

Indignity of Labor: Role of Occupational Prestige in Unemployment

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Abstract

Occupational prestige or job status may induce people to remain unemployed even when jobs are available. Thus measured unemployment will always have a voluntary component. Accumulated wealth in a family tends to increase the opportunity cost of job search, more so in a world where job status is socially important. Thus prosperity and unemployment may go hand in hand independent of the standard income effect. The paper shows that measured unemployment always may have a voluntary component. In fact an increase in reservation wage increases voluntary unemployment. However, the impact on the level in involuntary unemployment of such an increase cannot be easily predicted.

JEL-Codes: J240, J280, J330.

Keywords: occupational prestige, reservation wage, ability to work, unemployment.

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INDIGNITY OF LABOR: ROLE OF OCCUPATIONAL PRESTIGE IN UNEMPLOYMENT

1. Introduction

Occupational prestige or job status is a well researched area in Sociology. General papers have dealt with the subject. There are authors who have demonstrated that despite all structural changes in Japan job rankings did not change.¹ While ranking of jobs is a usual way of quantifying preference for social prestige of jobs, in traditional societies such ranking may not depend only on remuneration. It is quite well known that social prestige of a job may be related to history, age-old beliefs, popular perception, caste, religion and other non-economic factors. Such perception will not allow some markets to function properly and wages may be necessarily high, though there may be plenty of competent workers simply unwilling to work.

Very little about this phenomenon has been written in economics. Groh et.al (2014) in a World Bank study on Jordanian unemployed youth finds substantial evidence on reluctance of the youth to accept jobs that are not socially prestigious. They conclude that reservation prestige is an important factor underlying the unemployment of educated Jordanian youth.

The idea of occupational prestige can be related to the economics of status seeking behaviour which has produced interesting results using relative income or as a status index. One may look at, Beladi, Marjit, Oladi and Yang (2021), Dwibedi and Marjit(2017), Long and Shimomura (2004) etc.

Concept of “prestige” attached to a job may not be static. In other words if labor supply shrinks for a particular occupation leading to higher market clearing wages and that continues for a while, such types of jobs will be known as relatively high paying and

¹ One can refer to the works of Sannabe (2015) and Hintikka (2000) et al.

eventually can be coined as prestigious and would move up social ranking. Indeed, in a recent study Zhan (2015) has shown that the choice of occupation is quite sensitive to non-economic factors, which remain largely neglected in the related literature. An occupation not only affects self-esteem directly, but also indirectly via a ‘constructed’ social perception about the activity. The perception is often influenced by the cultural contexts and practices in specific countries, where the dignity of labor attached to occupation selection has varying interpretations. It seems fair to argue that the non-economic factors influencing the choice of occupation matters for the well-being of individuals without altering their consumption of material goods (see, Corneo and Jeanne, 2010). Empirically speaking, some of the prevailing analytical conjectures found support earlier, wherein, Dolton *et al* (1989) have demonstrated that social status guides the occupational choice among college graduates in the United Kingdom; or in related studies where the choice of educational level and discipline is guided by perceived social identity among Danish youths (Humlum *et al.* 2012). Zhan (2015) explores the choice of occupations among a large number of native-born Americans (to the extent it can be linked to their specific ancestry, whether European, Asian, African, etc., -- being essentially an epidemiological approach, as in Fernandez, 2011, that has been utilized in a number of studies on cultural roots in economic outcomes; see Giuliano, 2007; Fernandez and Fogli, 2009; Giavazzi *et al.*, 2009) with regard to the preference over pecuniary returns and job prestige, which are far from positively correlated. The study among other things finds that individuals who live in ethnically dense neighbourhoods still pursuing ancestral values in favour of status more, the impact of job prestige is stronger than the influence of pecuniary returns. In other words, if an occupation offers higher pecuniary returns but low prestige compared to one with low returns but high social status, the latter would be chosen more often.

In fact, the characteristics attached to economic activities culminating into the choice of occupation are ‘symbolic values’ (Corneo and Jeanne, 2010) that may affect long-run growth, but owing to the dynamic nature of cultural transmission across races and individuals, might in turn get influenced by the level of development. It is argued that occupational choice is the link between values that a society nurtures and the economic

performances. Symbolic values of occupations as recognized by relevant sections of the society create identities that subsequently enter the preference set of individuals. This seems consistent with the finding of psychologists that occupation is a central category for defining one's identity. Second, it echoes historians' accounts of social life in medieval towns, where one's association with a given craft, often organized in a guild, helped categorizing and identifying sections of the population according to their trades. In more traditional societies that have made slow progress with upward mobility, such as that in India, intergenerational transmission of family occupations is common among a large section. However, occupational pride is often not part of such transmissions and therefore, in recent times, the withdrawal from traditional occupations into those which receive contemporary social attention is fairly common. Corneo and Jeanne (2010) explores if value system affects long run growth and whether the level of development in a country in turn affects the value system (also see Algan and Cahuc, 2007), making it a complex dynamics. They find that the marginal utility of consumption in a growing economy as a response to income differentials vis-a-vis esteem differential across occupations is an important criterion. If the elasticity is large, the esteem differential dominates the career choice even if the income differential grows.

Despite the forces of globalization and recast of the value system, many still make occupational choices based on social perceptions such as that for a cohort of U.K. graduates, discussed in Dolton *et al.* (1989) where the social status that has been attached to occupations is a major determinant of choice, explaining why some occupations are chosen by high-ability individuals despite relatively low earnings. Further, Arcidiacono (2004) has found that the sorting of U.S. students in to different college majors is explained by differences in preferences for majors rather than differential monetary returns to ability. Humlum *et al.* (2009) especially have focused on identity-related payoffs; using a combination of the Danish part of the international PISA study and register data, they found that identity-related attitudes are pivotal in shaping the educational plans of the Danish youth.

For our purpose the occupational prestige will have a given distribution, i.e. a given social ranking. The purpose of this paper is to provide a theoretical model of occupational prestige

and unemployment. Then we want to show that a more prosperous society may have greater unemployment and any measured unemployment would have a voluntary component.

To motivate the idea and the model we try to work out we have conducted a small case study on job aspiring educated youth in the city of Kolkata, India. The next section describes the study in detail. The interesting outcome of this survey related to our work is as follows.

For the category of educated unemployed, many are looking for “suitable” jobs and not really any job. It is possible that everyone is looking for a job with higher wage, but prima facie one cannot ignore the fact that they are not looking for a better status in the society. In Groh et.al (2014) World Bank study for Jordan, 28% of job aspirant youth did not attend interviews they received due to low prestige jobs.

