

**AN ANALYSIS OF SOCIO-ECONOMIC FACTORS DETERMINING  
EMPLOYABILITY: A CASE STUDY OF ECONOMICS GRADUATES IN  
DELHI AND KOLKATA**

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**MASTER OF PHILOSOPHY**

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DATE 25.07.2011

**DECLARATION**

This is to certify that the dissertation called “An Analysis of Socio-Economic Factors Determining Employability: A Case Study of Economics Graduates in Delhi and Kolkata” submitted by me in the fulfillment of the requirement of the degree of Master of Philosophy of Jawaharlal Nehru University is my original work and has not been previously submitted, in part or full, for the award of any degree of this University or any other University.

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## Abbreviations

B.A.	Bachelor in Arts
B.Sc.	Bachelor in Science
BPO	Business Process Outsourcing
B.Tech	Bachelor in Technology
CESP	Centre for Economic Studies and Planning
CITD	Centre for International Trade and Development
CV	Curriculum Vita
DSE	Delhi School of Economics
ECAs	Extra-Curricular Activities
HEIs	Higher Educational Institutions
JNU	Jawaharlal Nehru University
M.A.	Masters in Arts
M.BA	Master in Business Administration
MHRD	Ministry of Human Resource Development
M.Phil	Master of Philosophy
M.Sc.	Masters in Sciences
NGO	Non-Governmental Organizations
PG	Postgraduation
UG	Undergraduation

## **Chapter 1: Introduction and Background of the Study**

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Economics of Education is yet to provide a satisfactory answer to the question of whether it is cognitive knowledge or behavioral traits which make educated workers valuable to the employers and this is the major reason for 'theoretical and empirical stagnation' in this field, according to Mark Blaug (1989)<sup>1</sup>. This is precisely the starting point of this dissertation. The intense relationship between education and employment is the main pillar of this study, and the operational features of employability are based on that. On the basis of a case study, this work looks into the nature of factors determining employability. Also it takes into account the perspectives of students and employers in conceptualizing the practical features of employability. This study focuses on employability in the discipline of Economics, and observes the campus-recruitment process of final year Master degree ('graduates' in international sense) students in four premiere institutions in Delhi and Kolkata.

### **1.1 The Link Between Education and Employment**

There are many schools of thought in Economics of Education linking education with employment. Although there are differences in these theories, mainly they fall into four categories. The most cited human capital theories believe that education augments skills in a person and make him more productive. Highly educated candidates thus stand a greater chance of getting selected for a job than their competitors. This theory views investment in education as investment in a capital which is embodied in human bodies (Schultz, 1961; Becker, 1964).

Another school considers education as screening device, because education injects moral values in a person. Educational qualifications thus often serve as the proxy for

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<sup>1</sup> quoted in Creedy, 1995

many unseen traits. Employers select ablest persons on the basis of their degrees as these signal many unobservable things (Spence, 1975; Stiglitz, 1975).

Labour market segmentation theories believe that productivity actually depends on the nature of the job, and it is not associated with the people. Education may provide the features needed for a particular job, or help one in fulfilling the criteria for getting a job but education is not the determinant of productivity (Kerr, 1954).

There is also another view which doubts existence of any linkage between education and employment and argues the relation between the two is just an illusion in the minds of candidates who apply for jobs (Sanyal, 1987).

The first two theories place importance on education in explaining the employment situation in any country. The latter expresses doubt about the role of education. The doubt gets firm basis if there is a phenomenon of educated unemployment or under-employment. Take the case of India. According to a World Bank report, jointly written by Blom and Saeki (2011), a major skill gap exists among Indian engineering graduates, making a strong case for the engineering colleges and institutions to focus more on employability and quality. According to the widely quoted report by the National Association of Software and Services Companies (NASSCOM) and McKinsey in 2005, only 25 per cent of the engineering education graduates are employable by a multinational company<sup>2</sup>. Only 39.5 per cent of graduates in India are employable and the challenge is to bridge the human resources gap by providing skills training to the other 60 per cent, says a Confederation of Indian Industry-Aspire report released at the 'Skills World 2008' summit organized by the CII and Aspire<sup>3</sup>. These statistics are apparently surprising and shocking as the age-old problem of 'finding adequate jobs' has suddenly shifted to 'finding employable graduates' in India. Apart from the problem of rising unemployment, lack of employability also gives rise to the problem of 'underemployment' which is taking a serious shape in India. This fact can be substantiated from the increasing proportion of B.Tech and MBA degree holders

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<sup>2</sup> quoted in "Employability and Skill Set of Newly Graduated Engineers in India" by Andreas Blom and Hiroshi Saeki, April 2011 (World Bank Policy Research Paper 5640) page 2

<sup>3</sup> [http://machinist.in/index.php?option=com\\_content&task=view&id=1277&Itemid=2](http://machinist.in/index.php?option=com_content&task=view&id=1277&Itemid=2)

working in BPO companies in India. Obviously the recruitment of over-qualified persons in semi-skilled jobs indicates towards the demand-supply mismatch and the gap between employers' expectations and the actual skill level of graduates.

## **1.2 Conceptualization of Employability**

In simple terms, employability is an individual's ability to gain and maintain his or her employment. According to Hillage and Pollard (1998), employability is about having the capability to gain initial employment, maintain employment and obtain new employment if required. Employability of an individual may come out from his basic skills, knowledge and understanding of a subject and personal virtues which will benefit him, the firm in which he is working and the community as a whole (Yorke and Knight, 2003). Apart from basic abilities like reading, writing, solving numerical problems, and the subject knowledge of a graduate, Employability demands much more. This 'more' could be his abilities to face a challenge in the work-place, be analytical and critical, work in a team, be honest and punctual and to act smart in demanding situations etc. Harvey, Locke and Mooney believe that employability cannot be measured through the indicator whereas a graduate bags a job or not. According to them, it is not an end product, rather it is a process. This process is closely associated to the learning experiences in Higher Educational Institutes (HEIs). Although employers often need a set of 'other' skills apparently independent of their subject knowledge, the role of HEIs, who are responsible of generating valuable skills in students, cannot be ignored.

An HEI is a place where students get academic and professional training and also get the competence and skills that allow them to participate in the development process of the economy. This notion has its roots in human capital theory which says that time spent in school increases worker's productivity. In such a case, the employers' job is really easy as all students undertaking a professional training should theoretically possess all the required skills and thus are treated equally employable by the employers.

But education also acts as a sorting device in case of information asymmetry in labour market. Employers screen employees according to their educational certificates because they prefer some unobserved traits to be there among their employees. Therefore educational certificates do a proxy for unobserved personal traits determining employability. The nature of jobs for which employment is sought about, also plays an important role and the determinants of employability can vary according to the type of jobs.

Summarizing the above discussion, it can be said that theoretically Employability can depend on either productive capacity or unobserved skills or the type of jobs, or on a combination of all three. Possession of these skills may be associated with the personal upbringing or family background and the society in which he or she lives.

### **1.3 Rationale of the Study**

So far we have briefly discussed the concept of employability and its plausible theoretical linkages with the theories of Economics of Education. Getting back to our initial problem of low employability among the educated (graduate and post graduate) youths in India, it is a pertinent question to ask what determines employability and what role the HEIs can play to improve the situation. Employability is obviously different from employment rates, and mere employment rate cannot judge the features of employability. In India, so many studies on employment have been done, but a deeper understanding of the problem of 'low-employability' is still missing. Very often our policy makers boast off our 'demographic dividend' and count on skilled manpower to bring in growth and prosperity to the nation in coming years, but at the same time various studies question the Employability of our youths. Employers on one hand, demand something 'more' than just the subject knowledge. Students and teachers in HEIs are possibly not fully aware of what consists this 'more'. As a consequence, there is a mismatch between skills generated and skills needed. In spite of doing the same course from the same institution, it is not surprising to see some of the students getting the 'best' jobs and others remaining jobless. Despite the gloomy

situation in Indian skilled labour market, little research has been conducted to identify the kinds of skills demanded by employers and the reasons for incapability of the graduates in meeting employers' expectation. To understand the features of Employability, it may be helpful to analyze the factors why some are getting good jobs and others can not. What are the features of this graduates which make them 'employable' in the eyes of the employers? Many studies have focused on the structural problems of labour market in India and found availability of less number of jobs is the main culprit for educated unemployment. But on the other side of the coin, there is another problem of being 'employable'. Apart from innate abilities, social structure can also be responsible for making any person 'employable' in the eyes of employers. Keeping this in mind, this study seeks to analyze the nature of employability sought out of educated youths who are fresh entrants into the labour market. This study examines the features and determinants of employability, both theoretically and practically based on a case study of Economics graduates in Delhi and Kolkata. The term 'graduates' in this study refers to those students pursuing Master degree courses and the term 'undergraduates' refer to those who are pursuing Bachelor degree courses.

#### **1.4 Objectives of the study**

This study tries to examine the link between Employability and the analogies drawn from theories in Economics of Education. It also tries to analyze the practical and operational characteristics of Employability and understand the nature of its determinants. It also seeks to understand the process of recruitment with the help of a case study involving final semester Master degree (M.A./M.Sc.) students in Economics in four institutions in Delhi and Kolkata.

## **1.5 Research Questions**

The following research questions are addressed by this study:

1. What are the operational determinants of employability in case of Economics discipline and how the placement process gets influenced by socio-economic background of students?
2. What is students' idea about the determinants of employability?
3. What is employers' idea about the determinants of students' employability?

## **1.6 Methodology**

This study closely observes a campus-placement process (for final year students of M.A./M.Sc. in Economics course) in four reputed institutions. Two of these institutions – Delhi School of Economics and Jawaharlal Nehru University including Centre for Economic Studies and Planning (CESP) and Centre for International Trade and Development (CITD) are situated in New Delhi while Jadavpur University and Presidency College are in Kolkata. Final year Master degree (MA/MSc in Economics) students who appeared in the placement were selected randomly and interviewed on the basis of a questionnaire. Questions were designed in a manner to capture their innate abilities and their ideas about employability. Placement co-ordinators of these institutions were also contacted to get hold of the placement data which tell us about the packages and job-profiles offered by companies which came to their campus for recruiting students. On the other hand, human resource managers or members of the recruitment board of these companies were contacted and asked to fill up a questionnaire to express their ideas about the determinants of students' employability. The whole process of placement (different rounds, type of questions employers asked, packages etc) was closely observed and analyzed.

## **1.7 Scheme of Chapterization**

The present chapter, the first one, presents the background of the study with the discussions on the development of idea behind the proposed study. The chapter outlines the theoretical and contemporary factors behind the debate over employability and draws the rationale and objectives of the study from the discussion.

The second chapter will discuss the theoretical aspects of employability and contextualize it within the theories of Economics of Education. This chapter will also explore the influence of socio-economic factors in influencing the hiring decisions of firms.

The third chapter will discuss the methodology of the study in details. A profile of selected institutions, rationale for choosing the particular stream 'Economics', making of the questionnaire etc will be presented in details.

The fourth chapter discusses the relationship between students' placement and other explanatory variables. This chapter also tries to establish a quantitative model based on logistic regression exercises.

The fifth chapter takes up the perspectives of students and employers and links it with the results found in chapter four.

The last chapter will make a summary of the findings along with the limitations. It will conclude the whole discussion against the backdrop of a larger context.



## Chapter 2: Review of Literature

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In Chapter One, it has already been said that the objective of this dissertation is to study the nature of the determinants of employability at the entry point in labour market and find out if there is any discriminating behavior among the employers in case of economics graduates. After completion of their courses, majority of graduates feel eager to enter the labour market, but at the entry point, they face serious competition not only because of availability of lesser number of suitable jobs, but also because of variations in degree of their employability. In this study, we are not dealing with the problem of scarcity of suitable jobs; rather we are interested in addressing the issue of finding 'employable' graduates. Employability is a consequence of many factors. The exact nature of its determinants can vary according to the type of jobs and one has to closely observe the hiring behavior of firms to get an idea about it. If employability is a combination of generic, specific and personal skills, then it may be logical to trace back its root in human capital and screening theories of education. In this chapter, let us start with the theoretical versions of employability and then search for the plausible logical connections between it and human capital and signalling theories of education.

### 2.1 Employability in Theory

Employability is actually different from employment. According to Yorke and Knight (2003), employability is a set of achievements – skills, understandings and personal attributes – that make graduates more likely to gain employment and be successful in their chosen occupations, which benefit themselves, the community and the economy. In other words, employability is about developing 'capable' graduates. The definition adopted by the United Kingdom's Enhancing Student Employability Co-ordination Team (ESECT, 2005) is the following - employability means a set of achievements, skills, understandings and personal attributes that make graduates more likely to gain employment and be successful in their chosen occupation. According to Stephenson (1998), '*Capable people not*

*only know about their specialisms, they also have the confidence to apply their knowledge and skills within varied and challenging situations and to continue to develop their specialist knowledge and skills.*' In simpler terms, a person is employable when he or she has the qualities to maintain employment, make progress in work place and is able to be employed in different places of same type of work. From the point of view of the individual, employability skills are the *career capital* that a person needs to get a job and acquire job specific skills (Datta, Pellissery, Paul, 2007). Earlier, Hillage and Pollard (1998) had defined it as the ability to gain and retain fulfilling work. But Brown and colleagues (Brown *et al.* 2002, p. 9) objected to the Hillage and Pollard definition and offered a different definition: employability is "*the relative chances of finding and maintaining different kinds of employment.*" The University of Newcastle (Allison *et al.*, 2002) defines employability as the capacity to move self-sufficiently into and within the labour market, to fulfill potential through sustainable employment. But according to Harvey (2001), "*Employability of a graduate is the propensity of the graduate to exhibit attributes that employers anticipate will be necessary for the future effective functioning of their organisation*".

From the point of view of policy makers, terms like 'employment' and 'unemployment' are macro terms, whereas employability is associated with an individual only. This term has gained importance as the role of welfare state in macro-economic policy-making has changed since economic liberalization. Gazier (1999) discussed various dimensions of the term employability in a chronological order. Starting from 'dichotomic employability' in the 50s (when employability was an administrative consequence), he had discussed 'labour market performance employability' in the 1980s, 'interactive employability' in the 90s and 'integrated employability' in contemporary times. The reason for transition, according to these authors, is explained by five factors: a) organizational form becoming more flat b) flexible production through multi-tasking, c) greater flow of information within firms using information technology and individualized treatment of employees and

customers, d) broader product line offered by firms and more emphasis on product quality, and e) breakdown of occupational boundaries.

Datta *et al* (2007) believe that *“a natural extension of the flow of monotony to interaction is holism. Employability in the context of holism entails ability to integrate work with both endogenous (by participation in wealth making, meeting customers’ demand, exploring new geographies, initiating discovery processes) and exogenous characteristics of the firm (by building consciousness about changes in business environment and technology, absorbing multiple cultures).”* One point might be clear from this distinction that as the form of employability changes over time, the process which generates employability is also bound to change. In the earlier phase, acquiring simple skills would be sufficient to attain employability, but now-a-days it is more complex and complicated as there is a need for employees with ability to transform from the role as a specialist to versatile (Morello, 2005).

From the point of view of the employers, employability skills are the generic skills, attitudes and behaviors that they require in all their employees (Bloom and Kitagawa, 1999 quoted in Datta *et al*, 2006). Generic skills are basically core and transferable skills in the sense that it can be easily or automatically transferred from educational to work contexts (Bennet, Dunne, Carre, 2000). Harvey *et al*. (1997) has reported that employers need intelligent, flexible, adaptable people who can be effectively doing well in a changing world. The analytical ability of an employee, along with his cognitive ability to solve real-life problems and managerial and co-operative ability to work in a team is the one that counts most in case of recruitment. Marshall and Tucker (1992) identified some of the general skills needed by most of the employers. These are capacity for abstract thought, to solve real-world problems, to communicate well in oral and written forms and to work well with others. Technical skills are no doubt important, but this can be tested thoroughly during interview or recruitment process. Communication skill, which is regarded as another important requisite as employees often need to express themselves clearly in front of others, can also be tested during an interview. But the other skills like the candidate’s ability to utilize

text-book knowledge in practical situations are very difficult for the employers to test in a short span of interaction.

Despite of different concepts, there is a general agreement that three types of qualities are important while assessing the employability performance (Datta *et al*, 2007). These are the followings:

1) Basic technical and academic skills specific to the job: Often, academic background enriches workers with some generic skills required for the job. These skills may include reading, writing, and numeric capacity, listening, written communication, oral presentation, global awareness, critical analysis, etc.

2) Process skills: Instead of schooling and curriculum, it is the work experience which helps to develop these process skills. Process skills are those skills which can be demonstrated on the work. These are problem solving capacity, decision making, planning and delegating, understanding business and its commercial interests, ability to work with persons from different backgrounds, team work, etc.

3) Personal qualities: it has been already said that an employer looks for the qualities of self-confidence, self-control, self- esteem, social skills, honesty, integrity, adaptability, flexibility, willingness to learn, emotional intelligence, stress tolerance, punctuality, efficiency, etc. These qualities are very much embedded with the personality type and shaped through life-experiences and difficult to observe in the interview process.

It is to be noted here that in literature the later two categories are classified as soft skills and the first one as 'core skills'. Having a perfect combination of soft skills and technical skills is important. Interestingly, the core skills can be directly linked to the years and quality of schooling whereas soft skills are results of job-experience or personal potentials.

According to Harvey (1999), employability is not about getting graduates into jobs. It is not even about delivering 'employability skills' in some generic sense. Rather it is about developing critical lifelong learners — and employability is subsumed as a subset within that. So the focus needs to be on empowering students to become

critical learners. Yorke and Knight (2003) also mentioned that employability is not only about skills but it is about skills *plus*. What employers are looking for are workers who can add value to their organization as well as change themselves if needed. Harvey very strongly argues that employability is not something very distinct from pedagogy and curriculum and it actually grows out of good learning. Organizations are thus looking much farther than degree subject and classification at the time of recruiting. Higher educational institutions can play a very important role. Harvey says, it is unwise to assume a causal link between the efforts (or lack of effort) of a higher education institution and the extent and type of employment of their graduates. This point is not that difficult to acknowledge since this goes perfectly well with the findings of human capital theory. Hence, to understand the link between employability and human capital theories, let us first recall some of the major developments of human capital theories in brief

## **2.2 Human Capital Theory**

The term 'capital' refers to 'means of production'. Machines, factory, raw materials - all different forms of capital, help in increasing the productive capacity of an economy which also increases income of the nation. This in the long run augments the growth possibilities and enhances its economic prosperity. But apart from these tangible capitals, some intangible form of capital like education and health also increases productive capacity of the workers and thus in the long run helps achieving a higher rate of economic growth as well as wellbeing of the people. This type of capital, which is embedded in human bodies, is referred to as 'human capital'. Human beings cannot be separated from this type of capital. Good health, knowledge, moral values, good habits, social awareness- all can be results of investment in human capital which can play a very important role in determining the welfare status of the individuals in an economy. Although it may not be right to treat the entire human capital research programme as a single theory, but the main idea of human capital research is that people spend on themselves in different ways, not for the sake of present enjoyments, but for the sake of future pecuniary and non-pecuniary returns (Blaug, 1976). People may consume health-services, go for higher studies, wait to

choose for a suitable job with high remuneration and decide to migrate to other cities for better opportunities. These decisions related to investment rather than to consumption may be undertaken by individuals or by society on behalf of its members who look forward to the future for the justification of these present actions. Many studies in human capital theory have shown importance of investment in health and education in a nation's development and treated investments in human capital as important as investments in physical capital.

In this discussion, investment in education would be given special attention as this is placed at the core of this study. Education and training increase productivity of an individual. Number of years spent in school or in a training course helps an individual in augmenting his skills to work more efficiently. Human capital theory actually suggests that a nation benefits from investment in people (Sweetland, 1996). According to Marc Blaug, “ *In the field of education, the principal theoretical implication of the human-capital research program is that the demand for upper secondary and higher education is responsive both to variations in the direct and indirect private costs of schooling and to variations in the earnings differentials associated with additional years of schooling*” (Blaug, 1976). In economic literature several approaches to explain investments in human capital have been found. Over the years, this section of economic discussions has attracted attention of world's most sound scholars of economics. In 1966, Blaug had organized 792 journal articles, books and research studies which were written on this subject. In 1970, this number grew up to 1350 and in 1976, it exceeded 2000 (Blaug, 1970 and 1976).

Blaug (1966, 1970, 1978) and Bowen (1964) also tried to categorize human capital methodologies. Blaug found three distinct categories- (i) production function approach, (ii) human capital formation and (iii) measurement of the returns. Bowen (1964) suggested categories like (i) the simple correlation approach (ii) the residual approach and (iii) the returns-to-education approach. Considering the vastness of academic works on this subject, here in this section let us discuss some of the pioneering studies. Although the term 'human capital' became popular during the 60s, let us have a look at the earlier references before discussing the 60's revolution.

Let us begin with three stalwarts – Adam Smith, John Stuart Mill and Alfred Marshall. It is true that any direct reference to the term ‘human capital’ might not be found in their writings, but the importance of investment in people has been emphasized again and again in their studies.

Adam Smith, in his “An Inquiry into the Wealth of Nations” (1776) makes it clear that the labour inputs of a nation qualitatively include ‘*the acquired and useful abilities of all the inhabitants or members of the society*’ and the skill, dexterity, and judgment with which this labour is applied. Degree of investment in human capital also accounted for differences in the wages of labour as well as in the pecuniary recompense of professional people (e.g., painters, sculptors, lawyers, physicians) whose education was much more “tedious and expensive” than others. Education and experience are the two sources of acquiring human capital (Spengler, 1977). According to Smith, the reward of human capital must reflect the investment embodied in it even as does the return on other fixed capital. “*The work which he learns to perform, it must be expected, over and above the usual wages of common labour, will replace to him the whole expense of his education, with at least the ordinary profits of an equally valuable capital*” (p.101).

Mill, on the other hand put importance on the fact that these human abilities cannot be exchanged at a market rate. He says, “*A country would hardly be said to be richer, except by metaphor, however precious a possession it might have in the genius, the virtues, or the accomplishments of its inhabitants; unless indeed these were looked upon as marketable articles, by which it could attract the material wealth of other countries*”(1926, p.48). This, by all means, does not mean that Mill did not value human abilities (Sweetland, 1996). He just required a market exchange for determining value of these human abilities so that these can be defined as ‘wealth’ in material terms. Human abilities are means to wealth, these are economic utilities; according to him, “*utilities fixed and embodied in human beings...the labour being in this case employed in conferring on human beings qualities which render them serviceable to themselves and others.*” (1926, p.46).

Alfred Marshall mentions “*we may define personal wealth so as to include all those energies, faculties, and habits which directly contribute to making people industrially efficient.*”(1948, p.58). Human abilities, according to Marshall, are agents of producing wealth. Like Mill, Marshall also denounces inclusion of human abilities in the definition of wealth as their values cannot be determined in a market.

Irving Fischer, unlike Mill and Marshall, expands his definition of ‘wealth’ to include qualities (1906). Although he realizes the difficulties in determining values for these human abilities, he clearly states, “*that wealth in its broadest sense includes human beings*” (p.51).

In 1960, in his presidential lecture in American Economic association T.W. Schultz enunciated his approach which, according to Bowman, had ushered in “Human Capital Revolution in Economic Thought.” The revolutionaries, namely Schultz, Gary Becker and Jacob Mincer not only incorporated individual decisions regarding education, training, migration, etc., in the areas of labour economics, but also extended their analysis to include investments in social provisions (Sobel, 1982). Before 1960, studies on human capital took demand for post-compulsory education as a mere consumption demand which is determined by tastes and preferences. Economists had ignored the question of ‘ability’ to consume such education and the cost of foregoing income was also neglected. “*The human-capital research program, on the other hand, while also taking "tastes" and "abilities" as given, emphasizes the role of present and future earnings, arguing in addition that these are much more likely to exhibit variations in the short term than the distribution of family background characteristics between successive cohorts of students*” (Blaug, 1976).

Jacob Mincer (1958) tried to examine the nature and causes of differences in personal incomes. He had regarded investments in human capital as one of the most important factors affecting variations in personal incomes. He developed a model incorporating years of education and years of work experience. His model provided an analysis of the manner in which on-the-job training influences differences in earnings across individuals and how this determines the inequality and skewness of earnings. Mincer found that years of work foregone to pursue education were rationally compensated



with higher earnings. He also found that as more skills and experience are acquired with the passage of time, earnings rise (p.287). With this analysis Mincer (1957, 1958) shows that within an occupation, earnings inequality increases with the steepness of the age-earnings profile, and that this profile is steeper for occupations requiring more skill, whether acquired in school or on the job. He also shows theoretically and empirically that inequality increases with age, schooling level and occupational rank (income). In summary, he concluded that “*interoccupational differentials are therefore a function of differences in training....Intra-occupational differences arise when the concept of investment in human capital is extended to include experience on the job*” (p.301). Mincer had provided the necessary framework for calculating rates of return on education for further studies (Blaug, 1966). Following him, many economists had tried to estimate rates of return to education. Estimates are generally derived from least square regression taking logarithms of wages or earnings as dependent variables. Independent variables include a constant, years of schooling, job experience etc. The coefficient associated with the schooling term is responsible for explaining the percentage change in earning with respect to one additional year of schooling. This type of approach is commonly known as Mincerian earning equation approach.

Before discussing the contribution of Becker and Schultz, let us discuss another two studies done by Solomon Fabricant and Abramovitz. Fabricant (1959) studied United States productivity from 1889 to 1957. He discovered that the methods and assumptions underlying productivity actually undermined the importance of intangible capital which includes all the improvements in basic science, technology, business administration, and education and training. Abramovitz (1956) also put emphasis on the importance of accounting intangible capital inputs. He found that national output had increased at a higher rate than traditional inputs could explain. The difference between output and explained inputs was termed as “measure of our ignorance”. Fabricant showed that this measure had grown at an increasing rate during 1919-1957. For drawing scholars’ attention to the measure of our ignorance, Fabricant attracted ‘volumes of macroeconomic interest in the viability of human capital theory’ (Sweetland, 1996).

Gary Becker's study (1960) was the leading and pioneering theoretical work on measurement of rate of returns on education (Blaug, 1966). Becker studied differentials in personal incomes among college students in the United States. He compared personal incomes of college graduates with that of high school graduates. Income difference between these two groups was related to the cost of acquiring human capital or to the cost of attending college. Becker then derived a rate of return on investments in college education. He concluded that investments in college education provided indirect returns in addition to direct returns. He also realized that if the fraction of able persons going to college increases, average return from colleges would also increase.

T. W. Schultz in his presidential address to the American Economic Association in 1960, said – *“Although it is obvious that people acquire useful skills and knowledge, it is not obvious that these skills and knowledge are a form of capital, that this capital is in substantial part a product of deliberate investment, that it has grown in Western societies at a much faster rate than conventional (non-human) capital, and that its growth may well be the most distinctive feature of the economic system”* (p.1).

