup>7</sup>It may be mentioned that the failed candidates at matriculation examination have not been included for application of these participation rates as they are not matriculates.

<sup>8</sup>It may be mentioned that there exists no other source which generates so frequently employment related information based on field enquiries. There are, however, projection exercises giving the annual demand. For details [see (i) Government of Pakistan (1985), (ii) Cohen (1983), and Government of Pakistan (1989a)].

<sup>9</sup>For a further study of (i) patterns of enrollment at different levels of education – Forward rates of the passed outs, and (ii) type of educated entering into labour market, [see Ghayur (1989)].

Table 1

## Output of Educated Persons during 1977-1986 at Matric and above Level

(000)

Year	Matric		Intermediate		Graduate		Post-graduate		Total	
	A	P	A	P	A	P	A	P	A	P
1977	287	142	149	48	-	-	-	-	-	-
1978	367	176	207	58	-	-	-	-	-	-
1979	363	184	215	72	-	-	-	-	-	-
1980	374	208	234	68	85	31	11	7	704	314
1981	379	216	239	73	86	32	12	7	716	328
1982	-	-	-	-	87	33	13	7	-	-
1983	459	262	311	97	107	36	16	8	893	403
1984	507	290	350	108	142	47	16	8	1015	453
1985	547	276	380	124	148	55	18	10	1093	465
1986	591	323	403	137	165	56	25	13	1184	529

Source: Central Bureau of Education, University Grants Commission and Education Section of Planning and Development Division.

Notes: This does not include output from the vocational, technical and Commercial institutions which was estimated to be 11,816; 3,400 and 6,300 respectively in 1983-84 as reported by Majeed Akhtar (1985) *Employment Problems in Pakistan*. Bangkok, Thailand: ILO 10-11.

'A' indicates appeared and 'P' indicates passed.

Table 1. From over a million students appearing at different examinations, the number of successful students were slightly over half a million. A number of failed students would also become labour market participants.

It has been estimated in Table 2 that the annual flow of educated persons into the labour market, based on the use of two different sets of participation rates, as explained earlier, would range between 210–246 thousand in the short-term. Efforts are needed to at least generate a corresponding demand to avoid further imbalances.

Some observations of significance regarding educated entrants into the labour market under both the supply scenarios are: (i) 43-44 percent are matriculates, (ii) 27 percent are intermediates, (iii) 14 percent are graduates, (iv) 5-6 percent are post-graduates, and (v) 9-10 percent are vocational, technical and commercial diploma/certificates holders. Such supply flows, besides indicating an asymmetric distribution *inter alia* a malfunctioning of education and training system, would also face absorption problems in the labour market.

#### 4. DEMAND FOR EDUCATED PERSONS

The economy as a whole is a low absorber of the educated labour force. Calculations made from the LFS 1986-87 show that 12.45 percent of the employed labour force was educated. This proportion, though low, is increasing over the years – it was 8.57 percent in 1974-75.

The calculations presented in Table 3 show that the annual demand being generated in the economy for educated people is 161 thousand.<sup>10</sup> The largest demand is for matriculates and intermediates i.e., 44 percent and 22 percent respectively. The share of graduates, post-graduates and others is 18 percent, 8 percent and 7 percent respectively.

#### 5. IMBALANCES

The calculations made from imbalances in supply-demand flows presented in Table 4 indicate a higher level of unemployment amongst the educated under both the supply scenarios and range from 23 percent to 35 percent. This clearly suggests that unemployment in the stock of educated labour force would also be considerably higher than 4 percent as given in official statistics. Such high unemployment rates indicate that the length of unemployment period, over the years, would further increase, if efforts are not made to evolve appropriate remedial measures. The prolongation of the unemployment period has serious socio-economic and political repercussions.

<sup>10</sup>For a study of (i) nature and type of employment generated for the educated in the medium and long-term, and (ii) patterns of employment of the educated, [see Ghayur (1989)].