The remaining part of the paper is organized as follows. Section 2 focuses on the small case study. Section 3 describes the model and the results and the last section concludes.

2. A Small case study on job aspiring educated youth

A pilot project has been conducted to study voluntary and involuntary unemployment in the urban areas and for this purpose a study on the attitude of educated youth regarding different types of jobs is important. Keeping this purpose in mind a field survey has been conducted during October-December 2019 in the city of Kolkata, India, and its surrounding areas and all total 455 individuals have been surveyed out of which 380 sample units who are job aspiring educated youths.² Out of these 380 educated youths, 224 are graduate/postgraduate students under general streams, 26 are individuals who are recently passed out students (either graduate or postgraduate) and are not engaged anywhere,³ 91 individuals are engineering students and 39

² The remaining 75 individuals are not job aspiring educated youths, rather they are working persons so we have ignored the response of these 75 individuals and we have confined our study to educated youths only.

³ By ‘recently passed out students’ we mean those persons who have completed at most 5 years since their day of passing.

individuals are students at different training institutes.⁴ So our sample consists of educated youths, mainly students (even if they are engaged in part-time jobs but still pursuing for degree/training as a full time student or doing a full time job but are still part-time students) and a small section of the sample are passed out educated youths who are yet to get a job. We have referred to them as non-working educated youths. Table 1 below describes the detailed composition of the sample on the basis of preferred job categories.

Table 1: Classification of the sample on the basis of groups and preferred job categories*

Preferred Job Categories	Graduate/Postgraduate Students (general stream)	Non-working educated youths	Engineering Students	Training Institute Students
Low skill	Sales person, Small Scale Industry (2)			
Medium skill	Tax Consultant, Business Consultant, Accountant, Business, Banking, School Teacher(Primary, Secondary), Management, HR, Marketing, Pharmaceutical Industry, Corporate MNC, Software, Legal Advisor, Financial Advisor, Government Service, Private Service, Fitness Trainer, Tourism, Executive, Research Assistant, Field Reporter, Auditor, Self Employed, BPO, PR, Graphic Designer (76)	Software management, School Teacher (Primary, Secondary), Software Private Service, Self Employed (6)	Company Management, Software management personnel, Government Service, Private Service, Self Employed, Petrochemical Plant, other engineering works (55)	Tax Consultant, Banking, School Teacher (Primary, Secondary), Government Service, Private Service, Executive, State Government Civil Service, Legal Manager (20)
High skill	Financial Advisor, Analyst, Lawyer, Business, CA, Government Officer, College Teacher, Research Assistant, Banker, NGO Development Sector, Journalist, Police, IT, Public Speaker(121)	Analyst, Government Officer, College Teacher, Photographer (13)	Government Officer, University/College Teacher, Research Analyst in IT, Software analyst in IT, Artificial Intelligence, Designing Firm (36)	Analyst, Business, CA, Government Officer, Civil Servant (19)
Upper bound skill	Highest Rank Public Sector Employee, Film Director, Actress, University Professor, Army, Model, CBI Officer, Fashion Designer, Merchant Navy, IAS, Business (25)	Film Director, Army, Business, Singer (7)		
Total Sample	224	26	91	39

*The figures in the brackets are the number of respondents as per preferred job categories

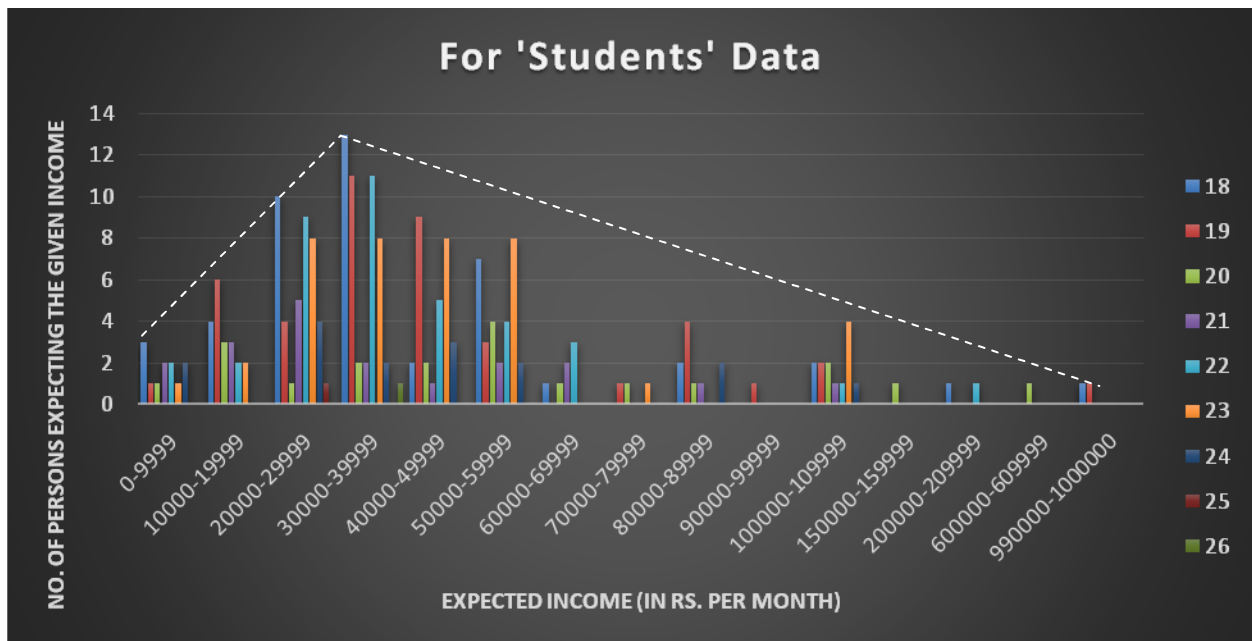
⁴ We have considered here both full time and part time students who are engaged in some jobs. There are 4 such students.

For our survey we have classified the type of jobs opted by the respondents into low skill, medium skill, high skill and upper bound skill. As we have surveyed four groups like students, non working youths, engineering students and training institute students categorization of jobs from one group to other varies. Table 1 above gives a detailed picture of this classification on the basis of different categories.