He explained that United States' national income had risen significantly during the 1900-1956 period and among the factors responsible for this growth, the estimated stock of education in the work force had grown at a rate nearly twice than the rate at which conventional capital had grown. His study disclosed *“the contribution that education makes to earnings and to national income because a change in allocation only alters the rate of return, not the total return”* (p.13). He asserted (through the estimates done by Becker) that the private and social return on education at the college level was significantly higher than the rate of return to physical capital. It was further used to argue the then prevailing underinvestment in education. Apart from establishing the importance of education in human capital formation, he also mentioned other types of human capital investments like – health and nutrition, on-the-job-training by firms, migration of individuals, etc. He contended that the best way to achieve greater income equality between the various groups in the society is to have equal human capital endowments. Such equalization, according to him, would

also benefit the whole society. Blaug had considered Schultz as “the father of the concept of human capital”(p.12).

Denison’s approach (1962) clearly falls under what Blaug had categorized as “production function approach”. Denison adopted an aggregate production function model to explain United States’ economic growth. He found that average annual growth rate of real national income of United States during 1929-1957 was 2.93 per cent (p.266). 2.0 per cent of this growth was explained by an increase in total inputs including 0.67 per cent attributed to education. Of the 0.93 per cent residual, Denison allocated 0.59 per cent to knowledge categories. Understanding the close link between knowledge and education, Denison concluded that 43 per cent of national income growth can be explained by human capital investments.

Schultz, again in 1963, addressed the question of economic growth and the residual. Re-establishing the importance of knowledge, he associated it with schooling and the research. Denison’s study considered total return, Becker’s (1960) study considered rates of return, and according to Schultz, “*the measured return to schooling is simply that part of earnings attributed to education*”(p.48). Becker in his study (1964) tried to explore rates of return on human capital investments in education and training. More highly educated people generally earn more; he used this phenomenon as the basis of his study. He had used 1950 census data and found a 13 per cent ‘best single estimate’ of the private rate of return on investments in education.

So far we have mentioned only some of the pioneering studies in the field of human capital theory. The field is so enriched with the works of prominent economists, that it is beyond the scope of this paper to mention all of them. In the nutshell, the above discussion points out the fact that human capital theory considers the spending decisions on education, health, migration, etc as investment since people spend on these things today in order to gain benefits from these tomorrow. Secondly, people take future incomes and today’s foregone earnings into account before deciding upon how much to study. Thirdly, these studies show the importance of investment in intangible capital in growth of the economy. Finally, various studies had tried to

estimate the rate of return, i.e., the expected increase in earnings due to one additional year of schooling. These studies strongly indicate that a certain percentage of the variations in personal income can be explained by differences in schooling.

### **2.2.1 Criticisms**

In spite of its huge popularity, human capital theory also faced some serious criticisms. The admissibility of the analogy between physical capital and human capital often appear to be narrow and limited in scope. The rate of return approach, because of its obsession with private rate of return, often ignored the 'externality' part of education. The applicability of production function approach (e.g. Woodhall and Blaug, 1965 and 1968) in economics of education and health is also questionable (Majumdar, 1983).

The next section introduces screening theory or theory of signalling which poses serious challenges in front of human capital theories by stressing on the role of education as only a 'screening device'. Employers look for more trainable workers, they judge workers in terms of 'personality traits' rather than 'cognitive skills' because cognitive skills are not explicitly observable.

### **2.3 Theory of Screening and Signalling**

In the job market, when a firm hires employees, it faces the problem of information asymmetry. There are a lot of differences in personal traits among individuals, and some of these would always remain unobserved. Firms, looking for a good deal of intrinsic productivity, cannot rely on applicants' own pronouncements about themselves. Generally the employers look for workers who will be diligent, honest, healthy, humble and free from bad habits. Apart from these, they also look for some attributes like smartness, fluency in English, sense of good manners, etc. But within the short period of interview, it is very difficult to identify the existence of these characteristics in any applicant. Only the applicants know whether they possess such attributes or not. Even if some of these are directly observed, the labour laws of a

country can restrict any employer to discriminate among applicants based on a very particular criterion. Without the mechanism of sorting, high quality workers would be treated at par with their low quality colleagues, and all of them would be offered the unconditional expected wage rate. Firms form these expectations on the basis of their previous experiences. Now, since this average expected wage rate is lower than the deserving wage rate of the high quality workers, they would not be willing to offer their service and eventually the market will be flooded with only low-quality workers. This case is analogous to the famous example of second hand car market, what is called the market for “lemons” by G. Akerlof (1970). Actually in a simple market-mechanism, without information asymmetry, price is expected to equate demand and supply. But in case of asymmetrical information, price-mechanism fails to perform the dual role of indicating the quality of goods as well as equating demand and supply. There lies the need for sorting. Both signalling and screening serve to sort workers, but there is a little difference between these two. In case of signalling, the informed party, here the applicants, move forward whether in screening models, the uninformed party like firms move first. The identification of certain qualitative attributes is called sorting and the devices used to sort high-quality individuals from low-quality are called sorting devices. (Phelps, 1972; Arrow, 1973; Rothschild, 1973; Taubman and Wales, 1974; Thurow, 1974; Spence, 1973; Spence, 1974; Wiles, 1974; Stiglitz, 1975).

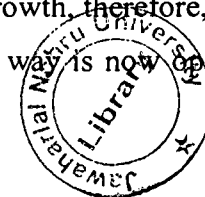
According to human-capital theory, the labour market is capable of continually absorbing workers with ever higher levels of education, provided that education-specific earnings are flexible downwards (Blaug, 1976). Human capital theory justifies the important role of education in overall development as it increases the productivity as a whole. From the individual perspectives also, education earns a return because it enables one to acquire more sophisticated knowledge and skill which leaves a positive impact on one’s ability to produce more goods or services in a specified time period. Education has been seen as a way of augmenting one’s skills and productivity, and consequently the earnings. But it is also true that education is not the only way which affects one’s skills and earnings. Family background, innate

ability, preferences or beliefs, health conditions all can play an important role in this context.

The sorting approach to education proposes that education does not affect individual productive capabilities but affect earnings through a wholly different mechanism. Employers look for certain traits and specific skills (such as they are looking for employees who have good moral character, behave humbly, do not smoke and take drugs, and do not have the tendency to quit the job) and there is no reason to believe that the process of acquiring education can create these traits. In a model of signalling, employers set a critical level of education (from their previous experiences) and they believe anyone who has done more than that level, does possess all the traits. Thus students very often choose to acquire that level of education to signal employees that they possess such traits. Employers appoint them not because they have passed that level and have good knowledge and productive capability, but because they are expected to have certain specific skills. Thus education can act as a sorting device in case of information asymmetry in labour market.

Although educational institutions are not the only ones to do screening in an economy, educational screening provides the primary determinant of one's initial job opportunities (Stiglitz, 1975). Educational institutions provide information about students' capabilities for a number of reasons. Firstly, for an efficient allocation of scarce educational resources, it is important for institutions to identify different individual abilities. Secondly, most educators argue that there are returns from recognizing the fact that some students learn faster than others. Thirdly, we know that students use their comparative advantage in the job market to get a job. Part of the social marginal product of educational institutions lies in the act of obtaining information about individuals' comparative advantages. Fourthly, due to a great deal of teacher-student interaction in any educational institutions, teachers generally know a lot about their students. For these reasons, it is expected that educational institutions can obtain a lot of useful information about the students, and provide a device for screening. The contribution of education to economic growth, therefore, is simply that of providing a selection device for employers, and the way is now open to consider

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the question of whether formal schooling is indeed the most efficient selection mechanism that we could design for the purpose. This is the so-called "screening hypothesis" or "theory of credentialism".

Michael Spence, in his paper "Job Market Signaling" (1973), designs a simple model of signalling where education plays the role of a sorting device. He considers the task of employers similar to purchasing of a lottery and the employers to be risk-neutral. For each set of signals they face, they will have an expected marginal productivity for an individual who possesses all those attributes. Applicants can change the indices (such as, education) by incurring a cost, namely *signaling costs*. These costs include monetary and psychic costs as well as the costs of time. One critical assumption of the model is that here the costs of signalling are negatively correlated with productive capability. The employers adjust their conditional probabilistic beliefs about the relation between signals and productive capabilities based on past experiences and set the wage schedule accordingly. The system will be 'stationary' if these beliefs are not rejected after one period and are confirmed by the present incoming data. In this model, equilibrium exists if the components in the cycle re-generate itself. If in the next round, employers' beliefs are confirmed, offered wage schedules regenerate themselves, the behavior of applicants re-appear again and again, then it can be said that the equilibrium exists.

### **2.3.1 Labour Market Segmentation Theories**

In the classic article, "The Balkanization of labour Markets", Clark Kerr (1954) talked about market segmentation. He divided the labour market on the basis of structural characteristics. According to him, a labour market is 'structured' if there are strong binding attachments between employees and employers. On the other hand, a labour market is 'unstructured' if there is no attachment among the employees or the employers except for the wage. This type of distinction had its root in the study by John Dunlop and therefore this approach is best termed as 'Kerr-Dunlop approach' (Sobel, 1982). Michael Piore and Peter Doeringer had further elaborated on this issue. The 'structured' or 'primary' labour market consists of high wage jobs in large

established firms which are generally unionized, associated with good working conditions and employment stability. On the contrary, 'unstructured' or 'secondary' labour market is associated with less attractive jobs earning low wages in poor working conditions and have less employment stability. Having said this much on labour market distinction, now it can be said that screening is more likely to operate in the first type of markets. Not only at the entry level, screening mechanism also exists in the internal selection for job-promotion in the primary markets. In these types of structured markets, there is a continuous queue of workers who need to be screened or allocated posts according to some desirable criteria.

In Lester Thurow's study (1972), screening takes place to assign workers to queues for the desirable internal labour market jobs. Evidence of existence of substantial labour market dualism is also found in studies by Paul Ryscavage (1973). According to him factors like race and sex are additional screening devices. This point will again be taken in coming sections to discuss the role of social determinants of employability. Edward Kalacheck (1975) concludes that although human capital variables are the prime determinants, labour market structure variables must also be taken care of in order to explain personal earning variations.

### **2.3.2 Empirical Evidence of Screening**

The first explicit test of signalling was done by Taubman and Wales (1973). They took a sample of United States Army Air Force volunteers who had different educational profiles, abilities and demographic characteristics. Taubman and Wales found that educational profile is an important factor determining entry conditions, and returns to education might get reduced in the absence of a screening mechanism. In spite of having same degree, there could be large variations in earnings due to the 'quality' of the institution. Drop outs from a high ranked college earned more than graduates from a low ranked college. They had calculated that a graduate from a low-quality university earned 53 per cent more than the average high school-leaver, a graduate from a high-quality university earned 98 per cent more (Brown and Sessions, 2006). Like Ashenfelter and Mooney (1992), they also found that only mathematical



aptitude affects individual's earnings significantly. They suggested that ability initially has little impact on wages, but this impact grows over time. The rate of growth of this impact, according to them, is higher for high-ability workers.

According to Layard and Psacharopoulos (1974), the above study could not capture all the crucial factors of ability. They tested three predictions of sorting hypothesis, and concluded that sorting hypothesis plays an insignificant role compared to human capital theory in explaining the relationship between education and earning. The differential effect on earnings of certified and non-certified worker has been referred to literature as "sheepskin effect" of education.

Riley (1979) criticized Layard and Psacharopoulos on the ground that screening hypothesis had been taken in a narrow sense in their study. Layard and Psacharopoulos only focused on strong version of screening hypothesis. Screening hypothesis never suggested that firms look only exclusively at certificates, but rather they look for a vector of informational variables about workers (Brown and Sessions, 2006). According to them as screening is mainly done for selecting able workers for jobs that require on-the-job-training, returns to education is expected to rise over time along with the rise in productivity and wages.

According to Chiswick (1973), even in weak screening hypothesis, sheepskin effects may be important as certified workers (graduates) might be more efficient learners, more serious to obey instructions and more eager to apply more effort. Weiss (1995) also believes that since these attributes are generally preferred by firms, they would be willing to hire graduates or pay more to them.

Belman and Heywood (1991) found that women and minorities enjoy larger sheepskin effects for university graduation than others. In another study (1997), they found sheepskin effects significantly working for young graduates but almost non-existent in case of older workers. Jaeger and page (1996) and Gibson (2000) also found few statistical differences in sheepskin effects across gender and race groups.

Another important study was done by Oosterbeek (1992). He took a sample of 1377 Dutch economics scholars and used their average test score in secondary education as a proxy for their ability. He found that if a student spends one extra year in studying economics, he or she is expected to get 8 per cent more rate of return than others. Therefore, he supports the human capital theory arguments that studying helps increase one's productivity. On the contrary, according to screening hypothesis, if a student finishes a course early, in less number of years, he or she is expected to gain in the labour market. In another study, Oosterbeek and Groot (1994) elaborated this methodology and distinguished between scholars' skipped years, effective years, repeated years, inefficient routing years and drop out years. They used a detailed panel data set from surveys in 1952 and 1983 of Dutch workers and found strong supportive evidences for human capital theory.

Studies done by Wolpin (1977) and Riley (1979) tried to test whether 'screened' workers acquire more education than 'unscreened' workers. Wolpin found only a minor screening function of education while Riley concludes that weak screening hypothesis more accurately explains the act of wage determination than human capital theory. Similarly, Shah (1985), Brown and Sessions (1988) for UK, Brown and Sessions (1999) for Italy, Katz and Ziderman (1980) for Israel, Grubb (1993) for the USA and Heywood and Wei (2004) for Hong Kong also found evidences for supporting weak screening hypothesis.

### **Criticisms**

According to Blaug (1976), this thesis runs into the serious objection that it accounts at best for starting salaries and not for the earnings of long- time employees in different firms. It ignores the effect of work-experience on earnings. Besides, this weak version of the screening hypothesis fails to explain why the correlation between earnings and length of schooling actually increases in the first 10-15 years of work experience. (Blaug, 1972, pp. 73-75; Chiswick, 1973; Layard and Psacharopoulos, 1974; Psacharopoulos, 1974).

### 2.3.4 Human Capital versus Screening Hypothesis

So far we have noted various studies which tried to explain the relationship between earnings and education. According to human capital theory, it has been said that years spent in school increases workers' productivity as well as his earnings. But this factor could not explain all the wage differences in practical life. Many preferential characteristics of the workers may not explicitly appear in the wage-education equations, but employers do consider some of the unobserved traits to select employees. As a consequence, students choose a length of schooling to signal their potentials. This is, precisely, signalling role of education. These two approaches apparently may look poles apart, but there are some interesting similarities among them. These two approaches, human capital and signalling, may not be as competitive as discussed above.

This is true that employers look for employees who are diligent, ready to learn, honest and obedient. These characteristics may not be independent of the workers' schooling experience. In other words, better educated workers are not a random sample of workers (Weiss, 1995). In most of the cases, students who choose to study more or select a longer period of study, are actually those who are hard-working, ready to learn more and obedient to teachers. Therefore, signalling or sorting approach is nothing but an extension of human capital theory. According to Weiss (1995), "*while human capital theory is concerned with the role of learning in determining the return to schooling, sorting models, while allowing for learning, focus on the ways in which schooling serves as either a signal or filter for productivity differences that firms cannot reward directly. Sorting models extend human capital theory models by allowing for some productivity differences that firms do not observe to be correlated with the costs or benefits of schooling*"(p.134).

## **2.4 Relevance of these Theories to the Study of Employability**

We began with the concept of employability and then discussed theories of human capital and screening. We have defined the term employability in terms of one's ability to get selected for the job. Employability gets determined by the possession of generic, specific and personal skills. According to many economists, generic skills are nothing but ability to read, write, solve simple numerical problems, express something in front of others, etc. These skills, can be obtained through a proper schooling. Schooling is the perfect example of a general training. Workers themselves pay for this training, i.e., schooling. Human capital theories explained the importance of schooling in raising productivity of an individual. Many economists studied the impact of investment in education on the earnings of individuals. A good number of studies tried to estimate the rate of return to education. In most of the studies, it has come out that one additional year of schooling is associated with an increase in income. In simpler words, if one individual chooses to study one more year in school, he or she will be rewarded in the place of work in terms of higher wages than others who have not done this extra year of schooling. According to human capital theory this happens because one extra year of schooling increases the worker's productivity. Employers having full knowledge of the fact are ready to offer higher wages to workers who have studied longer than others. Here one can draw an analogy between the theory of employability and human capital investments.

In the literature of employability more references are made to the necessity of lifelong education to become flexible in terms of changing needs of the jobs and fewer argument are given to explain the phenomenon at the entry point of the labour market. Different types of employability have been discussed and the requirements keep on changing. A worker has to mould himself according to the changes to remain 'employable'. In this context, need for lifelong training has been emphasized again and again. But at the time of fresh recruitments, where fresh college graduates are recruited, employers look for employability in terms of generic skills, specific process skills and personal traits. Now, generic skills may be results of a good schooling and human capital theory re-iterates the fact that schooling makes a man or woman more

productive. Therefore, schooling has a role to play in our discussion of employability. Students being aware of the fact, would select to go for more education as that will enrich them with generic skills, which in turn is a determinant of employability in the labour market. Therefore, in the same lines of human capital theory, one may argue that doing one extra year of schooling may give some advantage to students who are going to appear at the recruitments.

Secondly, on-the-job-training is another form of human capital investments. This also has serious implications for determining employability. After being employed in a job for a few years, when a worker applies for a better post or promotion, the experience helps him or her in developing better process skills. The benefits of learning-by-doing will increase his employability than fresh applicants. So, one of the most important determinants of employability, possession of job specific process skills, can be explained by human capital theories.

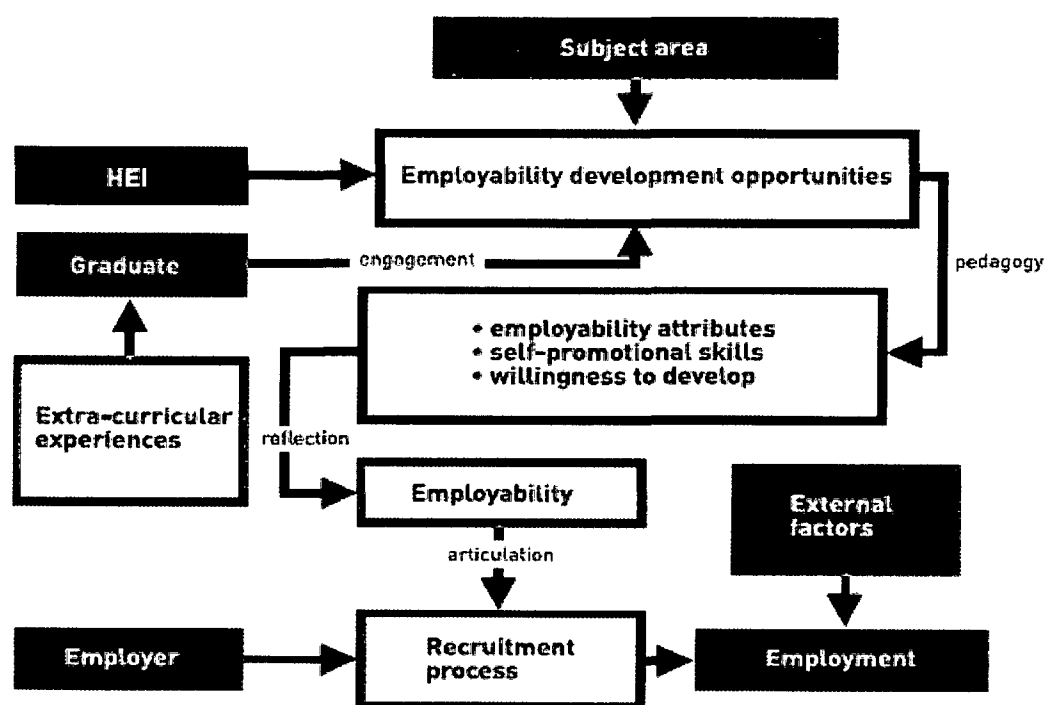
Thirdly, personal traits are also important for achieving employability. These traits may include virtues like honesty punctuality, diligence, willingness to learn, obedience, co-operative attitude, team spirit, etc. As stated earlier, these are not easy to observe in a recruitment process. But employers put a great degree of importance on these characteristics. This, in turn, forces us to recall our discussions about screening hypothesis. Screening or signalling hypothesis also states the importance of unobserved personal skills, which cannot be judged in an interview. Very often employers use workers' educational degree certificates as a screening device to select best suitable employees. Therefore, in real life, the third determinant of employability is closely associated with the possession of educational degree certificates which act as a screening device. Suppose a student has studied all courses like others, but could not appear in the final examination and hence did not get any certificate at the end, he or she will be screened out in the recruitment process where educational degree stands as a proxy for one's personal skills. This student will lack in employability because it would be difficult for him to prove his unobserved virtues. Alternatively, students with degree certificates will be considered as the preferred ones since their certificates will speak for their traits. One thing may be noted here that screening hypothesis and

human capital theory may not be competitive and mutually exclusive. It is true that screening hypothesis undermines the productivity augmenting role of education and considers education as a mere screening device. But it may be true, as argued by Weiss and others that those students who end up having degree certificates may not be random people. It is very much possible that they are those who are hard working, sincere, ready to learn and obedient to teachers. In this case, screening theory would be an extension of human capital theory and both can be best viewed as complementary to each other.

### **2.7 Employability generated in Higher Educational Institutes (HEIs)**

It has already been stated that employability is much beyond the incident of getting any job. It is actually a process which comes out of good learning. An educational institute being a place for generating valuable skills among its students, can play a very important role in improving employability. An institution may develop graduates' employability and enhance the attributes that make them employable. However, the institution is but one among many factors that influence the employability of graduates. While the institution might contribute to a graduate's knowledge, skills and experience, graduates also draw on other life experiences and personal attributes (Harvey, Locke and Morey, 2002). Therefore one cannot expect HEIs to automatically improve employability of its students; rather it is a complex interaction between many factors. This phenomenon is depicted in the figure below in Figure 2.1:

**Figure 2.1: A Model of Graduate Employability Development**



A model of graduate employability development

Source: Enhancing employability, recognizing diversity - Universities UK and CSU, 2011

This diagram is taken from the report “Enhancing employability, recognizing diversity - Universities UK and CSU” written by Harvey, Locke and Morey (*ibid.*). According to the report, Three core processes impact on employability: first the pedagogic process that encourages development; second, self-reflection by the student; and third, articulation of experiences and abilities. Pedagogy is related to the teaching and learning processes in HEIs. Self-reflection is what a student does with this learning. Recruitment practices, on the other hand, are a key element in the process by which graduates get jobs. Although ‘[large] companies with very different activities and concerns recruit graduates using selection criteria that are very similar’

(Bennett *et al.* 2000, p 143), it still pays off to study these practices closely. Operational and practical features of employability may get revealed from these practices. For an example, the report mentioned about a research project, “Access to What?” (Centre for Higher Education Research and Information (CHERI) 2002), which found that even after taking the ‘indirect effects’ of status of university, subject studied, and geographic region into account, the age and socio-economic/ethnic background of a graduate appears to influence recruitment decisions. The next section discusses the importance of some socio-economic factors in determining one’s employability from a socio-economic perspective.

## **2.8 The Role of Socio-Economic Factors Determining Employability**

There are several forms of discriminating factors present in a society. Apart from the degree of cognitive skills and personality traits, often these determinants become important. There is also a great possibility that these discriminating social factors affect the skill and personality factor to a great extent. Any study of the determinants of employability cannot be complete without taking these socio-economic factors into account.

There may be some natural or physical differences among individuals. The differences in the cognitive capabilities among individuals are not much of our concern at this point: rather this study is interested in exploring other socio-economic forms of discrimination which enhance inequalities in a society. In his essay on the origin of inequality, Ralf Dahrendorf (1968) distinguished between natural differences of kind and natural differences of rank, and again between the latter and social stratification. According to Beteille (2003), the relation between natural differences and social inequality is a complex one. He says, “*natural differences do not present themselves to us directly, but are perceived in a highly selective manner through the lens of socially established systems of classification (Levi-Strauss 1966).*”



Class caste and gender-these are three overlapping social dimensions of Indian society. Many sociologists have considered class and caste as the primary sources of power (Frankel, 1989). Very often in a society men and women are given different roles and the differences in their temperament and abilities are taken as a reason (Beteille , 2003). But this practice actually has its root in the social norms and conventions which varies across societies (Mead, 1963). Several studies have shown the negative effect of caste discrimination on educational attainment in India (Mathur, 2005).

Social and economic class consciousness very often makes a difference in the upbringing of a child and determines his or her attainments in life. Similarly the 'status' of one's family also plays an important role. The importance of status groups in enjoying social honour in capitalist societies had been emphasized in Weberian sociological theories. These status groups also try to monopolize valued economic opportunities (Weber 1968). If education and training augments one's productive abilities (as said in human capital theories) then the role of these interacting socio-economic factors deterring one's capability becomes important. Sen (1997) distinguishes between 'productivity' and 'ability' in the sense that productivity idea relates to all factors of production while the notion of ability relates essentially to labour. He further distinguishes between the two as

- (i) opportunities for the use of one's abilities may not arise in a particular situation and
- (ii) 'innate abilities' may be distinguished from derived competence reflecting education, training, and opportunities of learning.

The point this discussion tries to make here is that it is expected that many socio-economic factors can actually narrow down the scope of one's innate abilities if there are social discriminations. Since labour market operations take place within a society only, it can be expected that this type of constraints also play a role there. For example in the United States, Collins (1979) observed that very often lucrative high salaried jobs require high educational qualification and exclude disadvantageous

groups from competition. Certain types of high salaried jobs often prefer people from high status groups, and this gets more importance than objective skills.

In the article, *The Legacy of Social Exclusion: A Correspondence Study of Job Discrimination in India's Urban Private Sector* by Sukhdeo Throat and Paul Attewell, it was found that there is severe evidence of discrimination according to caste and religion in private urban jobs in India. In a paragraph they have said,

*“ people who hold privileged positions within large organizations develop a sense that a certain kind of person is especially effective in their roles, leading to many managers to favour potential recruits who are socially similar to themselves, a process that Kanter (1977) has termed ‘homosocial reproduction’. Conversely, employers hold stereotypes about certain out-groups as being unsuitable for employment (Holzer 1999, Kirschenman and Neckerman 1991). One corollary is that a person’s social networks prove important for finding jobs in the US, both at the professional end (Ganovetter 1974) and at the blue-collar end (Royster 2003) of the labour market, because social networks often run along group lines, sponsoring people who are ‘like us’ (Elliot 2001, Smith 2003)”*

The employers often want employees who are like them. This fact actually gives rise to a vicious cycle of inequality where the socio-economically advantaged’ group gets the advantage again and again. Very often it is said in that a certain type of personality is needed for a certain kind of job. But personality is the complex organization of cognitions, affects, and behaviors that gives direction and pattern (coherence) to the person’s life (Pervin, 1996) and social situations, roles and expectations encourage and afford different behavioral patterns (Mischel and Shoda, 1995). According to many psychologists like Albert Bandura (1999), *“social systems that cultivate generalizable competencies, instill a robust sense of efficacy, create opportunity structures, provide aidful resources, and allow room for self-directedness increase the chances that people will realize what they wish to become.”*

## **2.9 Concluding Remarks**

Having discussed the role of socio-economic factors determining the selection of candidates in labour market, let us conclude the section. The traits of employability often relate to the cognitive skills and innate abilities of a candidate. But at the same time socio-economic factors do play a role in the selection process. An employable candidate may not be selected, and an unemployable candidate may get selected due to these factors. The theoretical aspects of employability often ignore the role of socio-economic factors. The determinants of employability have been identified by many economists, but few attempts have been to understand their generating processes. This study seeks to explore the link between employability and the standard theories of human capital and screening on one hand, and the role of socio-economic factors in determining employability. To understand the practical features of 'employability, it is thus required to follow a recruitment process closely. Against this backdrop, the present study makes an effort to observe the recruitment process of Economics graduates in four institutions and analyze the features of employability in operational sense. The next chapter deals with the detailed discussions about methodology of the study.