Table 2  
*Estimates of Educated Entering into the Labour Market during 1986-87*

(000)

Educational Level	No. of Educated Entering into Labour Market									
	A					B				
	Low Scenario					High Scenario				
	Output	Students Absorbed in Higher Stage	Students Leaving/Completing Studies	No. of Failed Candidates	From Students Leaving/Completing Studies	From the Failed Candidates at Intermediate and High Level	From Students Leaving/Completing Studies	From the Failed Candidates at Intermediate and High Level	Total	Total
1. Matric	323	250	73	266	51	40	91	56	53	109
2. Intermediate	137	78	59	109	41	16	57	45	22	67
3. Graduate	56	22	34	10	26	4	30	32	5	37
4. Post-graduate	13	—	13	—	12	—	12	12	—	12
5. Others	21	—	21	M.A.	20	—	20	21	—	21
Total	550	350	200	385	150	60	210	166	80	246

Source: For Serial 1 to 4 same as given in Table 1 and for Serial 5, Majeed Akhtar (1985) *Employment Problems in Pakistan* Bangkok: ILO 10-11.

Note: The output for Serial 1 to 4 relates to 1986, while for Serial 5 it is for the year 1983-84. The absorption of students in higher studies is, however, for the year 1986-87.

Table 3  
*Estimated Annual Demand for the Educated*

(000)

Educational Level	Mid-term Annual Average Demand (1982-83 to 1986-87)
Matric	71
Intermediate	36
Graduate	29
Post-graduate	13
Others	12
Total	161

Notes: (i) Calculations are based on the Labour Force Survey for the years 1982-83 and 1986-87.  
(ii) The "others" category mainly comprise of vocational/technical and commercial diploma/certificate holders.

Table 4  
*Imbalances in the Supply-demand Flows of the Educated Labour Force*

(000)

Educational Level	Supply		Demand	Imbalance	
	Low	High		Low	High
Matric	91	109	71	20	38
Intermediate	57	67	36	21	31
Graduate	30	37	29	1	8
Post-graduate	12	12	13	-1	-1
Others	20	21	12	8	9
Total	210	246	161	49	85

The imbalances interestingly show shortages of high-level manpower i.e., of post-graduates. This shortage may, over the years, become significant if efforts are

not made to increase the supply either by enhancing enrollments or reducing failure rates at such examinations.

The graduates are also marginally surplus if the low scenario outlook is considered whereas in the high scenario outlook 9 percent of them are unemployed.

Under both the supply scenarios unemployment, in terms of members, is largely concentrated amongst the matriculates and intermediates. These two categories form more than 80 percent of unemployment in the two supply scenarios. Surprisingly the other significant category of unemployed were the "others" category of educated persons, which mainly comprise the vocational, technical and commercial diploma/certificate holders. This phenomenon, however, needs to be studied further.

This situation indicates a malfunctioning of the education and training system which is working in total isolation of the world of work and labour market requirements. Restructuring of the whole education and training system are probably the important instruments for minimizing the imbalances. This can be greatly facilitated by the development of a comprehensive labour market information system.<sup>11</sup>

## 6. CONCLUSIONS

The primary objective of this exercise was to study, by using secondary data, the demand-supply flows of the educated labour force to determine the imbalances by different levels of education. The need for such an exercise was felt due to: (i) a wide variation in the estimates of unemployment amongst the educated which ranged from 5 percent to over 30 percent, (ii) availability of reliable data on flows, and (iii) unemployment is basically a short-term phenomenon, particularly in a country where no social security system exists.

Supply flows were estimated under low and high scenarios. Existence of a higher unemployment was found – the rates increasing further in high supply scenario. This indicates the need for additional efforts to generate demand for educated manpower.

Unemployment was largely found to be concentrating amongst the matriculates and intermediates under both supply scenarios. Surprisingly the "other" category of educated was also found to be unemployed – they were about one-tenth of total unemployed.

The graduates, under the low supply scenario were marginally surplus while in the high scenario about 8 percent of them were estimated to be unemployed.