The questionnaire has been framed in a manner to capture the preferences for various jobs classified on the basis of different categories of skill and expected income. The family and socio-economic background of the respondents have been captured on the basis of the questionnaire. The questionnaire and the survey have been conducted though at a pilot level for the city of Kolkata, India, it is quite close to the work of Groh et.al (2014) for a country like Jordan. In table 1 it is to be noted that out of 224 are general stream students 128 are undergraduate students, 75 are postgraduate students, 7 are law students, 10 are medical students and 4 are MBA students. Out of the 26 non working educated youths surveyed who have recently passed out we find that 22 of them do not have any job by choice and only 4 of them do not have any job as they have failed to get any job. Regarding engineering students we find that out of 91 students surveyed 1 belongs to architecture, 13 belong to civil engineering, 18 from computer engineering, 3 students are from mechanical engineering, 2 students from chemical engineering, 23 students are from electrical engineering, 16 are from electronic and communications engineering, 10 from information technology and 1 each from metallurgical, polymer and power. Finally 2 are from engineering related to production. Out of 39 training institute students only 13 are full time students of the institute, 4 are part-time students and doing some job and 22 are part-time students who are non-working.

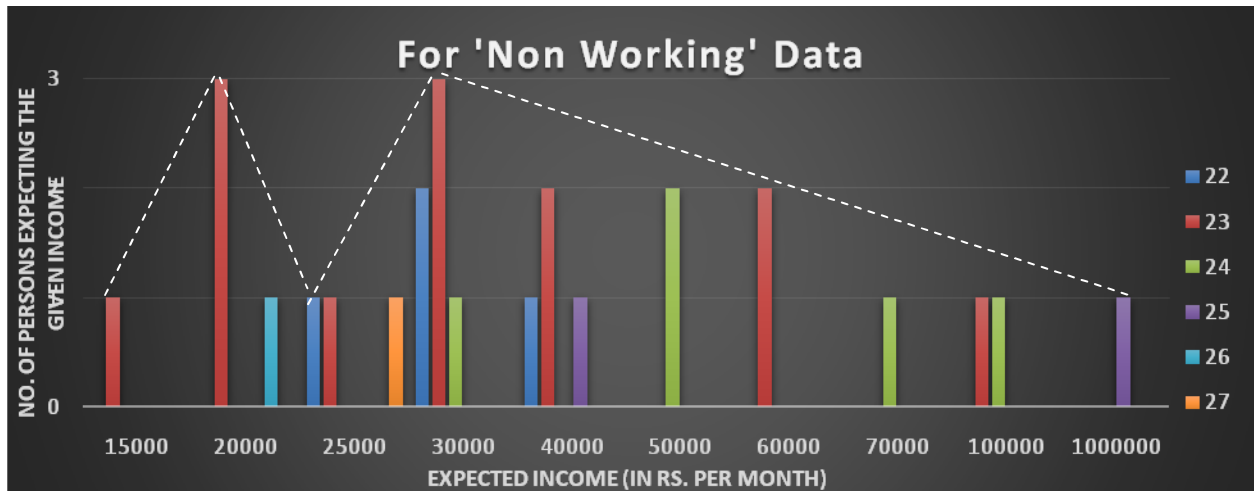
We have linked expected income with different categories of jobs for which the respondents reveal their preferences and have tried to link the number of persons, belonging to the above-mentioned categories of students and non-working youths, with that of expected income. For categories like students, non-working youths and engineering students we find that when the level of expected income is low, the sample of persons under all the above-mentioned three categories who opt for that income is also low; when it increases the willingness of the number

of persons for each of the three categories to have that level of income increases. As the level of expected income grows further, the number of persons for all the three categories who opt for that level of income falls. So, we find that the behaviour of the preferences of the individuals, for all the four categories of sample, with different levels of expected income is inverted-U shaped. These are shown not in terms of inverted-U shaped supply of labor curve, rather they are shown in the form of column chart because we have categorized our data in terms of not only expected income and willingness to work (on the basis of the expected income through appropriate jobs) but also we have disaggregated the respondents on the basis of their ages. However, we have approximated the column-chart by line diagram which shows a shape close to inverted-U (with some initial breaks). These are shown in terms of charts 1, 2 and 3. It is only for training institute students we find that the line is not purely inverted-U shaped. It is shown in terms of chart 4. However, in chart 4 with some steady results for willingness to work a sharp rising trend is observed when the expected income is at the middle category and then it falls.



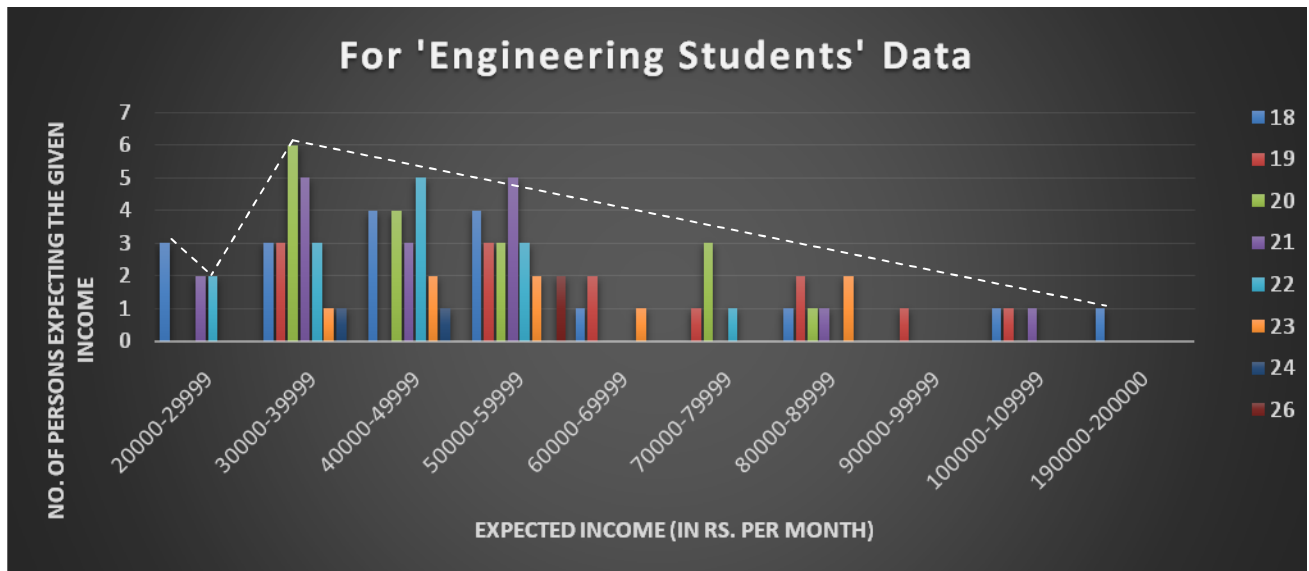
Note : The numbers against the colour bars on the extreme RHS of the Chart implies age in years