## **Chapter 3: Methodology and Sample**

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In Chapter One, it has already been stated that this study seeks to reveal the nature of employability often sought in real life. The research questions centre on the nature of factors determining employability and the idea of employability nurtured by students as well as the employers. Before discussing the methodological details, let me discuss in a nutshell what has been done in this study. Because of limited time and scope, first a particular discipline was chosen and the nature of employability of students who have studied in this discipline has been studied. The discipline, 'Economics' has its own interesting characteristics and its job-market consequences are dynamic enough to be studied in details. Four reputed institutions where students do Master (M.A./M.Sc.) in Economics have been chosen. Two of them are in Delhi while the other two are in Kolkata, West Bengal. Two types of separate questionnaires were designed- one for the MA final semester students and the other for the employers who visit these institutions to recruit students for their companies. Students, randomly chosen, were interviewed according to the questionnaire. On the other hand, employers (those who visit campuses for placement) were contacted personally and were sent the questionnaire through e-mails. Thus, all the data used in this study mainly come from a primary source, i.e., the sample survey.

### **3.1 Rationale for Choosing the Discipline 'Economics'**

The discipline 'Economics' is interesting in many a sense. First of all, if one observes the admission process in Bachelor courses for the past few years, the surprising fact about 'Economics' becomes clear. For example, in Delhi University colleges, cut-off points for getting admission in Economics honours courses are as high as science subjects like Physics. Economics as a discipline has evolved as a science in terms of generalizable theories, models and empirics. This also fosters a tendency to treat Economics as science rather than social sciences. At the same time, Economics is

argued to be located in the realm of social sciences. The tussle between the two has defined the course contours which vary across the institutions. This can be a factor determining the employability and skill. This feature has made the subject interesting for students who had science in class 12<sup>th</sup> and have not studied Economics in school. Students from any stream (science, commerce and humanities) can opt for Economics honours course subject to some minimal restrictions. Apparently this is the only social science discipline whose 'market value' is perceived to be high among the students. The term 'market value' has its theoretical roots lying in the theory of 'rate of return'. According to parents and students, Economics is a subject for which 'rate of return' is higher than other social science courses. But this perception can vary across regionally. In Kolkata, the cut-offs for getting admission in Economics honours courses are not as high as they are in Delhi. In Kolkata, students from middle-income background who cannot wait for five years with uncertainty, prefer engineering degrees because the latter has a higher chance of placement than the former. Students who can afford to do five years Master degree without knowing the possibilities of getting employed, mainly come from well-to-do families.

Now-a-days there is a growing demand for economists in corporate companies. After the recession, now-a-days, every company wants an economist to be a part of their team. Be it a pharmaceutical company or travel agency, it needs people who has deeper understanding of the changing economy. Every company does not need a biologist or a physicist, but they do need an economist to be aware of the dynamics of the market economy. This unique feature of the discipline has increased the demand for Economics courses among students. Companies which do not have a post for an economist, often depend on Market Research Companies which provide information to other firms on the demand of their products. These companies also increase demand for Economics graduates.

Financial sector, which includes banking (commercial and investment) and insurance, is growing in India. In this era of globalization and liberalization, Indian financial sector is facing new challenges and diversifying its activities. This sector is one of the important sectors held responsible for augmenting growth potential. In Tenth Five

Year Plan, 19.3 lakhs new job opportunities were created in this sector.<sup>4</sup> This sector possesses huge employment-potentials for Economics graduates.

According to students, Economics earn them high rate of returns. For employers, Economics graduates are an essential part of their human resources. But not all the Economics graduates are equally employable in our country. There is a wide variation in the quality of learning students go through. Reputation of the institution, quality of teaching, student's ability to absorb- all of these matters in the long run. Obviously there are other factors determining employability of students which need to be explored. In a nutshell, studying the employability characteristics of an Economics student is a challenging task.

### **3.2 Profile of the Institutions**

In Delhi, two institutions have been chosen. These are – 1) Delhi School of Economics (DSE) under Delhi University and 2) Jawaharlal Nehru University or JNU (which includes Centre for Economic Studies and Planning (CESP) and Centre for International Trade and Development (CITD)). Both the institutions are highly reputed and offer Master degree courses in Economics which is considered as one of the best in our country. In Kolkata, Jadavpur University and Presidency College have been selected for this study.

**The Delhi School of Economics** (established in 1949) is a major leading institution in offering M.A. course in Economics in our country. It places emphasis on quantitative methods, state-of-the-art Economics, and hands-on training in the use of econometric software, as claimed by the department in their website<sup>5</sup>.

The department also offers M.Phil. and Ph.D. programmes apart from its M.A. course. The department also has a Placement Cell (initiated in 1998) that successfully

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<sup>4</sup> See Report of the Special Group quoted in Employment and Unemployment Scenario in India, DGET.

<sup>5</sup> [http:// www.econdse.org](http://www.econdse.org)

places students in attractive corporate jobs. Recruiters on campus include Nomura, Goldman Sachs, American Express, Citibank, Proctor & Gamble, Essex Lake Group, Accenture, Merck, HSBC, Genpact, ICICI, Ernst and Young, Pricewaterhouse Coopers, Deloitte, Hewlett Packard, GMR, India Infrastructure, BMR Advisors, Target, CEPA, IFMR, IMRB, RBI, TERI, Centre for Civil Society, and CRY<sup>6</sup>. The rationale for choosing this institution lies in its orientation towards corporate placements.

**Jawaharlal Nehru University**, also known as JNU was established in the year 1969. It is mainly a research oriented postgraduate University with approximately 7000 students and faculty strength of around 550. There are mainly two centres (departments) which offer MA (Economics) course. These two centres are – **Centre for Economic Studies and Planning (CESP) and Centre for International Trade and Development (CITD)**.

CESP, established in 1973, comes under the School of Social Sciences (SSS) which is the largest centre in JNU. It aims at developing a sound theoretical base along with analytical tools. Students are admitted through a nation-wide exam, conducted in over 70 centres all over the country. Only the top 0.5 per cent of the applicants get admitted into the centre. Apart from offering basic core courses, it offers optional papers such as Foreign Trade, Aid and Investment Policies, Production Conditions in Indian Agriculture, Law and Economics, Industrial Organization Theory, Money, Banking and Monetary Institutions, Labour Economics, Auction Theory Econometric Methods, Environmental Economics, Database on Indian Economy, Public Finance, Financial Structure and Development etc. There is no official placement cell in this centre. However, students volunteer to invite employers in the campus. The list of leading recruiters includes Accenture, Watson Wyatt, McKinsey Knowledge Centre, Ernst and Young, Price Waterhouse Coopers, Infosys, HSBC Bank, GE Money, ICICI Bank, The Economic Times, India Infrastructure, Dunnhumby etc<sup>7</sup>.

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<sup>6</sup> <http://dsebottomline.com>

<sup>7</sup> CESP Placement Brochure available at [http:// www.cespnju.in](http://www.cespnju.in)

CITD was initially known as the International Trade and Development (ITD) division which was a part of the erstwhile Indian School of International Studies, which integrated with the Jawaharlal Nehru University in the early 1970s as the School of International Studies. In 1995, CITD had introduced an M.A. programme in Economics with specialization in the world economy. The course has been designed with a clear emphasis on emerging global issues like trade, technology, development, environment, natural resources, finance, banking, law and economic regulation. CITD is now a popular centre for focusing exclusively on the international economy as its thrust area of teaching and research, specializing in areas like Trade, Investment, Technology, Environment, Natural Resources, Finance, Poverty, Inequality, and Social Sectors<sup>8</sup>.

**Jadavpur University** was established in 1955 and its Economics Department was established in 1956. The Economics Department offers B.A., M.A., M.Phil. and Ph.D. degrees. At present there are twenty-six full time faculty members, six support staff, and a total student enrollment of around three hundred. The B.A. and M.A. programmes have been organized under a semester system and have been designed to provide a strong foundation in economic theory, and statistical and econometric techniques. Layered on top of these are a variety of courses on environmental Economics, financial Economics, the Indian economy, international trade, public finance, etc<sup>9</sup>.

The department of Applied Economics in **Presidency College** is a comparatively newer department offering MA in Applied Economics. In 2002 Presidency College, Kolkata was ranked number one by the weekly news magazine India Today. In the year 2010, when the college was upgraded to university status, it was ranked 3rd in India. The department started offering Master degree course in Applied Economics some years back and this course has gained popularity among students and employers because of its focus on economic applications.

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<sup>8</sup> <http://www.jnu.ac.in/Academics/Schools/SchoolOfInternationalStudies/CITD/>  
<sup>9</sup> <http://www.juEconomics.in/>



### **3.3 Rationale for Choosing the Area- Delhi and Kolkata**

The institutions have been chosen from two cities- Delhi and Kolkata in order to pursue a cross-regional study of the recruitment process. Initially, students from DSE and JNU had been interviewed and it was found that the random sample has a regional skewness towards West Bengal. But when one checks the features of the population, it is not a surprise at all. The population, itself has a regional skewness in the sense that West Bengal is ranked number one among as the state from where maximum number of students came to DSE and JNU to do an M.A. in Economics. When students were asked why they have migrated from their previous university to DSE or JNU, most of them cited the reason that their native universities are not blessed with ample corporate job opportunities. This point instigates me in taking the case of two universities in Kolkata. Another reason for including Kolkata sample in this study is to increase the variation in the data set. For example, it was found that most of the students in the institutions in Delhi are highly fluent in English. To check the impact of fluency in English on the possibility of placement, inclusion of some students with medium fluency was required.

Finally, the samples collected from Delhi and Kolkata give a detailed idea about the differential situation prevailing in HEIs in India. In spite of being ranked among the best universities in our country, Presidency College and Jadavpur University are still not in the preferred list of employers. This in turn opens many doors for discussions in our study of notion of employability.

### **3.4 The Questionnaires**

Three different questionnaires have been used in this study. One questionnaire (Questionnaire A) was prepared for the M.A. (Economics) students who participated in the placement process in DSE, JNU, Jadavpur University and Presidency College.

Another questionnaire (Questionnaire B) was prepared for the employers who visited these institutes for recruiting candidates. First let us discuss about Questionnaire A.

### **Questionnaire A**

Section I of the questionnaire A has six questions pertaining to general information about the respondent like sex, age, name of the institution and department, name of the course, semester, and year of admission.

Section II deals with personal information like the family background, state of origin, caste and region. This was framed in order to understand the upbringing of the respondent properly. One detailed question was asked on the educational and occupational background of father, mother and siblings. Question no. 9 seeks information about per month family income (in Rs). Five income slabs were considered- (i) less than 5000, (ii) between 5000 and 15000, (iii) between 15000 and 30,000, (iv) between 30,000 and 45,000 and (v) more than 45,000. The next question was asked to know about the caste of the respondent, whether he/she belongs to General, Scheduled Caste, Scheduled Tribe or Other Backward Caste categories. 'Region' has two categories- 'Rural' and 'Urban'.

Section III of the questionnaire A contains educational portfolio of the respondent. Information on examinations they have passed (or appearing) like 10<sup>th</sup>, 12<sup>th</sup>, graduation and postgraduation were collected. Year of passing, stream (in case of class 12<sup>th</sup>), medium of instruction, type of institute (Government or Private), board or university and percentage obtained – all were required to be mentioned by the respondents. A special note on optional papers in M.A. course was also incorporated to have an idea about the respondents' interests. Question no. 13 to 16 gives us an idea about the respondent's personal qualities like languages known, fluency in English, software skills and extra-curricular activities. Fluency in English has been categorized as 'High' and 'Medium' and it is judged by the student him/herself. All the students are assumed of having a basic knowledge of computer applications and thereby software skills are categorized on the basis of whether the student is a certificate holder or not. Question no. 17 seeks information about the student's past

research or job experiences. This question was framed to incorporate the experience of summer internship programme which is very popular among Master degree (Economics) students.

Section IV of the questionnaire A concentrates upon the placement experience of the interviewee. Questions no. 18 and 19 tell us whether the student is facing a prospective employer for the first time and how many companies he or she has appeared for. Question no. 20 deals in details of the job offer (if any) received by the student. Name of the company, job profile, annual gross pay package, tenure, contracts etc. were asked in details to have a proper idea about the jobs bagged by many a students. In this question, student's expected pay package before taking up this course was also mentioned. Next seven questions starting from 21 to 27 asked the students about the recruitment process. Whether employers asked them questions on the current syllabi (if yes, then the areas), current affairs, term papers written by students, optional papers etc were noted down. To see if the employers are interested in students' grades, a separate question was incorporated. Similarly, employers' interest in student's extra-curricular activities was captured through question no. 27.

In the next section, i.e. in Section V of the questionnaire A, the respondents were requested to furnish us with their personal thoughts and suggestions. The first question, question no. 28 deals with the reason for appearing in the placement process. This question was framed to see how serious the respondent is about getting a corporate job. The next question tells us about his or her future career plans. Question no. 30 gives us a reason why he or she has migrated from the previous university or institution. Questions drafted in no. 31-33 ask the respondent to rate the importance of grades, course materials and communication skill for impressing the employers. The last question provides us an idea about the factor(s) which, according to the respondent, is (are) the most important for getting placed. Answer to this question is open-ended and is expected to give us an idea about students' viewpoint about determinants of employability.

**Questionnaire B** is meant for employers only. It has two sections. Section I is meant for general information about the respondent and his/her company. How long the respondent is working in the company and his or her job-profile or post were sought to be answered. Type of the company (whether private, government, multi-national (MNC) or non-governmental organization (NGO)) and working area were put in order to have an idea about the company's profile. Another question pertaining to this section is how long the company has been operating in India. This was important to understand the company's reliability and reputation.

Section II contains all the recruitment related questions. First it was necessary to know for what post and for what purpose they need M.A. (Economics) people in their companies and what pay package is offered to them on an average. Next question deals with the mode of recruitment- whether they recruit employees only from campus visits or they conduct off-campus test and interviews also. Question no. 9 seeks information about the institutions they had visited this year. Detailed information about how many students in different institute(s) were interested in their company, how many students were finally selected and about the gross pay package (p.a.) offered, etc were sought. Question no. 10 deals with the factors responsible for selecting a particular institution for a placement-visit. Relative importance of student CVs, faculty, alumni, course structure, reputation or brand of the institution, past experience, etc. comes out of the answer given by employers. The next question provides information about the different rounds (technical / human resource) they conduct in a recruitment process and their modes (written/verbal/telephonic etc.). The last question, i.e. question no. 12 asks the employers to rank 14 factors apparently important for selecting any candidate. Factors include technical knowledge, smartness and problem solving ability, communication skill and fluency in English, managing and marketing skills, analytical skills, grades, awareness about the current affairs of the society and economy, family background, special papers of interest, internships and experience, extra-curricular activities, computer skills, reputation of the institutions etc. This question was framed to understand the employers' idea of factors determining employability of candidates.

### **3.5 Collection of Data**

Most of the data used for analysis in this study has been taken from a sample survey. Since, the objective is to understand the concept of employability in operational sense, it was necessary to get the views of students who are about to enter into the labour market after completing their studies and the employers who recruit them. It has already been mentioned that the present study confines the discussion within one particular discipline, i.e. Economics and studies the campus-recruitment process of M.A. (Economics) students in three reputed institutions (two in Delhi, one in Kolkata).

Final semester students of MA (Economics) degree course in DSE, JNU (CESP and CITD) and Jadavpur University and Presidency College in Kolkata (who were interested in getting placed) were interviewed according to the questionnaire (Questionnaire A). Respondents were selected randomly from a group of students who had participated in the placement process. The visit in DSE and JNU were made during February-March, 2011. This period was chosen because generally the campus recruitment process continues till the end of January. In Kolkata, students were interviewed in May, after their end-semester examinations. Apart from the randomly selected students, some of the placement co-ordinators (students who manage their placement process) were also contacted personally. However, students in all four universities were not only asked to fill up the questionnaires but also were interviewed personally by the scholar. This was done to have an idea about the qualitative factors important for studying employability which might help in an in-depth analysis.

All the employers who visited DSE, JNU, Jadavpur University and Presidency College, were sent a questionnaire (Questionnaire B) through e-mails. Only five of them replied with the filled up questionnaire.

Thus, the data used for analysis in this study come out of the primary sources mainly.

### **3.6 The Assumptions**

Among the students who have joined the M.A. (Economics) course in DSE, JNU, Presidency College and Jadavpur University, a large number of students are actually interested in getting placed in leading corporate companies. But this is not a universal case in the sense that there may be many students in an MA class who wish to join either research or government or academics after completing their studies. The concept of employability in the latter case is obviously different from that of corporate employability. In this study, we would concentrate mainly in understanding the nature of employability in case of corporate jobs. Therefore, the whole class of M.A. students in DSE, JNU, Jadavpur University and Presidency College was not considered as our population. Rather, only those students were considered who had appeared in the placement process were supposed to be interested in getting placed in a corporate job. Hence, the group of students who has participated in the campus-placement process serves as our population and from this group, respondents were selected randomly. All students who had taken part in the campus-recruitment process are, therefore, assumed to be interested in corporate employment.

Secondly, although the sample contains students from Delhi and Kolkata, the impact of regional factor is assumed to be not very important. This is due to the overall similarity in the socio-economic background of students in the sample. For example, the distribution of family income and parental education among Delhi sample is similar to that of Kolkata sample. It is observed in the sample that students pursuing Master degree in Economics mostly belong to the higher socio-economic background, irrespective of their place of study. The uncertainty associated with the decision of doing an Economics course instead of an engineering course (where the chance of getting employed after the completion of the course is higher) is the major reason for this. Therefore, the entire sample of students collected from Delhi and Kolkata, in this study, has been considered mostly homogeneous.

On the other hand, the employers also have a national character. They do not differentiate much between the location of the institution and the distance of it from their main office. For example, a Bangalore based multi-national company every year comes to Delhi to recruit students, and sometimes it gives them postings in Kolkata. Also many companies visit Kolkata institutions as well as Delhi institutions, the only distinction they make is in terms of pay-packages. That is why the differences in the nature of companies visiting Delhi institutes and Kolkata institutes have not taken into account.

Finally, the ideological differences in designing a course-curriculum in Economics across institutions have not been incorporated in this study. It has been assumed that largely a similar pattern of course-curriculum is followed in these institutions.

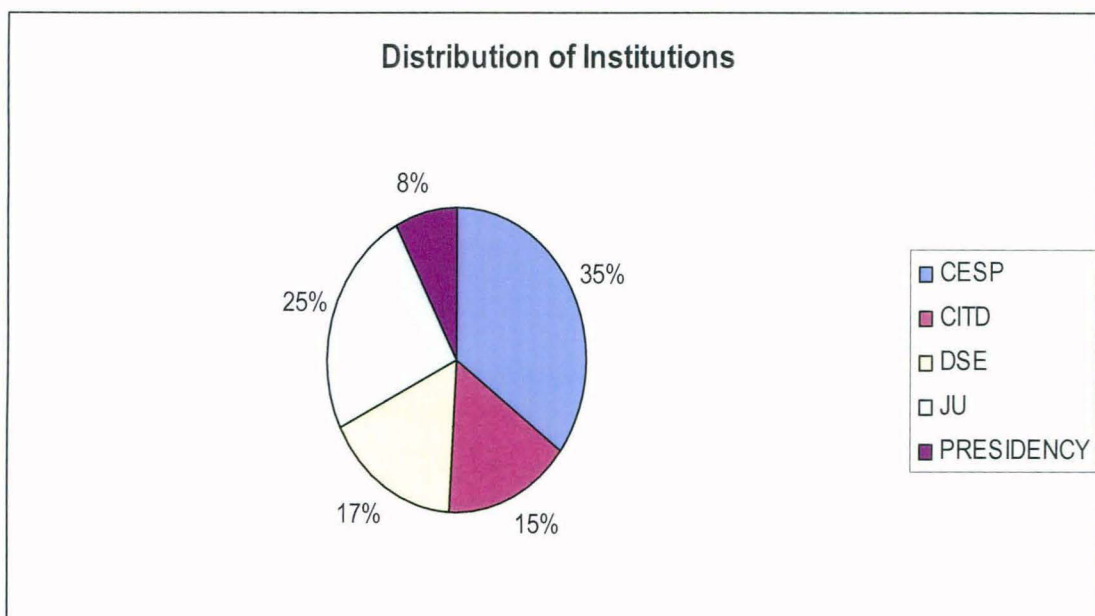
### **3.7 The Sample**

Hereafter the term 'sample' would mean the sample collected from students of DSE, JNU, Presidency College and Jadavpur University. Almost sixty-five students who had appeared in placement process in these institutes were interviewed in the survey. Some of the basic features of the sample are discussed below:

#### **3.7.1 Distribution of Institutions**

Among these 65 students surveyed, 23 are from CESP, 11 are from DSE, ten from CITD, 16 from Jadavpur University and 5 from Presidency College. Therefore from Delhi, there are 44 students while from Kolkata, there are only 21.

**Figure 3.1: Distribution of Institutions among the Sample**



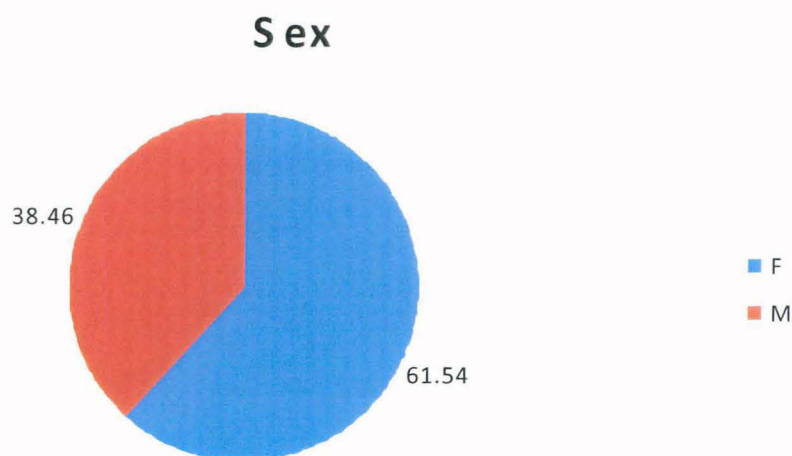
Source: Sample Survey

### 3.7.2 Sex Ratio

Among the 65 students, 40 are female while 25 are male. This may establish the fact that still in our country, there is a gender bias in courses of social sciences and humanities in the sense that number of girls in these courses often outnumbers their male counterpart. The story might be opposite in case of professional and technical courses. The uncertainty (of employment) associated with this type of courses and the societal pressure on boys to get employment immediately after completion of the course, make the gap wider.



**Figure 3.2: Gender Distribution of the Sample**

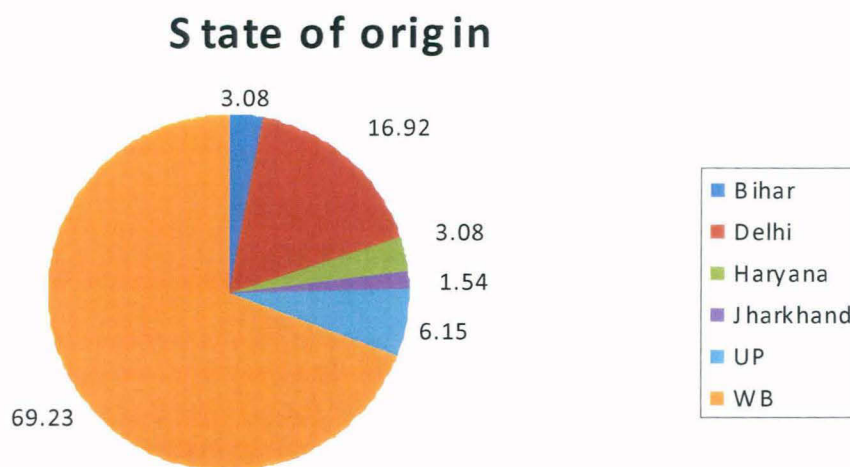


Source: Sample Survey

### 3.7.3 State of Domicile

Students from Delhi, West Bengal, Haryana, Uttar Pradesh, Bihar and Jharkhand are found in the sample. Among 65, 45 hail from West Bengal, 11 from Delhi, 4 from Uttar Pradesh (UP), 2 from each Bihar and Haryana and only one from Jharkhand.

**Figure 3.3: State of Origin**

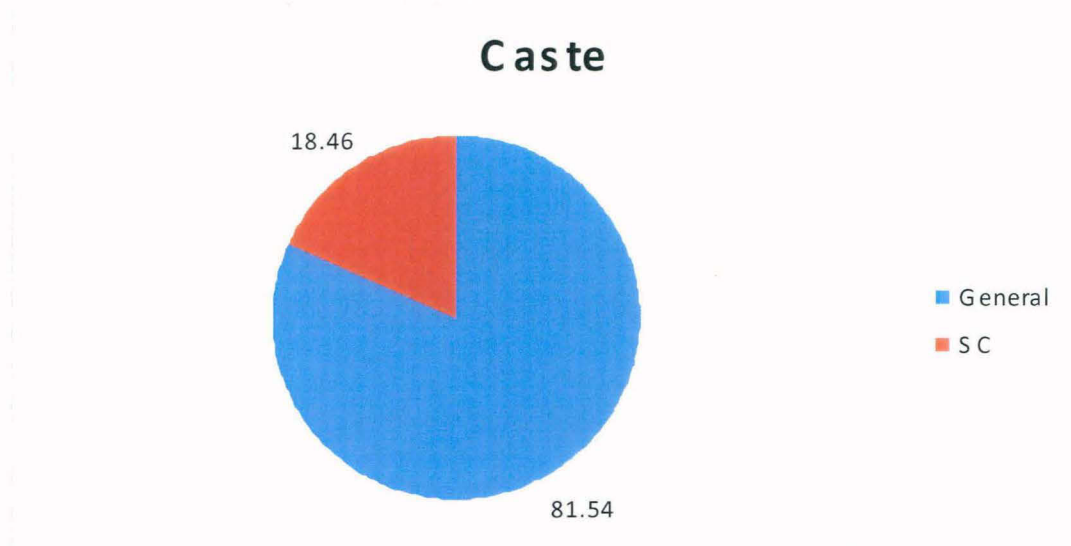


Source: Sample Survey

### 3.7.4 Caste

Some students from Scheduled Caste were also surveyed. The number of general category students is 43 as opposed to 12 from Scheduled Caste. Surprisingly there is no representative from Scheduled Tribe and Other Backward Classes although the institutes strictly follow MHRD rules of admission. There might be two possible reasons for this. First, it may be the case that the group of students interested in placements has a very less number of reserved category students, as a consequence of which our sample has a low number of reserved category students. Secondly, even if the population consists of good number of reserved category students, it may be the case that they did not want to mention their actual caste to the interviewer.