Interestingly, shortages were estimated for the post-graduates under both supply scenarios. Efforts are needed to increase this high level manpower as its shortages can affect development initiatives.

<sup>11</sup>For details, [see Ghayur (1989) and Government of Pakistan (1989)].



## REFERENCES

- Anwar, Abdul Aziz (1973) Problems of Unemployment of Educated Manpower. Lahore: The Punjab Board of Economic Enquiry. (Report No. 156)
- Cohen, Suleiman I. (1983) An Estimated Framework for Sixth Five-Year Plan, 1982-83-1987-88. Islamabad/Rotterdam: Pakistan-Netherlands Project in Employment, Income and Basic Needs.
- Ghayur, Sabur (1989) Unemployment of the Educated: Considerations on Patterns of Supply, Demand and Imbalances. In S. N. Hyder (ed.) *Employment in Pakistan: Some Selected Issues*. (Under Print). Islamabad: Pakistan Manpower Institute.
- Ghayur, Sabur (1989a) Labour Market Information System in Pakistan: Existing Situation, Inadequacies and Suggestions for Improvements. (Paper presented in the 4 day National Workshop on Training of Functionaries of Employment Exchanges, organized jointly by the Punjab Directorate of Manpower and Training and ILO (9-12 January), Lahore.
- Pakistan, Government of (1984) Higher Education and Employment Opportunities in Pakistan. Draft report of a study jointly conducted by Ministry of Education, Academy for Educational Planning, Islamabad and Management and International Institute of Educational Planning, Paris.
- Pakistan, Government of (1985) A Study of the Occupational and Educational Requirements and Supply of the Sixth Five-Year Plan. Islamabad: Manpower Division.
- Pakistan, Government of (1989) Draft Report of National Manpower Commission. Islamabad: National Manpower Commission.
- Pakistan, Government of (1989a) Projections of Manpower Requirements and Supply for the Seventh Plan and for the Perspective Plan (1988-2003). A study prepared by the Pakistan/Netherlands Project on Human Resources for the National Manpower Commission (Preliminary Draft). Islamabad: National Manpower Commission.

## Comments on "Educated Unemployed in Pakistan: Estimates of Imbalances in the Current Flows"

A study on the educated unemployed in Pakistan is not only interesting but also very useful especially in the context of a country which has a low literacy ratio and is also labour-abundant. An exercise which can indicate the emerging imbalances and interventions required for correcting them is, indeed, much-desired. The author's choice of this vital subject is, therefore, commendable.

However, a few shortcomings in the analysis need to be pointed out:

The potential supply of educated labour has been taken as the difference between the output at matriculation and above and the enrollments at post-matric levels. One must, however, remember that there is a sub-set of enrolled students who also offer themselves in the labour market. Some adjustment for such individuals is, therefore, necessary.

The calculations for the demand flows of educated labour appear to be based upon a primitive method of simple averages. A more careful approach is required to assess this important variable. The Labour Force Survey provides the statistics on the distribution of workers by educational levels and major occupational groups e.g., agricultural workers, production and related workers, service workers, etc. The calculation of labour demand for the educated could have been calculated more appropriately by assuming certain rates of sectoral growth and corresponding occupation-wise demand for educated labour.

It is also very surprising to note that although the demand flow has been adjusted to avoid seasonal and temporary fluctuations, no such adjustment has been made for the supply statistics on educated labour.

Further, a derivation of actual labour supply from potential supply is based upon two participation rates giving low and high scenarios. Although the references are provided in the footnote, yet a couple of sentences in the text about the rationale underlying each set of rates would have enriched the analysis.

It may be mentioned that there appears a discrepancy in the figures quoted for labour demand for matriculates in Tables 3 and 4. In the former, the figure is 71,000 which results in a total demand of 161,000 for the educated, whereas in Table 4 this figure is 61,000, which yields a total demand of 151,000 educated persons.

Finally, although the study promises to provide interventions which may be required to correct these labour market imbalances, yet no specific prescription or policy measures are suggested in the paper.

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