Chart 1: Willingness to work and expected income of the students



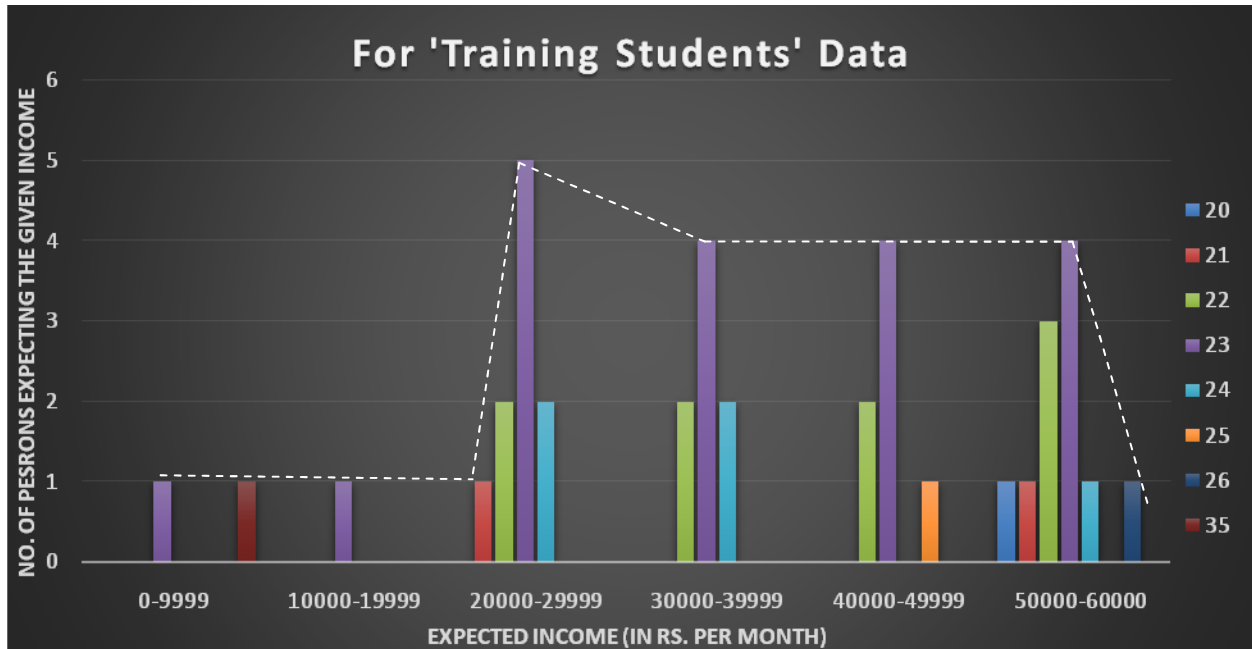
Note : The numbers against the colour bars on the extreme RHS of the Chart implies age in years

Chart 2: Willingness to work and expected income of the non-working youths



Note : The numbers against the colour bars on the extreme RHS of the Chart implies age in years

Chart 3: Willingness to work and expected income of the engineering students



Note : The numbers against the colour bars on the extreme RHS of the Chart implies age in years

Chart 4: Willingness to work and expected income of the training students

The common element in all the four charts is that the supply of labor increases its peak in the range of expected income which is either Rs.30000 per month or marginally above/below this amount per month. The above empirical analysis based on a pilot survey motivates us to construct a stylized theoretical model to capture the issue of occupational prestige in job selection.

3. Model and Results

Occupations in our society are indexed by $Z \in [0,1]$ and $S(Z)$ is a real valued occupational prestige function with following properties

$$S(Z) \in R_+, S(0) = S_0, S(1) = \bar{S}, S' > 0 \quad (1)$$

To understand the implication of $S(Z)$ on labor supply, we define two wage rates $W(Z)$ and $\tilde{W}(Z)$. $W(Z)$ is the market wage rate for Z th job and $\tilde{W}(Z)$ is the prestige augmented wage rate. $\tilde{W}(Z)$ is defined as

$$\tilde{W}(Z) = W(Z)(1 + S(Z)) \quad (2)$$

It looks reasonable to assume $W' > 0$.

However, this assumption will imply more prestigious jobs pays more as more prestigious occupation promises greater income. But evidence may not be rare where people do not want to earn more as a plumber or handyman than as engineer. At this stage we try to abstract from the income effect and focus only on social prestige factor. We will return to the wage issue later. Hence, for now we use

$$W(Z) = W \quad \forall Z \quad (3)$$

This says that given the same wage across occupations, only social prestige or job status or reservation prestige as in Groh et.al (2014) is determined by the effective wage in (2).

$$\text{Given } S'(Z) > 0, \tilde{W}'(Z) > 0 \quad (4)$$

Our society has m classes of people with household wealth levels $\Omega_1, \dots, \Omega_m$. We rank them as

$$\Omega_1 < \dots < \Omega_m \quad (5)$$

If a family/household has greater wealth, it can better support an unemployed person looking for a job. This is the same case where an actual job search cost of a wealthy individual is expected to be relatively low. This in turn determines the reservation wage or opportunity cost of working denoted and distributed as

$$W_{01} < W_{02} < \dots < W_{0m} \quad (6)$$

In terms of a continuous distribution it is redefined as

$$W_R(\theta) \text{ with } \theta \in [0,1] \quad (7)$$

$$[W_R' > 0, W_R'' > 0, W_R(0) = W_{0R}, W_R(1) = W_{1R}]$$

Appealing to the well recognized pattern of wealth distribution worldwide we can assume

$$n(\theta) \text{ for } \theta \in [0,1], n'(\theta) < 0 \quad (8)$$

where $n(\theta)$ is number of aspiring workers in θ , with $\int_0^1 n(\theta) d\theta = N$, representing total potential labor supply.

$$\text{Suppose } \tilde{\theta}(Z) \text{ solve } W_R(\theta) = \tilde{W}(Z) = W(1 + S(Z)) \quad (9)$$

It is straightforward that $\tilde{\theta}' > 0$.