**Figure 3.4: Distribution of Different Caste Groups**



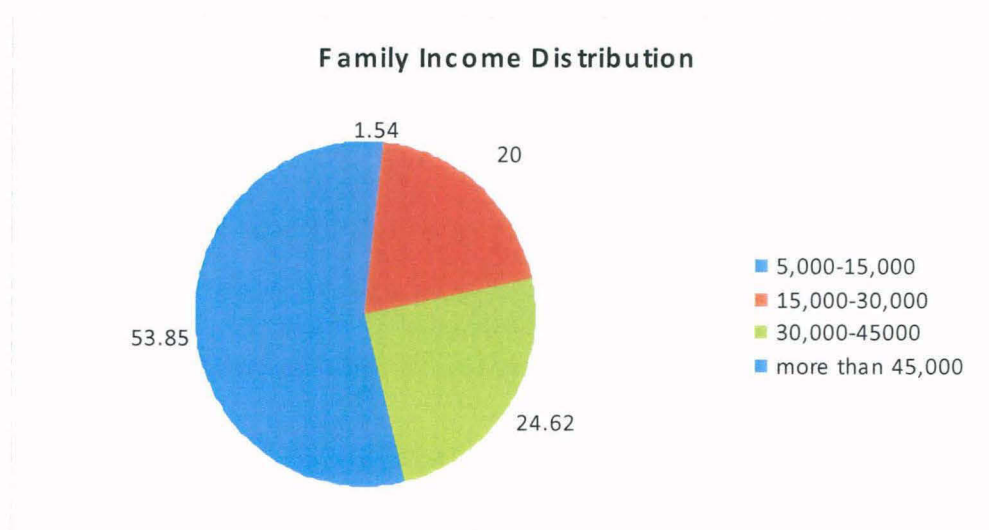
Source: Sample Survey

### 3.7.5 Family Background of the Respondents

Family income of the respondents has been categorized in five classes. It was found, that no student surveyed belongs to a family which earn less than Rs.5,000 per month. There is only one student from a family earning between Rs. 5,000-15,000 per month. Twenty per cent of the students surveyed have family incomes in the range Rs. 15000

to Rs. 30000 per month. Almost 25 per cent students in the sample have family incomes falling between Rs. 30000 to Rs. 45000 per month. Most of the students, twenty-eight out of 65, i.e. 54 per cent of them come from a family which has a monthly income of more than Rs.45000.

**Figure 3.5: Distribution of Family Income of the Students**



Source: Sample Survey

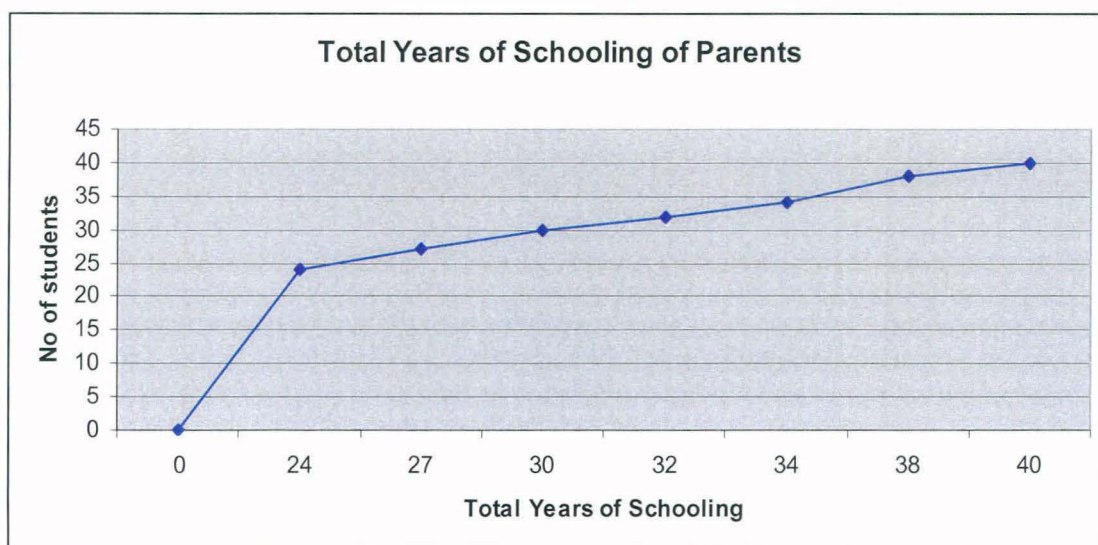
This fact points towards the skewed nature of our higher education system. Although the institutions visited all are government and cost of admission and living is relatively low than other private institutions, still there is a clear-cut bias in the system towards students coming out of well-to-do families. In a differentiated society like India, this phenomenon is not very surprising. As already discussed in Chapter Two, the impact of supportive home atmosphere on children's educational attainment is well established in literature.

### 3.7.6 Parental Education

Educational profiles of both father and mother of students have been collected through the questionnaire. The years of education of parents (father and mother) have been added for each student. Eight groups have been found- 0, 26, 29, 32, 34, 36, 40 and 42. For example if a student's father is a graduate (which means he has completed

15 years of education) and mother is a postgraduate (which means she has completed 17 years of education), then their total years of education is 32 years. The distribution is presented in the following figure:

**Figure 3.6: Parental Education**



Source: Sample Survey

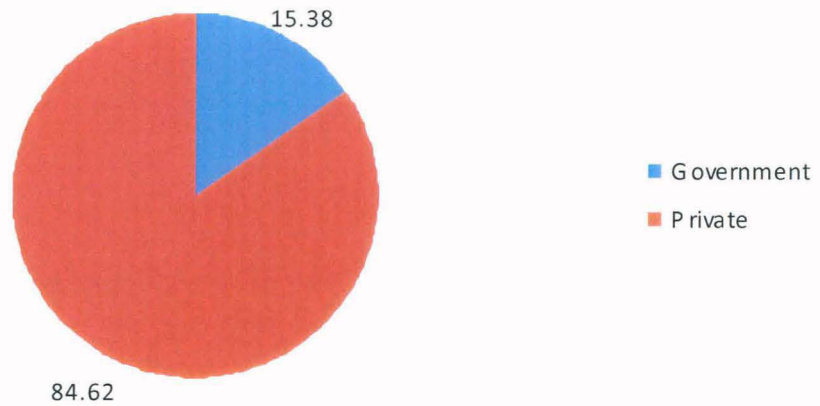
It is clear that most of the students' parents are highly educated. Highly educated parents create a supportive home atmosphere which augments the possibility of their children's high educational attainment.

### **3.7.6 Type of School and Board in School**

Most of the students in the sample come from private schools. The percentage is as high as 85 per cent while only 15 per cent of students surveyed studied in government schools. Since most of the students have a high income

**Figure 3.7: Type of School**

### **Type of School**



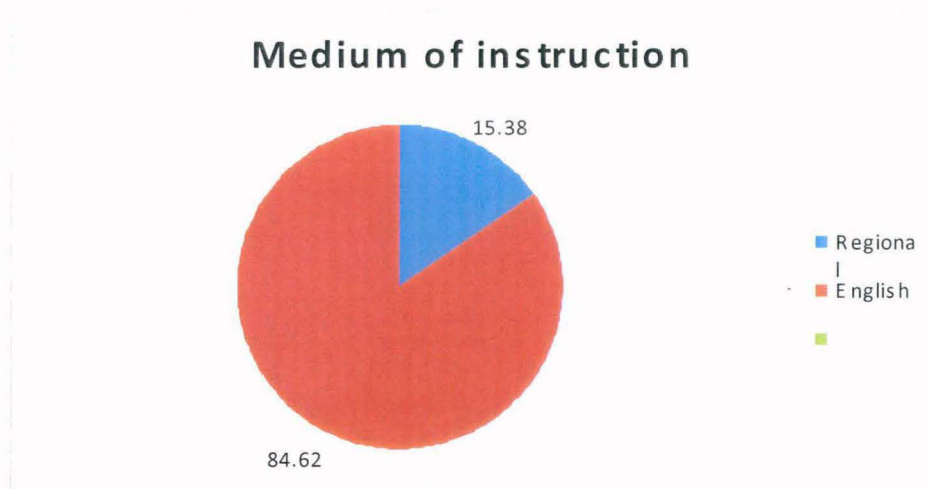
Source: Sample Survey

family background and highly educated parents, the dominance of preference for private schools can be understood.

#### **3.7.7 Medium of Instruction and Fluency in English**

Forty-four out of 65, i.e. about 85 per cent students in the sample had English as the medium of instruction in their schools while only 15 per cent are from regional medium schools.

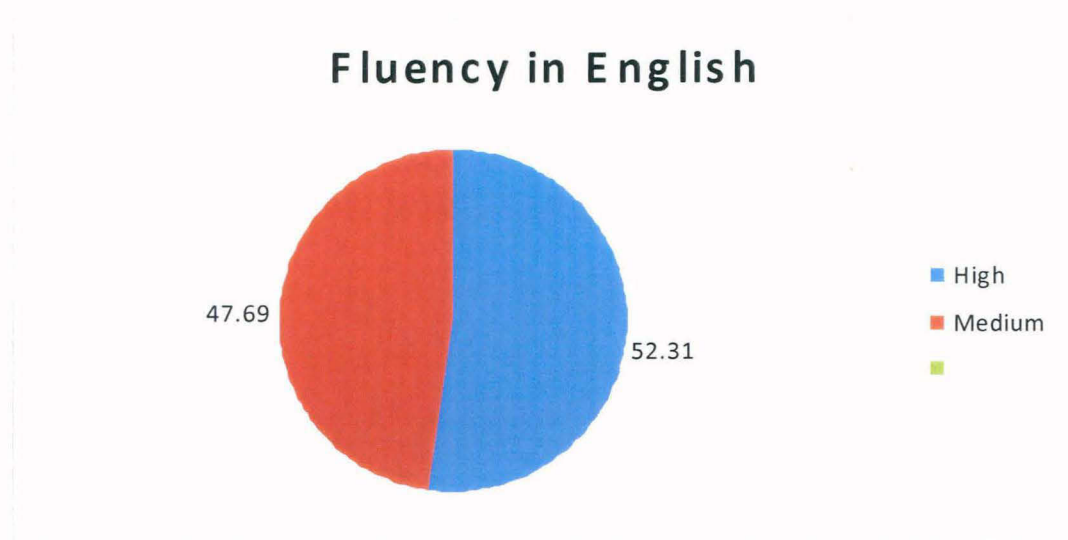
**Figure 3.8 Medium of Instruction**



Source: Sample Survey

As a corollary to this, it can be expected that most of the students will have fluency in communicative English as they have studied in English medium schools. But it was found that 52 per cent students do have high fluency in English, while almost 47 per cent have medium fluency.

**Figure 3.9: Fluency in English**



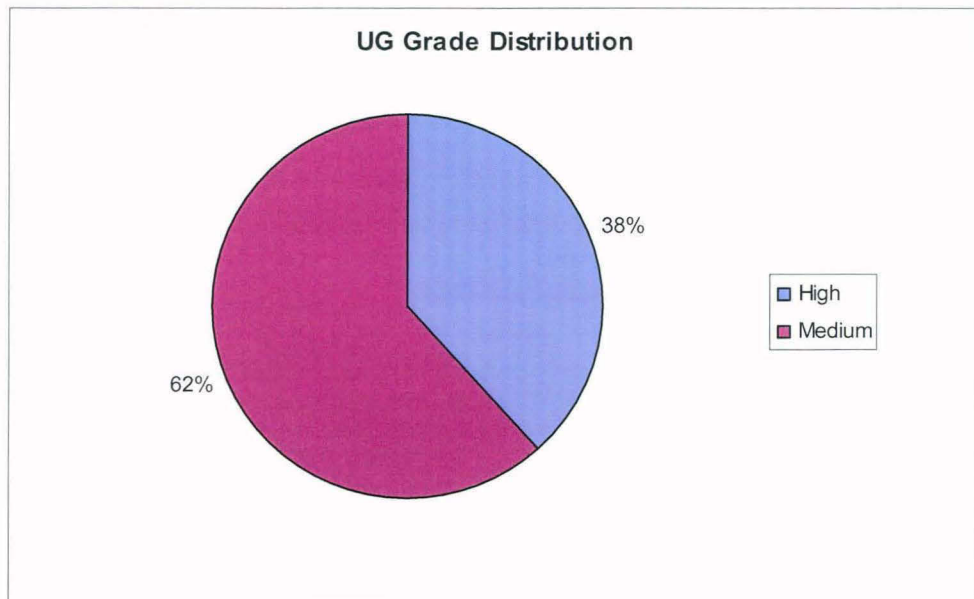
Source: Sample Survey

This means that not all the English medium schools in which the students have studies are qualitatively similar and provide same level of training.

### 3.7.7 Academic Performance

Students in the survey have done a Bachelor degree (mostly in Economics) from colleges in Delhi University, Calcutta University, and from Jadavpur University. Although these three universities are highly reputed, still there are differences in their evaluation and marking system. Therefore the grades students earned during their Bachelor may not be directly comparable to each other's. To resolve this problem a particular coding system has been followed in our study. If a student has scored 60 per cent, the grade is classified as 'High', otherwise 'Medium'. According to this classification, 25 out of 65 i.e. 38 per cent students in the sample earned high scores in their Bachelor course, while 62 per cent earned medium grades. Low grades were not found as almost all the students have a basic understanding of the subject on the basis of which he or she had cleared the entrance tests. Also there has been another factor that students who did not earn fair grades might voluntarily withdraw themselves from this placement process.

**Figure 3.10: Academic Performance in Bachelor Course**



Source: Sample Survey

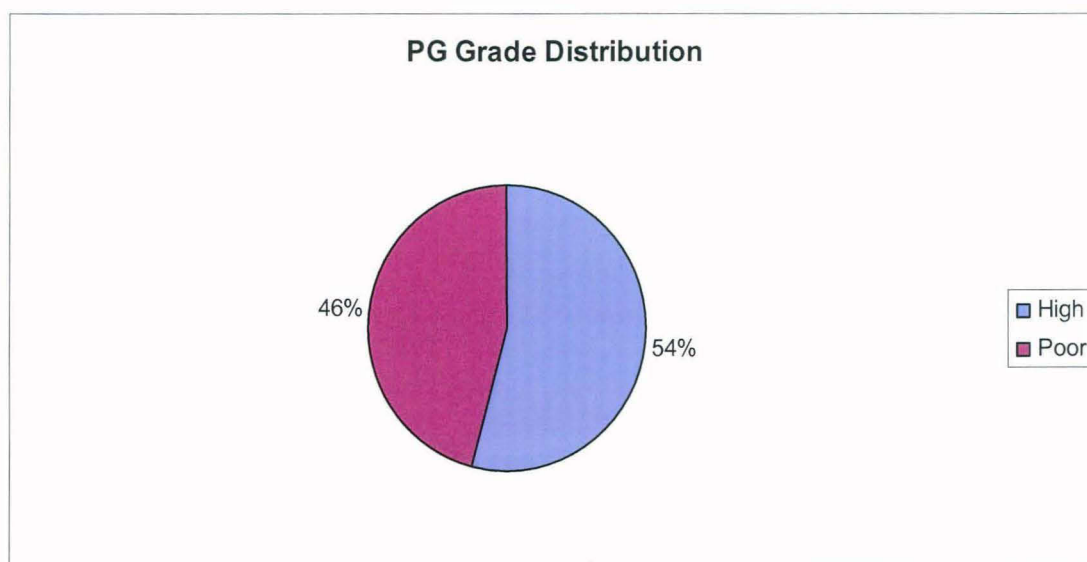
Similarly, an exercise was done for M.A. scores (till 3<sup>rd</sup> semester) of the students surveyed. It had to be done to avoid the problem of comparability of scores in different universities.

**Table 3.1: Universities and the Coding of Scores in PG**

<b>Name of the Institution</b>	<b>Range of Scores</b>	<b>Code</b>
<b>JNU (Out of 9)</b>	Above 6	High
	Below 6	Medium
<b>DSE and Presidency college</b>	Above 55 per cent	High
	Below 55 per cent	Medium
<b>Jadavpur University</b>	Above 60 per cent	High
	Below 60 per cent	Medium

According to this method, only 54 per cent students are found in the sample who have done well in their M.A. courses (till 3<sup>rd</sup> Semester) and 46 per cent have earned medium grades.

**Figure 3.11: Academic Performance in PG (till 3<sup>rd</sup> Semester)**



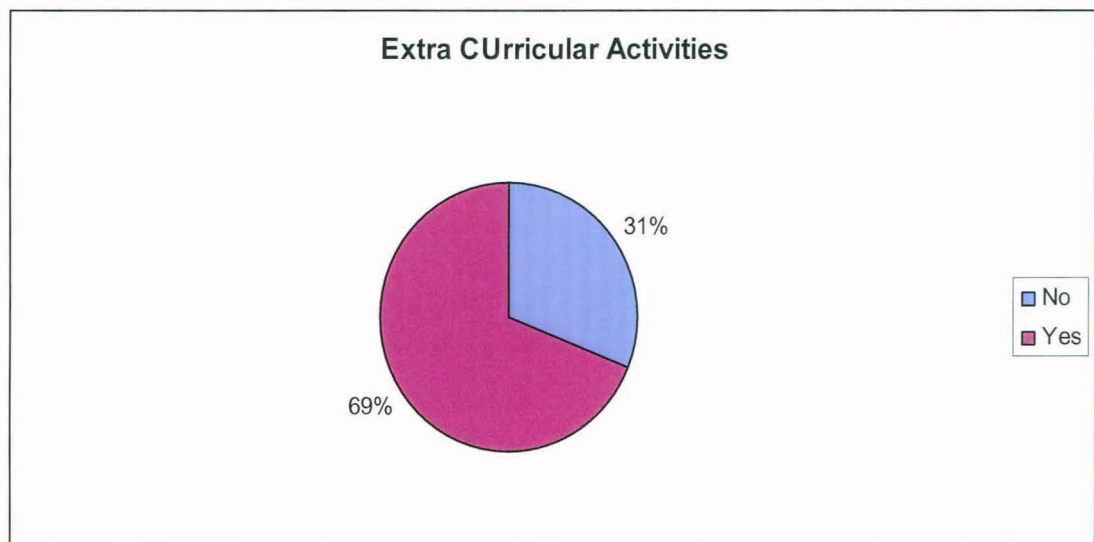
Source: Sample Survey



### 3.7.8 Extra-curricular activities, Software Skill and Internship

Extra-curricular activities (ECAs) in our questionnaire include Sports and Performing Arts like music, dance, theatre, elocution, debate, quizzing etc. It was found in the sample that almost 31 per cent have no interest in either of these two, the rest have done ECAs during schools.

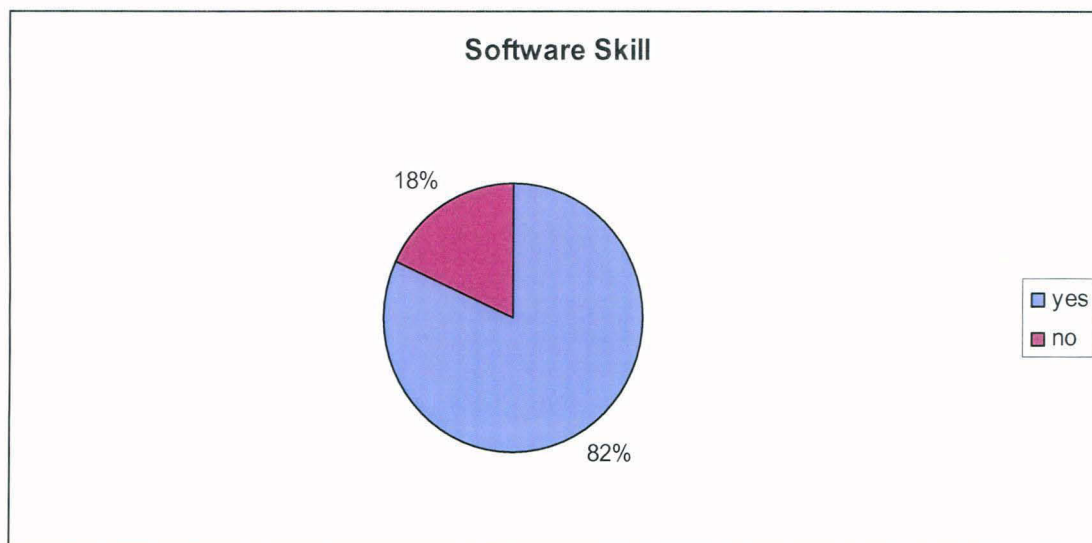
**Figure 3.12: Extra-curricular activities**



Source: Sample Survey

It was assumed that almost all of them are familiar with basic computer application skills. Therefore information was sought whether they have done any specialized certificate computer application (statistical packages) or programming course or not. Almost 82 per cent of the students surveyed know only basics, while 18 per cent know programming.

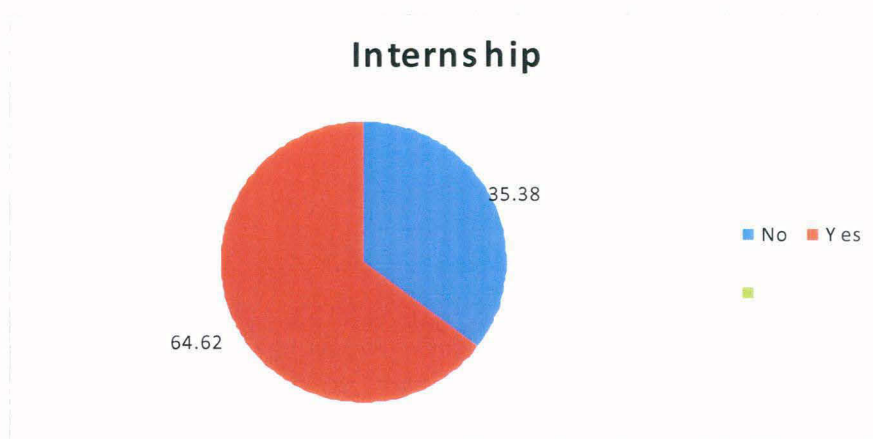
**Figure 3.13: Software Skills among the Students Surveyed**



Source: Sample Survey

Now-a-days there is a growing tendency among MA (Economics) students to join a research institution or a corporate during their vacations to have some practical work/research experience. In our sample, almost 65 per cent students joined internship programmes.

**Figure 3.14: Internship Pattern among the Students**

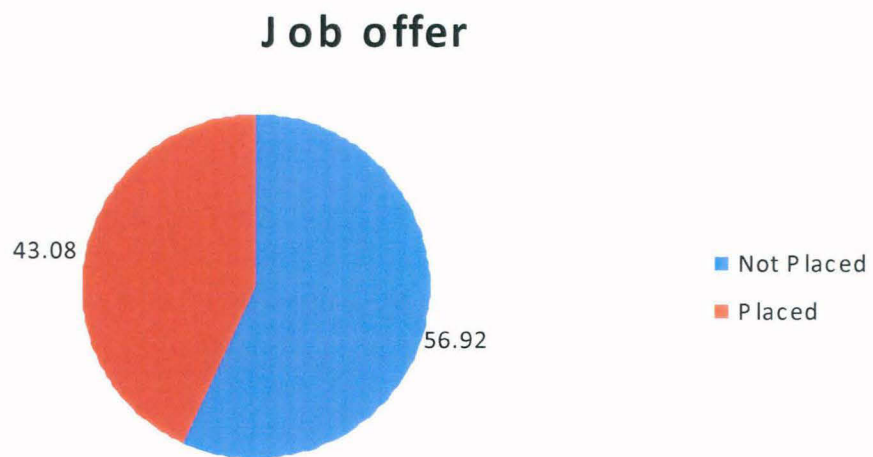


Source: Sample Survey

### 3.7.9 Placement

One of the most important indicators for our study is how many of the students in the sample got placed in campus-recruitments. Almost 43 per cent of the students surveyed have actually received job- offers from corporate who visited these institutions. Gross pay package (p.a.) varied from 2.5 lakhs to 9 lakhs. Actually except for one start-up company in Kolkata, all other companies offer a pay package above 5lakhs (p.a.). Posts like research trainee, business analysis, junior economist, assistant manager etc. are being offered to them.

**Figure 3.15: Placement of the Students in the Sample**



Source: Sample Survey

### 3.8 Concluding Remarks

In this chapter details of collection of data and features of the sample have been discussed. It has been seen that the sample is mainly consisting of students from upper-middle and high income groups, educated family background and English medium private schools. Detailed methodology of the study, rationale for choosing the discipline Economics and the profile of the institutions are also given. We have ended the discussion of our main sample with the mention of placement offers. It was

found that almost half the sample has received job-offers in campus recruitment from corporate companies. It is this thread which will lead us towards an in-depth analysis of the factors behind placement of these students. In the next chapter, relationships between job-offer and other variables like academic performance, internship, fluency in English, extra-curricular activities, etc., will be worked out. Several other features of the sample like students' ideas, views, suggestions, etc., are also discussed in the next chapter. Here the responses of the employers have not been discussed because of their qualitative nature. These qualitative answers, it is believed, will add to our understanding of the whole process.

## **Chapter 4: Analysis of Data and Findings**

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In the previous chapter, the basic features of the sample have been discussed. Now let us understand the sample in more details to analyze the particular process of campus recruitment in Economics discipline. It has been stated that out of 65 students surveyed, 28 are placed and the rest are not. In other words, about 43 per cent of students surveyed got jobs through campus recruitment and 57 per cent are still waiting. The fact whether one has got a job-offer or not is central to our discussion. The research questions already stated in Chapter One roam around the notion of employability as conceived by students and employers and the nature of its determining factors. The objective is to understand the process of recruitment as a whole and explore the interactions of several factors which determine the employability. Here in this chapter, let us first start with defining the dependent and independent variables of our study and see the type of relationships they share. In the second half of this chapter, an effort has been made to work out a model based on quantitative analysis to explain the phenomenon of getting a job as a function of several explanatory variables.

### **4.1 Dependent Variable**

In this study, we are not merely interested in finding the number of students who are placed. Rather, the factors operating behind their placements are of our concern. The phenomenon of being placed just after doing a Master degree is a consequence of so many other factors which need to be explored. For example, a student bags a job because in the interview he or she has performed better than others. But there may be several factors responsible for his or her better performance in the interview. A good performance in front of employers is not a random incident; rather it is expected to be linked with several other socio-economic and educational factors. Therefore in this study, the variable “job offer” is the dependent variable. Now let us see its relationship with the independent variables.