As Z increases we find that W_R increases and that would imply an increase in $\tilde{\theta}$ as $W_R'(\theta) > 0$. Given any Z , \exists a $\tilde{\theta}(Z)$ such that $\forall \theta \geq \tilde{\theta}(Z)$, no one wants to work in that job and $\forall \theta \leq \tilde{\theta}(Z)$ everyone wants that job. This in turn would imply that at a given (same) W ,

supply of workers for the Z th job is given by $\int_0^{\tilde{\theta}} n(\theta) d\theta = N_S(Z)$

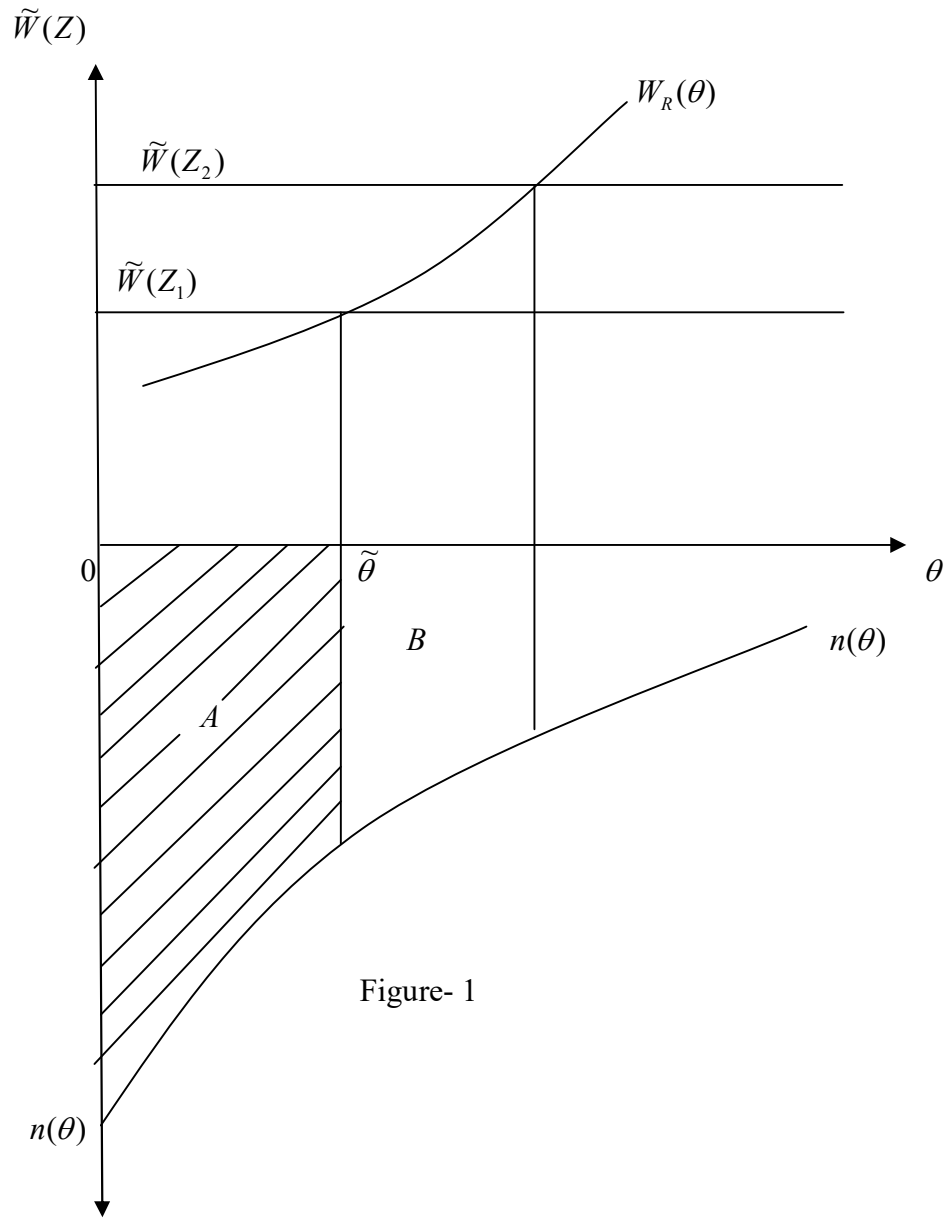


Figure- 1

In figure 1 shaded area A measures total labor supply for occupation Z_1 , denoted as $N_s(Z_1)$. When Z_1 increases to Z_2 the total area under $n(\theta)$ increases to $B+A > A$ such that $N_s(Z_2) > N_s(Z_1)$. An increase in W will increase the areas $A, A+B$ etc. Therefore if $W > W'$, then $A > A'$, $A+B > A'+B'$ etc.

Total labor supply for Z is given by

$$\int_0^{\tilde{\theta}(Z)} n(\theta) d\theta = N_s(Z) \quad (10)$$

$$\frac{dN_s(Z)}{dZ} = n(\tilde{\theta})\tilde{\theta}'(Z) = n(\tilde{\theta}) \frac{WS'(Z)}{W_R'(\tilde{\theta})} \quad (11)$$

Note that as prestige factor increases more people are interested in working and the extent of such increase depends on the number of people who are interested in working at $\tilde{\theta}$ and how skewed is wealth distribution $W_R'(\tilde{\theta})$ and at what rate the prestige factor increases. For very high $\tilde{\theta}$, $n(\tilde{\theta})$ will be really low, or W_R' will be really high, both will drive down increase in $N_s(Z)$.

It is easy to see that if $W_{0R} > W(1+S(0))$, then there will be jobs with very low social prestige where nobody will be willing to work. In fact if the growth in wealth is independent of increase in W (Pikety 2020) fewer people will be interested in low prestige job.

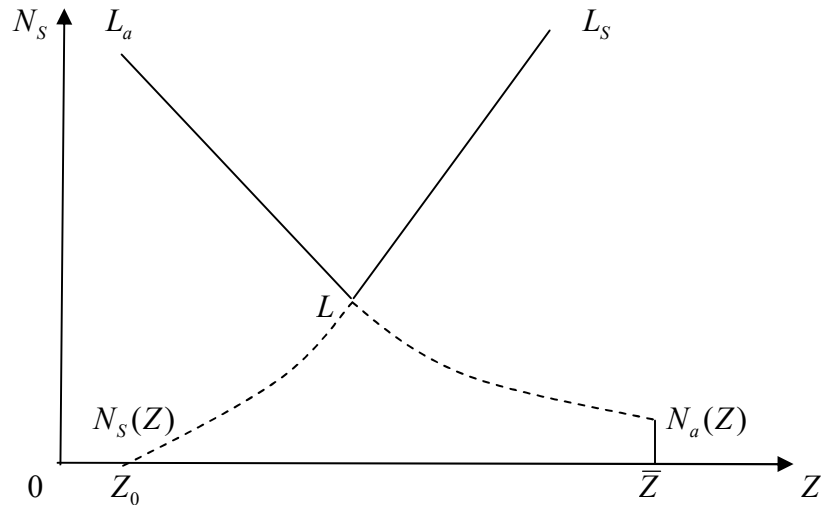


Figure- 2

As figure 2 suggests no one will be available to work in jobs upto Z_0 . Note that $N_s(Z)$ is drawn when all professions pay W , as we focus only on the occupational prestige.