## 4.2 Explanatory Variables

The questionnaire has been designed in a way to capture information about many a things which may explain the consequence of getting a job. These are the followings:

1. Sex
2. Caste
3. State of origin
4. Region
5. Parental income
6. Parental education
7. Type of school
8. Academic performance in undergraduate course
9. Academic performance in postgraduate course
10. Reputation of colleges of graduation
11. Medium of instruction
12. Fluency in English
13. Internship experience
14. Extra – Curricular Activities (ECAs)
15. Software skills

One thing should be noted here that many of these variables may not be totally independent of each other. These variables are related to the social realities, and therefore, may reflect some kind of association with each other. For example, take the variables parental income and parental education. If a highly educated person is expected to get engaged in a high remunerated job, then it might not be surprising to see some kind of association between these two variables. However, here at this point we do not exclude any variable because of its association with other variables. In the next section, relationship between these variables and the independent variable 'job offer' would be explored.

The variable 'region', indicating whether the student is from a rural or urban region, has been dropped in the next section because among sixty-five students surveyed, only two of them belong to rural areas. This is not unexpected as the population we are considering is mainly urban in nature. Similarly the variable 'State of origin' does not matter much because the study is not intended to look into state specific differences, except the distinction between Delhi and Kolkata.

### **4.3 Relationship between Dependent and Independent Variables**

In this section, we are trying to see the relationship between the variable 'job offer' and other variables such as sex, parental income, parental education etc. This exercise is carried out to identify the possible factors determining the placement of a student. Values of the dependent and independent variables are shown in simple tabular forms, just to have an idea of their relationship. This section might not help us in making any statistically firm conclusion about the relationship between variables, but it would help us in understanding the importance of a variable in explaining the outcome and identifying the actual explanatory variables to be included in the quantitative model.

#### **4.3.1 Job Offer and Institutions**

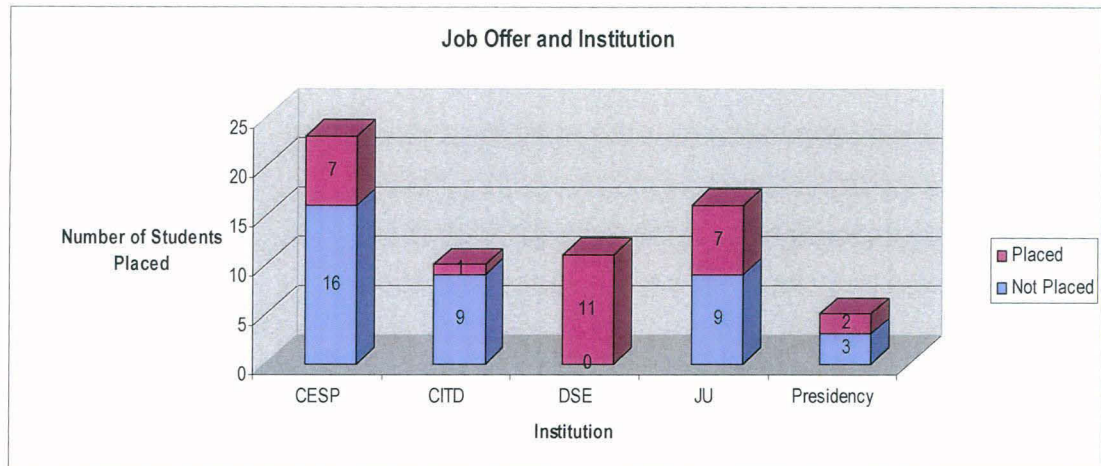
Jawaharlal Nehru University (Centre for Economic Studies and Planning or CESP and Centre for International Trade and Development or CITD) and Delhi School of Economics (DSE) in Delhi University are the two main institutions from where 44 students constitute our sample. Jadavpur University in Calcutta has 16 students and Presidency College has 5 students only in our sample. Among 23 students surveyed in CESP, 6 are placed and among 10 students in CITD, only one is placed. The sample has 11 students from DSE, all of them are placed<sup>10</sup>. In Jadavpur University, out of 16

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<sup>10</sup> In DSE, the placement cell functions under the supervision of a team consisting of faculty members and student co-ordinators. There the placement situation is very promising in the sense that most of the students eligible for appearing in the placement finally get placed.

students surveyed, seven are placed. In Presidency College, 2 out of 5 are placed. The statistics are shown below:

**Figure 4.1: Job Offer Received by Students across Institutions**



Source: Sample Survey

One thing should be noted at this point that the placement operation organized in JNU (CESP and CITD) is mainly organized and managed by student bodies which have elected students representatives as ‘placement co-ordinators’. The faculties along with the department officially do not take any part or interest in this operation. Students with the help and contribution from their seniors invite companies to recruit students in the campus. On the other hand, DSE has a systematic separate body for organizing placements. Their placement cell is managed by one of the faculty members with the help of student co-ordinators. The placement cell functions as a team comprising faculty members and students. The cell is very much active in inviting companies and organizing placements from the past few years. This actually explains why all students from DSE in the sample are placed. These structural differences may be responsible for such a high percent of placement in DSE in comparison to JNU. In Jadavpur University, there is a placement cell, which works for the engineering department as well as the economics department. One of the faculties from department is generally associated with the process. Apart from student placement co-ordinators, the teachers also try to invite companies in campus. However, JNU and

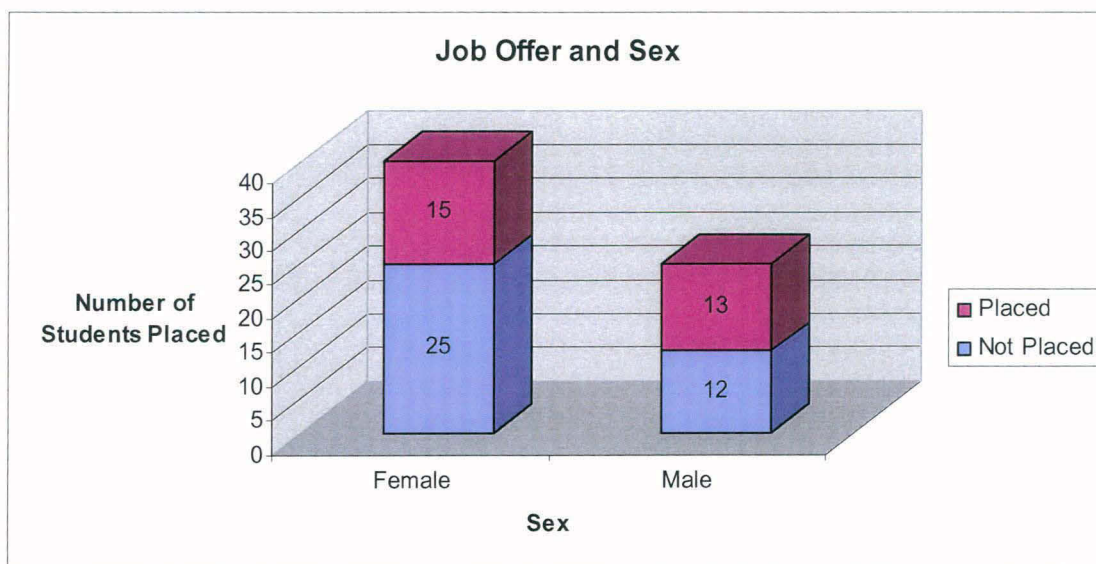


DSE have a minimum criterion (in terms of annual gross pay package) for allowing companies to come and recruit students from their campus. Students in Jadavpur University, on the other hand, experienced placement in a newly established company which offers Rs. 2.5 lakhs per annum only. Therefore, mere numbers cannot truly describe the situation here. Apart from the number of students placed, the pay package, job profile, and reputation of the company – all of them should be taken into account.

#### 4.3.2 Job Offer and Sex

In our sample, out of 40 female respondents, only 15 got selected for jobs. In case of males, out of 25, 13 are placed and the rest are not. In other words, 38 per cent of female students and 58 per cent of male students surveyed found placements. The situation is presented in figure 4.2 below.

**Figure 4.2: Job Offer and Sex**



Source: Sample Survey

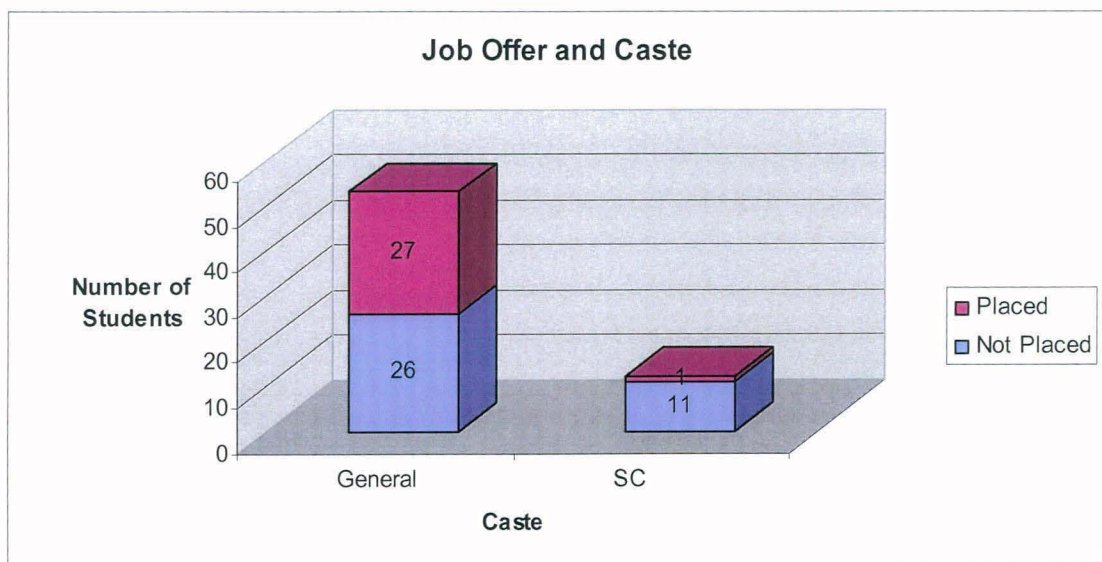
This fact does not readily lead to anything conclusive about the placement of women employees in corporate jobs if we consider the fact that out of 28 students selected, 15 (54 per cent) are female while 13 (46 per cent) are male. Although the findings of *The*

*Corporate Gender Gap Report (2010)* show that the corporate world is not doing enough to achieve gender equality, we cannot find any substantial proof for it. According to the Report, India is the country with the lowest percentage of women employees (23 per cent), followed by Japan (24 per cent), Turkey (26 per cent) and Austria (29 per cent) while The United States (52 per cent), Spain (48 per cent), Canada (46 per cent) and Finland (44 per cent) have the highest percentage of women employees at all levels among the responding companies. But because of limited number of data, at this point it would not be proper to make any conclusion about the gender gap in corporate placement here.

### 4.3.3 Job Offer and Caste

In our sample, 12 students are from Scheduled Caste categories. Surprisingly, only one of these 12 students got placed. Number of placed students are 28, and 27 of them belong to the general category (figure 4.3).

**Figure 4.3: Job Offer and Caste**



Source: Sample Survey

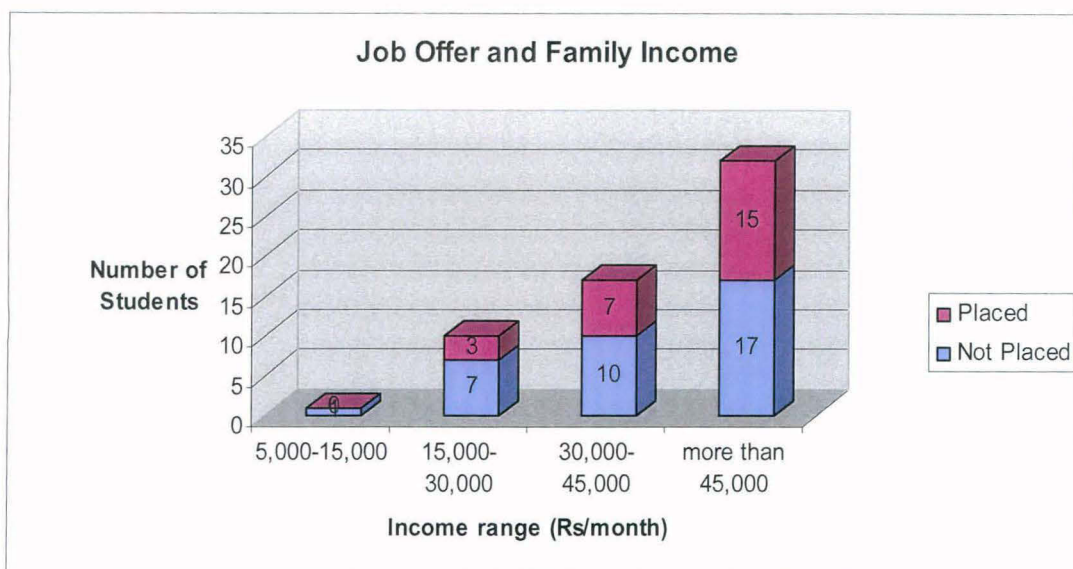
The data is not large enough to comment on the discrimination between Scheduled Caste and general students, but apparently it looks like employers prefer general

category students over them. Obviously the final conclusion is subject to statistical tests.

#### **4.3.4 Job Offer, Parental income and Parental education**

If we closely observe the sample, apparently there is a feeling that the percentage of students placed in one income category increases as the range of income increases. In the first income category, Rs. 5,000 to Rs. 15,000 per month, there is only one student who has not been placed. In the second income category, Rs. 15,000 to 30,000 per month, there are 10 students in the sample, and 3 of them are placed. Out of 17 students in the income range Rs. 30,000 to Rs. 45,000, 7 have got jobs. 32 students belong to the income category 'more than Rs. 45,000 per month'. 15 out of these 32 are placed. The percentage of students placed increases from 30 per cent in the second income category to 41 per cent and 47 per cent in the last two categories. The reason behind this concentration of students in the high income group is the uncertainty associated with studying in general line. Since there is no surety that a student would get immediately employed after the completion of an MA/MSc course, there is a tendency for students coming from low or middle income background to go for professional degrees than these. Alternatively, only students from high income background can afford to wait for job or go for higher studies, and this explains why there is a concentration of students from high income background in the sample.

**Figure 4.4: Job Offers Across Parental Income Categories**

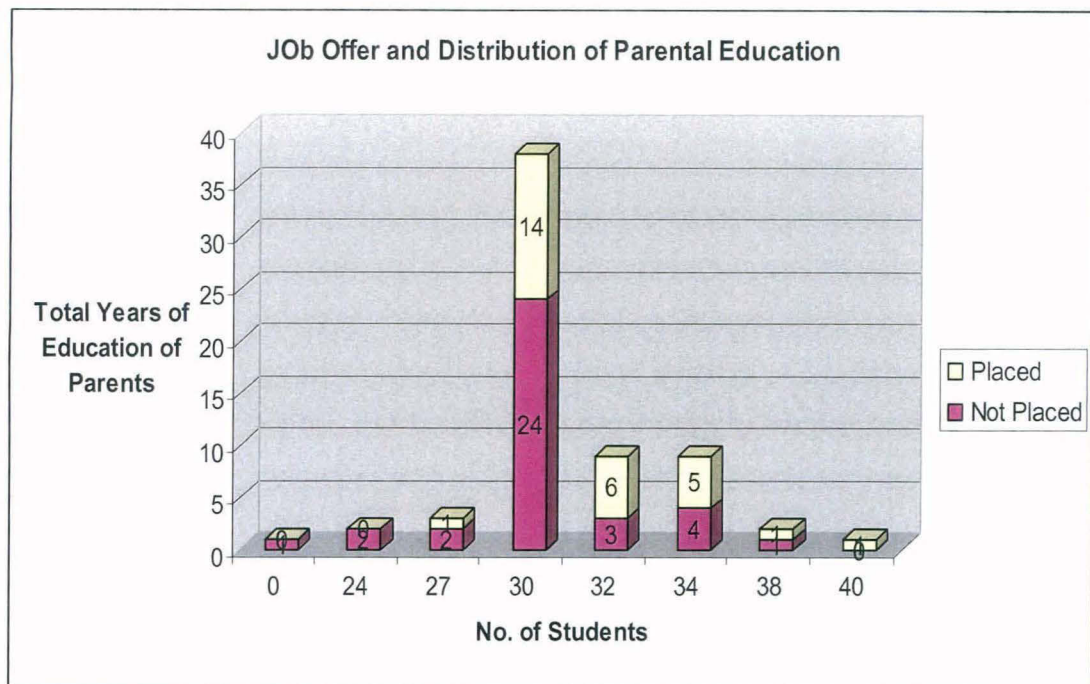


Source: Sample Survey

Out of 28 students placed, 18 have come from the 'more than Rs. 45,000 per month' group, 7 from 'Rs. 30,000-45,000 per month' group and there are only 3 from 'Rs. 15,000-30,000 per month' group.

If one looks into the relationship of parental education and job offers, a similar story emerges. The years of education of parents (father and mother) have been added for each student. Eight groups have been found- 0, 26, 29, 32, 34, 36, 40 and 42. For example if a student's father is a graduate (which means he has completed 15 years of education) and mother is a postgraduate (which means she has completed 17 years of education), then their total years of education is 32 years. The percentage of placed students for each of the categories are calculated and presented in the figure below:

**Figure 4.5: Job Offer and Total Years of Education of Parents**



Source: Sample Survey

The '30' total years of education correspond to the case where most of the parents are graduate. These facts are not at all surprising. Parents provide human and material resources that benefit the development of their children's academic skills and orientations (Leibowitz, 1974 and 1977; Mercy and Steelman, 1982). Parents with more education and income probably have more ability and motivation to create educational resources (Teachman, 1987). Many sociologists have also argued that parents use material and nonmaterial resources to create a home atmosphere that fosters academic skills, motivation, and orientation.

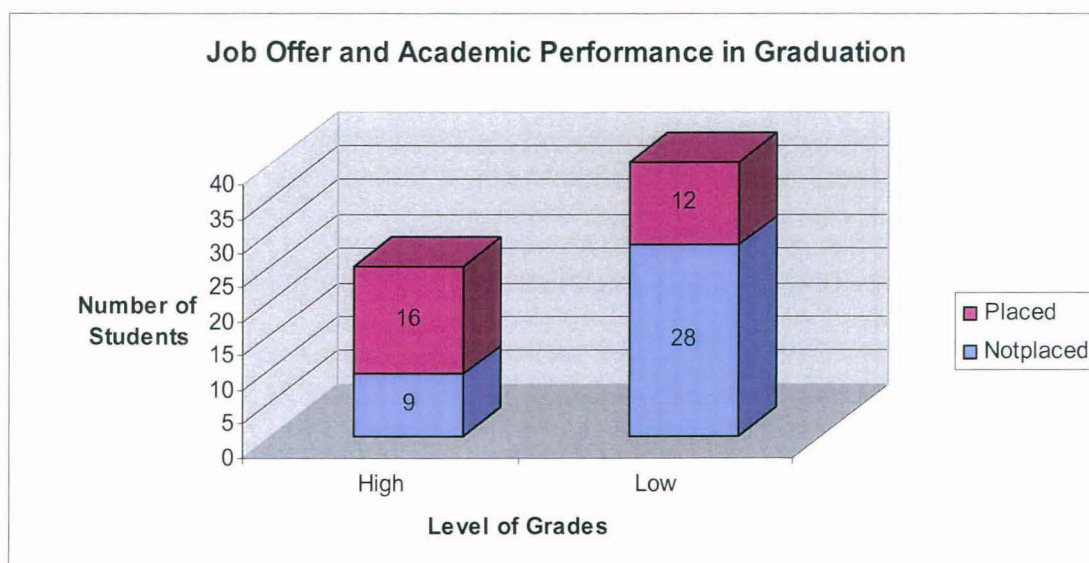
Apart from that it may also happen that the income of a family shares close association with parental education. The correlation coefficient between parental income and parental education is 0.35. Therefore it can be expected that highly educated parents generally earn high income and they can afford to send their children to good schools and give all types of material and non-material aids to nurture their children's abilities. Although still the nature of factors determining employability is not clear, a supportive home atmosphere can be expected to increase the probability of

getting a job. In our quantitative model, both the variables parental education and parental income would not be taken together to avoid the problem of collinearity.

#### 4.3.5 Job Offer and Academic Performance

Undergraduate grades of students are categorized as High and Low. If a student's undergraduate grade is 60 per cent or more, it has been termed as 'High', otherwise Low. Twenty-five out of 65 students (38 per cent) in the sample have 'high' grades and 40 students (62 per cent) have 'Low' grades. Out of 25 'High' grade students, 16 are placed. Alternatively, out of 40 'Low' grade students, 12 are placed. This is depicted below:

**Figure 4.6: Job Offer and Undergraduate Grades**



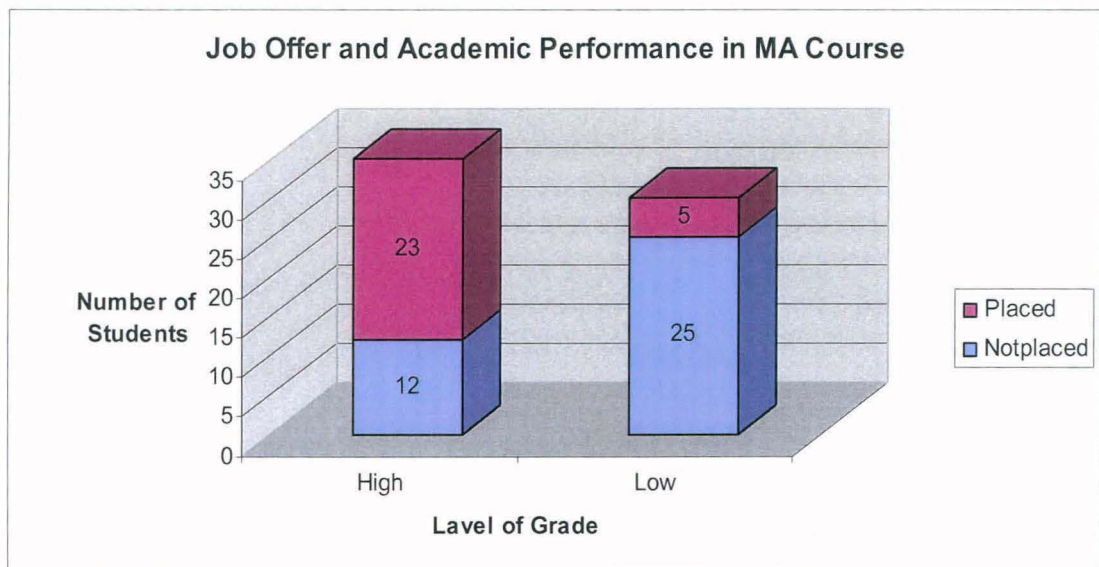
Source: Sample Survey

Out of 28 placed students, 16 students are from 'High' grade category (i.e. 57 per cent) and 12 belong to 'Low' grade category (43 per cent).

Post-graduation grades are also classified as 'High' and 'Low'. A student's grade is 'High' if he or she gets at least 60 per cent and 'Low' if it is less than that. There are

35 'High' grade students, and 30 'Low' grade students. Out of these 35, 23 are placed (66 per cent) and out of 30 'Low' grade students, only 5 are placed (17 per cent). Out of total 28 students placed, 23 are from 'High' grade category (82 per cent) and only 5 are from 'Low' grade category (18 per cent).

**Figure 4.7: Job Offer and Post-graduation Grades**



Source: Sample Survey

One logical doubt arises at this point that there may be high degree of association between students' undergraduate (UG) and postgraduate (PG) grades. To check this connection, a logistic regression was done considering PG grade as dependent variable and UG grade as independent. It was found that if a student's UG grade is high, the student is almost 7 times more likely to get a high PG grade. The impact of UG grade on PG grade is statistically significant at 99 per cent level of confidence<sup>11</sup>. Therefore one can argue that one should not take both the variables 'UG grade' and 'PG grade' together in the quantitative model.

Although the impact of academic performance upon placement cannot be strongly determined at this stage, still the pattern of data described above gives a signal that

<sup>11</sup> See appendix for detailed results.

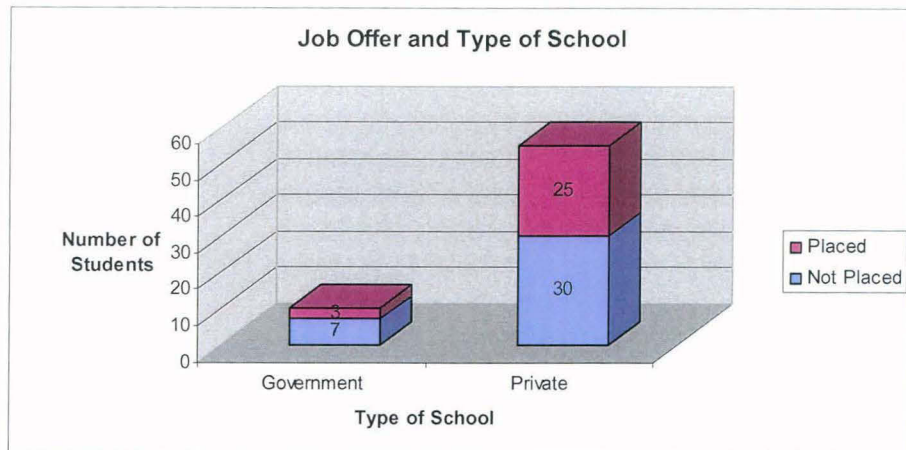
academic performance (reflected through grades) can be one of the determinants of employability in this case. The relationship between undergraduate grades and job-offer is not clear, but the positive impact of a 'High' postgraduate grade on placement is apparently clear from the above table. Obviously, this impact is subject to statistical tests, which would be carried on in next section. The variable, academic performance is very crucial for this study. In chapter Two, the human capital theories were discussed and it was mentioned that the analogies of this theory can be applicable to explain determinants of employability. A high grade reflects the student's grasp on the subject. Obviously, it can signal many other things like the student's seriousness, willingness to learn and diligence. Even if the signalling role of the grade is ignored for the time being, it directly indicates the magnitude of knowledge one possesses after finishing the course. Therefore, the academic performance of students in undergraduate and postgraduate level is a strategic variable and should be taken into consideration during the effort to establish the quantitative model.

#### **4.3.6 Job Offer and Educational Institutes**

The type of educational institutes one goes through can play a very important role in determining his or her abilities. In this study, the type of schools has been classified as 'Government' and 'Private'. In our sample, only 10 are from government schools while 55 are from Private schools. Out of 28 students placed, only 3 students belong to government schools and 25 belong to private schools.