While ability and prestige may not always go hand to hand, it will not be pathological to assume that jobs with greater prestige would require greater skill and as we move up the ladder, fewer people will have such abilities. $N_s(Z)$ gives us the number of people who are *willing* to work at the Z th occupation. Let $N_a(Z)$ denote number of people who *can* work in Z th occupation, i.e. who has the requisite skill. A believable $N_a(Z)$ function will look like as given in figure 2.

(L_a, L) stretch denote those who have the ability but do not wish to work for these jobs. (L, L_s) segment reflects people who have desire to work in occupations but do not have the ability. Both segments will be excluded from effective labor supply, i.e. $(Z_0, L\bar{Z})$.

Demand for labor for various occupations at the same wage rate W can be anything and therefore if $D(Z)$ denotes the distribution of demand across Z , it can have any shape depending on market conditions. Let us first look at the neutral case, i.e. when $D(Z)$ is uniform. From the janitor to rocket scientist; demand for labor for each occupation is \bar{D} .

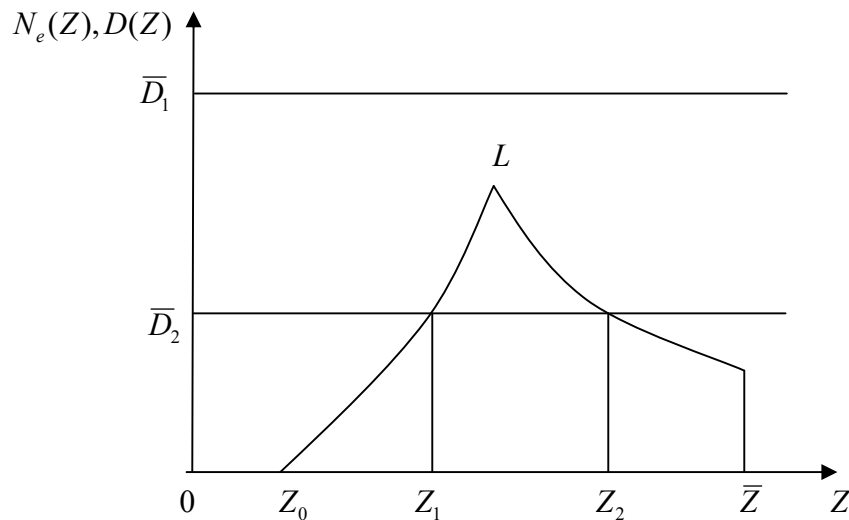


Figure -3

Figure 3 describes the labor market disequilibrium, as given (W, \bar{D}) , market for specific occupations do not clear.

Uniform demand \bar{D}_1 is so high that there is excess demand for labor at W for all occupations. But it is to be noted that D_2 gives us a more interesting perspective as it intersects $Z_0L\bar{Z}$ at two points (Z_1, Z_2) . In figure 3 $(0, Z_1)$ is a situation of excess demand so is (Z_2, \bar{Z}) . In the figure (Z_1, Z_2) is a situation of excess supply. At wage rate W and with uniform demand for labor we find that the range $(0, Z_1)$ exhibits voluntary unemployment. People do not want to do the job even if it is available. (Z_2, \bar{Z}) range exhibits vertical supply curve like situation because skilled people are just not available to work at W . The triangle like case (Z_1LZ_2) gives us the extent of involuntary unemployment. We are now ready to propose the following

Proposition: *With uniform distribution of demand across occupations, **voluntary unemployment** is likely to emerge for jobs with low occupational prestige. For jobs with very high prestige **excess demand** is likely to emerge due to shortage of high skills. For jobs in the middle it is likely that **involuntary unemployment** will emerge.*

Proof: See figure 3 and the discussion above.

QED

Demand for labor across occupation is given by

$$D = D(W(Z), D_0(Z)) \tag{12}$$

where $W(Z)$ is the wage rate for Z th occupation and D_0 is a shift parameter. We have suppressed prices of goods as given from outside the system. With $W(Z)=W$ and $D_0(Z) = \bar{D}_0 \forall Z$, we have assumed uniform distribution so far with $D = \bar{D}$.

Although we are not interested in determining the exact equilibrium in labor market, we can conjecture how the disequilibrium is likely to be eliminated in figure 3 or in figure 4.

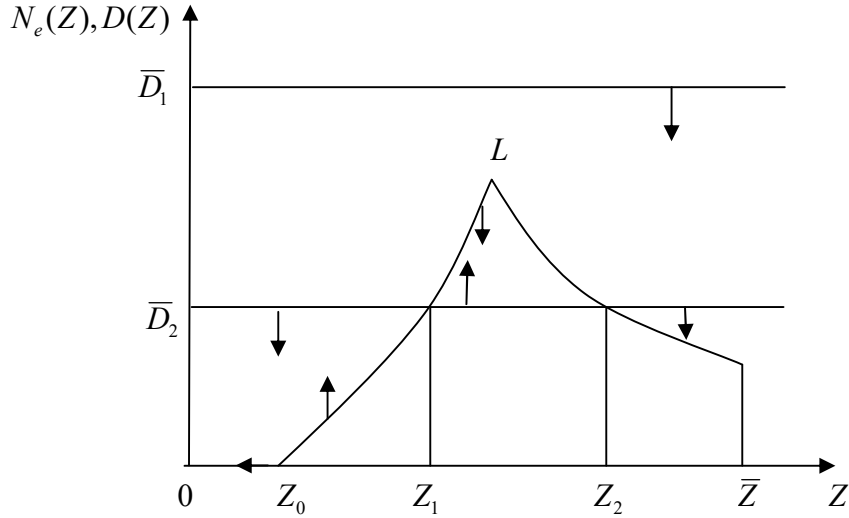


Figure 4

Note that in figure 4 we find $0Z_1$ represents a situation where there are jobs but people are unwilling to work. Excess demand here will push up $W(Z)$ for this stretch reducing $D(Z)$ and shifting the effective labor supply above. The supply side effect is driven by the fact that when $W(Z)$ starts rising wealthier agents would like to participate in jobs they were not interested in. Excess demand falls on both counts, i.e. falling demand and rising supply. Between $Z_2\bar{Z}$, supply cannot adjust as there are no more people with such high skills, so demand will fall to level with supply as $W(Z)$ rises.

For Z_1Z_2 we find that $W(Z)$ should start falling as there is excess supply of labor or involuntary unemployment at W . Due to the prestige factor and expertise many wish to work at W , but demand is not that high.

It is conceivable that $W(Z)$ in the ideal case will move in a way to equilibrate the market for each occupation. However, if one is willing to visualize the system in a constant flow of momentary disequilibrium and $W(Z)$ is slow to adjust, the state of unemployment of two extreme natures will exist as given by $0Z_1$ and Z_1Z_2 .

3.1 Implications for Employment Survey

We provide a simple example (which must be evident by now) that shows the limitation of measuring unemployment from a standard employment survey if we do not internalize occupational prestige factor in the survey questionnaire.

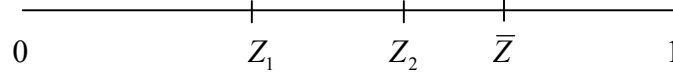


Figure-5

Those who cannot find a job (Z_1, Z_2) are capable of working in occupations ($0Z_1$) where there is excess demand for labor. Engineers do not wish to work as plumbers. If one could shift engineers to plumbing, salary for engineers will increase and that of the plumbers will fall. Therefore, those measured as unemployed are technically voluntarily unemployed by not choosing to go to other professions due to subjective perceptions. Therefore for any $Z \in [0, \bar{Z}]$ (where \bar{Z} is the starting point of vertical supply curve due to unavailability of high skills) the true measure of unemployment, in this structure, has to depend on whether there is involuntary unemployment in the range $[0, Z]$. Suppose there is no such excess supply to the left of Z ; then reported or measured unemployment at Z will imply voluntary non-participation in labor market or a de facto measure of the incidence of occupational prestige.

3.2 Increase in Reservation Wage

The impact of increase in reservation wage of the workers on voluntary and involuntary unemployment cannot be easily predicted. To make matters simple we first assume that there are two types of jobs in the economy. One is the low-prestige job (L_p) and the other is the high prestige job (H_p). We first illustrate the impact in terms of a numerical example. We assume that there are 200 workers and each type demands 100 workers. Initially only 50 workers wish to do L_p type job, 150 workers want to do *only* H_p type job. Actually 200 workers wish to do

H_p type job. So 50 will be the excess demand for L_p type job. So out of 150 who do not wish to do the type L_p type job, 50 could get a job for the L_p type but they do not want to do that job implying voluntary unemployment is 50. Involuntary unemployment is also 50 as all 150 workers wish to do H_p type job, but only 100 are hired. Those who are voluntarily unemployed for L_p type are involuntarily unemployed for H_p type.

We now consider two cases. In the first case an increase in reservation wage increases both voluntary and involuntary unemployment. Suppose reservation wage rises and only 30 workers are willing to work for L_p type job and 170 workers for H_p type job. Voluntary unemployment is 70 as out of 170 workers who are willing to do only H_p type only 70 workers could be hired for L_p type job which they do not want. Involuntary unemployment also goes up to 70 as 170 people look for H_p type job, but only 100 are demanded. We thus find that there is increase in the levels of both voluntary unemployment and involuntary unemployment as a result of an increase in reservation wage rate.

It is not necessarily true that involuntary unemployment will increase as a result of increase in reservation wage. We still assume that there are 200 workers and each type of firms demands 100 workers. Suppose compared to the initial situation like 150 workers want to do *only* H_p type job there is a reduction in the number of workers who are willing to do H_p type job to 140 as a result of an increase reservation wage rate. Assuming once more that only 30 workers are willing to work for L_p type job we find that voluntary unemployment is 70 as they can be employed for L_p type job though they are not willing to do it. Suppose in this situation 10 workers want to move out from the involuntary group to the next level and they feel that this particular H_p type job is not good for them. In this case the level of involuntary unemployment falls from 40 to 30 though the level of voluntary unemployment increases to 80. The essence of this argument is that if there are only two types of jobs L_p and H_p the two types of unemployment will go up. However, if there are hierarchy of (L_p, H_p) type jobs, we find that workers' willingness shift from lower to higher level of jobs. So in a continuum it is more likely that voluntary

unemployment increases and involuntary unemployment falls, though one cannot negate the fact that involuntary unemployment might increase.⁵

We now consider the problem more formally. When there is an increase in reservation wage due to some exogenous reason (which we can capture in terms of a shift parameter like α) in a continuum of jobs we find that it is more likely that the level of involuntary unemployment will fall. As a result of an increase in α we find that the W_R curve in figure 1 shifts to the left. It causes the willingness to work curve in figure 2 to shift to the right, without affecting the ability to work curve. This is shown in figure 2.1.

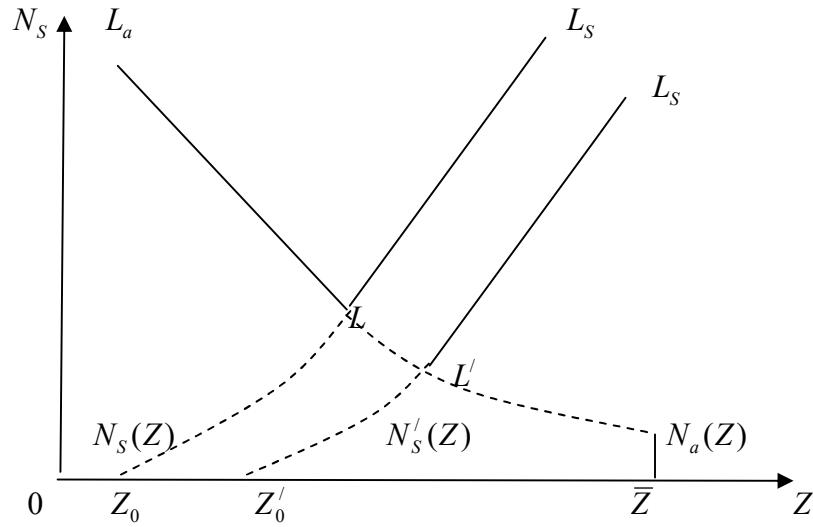


Figure- 2.1

Algebraically we can obtain this result by rewriting equation (9)

$$W_R(\tilde{\theta}, \alpha) = W(1 + S(Z)) \quad (9.1)$$

From equation (9.1) we get

$$\frac{\partial W_R}{\partial \theta} \frac{d\tilde{\theta}}{dZ} \frac{dZ}{d\alpha} + \frac{\partial W_R}{\partial \alpha} = WS'(Z) \frac{dZ}{d\alpha}$$

⁵ This is different from income effect since with higher income leisure consumption might go up. So labor supply might drop for every profession. That will happen independently of the status effect. But our results can be obtained even if such effect is absent or negligible.

$$\frac{dZ}{d\alpha} = \frac{-[\frac{\partial W_R}{\partial \alpha}]}{[\frac{\partial W_R}{\partial \theta} \tilde{\theta}'(Z) - WS'(Z)]} \quad (13)$$

Here $\frac{\partial W_R}{\partial \alpha} > 0$, $\frac{\partial W_R}{\partial \theta} > 0$, $\tilde{\theta}' > 0$ and $S' > 0$ so that the sign of $\frac{dZ}{d\alpha}$ is ambiguous.