**Figure 4.8: Job Offer and Type of Schools**



Source: Sample Survey

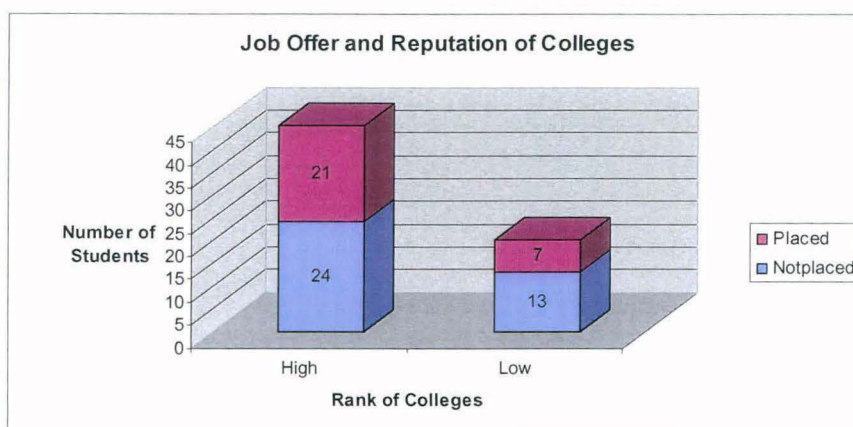
Because of the presence of such a low number of students from government schools in our sample, the distinction between students of government and private schools is not clear. But it is to be noted here that 85 per cent of the students in the sample come from private schools, which indicate towards the qualitative differences between these two types of schools and inequality of opportunities offered in our society. Most of the students in our sample come off a well-to-do family (earning more than Rs. 30,000 per month) and this income factor must have some connection with their choice of schools (correlation coefficient between parental income and type of school is 0.30).

To check the relation between parental income and type of school, correlation coefficient between type of school and parental income has been calculated. The correlation coefficient between these two variables is 0.30. This means there is a confirmed relationship between income and choice of schools and the latter depends on the level of parental income.

Based on the reputation of colleges from popular sources, the colleges of the students have been termed as 'High' ranked and 'Low' ranked. High ranked colleges include colleges like St. Stephens College, Lady Shri Ram College, Miranda House etc. in

Delhi and Presidency College, St. Xavier’s College, Jadavpur University etc. in Kolkata. Low ranked colleges include colleges like Deshbandhu College, Ramlal Anand College in Delhi and Bethune College, Maulana Abul Kalam Azad College etc. in Kolkata. The sample consists of 45 students from ‘High’ ranked colleges, and 21 out of these 45 are placed. Out of 20 students from ‘Low’ ranked colleges, 7 are placed (see figure 4.9)

**Figure 4.9: Job Offer and Reputation of Colleges.**



Source: Sample Survey

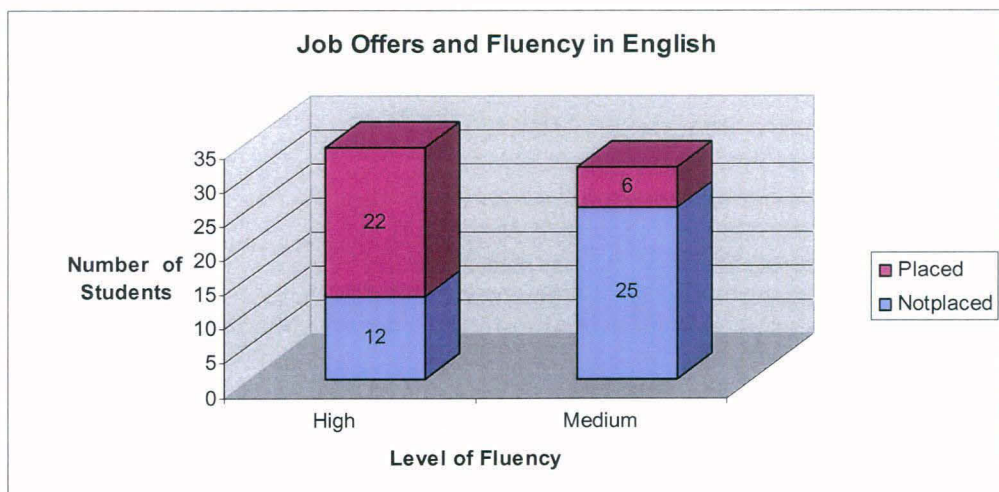
Rank of the colleges can play an important role in our study because it can signal the employers about student’s various unseen abilities. A student from a high ranked college can be expected to be smart, confident and communicative. But in this case the above mentioned traits are not exactly ‘unseen’, since the employers can test these in the interview. Alternatively it can be argued that since students have come to JNU, DSE, Jadavpur University and Presidency College through entrance tests, the significance of the reputation of their undergraduate colleges has been lost. At this point it cannot be said which of these two arguments is valid, and this is subject to further statistical tests.

### 4.3.7 Job Offer and Communication Skills

Communication skills can have many dimensions- fluency and command over the language, use of right gestures or ‘body language’, ability to organize and express thoughts, etc. It is very difficult to capture this skill variable on the basis of a questionnaire. For simplicity of assessment, only one aspect of communication skills – fluency in English has been taken into consideration. Students themselves were asked to scale their fluency as either ‘High’ or ‘Medium’. Indeed there was a chance of bias in this self-declaration method, but during interview the interviewer also kept an eye on the respondents’ degree of fluency in English and noted down her ratings. Later these ratings were checked with respondents’ ratings to avoid any discrepancy.

In the sample, out of 65 students, 34 declared themselves to be highly fluent in English while others were less fluent. Out of these 28 students placed, 22 are highly fluent (79 per cent) and only 6 are less fluent (21 per cent).

**Figure 4.10: Job Offer and Fluency in English**

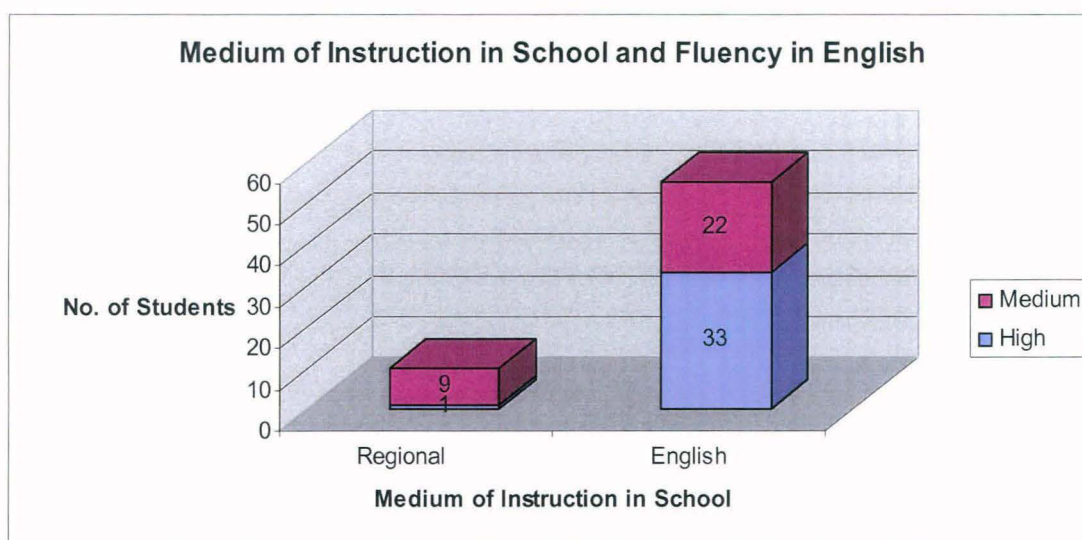


Source: Sample Survey

The factor fluency in English seems to be important in explaining the placement phenomenon. In this era of globalization, Communication skill stands to be one of the most important factors help in reaching an employer’s work to a larger audience. Most of the companies considered here are multi-nationals. Obviously, employees in these companies have to interact with clients and other people regularly. Fluency in English’ can give a proxy for one’s ability in communicating with others as well as his or her smartness and some degree of managerial abilities. In short, this one factor can actually reveal a student’s personality before the employers. Therefore, it is no surprise that the employers would put a high weight on this ability.

The questionnaire (Questionnaire A) also collects information about students’ medium of instruction in schools (up to class 12<sup>th</sup>). Only 10 students out of 65 in the sample have gone through regional medium schools while 55 are from English medium schools. Regional medium schools are mainly government whereas private schools are mostly English medium. Drawing analogy from the previous parental income- type of school discussion, it can be said that there would be a trend that high income earning parents want their children to study in private schools which are generally English medium.

**Figure 4.11: Medium of Instruction in Schools and Fluency in English**



Source: Sample Survey

To check the relation between fluency in English and medium of instruction in school, a logistic regression was run and it was found that if a student studies in English medium, he or she is 13 times more likely to be highly fluent in English. The impact of medium of instruction in schools on students' fluency in English is significant at 95 per cent confidence level<sup>12</sup>. The correlation coefficient between the two is 0.37. Therefore one can expect a close relation between medium of instruction and fluency in English.

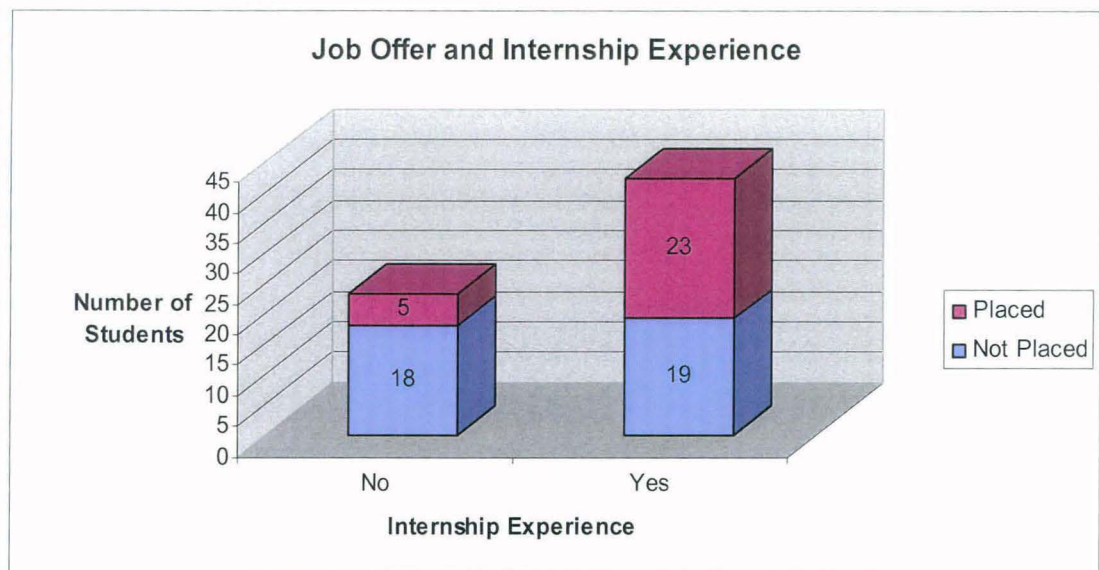
#### **4.3.8 Job Offers and Internship Experience**

Now-a-days there is a growing tendency among students to go for internship during their vacations in summer and in winter. Generally, students find research internships where they assist a research fellow in conducting research. Some students also manage to find corporate internships but availability of this is limited. Forty-two students out of 65 (i.e. 67 per cent) in the sample have internship experiences. Out of these 42, 23 students are placed (55 per cent). Among 28 students who have been placed, only 5 students have no internship experience (18 per cent) and the rest (82 per cent) have internship experience.

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<sup>12</sup> see appendix for details.

Figure 4.12: Job Offers and Internship Experiences

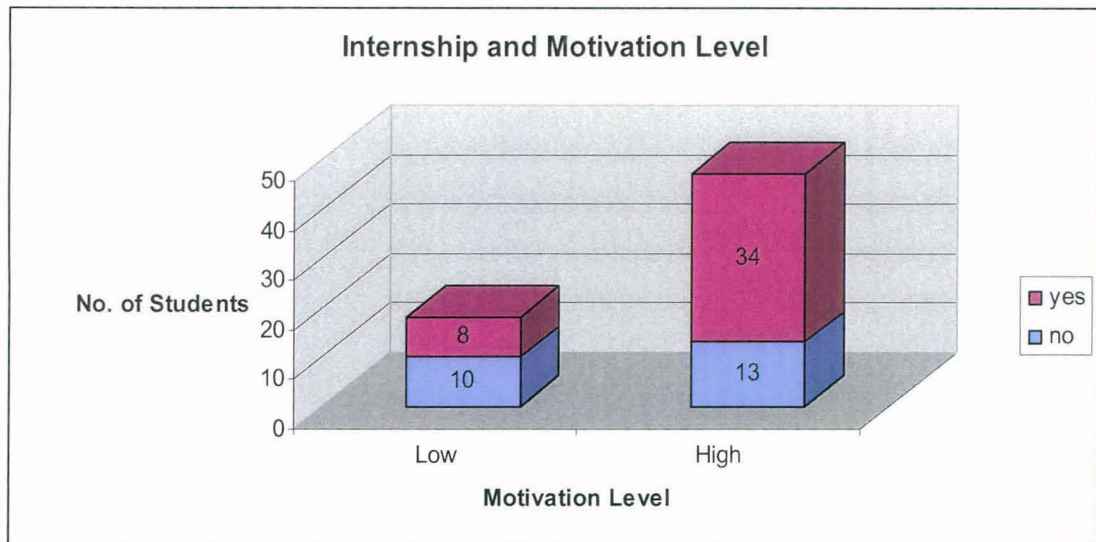


Source: Sample Survey

This clearly suggests that one should take this variable into account in drafting the quantitative model. The fact whether one has done an internship or not may be important for employers since it indicates the student's willingness for working. The opportunity cost of doing an internship during vacations for students is not negligible. Still they go for it since they are willing to work and ready to learn. These factors may influence an employer during interview.

Students' motivation levels have also been captured through the questionnaire. If a student is really eager to get employed in corporate jobs, his or her motivation level has been labeled as 'High' while if a student is not very keen to get a job but participated in the placements only because of gaining experience, his or her motivation level is 'Low. Out of 47 students having 'High' motivation levels, 34 students opted for an internship (72 per cent). On the other hand, out of 18 students with 'Low' motivation levels, only 8 did an internship (44 per cent).

**Figure 4.13: Internship and Motivation Levels**



Source: Sample Survey

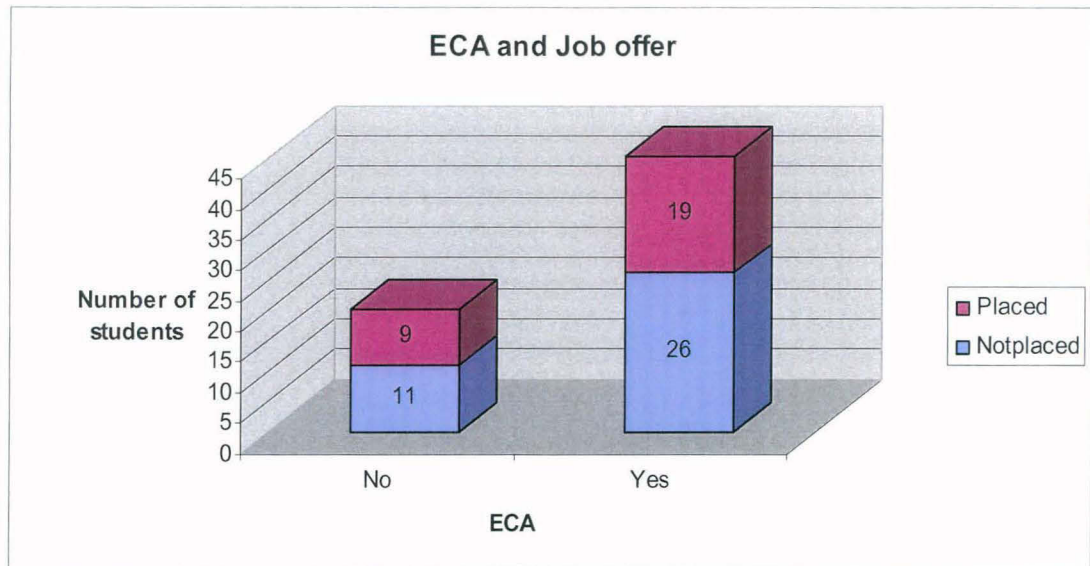
This clearly shows that there is indeed a relationship between students' motivation level to get a corporate job and doing an internship. A logistic regression was done considering internship as dependent variable and motivation levels as independent variable. The results show that if a student has high motivation, he is almost two times more likely to do an internship. The impact is statistically significant at 95 per cent confidence level<sup>13</sup>. In spite of being aware of the fact whether employers give preference to students with internship is not clear at this point. This can only be concluded after conducting statistical exercises.

#### **4.3.9 Job Offers, Extra-Curricular Activities and Software Skills**

Out of 20 students with no extra-curricular activities (ECA), 9 students got placed (45 per cent) while out of 45 students with ECA, 19 got employed (42 per cent). This situation is depicted below:

<sup>13</sup> See appendix for detailed results.

**Figure 4.14: Job Offers and ECAs**

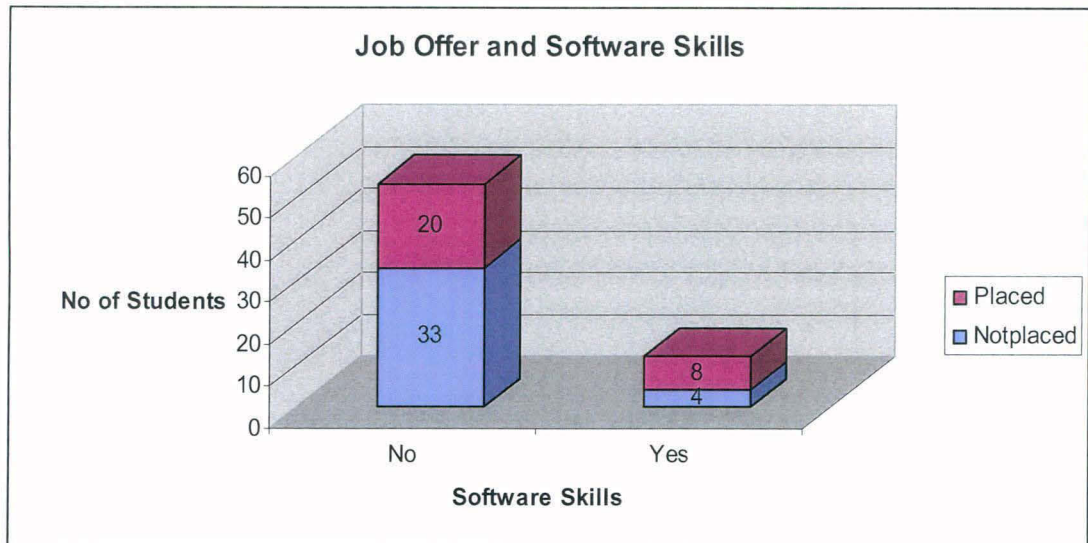


Source: Sample Survey

This does not give us any signal for high importance of ECAs in determining employability for Economics graduates. Another skill which might make a difference is Software Skills. Statistical softwares are now-a-days very much in demand for analytical jobs. But only 12 of 65 students in the sample are confident in using such statistical packages. Out of these 12 students, 8 are placed (see Figure 4.15)



**Figure 4.15: Job Offers and Software Skills**



Source: Sample Survey

Due to the presence of a low number of students having knowledge about statistical packages, the impact of having this knowledge over placements cannot be concluded. Since these two variables, ECA and software skills do not indicate their high importance in determining employability of Economics graduates, the model to be established in the next section would not take them into account.

#### **4.4 The Model**

In this section an effort has been made to establish an econometric model which best fits the data. Since the dependent variable 'Job Offer' is a category variable taking two values "Placed" and "Not Placed", a Logistic Regression model has to be designed. Specification of the model and results of this exercise are discussed below.

##### **4.4.1 Specification of the Logistic Regression Model**

The dependent variable is 'Job Offer' and the explanatory factors are – sex, caste, parental education, parental income, academic performance in undergraduate Course,

academic Performance in postgraduate course, communication skill, internship experience, and reputation of the undergraduate colleges.

All the variables except parental education and parental income are binary variables which can take only two values. Sex of a candidate can be either Male or Female. Caste is categorized as General and Reserved. Academic performance in undergraduate course and postgraduate course are either 'High' or 'Low'. Communication skills are reflected through fluency in English, which can be either 'High' or 'Low'. Internship experience has been categorized as 'Yes' and 'No'. Reputation of the undergraduate colleges is either 'High' or 'Low'. Medium of instruction can be 'English' or 'Regional'. Separate dummy variables had to be created for each of them. Parental income is in actual numeric and Parental education has been presented as the total number of years of education of parents. A detailed description of the variables is given in Table 4.1 below.

**Table 4.1: Definition of Variables used in the Model**

<b>Serial No.</b>	<b>Name of the Variables</b>	<b>Description of the Variables</b>	<b>Nature of the Variables</b>
1	joboffer	Job Offer	Dependent
2	pinc	Parental income	Explanatory
3	pedu	Parental education	Explanatory
4	pg	Postgraduate Grade	Explanatory
5	ug	Undergraduate Grade	Explanatory
6	fluency	Fluency in English	Explanatory
7	medium	Medium of Instruction in School	Explanatory
8	rank	Rank of the Colleges	Explanatory
9	internship	Internship Experience	Explanatory
10	sex	Sex of the candidate	Explanatory
11	caste	Caste of the Candidate	Explanatory

The previous discussion in section 4.3 gives us an idea of close association between the variables mentioned in parenthesis below:

- (pinc and pedu)
- (pg and ug)
- (fluency and medium)

Therefore one of these closely connected variables in each set would be taken in our model. To begin with, let us first design a model where 'joboffer' is a function of pg, pinc, fluency, rank, internship, sex and caste. Consequently one variable is dropped from the regression and results are noted. The models are described below:

**Model I :** joboffer = f (pg, pinc, fluency, sex, internship, rank, caste)

**Model II:** joboffer = f (pg, pinc, fluency, sex, internship, rank)

**Model III:** joboffer = f (pg, pinc, fluency, sex, internship)

**Model IV:** joboffer = f (pg, pinc, fluency, sex)

These four logistic regressions were run in STATA 11 and the results (R1, R2, R3, R4 correspond to Model I, II, III and IV respectively) are presented below in Table 4.2:

**Table 4.2: Results of Four Logistic Regression Models (Reporting odd-ratios and z value) Dependent Variable: joboffer, N=65**

Serial No	Explanatory Variables	R1	R2	R3	R4
1	pg	5.925 (1.94)	6.501 (2.14)*	5.369 (2.01)*	4.889 (1.99)*
2	pinc	1.491 (3.01)**	1.153 (3.13)**	1.158 (3.18)**	1.138 (3.27)**
3	fluency	7.066 (1.87)	7.497 (1.97)*	8.574 (2.20)*	8.759 (2.34)*
4	sex	0.050 (2.27)*	0.045 (2.40)*	0.053 (2.41)*	0.091 (2.35)*
5	internship	4.013 (1.25)	3.882 (1.22)	4.509 (1.40)	
6	rank	2.411 (0.88)	2.583 (0.97)		
7	caste	1.481 (0.30)			

\*  $p < 0.05$ ; \*\*  $p < 0.01$

Comparing the results of four regressions, it is clear that four variables – postgraduate grade, parental income, fluency in English and sex of the candidate have statistically significant effect on the placement. For example, let us take Model II and discuss its result (R2) in details.

#### 4.4.1.1.Details of Results of Logistic Regression Model II

Model II considers postgraduate grade, parental income, fluency in English, sex of the candidate, internship experience and rank of the undergraduate colleges as explanatory variables. The details of this logistic regression are presented below:

**Model II: joboffer = f (pg, pinc, fluency, sex, internship, rank)**

Logistic regression	R2	Number of obs = 65
		LR chi <sup>2</sup> (6) = 50.51
		Prob > chi <sup>2</sup> = 0.0000
Log likelihood = -19.176256		Pseudo R <sup>2</sup> = 0.5684

joboffer	Odds Ratio	Std. Err	z	P>z	[95% Conf	Interval]
pg1	6.501097	5.680719	2.14	0.032	1.172732	36.03914
pinc	1.152684	.0523876	3.13	0.002	1.054448	1.260071
fluency1	7.496833	7.660419	1.97	0.049	1.011818	55.54606
sex1	.0453966	.0585043	-2.40	0.016	.0036312	.5675419
internship2	3.882271	4.329885	1.22	0.224	.4362579	34.54843
Rank1	2.583331	2.536552	0.97	0.334	.3770439	17.69979

[ug1= High Undergraduate grade

pinc= Parental income

fluency1= High Fluency in English

sex1= Female

internship2= Yes (the student has done an internship)

rank1= High Reputation of Undergraduate College]

#### **4.4.1.2 Interpretation of the Results**

The log likelihood of the final model is -19.176256

The likelihood ratio (LR) chi-square test is 50.51. The number in the parenthesis indicates the number of degrees of freedom, which in this case is 6.

Here  $\text{Prob} > \chi^2 = 0.0000$ . This is the probability of obtaining the chi-square statistic given that the null hypothesis is true. In other words, this is the probability of obtaining this chi-square statistic (50.51) if there is in fact no effect of the independent variables, taken together, on the dependent variable. In this case, the model is statistically significant because the  $\text{Prob} > \chi^2$  is less than .000.

The pseudo R-squared is equal to 0.5684.

#### **Odd Ratios and Significance**

- (i) The odd ratios corresponding to 'pg1' suggest that a student, who has earned 'High' grade in post-graduation, is almost 6.5 times more likely to get placed, other things remaining the same.
- (ii) The odd ratios corresponding to 'pinc' suggest that if a student's parental income increases by one thousand rupees, he or she is 1.15 times more likely to get the job, other things remaining the same.
- (iii) The odd ratios corresponding to 'fluency1' suggest that a student, who is highly fluent in English, is almost 7.49 times more likely to get placed, other things remaining the same.
- (iv) The odd ratios corresponding to 'sex1' suggests that a female student has only 4 per cent less chance to get placed than a male student, other things remaining the same.

- (v) The odd ratios corresponding to 'internship2' suggests that a student who has done an internship is almost 4 times more likely to get placed, other things remaining the same.
- (vi) The odd ratios corresponding to 'rank1' suggests that a student who has come from a highly reputed college is 2.58 times more likely to get placed, other things remaining the same.

Here all the variables have a positive effect on the logit, except the variable sex. The regressors i.e. 'pg', 'fluency' and 'sex' have effects on the logit which is significant at 95 per cent level of confidence and the impact of 'pinc' is statistically significant at 99 per cent level of confidence. Impact of the variables 'internship' and 'rank' are not statistically significant. However together all the regressors have significant effect as the p value of the model is 0.000.

#### **4.4.2 An Alternative Logistic Regression Model**

Similarly another Model including undergraduate grades, parental income, fluency, sex of the candidate, internship and rank of undergraduate College can be proposed. This model is termed as Model V<sup>14</sup>.

##### **4.4.2.1 Interpretation of the Results**

The log likelihood of the final model is -19.305817

The likelihood ratio (LR) chi-square test is 50.25. The number in the parenthesis indicates the number of degrees of freedom, which in this case is 6.

Here  $\text{Prob} > \chi^2 = 0.0000$ . This is the probability of obtaining the chi-square statistic given that the null hypothesis is true. In other words, this is the probability of obtaining this chi-square statistic (50.25) if there is in fact no effect of the independent variables, taken together, on the dependent variable. In this case, the model is statistically significant because the  $\text{Prob} > \chi^2$  is less than .000.

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<sup>14</sup> The same combination of independents variables (as carried on in Model I,II,III and IV) have also been tried with variable 'ug' and similar results were obtained. However, only one result is presented here.

The pseudo R-squared is equal to 0.5655.

**Model V: joboffer = f (ug, pinc, fluency, sex, internship, rank)**

Using STATA 11 software package, this regression gives us following results-

Logistic regression	Number of obs = 65
	LR chi <sup>2</sup> (6) = 50.25
	Prob > chi <sup>2</sup> = 0.0000
Log likelihood = -19.305817	Pseudo R <sup>2</sup> = 0.5655

<b>joboffer</b>	<b>Odds Ratio</b>	<b>Std. Err.</b>	<b>z</b>	<b>P&gt;z</b>	<b>[95% Conf. Interval]</b>	
ug1	6.827585	6.425496	2.04	0.041	1.07943	43.18569
pinc	1.155621	.0483447	3.46	0.001	1.064648	1.254368
fluency1	13.21942	13.66573	2.50	0.013	1.742901	100.2656
sex1	.0466025	.0568729	-2.51	0.012	.004262	.5095668
internship2	2.002383	2.164298	0.64	0.521	.2407224	16.65627
rank1	1.150648	1.057776	0.15	0.879	.1898646	6.973345

[ug1= High Undergraduate grade

pinc= Parental income

fluency1= High Fluency in English

sex1= Female

internship2= Yes (the student has done an internship)

rank1= High Reputation of Undergraduate College]

### **Odd Ratios and Significance**

- (i) The odd ratios corresponding to 'ug1' suggest that a student, who has earned 'High' grade in under-graduation, is almost 6.82 times more likely to get placed, other things remaining the same.
- (ii) The odd ratios corresponding to 'pinc' suggest that if a student's parental income increases by one thousand rupees, the student is 1.15 times more likely to get the job, other things remaining the same.
- (iii) The odd ratios corresponding to 'fluency1' suggest that a student, who is highly fluent in English, is almost 13 times more likely to get placed, other things remaining the same.
- (iv) The odd ratios corresponding to 'sex1' suggests that a female student has 4 per cent less chance to get placed than a male student, other things remaining the same.
- (v) The odd ratios corresponding to 'internship2' suggests that a student who has done an internship is almost 2 times more likely to get placed, other things remaining the same.
- (vi) The odd ratios corresponding to 'rank1' suggests that a student who has come from a highly reputed college is 1.15 times more likely to get placed, other things remaining the same.

Here all the variables have a positive effect on the logit, except the variable sex. The first regressors i.e. 'ug', 'fluency' and 'sex' have effects on the logit which is significant at 95 per cent level of significance and impact of the variable 'pinc' is significant at 99 per cent level of confidence. Impact of the variables 'internship' and 'rank' are not statistically significant. However together all the regressors have significant effect as the p value of the model is 0.000.

#### **4.4.3 Implications of these Results**

The results of the logistic regression show that the each of the factors academic performance, parental income, communication skill and sex of the candidate have



significant impacts on placement. However when variables like caste, parental education, medium of instruction had been included in both the models, satisfactory results have not come. This is because there is a possibility of close relation between caste, parental education and parental income, and between medium of instruction and fluency in English. However, this is not something surprising. In reality, a close relation between these variables can very well be expected. Therefore to avoid the problem of collinearity, these variables were kept outside the model.

Academic performance has two indicators- undergraduate grades and postgraduate grades. Discussion in Section 4.3 indicates close association between students' undergraduate grades and postgraduate grades. That is why these variables were not taken together in one model. Instead, two separate models had been tried to explain the phenomenon of receiving job offers and in both the models, the positive impact of academic performance on placement is statistically significant. The statistically significant effect of academic performance on the estimated logit is very crucial for our discussions. Grades have been supposed to reflect the embodiment of Human Capital and knowledge. A student earns high grades because he or she knows more than others. This knowledge factor becomes important for employers as human capital theory suggests that learning increases the productive capacity of a person. Alternatively based on the screening theories of education, one can argue that it is the signalling role of a grade which becomes important in placement interviews. A high grade can reflect many unseen characteristics of a student like hard-working ability, seriousness, modesty, etc. Although in this case, grade does not have to signal many things as employers can check for other traits personally in an interview, still there is a role of grade in indicating other characteristics of the students. Therefore, the importance of grades lies mainly in the core of human capital theories and the signalling theories of Education.

Parental education has a significant positive impact on the logit meaning if there is a unit increase in the income of the parents, the estimated logit also increases, suggesting a positive relationship between parental income and receipt of a job offer. This result has deeper implications for explaining inequalities in our society. High-

income earning parents are more likely to send their children in good schools and good colleges, provide supportive material and non-material resources, nurture their children's abilities. As a consequence, students from high income earning families enjoy great opportunities as compared to their friends coming from low-income background. After going through rigorous learning sessions in schools and colleges, these students are more likely to perform well in life. In an M.A. course, where students come from different reputed colleges, these already groomed students get advantage over others. In placement interviews, these students perform better than others and stand a good chance of getting selected.

Communication skills as reflected through fluency in English, have a positive impact on the estimated logit and the impact is statistically significant. As already discussed in Section 4.3, Communication skill can be a very strategic factor in determining employability of Economics students. This factor can very well give proxy for students' smartness and personality as well as his or her managerial abilities. But the fact that good Communication skill cannot be achieved on one day, or even in one year. It is a consequence of life-long training and grooming. Students who have gone to good English medium schools and get congenial home atmosphere can be expected to be fluent in English. Obviously, a student with high fluency in English can be introvert and shy with low Communication skills, but these exceptions are not considered here. Students with good command over English get advantages in the interview and are more likely to be placed.

Ideally sex of the candidate should not matter in a placement interview. Still the results show that female candidates have a lower chance of getting placed than their male counterparts. Although the odds ratio associated with female sex is very small, still the fact is a matter of concern. The gender gap in corporate world gets exposed even in our small sample. In our society factors like marriage and house-hold responsibilities often influence women's career decisions and employers may not be ready to co-operate with them in time of needs.

Rank of the undergraduate colleges has a positive effect on the estimated logit suggesting that if a student comes from a highly reputed college, his or her chance to get placed increases. However, this impact is not statistically significant. The positive effect of rank can be understood in a way that it signals many things like 12<sup>th</sup> standard grades, smartness and interacting skills, the level of sophistication of the learning process, and obviously the rigour of the training. But because the students in DSE, JNU, Jadavpur University and Presidency College have come through entrance tests, the significance of the reputation of their undergraduate colleges has been lost to some degree. After completion of M.A. course, what matters is that they are from premiere institutions like DSE, JNU, Jadavpur University and Presidency College. Reputation of undergraduate college may add some extra benefit to their portfolios, but can not be a deciding factor any more. That is why in our sample, out of 65 students, 45 came from highly reputed undergraduate colleges and among these students 47 per cent are placed, 53 per cent are not placed.

Another interesting factor is internship. Although it has a positive impact upon the estimated logit, the impact is not statistically significant. The positive impact of internship is very clear to us as having a work experience always gives some extra benefits to students over those who do not have any such experience. Internship also signals many things- the willingness to get a corporate job, motivation level, readiness to learn etc. However in our sample there are many students (45 per cent) who have done internships but have not got any job. Therefore it can be said that impact of internship alone is not a very significant factor deciding a student's placement. Also there was a moderately high correlation between fluency and internship (0.41) which may reduce its significance level in the regression models. A student has to be smart enough having a fair grade and good interaction skills to bag an internship offer.

#### **4.5 Concluding Remarks**

The factors like parental income, academic grade, fluency in English, sex of the candidate have significant impact on the placement. Internship experience and rank of

undergraduate colleges have positive impact on the estimated logit, but these are not statistically significant.

The combination of factors working significantly on the placement phenomenon is interesting enough for this study. In both the logistic regression models discussed in Section 4.4, there was one variable indicating the embodiment of human capital (academic grade), one indicating the socio-economic background of the student (parental income), one variable indicating communication abilities and signalling many other unseen traits (fluency in English), one variable indicating societal taboos and norms (sex), one variable indicating the student's willingness to get a corporate placement (internship), and one variable signalling students' upbringing and educational background (reputation of undergraduate colleges).

Both the models are overall significant as their probability less than chi-squared are very small (0.000). This means, in case of recruitment of Economics graduates in corporate jobs, the above factors matter. The factors can be classified in three types- human capital type, signalling type and societal type.

Academic grades (undergraduate and postgraduate) possess mainly the features of human capital type factors. If a hard-working student attends classes regularly and prepare lessons religiously, it can be expected that his or her chance of earning a high grade increases, given the level of cognitive capacity. This rigorous learning experience provides him or her clarity of concepts and knowledge on the subject. Therefore, in this case, grades reflect the cognitive skills and productive abilities of students. It can also play the role of signalling device like it can indicate whether the student is regular in classes or not. But since most of the other traits like seriousness, modesty, smartness can be checked during the interview, the main importance of grades lie in augmenting one's analytical abilities. A positive significant effect of grades on placement confirms the significance of possession of knowledge in explaining hiring behavior of firms.

Signalling type factors include fluency in English. Fluency in English, as already mentioned in earlier sections, can signal towards the candidate's interacting skills, smartness, communicating abilities, managerial traits, etc. It can also signal the educational background of students as smart, confident and communicative students are generally expected to come from English medium schools and highly reputed colleges. As these schools and colleges are generally expensive, this can also signal towards the family background of the candidates. Therefore fluency in English is actually a signalling variable which signals the personal traits of candidates.

Internship can be argued to have some human capital components, as it generates learning by doing. At the same time, it also signals a student's motivation level and willingness to join a corporate firm. Thus, this factor has features of both the aspects of human capital and signalling. Similarly, reputation of undergraduate college (rank) also has some mixed features. It can signal towards the smartness, communicative abilities, possession of extra-curricular activities etc as well as towards the good learning experience. Highly reputed colleges not only have a 'brand value' but they also provide rigorous training and grooming sessions. It also gives a proxy for students' 12<sup>th</sup> standard grades. Therefore, this is a factor having a combination of human capital components and signalling roles.

Societal variables include Parental income and Sex of the candidate. Parental income is one of the major factors determining the boundary of the opportunity sets for children in our society. Parents use resources to create a home environment conducive to higher attainment in education (Teachman, 1987). Since childhood, the supportive home atmosphere makes a lot of difference. The type of school one chooses, the type of environment one goes through, the reputation of colleges in which one studies - everything can depend on the income factor. Apart from a child's cognitive capacities, parental income thus plays a very important role in deciding the level of education.

Sex of the candidate is something which should not matter in case of placements. But in a patriarchal society, the rate of corporate placement of women candidates is lower than their male counterpart as indicated by Corporate Gender Gap Report, 2010. Social norms and taboos may have created the barriers for women employees.

The whole discussion on the nature of factors determining employability in case of Economics graduates can be concluded by saying that a combination of factors having human capital component, signalling roles and socio-economic features actually determine employability. However, the perspectives of students and employers about employability have not been discussed so far. Next chapter discusses their perspectives from qualitative aspects and this discussion, it is believed, would add to the understanding of the nature of factors determining employability in this case.

## **Chapter 5: Employability- Perspectives of Students and Employers**

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So far we have discussed the quantitative relations between dependent and independent variables and the results of statistical exercises. But there are another two research questions still to be addressed. These questions deal with the idea of employability as conceptualized by the Economics students and their employers. First in this chapter, let us begin with students and then move to employers' perspectives about employability.

### **5.1 Employability: Students' perspectives**

Most of the students, 57 out of 65, have appeared in the placement process for the first time. Others (8 out of 65) had already experienced the process after they finished their Bachelor degree course. So it was expected that most of them would not have a fair enough idea about the whole process before appearing in the placements. Their views and ideas about employability and their experiences in the placement have been captured through a number of questions scheduled in the last two sections of the Questionnaire A. We did not ask directly what they mean by the word employability because the term itself does not have a proper definition. Instead several indirect questions were asked to understand their views about it. Their experience in the placement process helps us understand the dimensions of the term employability.

#### **5.1.1 Questions from the Syllabi**

The profiles of the jobs which were offered to students range from Junior Economist, Risk Analyst, Business Analyst, and Assistant Manager to Assistant Editor. Obviously, it depends on the nature and type of the company. It is surprising to note that some companies have offered the post of Assistant Manager to the students in DSE. In a time when management institutions are mushrooming across the nation, it is interesting to observe that these companies prefer Economics graduates over

management students for the post of a manager. These companies might want employees with sound understanding of the subject with basic managerial abilities. Depending on the profiles of the jobs companies offered, their requirements and preferences keep changing. The type of employees they are looking for is expected to be reflected through the questions asked in the interview. However, in the placement, 52 out of 65 students faced questions from Econometrics, and the rest were asked from other areas like Micro-economics, Macro-economics, International Trade, Game Theory, etc. Huge weight assigned to Econometrics tells the students about the employers' preference for students having analytical skills and the ability to handle empirical work. Surprisingly, only eight students mentioned that they were not asked anything from the syllabi. There is a popular idea among students that a good knowledge of Econometrics helps in impressing the employers. Mainly it has been understood that most of the companies are looking for persons with analytical skills. These skills, in this case, are the abilities to analyze an economic problem, identify the associated variables, run a statistical exercise and to interpret the results. Almost 91 per cent of the students face questions pertaining to the real life problems. For example, one employer asked one student the following question,

*Imagine yourself alone to be confined into one room. You have no access to mobile phones, television or other electronic equipments except one laptop with internet connections. You are asked to estimate the demand for chocolates in New Delhi. How would you proceed?*

Similar questions were also asked on the basics of consumer theory or simple trade models. It seems clear that the employers were not much interested in testing the knowledge in Economics; rather they were interested in things of practical relevance. The problem solving abilities of students or their approaches are important for them. Even from Econometrics, most of the employers asked questions which reveal that they were interested in checking if the candidate is clear about basic concepts or not. Apart from it, management related questions were also asked to test the leadership abilities or team spirit.



### 5.1.2 Questions from Other Areas of Interest

Apart from questions from the syllabi (mainly Econometrics, as stated above), employers also asked questions about current affairs in the national or global economy or society as a whole. Forty-six out of 65 i.e.71 per cent students faced questions which centre on current general affairs in the economy. This means employers are actually looking for employees who are well aware of the current happenings in the world.

Very often employers ask students about their special or optional papers. Seventy-two per cent students confirmed that they were asked to reveal their interests in these optional or special papers in the interview. To judge students' analytical and innovative skills, they were also asked about the term papers they had written during the M.A. course. Rationale behind choosing any topic for the term paper, the methodology or approaches they followed, or the conclusions they have made on a topic were often asked.

**Table No. 5.1: Type of Questions faced by the Students in the Placement**

Serial No.	Questions from the Area	Yes		No	
		Count	Percent	Count	Percent
1	Problem Solving	59	91	6	9
2	Course Materials	56	86	9	14
3	Special Papers	47	72	18	28
4	Current Affairs	46	71	19	29
5	Term Papers	45	69	15	31

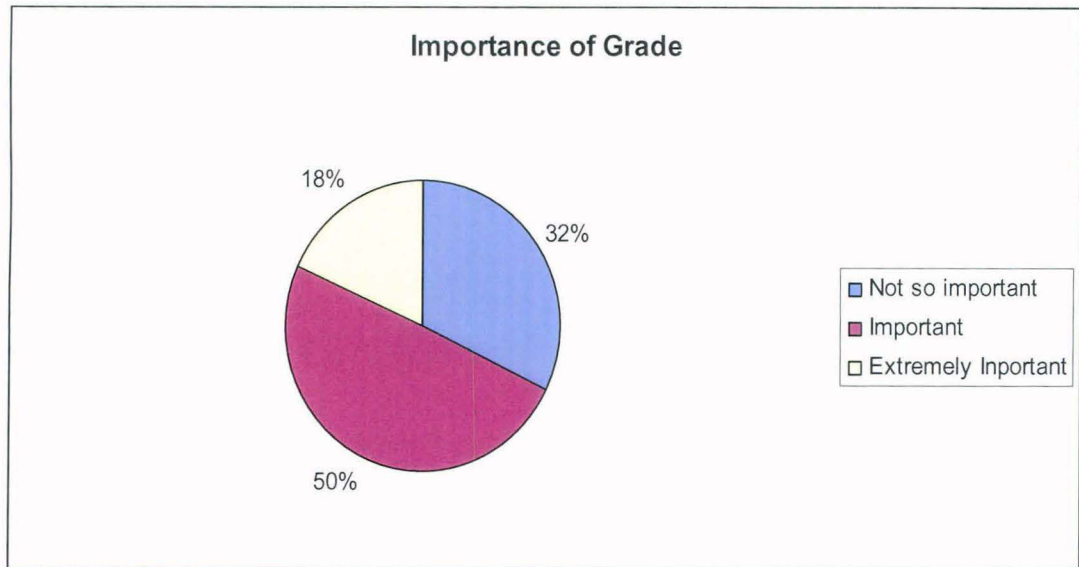
Source: Sample Survey

### 5.1.3 Importance of Grade or Academic Performance

Now, let us discuss the importance of 'Grade' or academic performance. Most of the students believe that a fair level of grade in the present course is actually useful for

clearing the cut-off barriers. Some companies collect *curriculum vita* (CVs) of students beforehand and screen those in advance. They call only a few numbers of students in the interview. This practice is rampant among the companies which visit Jadavpur University. But in JNU and Presidency College, companies generally do not use grade as a cut-off instrument to eliminate people. Most of the companies allow everybody to appear in the process. In DSE, it is the department which sets the cut-off at 45 per cent for students to appear in the placement. Only those students, who had scored at least 45 per cent in the last three semesters, are eligible to sit in the placements. Companies do not have any say there. In our sample, 32 per cent of the students believe grade does not matter much if one clears the minimum criteria. According to them, whoever performs in the placement bags the job. If a student can impress the employers with all the answers, nobody is going to look at his or her grades. On the other hand, most of the students (50 per cent) believe that grade is important to a certain extent to create an impression of a hard working serious student before the employers. According to them, a good grade can give a proxy for a number of things. Only 18 per cent of the students consider grade as one of the most important factors determining the placement. They believe, employers put a lump sum weight on the 'grade' factor and it certainly gives tremendous advantage to one if he or she is a topper.

**Figure 5.1: Importance of Grades according to Students**



**Source: Sample Survey**

#### **5.1.4 Importance of Communication Skills**

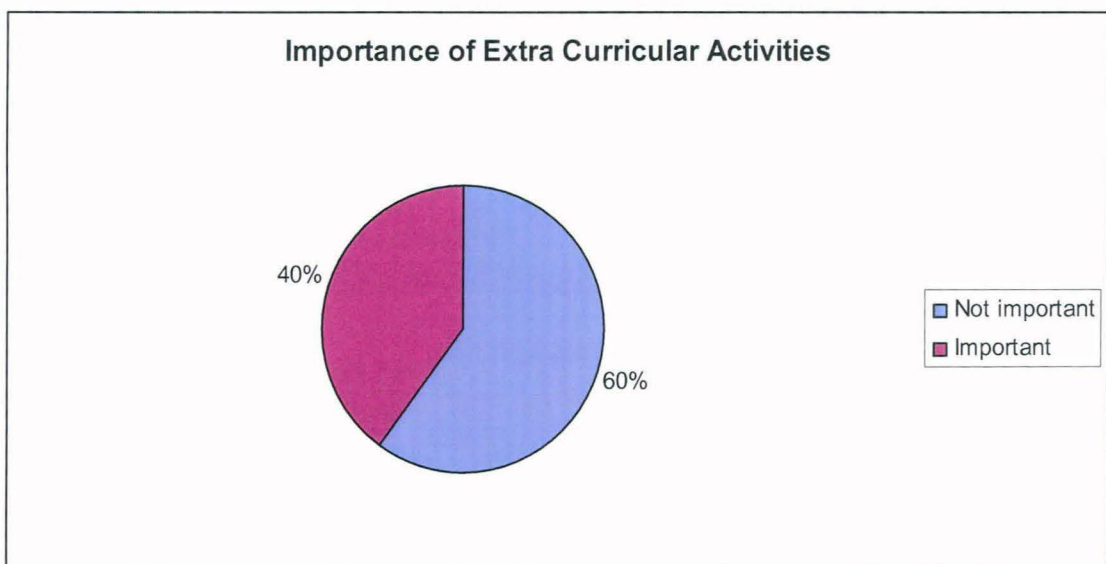
In case of communication skills, students seem to be pretty sure of its extreme importance. Fifty-five out of 65 students believe that it is the most important factor determining one's performance. Only 10 of the 65 students feel that it is important, but not as much as it thought to be. They believe one cannot play with the words and fool the employers. If one knows the answers and is able to convey it in simple English, it is enough. But others do not agree with them. According to the majority, a great command over English language and good communicative ability actually helps in hiding many a fault at the interview. They know that now-a-days an employee has to present his or her work in front of their clients or other employees. So it is natural that the employers would seek to employ those who are confident enough to speak in English and communicate well with others. In the round of Group discussion, communication skill is the most important factor determining one's chance to get through. Students believe that anyone who can command authority in this round and make the others listen to his points without interruption will surely get tremendous

advantage over the others The type of topics employers had chosen for this topic (e.g. price hike in Petroleum goods) need a good deal of general awareness about the economy as well as theoretical understanding and communication skills.

### 5.1.5 Importance of Extra-Curricular Activities

Sixty per cent of the students surveyed were sure that extra-curricular activities do not actually help in getting a job. They believe now-a-days employers do not give special credits to students who can sing, or dance or participate in any sports activity. According to them, employers only require specific skills relevant to the job profiles. Forty per cent students, on the other hand believe that extra-curricular activities give additional advantages to candidates when they face employers. If one student is active in performing arts, then it gives him or her, a certain degree of confidence which may help him or her in the interview.

**Figure 5.2: Importance of Extra-Curricular Activities according to Students**



**Source: Sample Survey**

### **5.1.6 Importance of Research/Work Experiences or Internships**

Almost all the students faced questions on their previous work or research experience, if any. Students, who have done an internship during vacations, got an advantage here. But it seems that most of the students were pretty familiar with this type of questions since most of them told us that they did their internships to deal with this kind of questions in the interview. On the other hand, immense interest on research and work experiences or projects done by students surely indicates employers' preferences for students who are familiar with analytical works.

### **5.1.7 Suggestions made by the Students**

Students were also asked to share their feelings about the most important factors one should keep in mind before appearing in the placement process. This was asked to get a feel about their views about what matters most. The suggestions they make range from building confidence, improving communication skill, etc. to getting familiar with statistical packages. The suggestions are not mutually exclusive and one has been allowed to make as many suggestions as he or she wanted to. It was found that 53 per cent students believe *confidence* is one of the key factors. No matter how much one knows, he or she has to be confident enough to impress the employers. If one is not sure about his or her capabilities, it is hard to make the employers sure about it. According to 47 per cent students, knowledge is important. If one answers all the questions in the test, no one can deny him or her a chance. It is the technical round that employers use as a screening process and a good knowledge about theory and current economy makes a difference there. Forty per cent students suggested their juniors to clear the basics of Econometrics before appearing in the placements. 17 per cent students suggested that one should keep track of the happenings in the country as well as in the world and have a general awareness about the current affairs. But 58 per cent students believe one should improve his or her communication skills because it matters a lot. Only 17 per cent students suggested that one should try to maintain a good grade in the semesters. Such a low percentage of students putting importance on

grades as a factor made it clear that students do not think employers are much concerned about their grades.

**Table 5.2: Suggestions made by the Students**

Sl No.	Suggestions	No. of Students who made this suggestion	
		Count	Percent
1	Improve Communication Skills	38	58
2	Be Confident	35	54
3	Do an Internship	30	46
4	Have Knowledge about the Subject	28	43
5	Know Basic Econometrics	26	40
6	Try to earn a good grade	11	17
7	Be aware of current affairs	11	17
8	Know about the Company	10	15

Source: Sample Survey

Another most useful thing, according to students, is to do an internship during the vacations during their course. Forty-seven per cent students think doing an internship (firstly, one should try for corporate internship, if not available, then he or she should go for research internship) actually helps one being more confident about himself in the interview. The type of work done in the internship may not be directly relevant to the profile of the job, still it is advisable to do an internship as this gives a student something to prove his or her interest in the job. In similar lines, 15 per cent students feel it is helpful to gather prior information about the company for which one is appearing.

### **A Comparative Note of the Placement Scenario of Economics Graduates in Delhi and Kolkata**

The sample consists of 44 students from Delhi and 21 students from Kolkata. Students in Delhi are surveyed from DSE and JNU (CITD and CESP). In Kolkata, students have been surveyed from Presidency College and Jadavpur University. Out of 44 students surveyed in Delhi, 19 have got placements (43 per cent). In Kolkata, out of 21 students, 9 students are placed (43 per cent). The placement rate is almost same for Delhi and Kolkata. But the reputation of companies and the pay package offered to the students are not same in these two cities. In Delhi, the minimum gross per annum package offered is Rs. 5 lakhs and the maximum is Rs 8.5 lakhs. In Kolkata, the minimum gross per annum pay package is Rs. 2.5 Lakhs only and the maximum is Rs. 6 lakhs. The level of reputation of companies also differs across cities. In Delhi, all the companies in which surveyed students got placed are highly reputed. However, in Kolkata, start-up companies with no or very poor reputation are also allowed to visit the campuses for recruiting students. Reputed companies also come to institutions in Kolkata, but number of students they recruit and the pay package they offered, both are less than their Delhi counterpart. One thing can be mentioned here that another reputed institution in Kolkata, Calcutta University, which has a well-reputed department of Economics, had no placement this year. This difference in placement situation in Delhi and Kolkata can be attributed to many things. First, the reputation and popularity of the M.A. Economics course in DSE and JNU is higher than that of two institutions in Kolkata. Secondly, number of financial companies operating in Delhi and Bangalore (from where employers came to Delhi institutes) is higher than that of Kolkata. Employers offer lower pay package in Kolkata may be because the cost of living is comparatively less there. However, the huge difference in minimum pay package should not be attributed to this cause; rather it may be related to the reputation and willingness of the companies. In a nutshell, the placement opportunities of institutions teaching Master degree course in Economics in Kolkata is not as prospective as it is in Delhi.

## **5.2 Employability: Employers' Perspectives**

It has been already mentioned in Chapter 3 that almost all the companies (which visited campuses for recruitment in these four institutions) were sent a questionnaire through e-mail along with a cover letter explaining the purpose of the study. Only five out of nine companies responded through e-mails and sent back a duly filled up questionnaire. For maintaining confidentiality, the names of these companies would not be disclosed here. Rather we would like to call them Company A, B, C, D and E. Company A conducts research on the areas pertaining to the infrastructure sector in India, while B works in the areas related to retail and Information Technologies (IT). Company C works on risk management and Company D on banking and insurance. Company E is mainly a consultancy whose job is to do market research. All of these companies, except A, are Multi-national Company (MNC) and well reputed in the market. Company A is a privately owned national firm.

The persons who were sent the questionnaire are mainly those who were in contact with the placement co-ordinators. All of them are senior employees in their companies and have an experience of minimum 5 years in this field. Therefore their responses are really crucial for understanding corporate employability from the employers' point of view. The posts for which these companies recruit Economics graduates are the followings:

Research Associates

Trainee Business Analyst

Research Analysts

Economic Analysts

Junior or Associate Economists



**Table 5.3: Profile of the Companies**

<b>Name</b>	<b>Working Area</b>	<b>Type</b>	<b>Posts offered to Economics Graduates</b>	<b>Gross Package (p.a.) offered in Rs. lakhs</b>
<b>A</b>	Research on Infrastructure Sector	Private National	Research Associates	7.0
<b>B</b>	Retail and IT	MNC	Trainee Business Analyst	6.5
<b>C</b>	Risk management	MNC	Economic Analysts	6.0 -6.5
<b>D</b>	Banking and Insurance	MNC	Research Analysts	6.0 -6.5
<b>E</b>	Market Research	MNC	Junior Economists	7.5

Source: Sample Survey

Although the names of the posts vary across companies, it is understood that mainly the job is related to the field of Analytics. Therefore it can be predicted that the people the employers are looking for must have the analytical skills and basic knowledge of econometrics to tackle an economic problem. The gross pay packages (per annum) offered by these companies range between Rs. 6 lakhs to Rs. 8 lakhs. These companies generally give postings to newly appointed employees in Delhi and Bangalore. All of these companies had come to recruit students from institutions in Delhi. Except for Company D, others recruit employees only through campus-placements. Surprisingly two of the companies, C and D recruit from both DSE and JNU and there is a difference between the gross packages (p.a.) offered in these

institutions. These companies recruit students for the same posts but offer Rs. 50,000 more to students in DSE than in JNU.

### **5.2.1 Factors behind Selecting Institutions**

It was found through their responses that most of them select an institution for placement visits on the basis of past experience of recruitment. In other words, if a company this year recruits two students from an institution and are satisfied with their working abilities, then they will again go for this institution next year. It seems that employers are not very adventurous and want to narrow down only on those institutions from which they have already recruited their employees. It was already mentioned that Company C and D prefer DSE over JNU and they are ready to offer more to students in DSE in order to attract best students. According to them, DSE students are more equipped with mathematical tools and statistical packages. On the other hand, Company A and E only come to JNU as they think the 'writing skills' and 'creative thinking' are the trump cards of JNU students. The importance of course structure and the style of learning get reflected through this type of preferences. Other important factors for selecting an institution are reputation of the institution and faculty profiles. One of the companies told us that they feel proud to receive invitations from renowned professors for visiting the campus for recruitment.

### **5.2.2 Rounds of Placement**

Different companies conduct different types of rounds for placement. Four out of five companies here go through four steps. Generally they take a written test (Short Questions-Answers type) to screen candidates. In the test questions mainly come on basics of econometrics, micro-economics, trade etc. Employers screen candidates on the basis of their basic knowledge in Economics. Short-listed candidates then go through two separate rounds of technical and Human Resource (HR) interviews. Some companies conduct a group discussion also. Technical rounds are designed to check a student's clarity about basic concepts of Econometrics and Statistics. HR

interviews mainly centre around hypothetical situations and problem solving in real life. In group discussion rounds, a topic with relevance to national or global economy is mainly asked. Some companies provide a scholarly article (which has a sound econometric exercise) to students 15 minutes before the round and ask them to discuss on the papers in the group discussion. This is done to check student's confidence, communication skill as well as his or her analytical ability. Students who qualify these rounds appear in the final round of the interview, which generally has a mix of technical and human resource questions. Company A, instead of the group discussion round, takes an essay test to check the writing skills. Topics in this test are similar to the ones asked in others' group discussion rounds.

### **5.2.3 Criteria for Selecting Employees**

Now let us come to the most important question; what are the criteria for selecting employees? Employers were asked to rank several factors according to relative importance. The four factors which came out as the most important ones are –

Analytical skills

Technical Knowledge

Communication Skill and Fluency in English

Smartness and Problem Solving Abilities

All the companies in the sample mark these four as most important. It is interesting to note that the employers have put relatively low weights on the grade and internship experiences of the students. Extra-curricular activities also do not have a high rank in the scale of importance.

### **5.3 Concluding Remarks**

Let us now sum up the whole discussion. We have seen students' perspectives and their views about the factors determining employability as well as employers'. According to students, communication skill, knowledge, confidence and smartness,

and a research experience (internship) determine the possibilities of getting employed. They do not put much importance on grade, text book knowledge and extra-curricular activities. In other words, they believe that if someone with great communication skill and fluency in English possesses basic understanding of the subject and has done an internship- he or she clearly has a great chance to be employed.

Employers, on the other hand believe that there is no substitute for technical knowledge and analytical skills. Apart from that communication skill and problem solving abilities are other determining factors. They are actually looking for people with analytical skills and problem solving abilities. No matter what grade one earns, if he or she is smart enough to tackle real life problems and has the ability to use analytical skills- they are happy with him, or her. Surprisingly, internship is one factor which is very important according to students, but not according to the employers. Employers believe the type of work students do during internship is not exactly relevant to the work they do in real life. But, they believe the experience as an intern gives a student some confidence about his or her abilities. May be this acts as a confidence booster in the interview. But technically speaking this experience does not add anything to the particular work they have to do in their companies. Students, on the other hand think doing an internship is one of the best ways to impress the employers.

In the previous chapter the results of the logistic regression models show that academic performance, parental income, communication skill, sex of the candidate, have statistically significant impact on placement of students. The two factors – internship and reputation of undergraduate colleges have positive impact on placement, but these are not statistically significant. The explanation of these insignificant impacts lie in the perspective analysis discussed above. For the employers, the reputation of the institution that the student is presently studying is much more important than the reputation of the institutions where they have previously studied. More importance is given to the belief that the students were selected in their present institutes through fair competition and hence the relevance of the reputation of their undergraduate colleges where they have previously studied has

been lost to some extent. Similarly, employers do not put much importance on internship, and for them just a certificate does not matter much. An internship is advantageous for a student if and only if it has helped him/her with a clear understanding about the problem that he/she had worked on.

Students and employers both understand the importance of communication skills and fluency in English. But the mismatch in their concepts lies elsewhere. Students do not put much importance on problem solving abilities as employers do. Students think employers are looking for people with a command over Econometrics, but employers are interested in the analytical ability, not the definitions or the derivations. For example, one employer asked students to explain the meaning of “R squared” to a five year old child. The definition one memorizes from Econometrics text book is not relevant here, what is needed is a detailed and clear understanding of the concept. Problem solving ability and analytical skills cannot be taught in any class, but can only be developed through the entire learning experience. Thus it can be said that most of the factors determining employability in this case are of long-term nature since the traits like fluency in English, good communication skill, smartness, problem solving abilities and analytical skills cannot be acquired over-night through preparation.

## **Chapter 6: Summary and Conclusions**

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Employability, in general, is determined by three types of factors- technical skills, process skills and personal attributes. Process skills which get generated through work experience do not matter much in case of fresh entrants in the labour market. Thus technical skills and personal attributes are the two main factors which are taken into consideration. Huge unemployment and under-employment in developing nations indicate that the process of skill development is not adequate which gets further manifested in the form of low employability skills among the educated youth as evident from various reports (Blom and Saeki, 2011). Before suggesting measures to improve the process of skill development in developing nations like India, it is necessary to understand the nature of skills employers are looking for. The nature of skills is generally associated with the nature of a particular job. Keeping this point in mind, this study seeks to understand the nature of factors determining employability in case of Economics graduates in Delhi and Kolkata only.

### **6.1 Making a Link between Theories and Realities**

As already mentioned in the paragraph above, technical skills and personal attributes are the major two types of determinants of employability in general. This statement has firm roots in the core theories of Economics of Education. Human capital theories, trace the productivity of a person to his or her educational background. Years of schooling, according to this theory help increasing one's productivity (Schultz, 1961; Becker, 1964). Technical skills, on the basis of this theory, have strong association with a person's learning experience in schools and colleges. On the other hand, theory of screening or signaling explains how education serves as a signal for unobservable personal attributes like modesty, honesty, diligence, etc. (Spence, 1975; Stiglitz, 1975). Particular features of a labour market can also dictate the skills needed for a job, as argued in labour market segmentation theories (Kerr, 1954).

It was argued that the screening theories of education would assume a different meaning altogether in case of India, where the society is stratified in terms of class, caste and gender. Recruitment to a certain job which often takes into consideration communicative skills, possessing fluency in foreign languages especially English, smartness, the ability to work in a team and the like apart from possession of cognitive skills, is thus often influenced by these socio-economic factors. These personal attributes in general reflect the type of up-bringing of a child and his or her background which in usual circumstances, are the manifestation of his or her socio-economic attributes. For instance, in India, an employee who has undergone schooling from regional medium government schools and who has received education from public colleges in urban areas, go through extreme troubles to communicate and interact in a sophisticated manner with clients or colleagues hailing from high socio-economic background. The presence of these attributes along with cognitive skills as mentioned above, add an extra dimension to the screening hypothesis. Studies on hiring behaviours of the firms undertaken in the Western societies (e.g., Harvey, Locke and Morey, 2002), often fail to understand the impact of social stratification on development of skills and personal attributes of an individual as found in case of developing nations like India. On the other hand, there have been studies on Indian labour market discrimination (e.g., Thorat and Attwells, 2010) focusing on a person's socio-economic attributes like caste, religion, gender which act as inhibiting factors in the recruitment process but theoretical implications of human capital and screening theories of education have remained unexplored.

Economics of Education theories have been responsible in establishing a strong link between education and earnings (Mincer, 1957), but in many cases, the relationship is weakened due to the presence of socio-economic diversities. The reason behind this statement is, given the level of cognitive capacities, development of personal attributes considered essential to secure a job, is often determined by various socio-economic factors. Absence of a favourable socio-economic background is responsible in hindering the development of these personal attributes, consequently lowering the possibilities of getting employed. Even if the extreme case of unemployment is kept aside for the time being, the possibility of experiencing an increase in the waiting-

time for getting job after completion of the work is very much higher. The increase in waiting-time for job is actually similar to an increase in the cost of higher education in terms of foregone opportunity cost.

Against this background, this study has been undertaken to look into the role of socio-economic diversities in determining employability. Family background, parental education, profile of schools and colleges, communication abilities, rural-urban background, etc. have been considered relevant factors to examine their impacts on recruitment process. The factors might not have an explicit impact on the recruitment process but they are responsible in affecting the outcome in two implicit ways. First, the employers do not always exhibit neutral characteristics and often are found to prefer employees of a particular type (Collins, 1979). Secondly, it is observed that the whole process of skill formation and personal attributes may facilitate a certain section of population in the society.

The relationship between family background and children's educational attainment is well established in literature. Various studies have cited evidences in support of the fact that a supportive home atmosphere helps developing a child's cognitive capabilities. Given the level of innate abilities, parents, possessing good educational background and financial affluence, are accountable in maximizing opportunities required for the correct grooming of their children. Among the various opportunities so created, the choice of school plays a very important role in shaping the minds of children. Academic performance of a child thus gets influenced by all these factors. On the other hand, the grooming which takes place in high profile modern colleges play a very important role in sharpening the skills and attributes of the students further developing their personality; but chances of getting admitted to a good college is not a random phenomenon. It is also a consequence of a long process, which starts on the very same day the child is born. This is further defended by innumerable psychological theories which confirm the possible impact of socio-cultural factors on the development of personality of a person.



Taking all of these together, this study has incorporated a comprehensive analysis of nature of the factors determining employability. Since the criteria for employing candidates can vary across job-profiles, this study has concentrated on the case of Economics graduates only.

## **6.2 Summary**

This study looks into the nature of the socio-economic factors determining employability through a case study of Economics graduates in Delhi and Kolkata. A sample of 65 Master degree (Economics) students interested in placement was collected from Delhi and Kolkata. On the basis of that an effort has been made to understand the nature of the determinants of employability from the perspectives of students and employers. A quantitative analysis has been done to check the statistical significance of these determinants. The findings from the study have revealed larger implications with respect to a differentiated society and a developing economy like India.

The discipline Economics is interesting in many senses. The growing demand for Economists in corporate houses has enhanced its demand among students also. Although the demand for the subject (as reflected through the cut-offs for admission in Bachelor degree courses) varies across regions, this is the subject which has highest craze among students in comparison to other subjects of social sciences. A notion of high rate of return may be there in the mind of the students, and at the same time employers are in search for some people with analytical skills and knowledge about the functioning of the market. This study has tried to capture the dynamics of hiring processes in the case of fresh Economics graduates through the process of campus-placements.

The sample was collected from Delhi and Kolkata in order to include some variations among the factors in the data set. Also an intention was there to compare the placement situations in Delhi with that of Kolkata. Placement situations (for Economics graduates belonging to prestigious institutes) vary across the two cities in

terms of reputation of the companies and the average gross pay package offered, which in Kolkata has been found to be lower than in Delhi .

Sixty-five students were surveyed in four institutions in Delhi and Kolkata. These institutions are DSE and JNU (CESP and CITD) in Delhi, and Jadavpur University and Presidency College in Kolkata. Among the population of all students in M.A./M.Sc final degree courses in Economics from these institutions, sixty-five students were randomly selected and interviewed on the basis of a questionnaire. Employers, who visited these institutions, were also contacted through e-mails and requested to fill up a questionnaire.

The perspectives of students and employers about the determinants of employability have been very crucial for this study. Based on the interviews, it has been found that the employers are mainly looking for students who possess clear understanding of the various econometric concepts and analytical skills. Knowledge on the subject has been an important deciding factor in the process of recruitment rather than the candidate's software skills, co-curricular activities and internship experiences. Good communication skill though, has been a very important determinant of employability in this case. Another important finding emerging from the study is that the employers have responded positively to the fact that the reputation of the institution and the number of past recruitments from the same has been fundamental in their recruitment process.

Students, on the other hand, put maximum weight on the candidates' grasp over Econometrics. Apart from this, eloquent communication skills and an internship experience were highly valued by them and many had indicated the practicality of an internship for their juniors who had similar aspirations.

The survey revealed employers and students, both did not put much importance on good academic performance. Both think grades play the role of a screening device to eliminate students on the basis of a minimum cut-off, and one's performance in the interview is the most important deciding factor.

Analyzing the data in great details, relationships between dependent variable 'job offer' and several other variables have been explored to identify the possible factors determining employability. Evidence of close relation between some variables like parental education and parental income (correlation coefficient 0.35), undergraduate and postgraduate grades (correlation coefficient 0.41), fluency in English and medium of instruction in schools (correlation coefficient 0.37), etc. have been found. A detailed examination of relationships has been undertaken to identify which factors to be included in the logistic regression model.

A number of logistic regression models considering dependent variable 'job offer' and other explanatory variables have been tried out with the help of statistical package STATA 11. The logistics regression approach has been used to examine the likelihood of a student/aspirant getting selected by the employer and identify the factors which contribute to the process of selection. Considering the outcome of placement as a binary variable, relative impact of several explanatory variables have been examined. In the econometric analysis it was found that the variables like Parental Income, Academic Performance, Communication Skills, Internship Experience, and Reputation of the Undergraduate Colleges have a positive impact on placement possibilities of a student. Among these variables, the first three have a statistically significant impact on receipt of job offers. Another variable having a statistically significant effect is sex of the candidate in the sense that employers do have a gender bias against women candidates, after controlling for all the other factors. Overall the two models discussed in the analysis are highly statistically significant as evident from the level of significance of Chi-square statistics which are very small (0.000).

It has been found in the regression analysis that for a thousand rupees increase in parental income, the odd ratio in favour of getting employed increases by almost 1.15 times, other things being fixed. Similarly, a high grade in post-graduation course makes the possibility of getting a job seven times more likely, other things being unchanged. If a student is highly fluent in English, his or her chance of getting a job increases by seven times. But a female student faces discrepancy in the sense that she

is little less likely than her male friend for getting employed, if other things are kept unchanged. The impact of these factors has come out to be statistically significant.

### **6.3 Limitations of the Study**

Although the study claims originality in collecting data and analysis, it is not beyond limitations. The major limitation in generalizing its statistical results arises because of a limited sample size of 65. This is another reason why separate statistical exercises could not be applied on Delhi and Kolkata sample. The main source of data in this study is primary and it was really difficult to interview each of the students in details. Although students were co-operative enough to answer the questions, a problem arises because of the presence of personal questions in the questionnaire. For example, most of the students hesitated in revealing their parental income in front of the researcher and there was no way of checking the accuracy of their answers. Some questions in the questionnaire also required self-assessment. For example, students were asked to scale their fluency in English as either 'High' or 'Medium'. There is obviously a chance of occurrence of self-bias in this case. However, efforts have been made to check this type of bias and to collect an unbiased sample.

The most difficult part of the data collection was to interview the employers. Almost all the companies which came to recruit students in these institutes were contacted but none agreed to fix a date for interview. Then the questionnaires were sent to them through e-mails and only five of the companies sent back fully filled up questionnaires. Thus the number of employers questioned is only five, and as a result, the degree of accuracy of the analysis has been compromised to some extent.

Economics is a discipline whose course and curriculum often gets shaped by the theoretical and ideological beliefs of the people in the institution. These differences can very well shape the orientation of minds of students and make a difference for employers. This study has not incorporated these factors and assumed the grades and courses of the four institutions are largely comparable.

## 6.4 Conclusions

The analysis carried out has tried to bring out the fact that a combination of human capital factors, signalling factors and socio-economic factors determine employability. Social norms and inequalities also play a role in terms of gender bias and income differences. There is a huge amount of bias in favour of the 'advantageous' groups in society in the entire process of placement. Students with low parental income may come to study in highly reputed post-graduate institutes on the basis of their cognitive capacities, but they tend to suffer in the placement process due to other factors. Placements also exhibit a gendered look, in which case, male candidates are given more preference than the female candidates. Being smart, having fluency in English, communication skill, etc., are often reflective of the type of upbringing, a student had in past years. Students from financially weak family backgrounds may have greater or similar cognitive capacities but face impediments in the corporate placements due to their modest and not so polished upbringing judging from the type of schools, colleges and home atmosphere they have come from. Moreover, since students from the 'advantageous' groups are more likely to get placed in these high salaried corporate jobs, this further paves path for rising level of inequality in our society.

The role of education in increasing social mobility is beyond any question but people coming from different strata of society with varying levels of opportunities in their hands often get further marginalized. The weaker gets weaker while the affluent rises higher in the socio-economic ladder of success. Given the same level of innate cognitive capacities with which the children are born, impact of social stratification becomes more embedded in the lifestyles of every individual with each and every decision their parents take. The inequality in our society is further aggravated due to the causal connection between parental education, parental income, and choice of schools, development of skills and other personal attributes.

The importance of socio-economics factors in a differentiated society often gets emphasis in sociological theories. On the other hand, theories in Economics of Education, stress upon the importance of education and skill development in case of a

developing economy. However, very few attempts have been made to link up these two types of realizations. This study makes an honest effort in understanding the inter-linkages between different types of factors determining employability. Since the survey was conducted for Economics graduates only, it was assumed that the employers though from different organizations, would be looking for a more or less similar set of attributes amongst the job applicants. Although this study concentrates on the case of Economics graduates only, the findings can have a larger implication in the context of socio-economic stratification in the society.

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## Appendix A: Regression Results

### Section I

#### (i) Regression Results of Post-graduation Grades on Under-graduation Grades

. logistic pg1 ug1

Logistic regression

Log likelihood = -38.97259	Number of obs = 65
	LR chi <sup>2</sup> (1) = 11.78
	Prob > chi <sup>2</sup> = 0.0006
	Pseudo R <sup>2</sup> = 0.1313

<b>pg1</b>	<b>Odds Ratio</b>	<b>Std. Err.</b>	<b>z</b>	<b>P&gt;z</b>	<b>[95 per cent Conf. Interval]</b>
ug1	6.666665	3.981437	3.18	0.001	2.068034 21.49115

#### (ii) correlation coefficient (pg1, ug1)= 0.41

[ug1 = High under-graduate grade  
pg1 = High post-graduate grade]

### Section II

#### (i) Results of Logistic Regression of Fluency in English on Medium of Instruction in School

. logistic fluency1 medium2

Log likelihood = -39.822926	Number of obs = 65
	LR chi <sup>2</sup> (1) = 10.08
	Prob > chi <sup>2</sup> = 0.0015
	Pseudo R <sup>2</sup> = 0.1123

<b>fluency1</b>	<b>Odds Ratio</b>	<b>Std. Err.</b>	<b>z</b>	<b>P&gt;z</b>	<b>[95 per cent Conf. Interval]</b>	
medium2	14.57143	15.88314	2.46	0.014	1.720585	123.4037

**(ii) correlation coefficient (fluency1, medium2) = 0.37**

[fluency1 = High Fluency in English  
medium2 = English as a medium of instruction in schools]

### **Section III**

**(i) Logistic Regression of Internship on Motivation**

. logistic internship2 reason2

Logistic regression

Number of obs = 65  
LR chi<sup>2</sup>(1) = 4.31  
Prob > chi<sup>2</sup> = 0.0379  
Pseudo R<sup>2</sup> = 0.0510

Log likelihood = -40.081646

<b>internship2</b>	<b>Odds Ratio</b>	<b>Std. Err.</b>	<b>z</b>	<b>P&gt;z</b>	<b>[95 per cent Conf. Interval]</b>	
reason2	3.269231	1.881825	2.06	0.040	1.057985	10.1021

**(ii) correlation coefficient (internship2, reason2) = 0.26**

[internship2 = Have done an internship  
reason2 = High motivation level for getting corporate job]



**Appendix B: Questionnaires**

**Section I**

**Questionnaire A**

**Respondent Code:** .....

**Section I: General Information**

1. Sex: Male  Female

2. Age: .....

3. Name of the institution: .....

4. Course: .....

5. Semester: .....

6. Year of admission: .....

**Section II: Personal Information**

**7. Family Background**

Serial no.	Relation	Education	Occupation
1	Father		
2	Mother		
3	Brother(s)		
4	Sister(s)		

8. Family income (per month): less than Rs.5000

Rs. 5000-15,000

Rs. 15,000 – 30,000

Rs. 30,000-45,000

More than Rs. 45,000

9. Caste: Gen  SC  ST  OBC

10. State of Domicile: .....

11. Region: Rural  Urban

**Section III: Educational Information**

12.

<b>Name of the Exam</b>	<b>year</b>	<b>Stream</b>	<b>Medium of Instruction</b>	<b>Name of the Institution</b>	<b>Type of the Institution</b>	<b>Board/ university</b>	<b>Percentage obtained</b>
<b>10th</b>							
<b>12th</b>							
<b>Bachelors</b>							
<b>Masters</b>							
<b>Special papers</b>							

13. Languages known: .....

14. Fluency in English: High  Medium

15. Extra Curricular Activities:

Yes  No

16. Software skill : Certificate  Non-Certificate

17. Work/Research Experience:

(i) Name of the Employer:.....

(ii) Job-Profile : .....

(iii) Tenure: .....

**Section IV: Placement Experience**

18. Is this your first exposure to recruiters? Yes  No

If no, please give details.....  
.....  
.....

19. This time how many placement interviews have you sat for?.....

20. Have you received any job-offer so far? Yes  No

If yes, please give details

(i) You got the job through

On campus recruitment

Off – Campus recruitment

(ii) You bagged the job in your ..... Interview.

(iii) Name of the Company:.....

(iv) Type of the Company : PSU  MNC  Private National

(v) Nature of the Company : .....

(vi) Job- Profile :.....

(vii) Pay package (P.A):

- (a) Basic .....
- (b) Performance Based .....
- (c) Expected salary before taking up this course:.....

(vi) Tenure: .....

(vii) Other Contract conditions:  
.....

**21. How many of employers asked you questions from your current syllabi?**

None  very few  most of them  all of them

Please mention which part of the syllabi had most of the questions.....

**22. Did they ask you anything about current general affairs of the economy or society as a whole?**

Yes  No

**23. Did they try to test your problem solving ability by giving hypothetical situations?**

Yes  No

**24. Did they discuss about your previous research/job experiences?**

Yes  No

**25. Did they comment on your grades?**

Yes  No

**26. Did they show interest in your special papers?**

Yes  No

**27. Do Extra Curricular Activities help in building impression during an interview?**

Yes  No

**Section IV: Personal Thoughts**

**28. Why did you sit for interviews?**

because you always aimed for this kind of job-opportunities

because you did not have any other certain alternatives

you were not interested in jobs, but just intended to have an experience

**29. What are your future career plans?**

.....  
.....  
.....

**30. Why did you choose this university over your previous one?**

Because.....

This university offers a more comprehensive and up-to-date curriculum

This university has highly reputed faculty and good infrastructure

Learning in this university widens my job-prospects

**31. According to you, how important is to have good grades for bagging any impressive job?**

Extremely important  Important  Not-so-Important

**32. Do you think going through course materials thoroughly would help one in cracking an interview?**

Yes, necessarily  Not Necessarily

**33. How important is to have a good communication skill and fluency in English?**

Extremely important  Important  Not-so-Important

**34. What would be your suggestions to juniors who are going to face the placement interviews next year?**

.....  
.....  
.....  
.....

## Section II

### Questionnaire B

Respondent Code: .....

#### **I. General Information**

1. Post.....

2. Job-Profile.....

3. Working since.....

4. Type of the Company:

Govt.....

Private.....

MNC.....

NGO.....

5. Working Area.....

6. Operating in India since .....

#### **II. Information about the Recruitment Process**

7. Students with MA in Economics are recruited for the post

.....

Job Profile.....

Gross Package given (p.a).....

8. Recruitment is mainly done through (say yes/no)

On-campus placement .....

Off-campus placement.....

9. This year On campus recruitments (for students with MA/Msc in Economics) were done in

Name of the institution	No. of candidates appeared	No. of candidates recruited	Gross Package offered (p.a)

**10. How do you choose certain institutes for on-campus recruitment? (Rank the followings in order of importance starting from the most important factor as No 1)**

- (i)By reviewing student profiles and CVs.....
- (ii)Having a look at their alumni profiles.....
- (iii)Examining the course structure.....
- (iv)On the basis of reputation of the institute.....
- (v)On the basis of reputation of the teachers/professors.....
- (vi)On request from professors from the institutes.....
- (vii)On the basis of past recruitments from the institute.....

Any other factor.....  
 .....

**10. Recruitment process**

Sl No.	Name of the round	Mode (written/verbal/telephonic)
1		
2		
3		
4		
5		
6		

Any other process.....  
 .....



**11. How would you rank the following criteria according to importance for recruiting candidates?(Rank the followings in order of importance starting from the most important one as No 1)**

- 1) Technical knowledge.....
- 2) Smartness and problem solving ability.....
- 3) Communication skill and fluency in English.....
- 4) Managing and marketing skills.....
- 5) Analytical skills.....
- 6) Awareness about the current affairs of the society and economy.....
- 7) Grades in post-graduation.....
- 8) Grades in other examinations.....
- 9) Reputation of the Institutions.....
- 10) Special Papers of interest.....
- 11) Internship Experience.....
- 12) Extra Curricular Activities.....
- 13) Software Skills.....
- 14) Family Background.....
- 15) Anything else.....