We again rewrite equation (10) as

$$\int_0^{\tilde{\theta}(Z,\alpha)} n(\theta) d\theta = N_s(Z) \quad (10.1)$$

From equation (10.1) we get

$$\frac{dN_s}{d\alpha} = \frac{dN_s(Z)}{dZ} \frac{dZ}{d\alpha} = n(\tilde{\theta}) \left[\frac{\partial \tilde{\theta}}{\partial Z} \frac{dZ}{d\alpha} + \frac{d\tilde{\theta}}{d\alpha} \right] \quad (14)$$

From equation (14) we find that for given Z , so that $\frac{dZ}{d\alpha} = 0$, we find (as $\frac{\partial \tilde{\theta}}{\partial \alpha} < 0$)

$$\frac{dN_s}{d\alpha} = n(\tilde{\theta}) \frac{\partial \tilde{\theta}}{\partial \alpha} < 0 \quad (14.1)$$

Equation (14.1) implies shift of the labour supply curve in the downward direction for some range of Z as $\tilde{\theta}(Z)$. When it is true for all Z it implies a parallel shift. From figure 2.1 we find that the effective supply of labor curve shifts to $Z'_0 L' \bar{Z}$ and the shift of the L_s curve is parallel which increases the range of voluntary unemployment. This is reflected in terms of figure 3.1

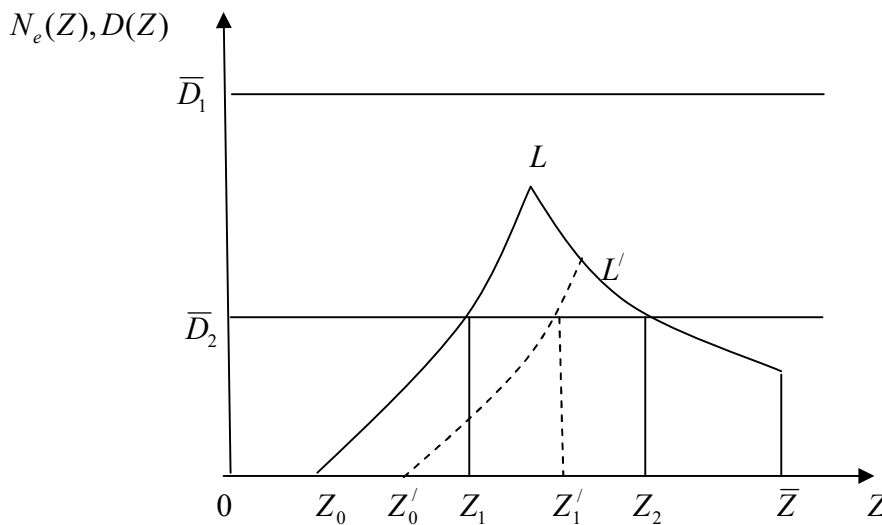


Figure -3.1

In figure 3.1 we find that as a result of increase in reservation wage the level of voluntary unemployment increases from $0Z_1$ to $0Z'_1$ whereas the level of involuntary unemployment is choked from the area Z_1LZ_2 to $Z'_1L'Z_2$.

We next consider another case where the shift of the L_S curve of figure 2 is in the downward direction (for some specified range of Z) but not parallel. This is shown in figure 2.2

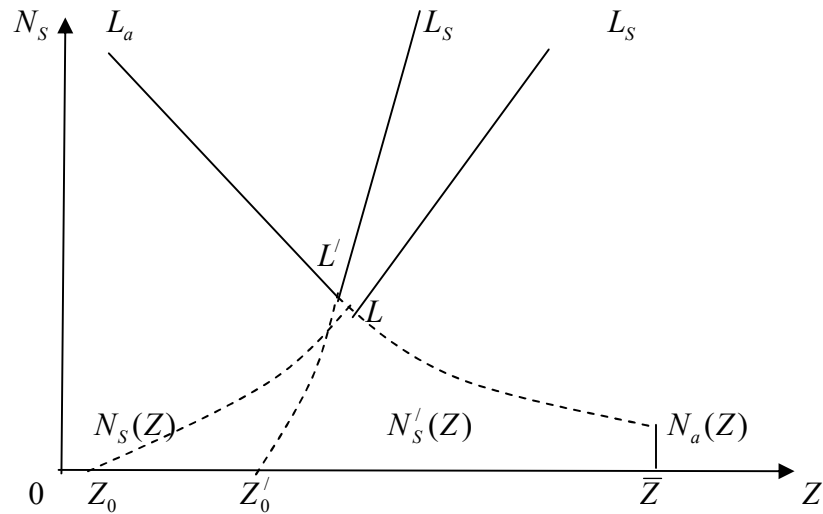


Figure 2.2

In figure 3.2 we show how the effective supply of labour curve shifts.

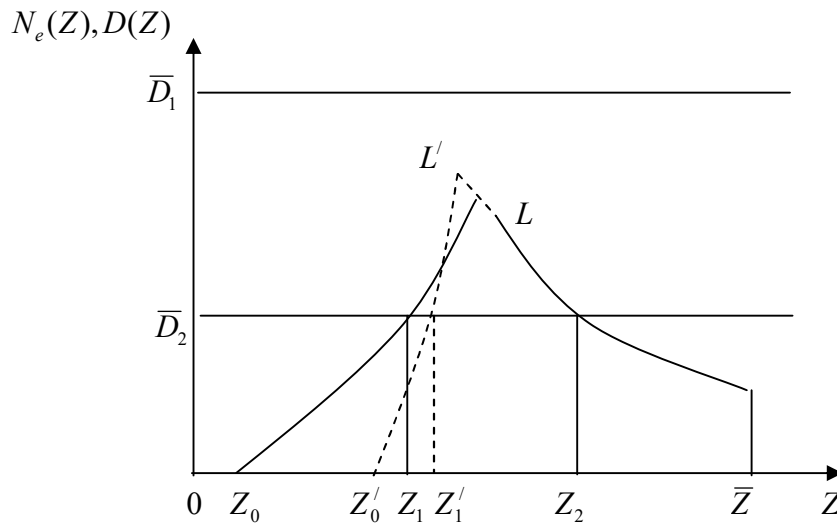


Figure 3.2

In figure 3.2 the level of voluntary unemployment increases from $0Z_1$ to $0Z_1'$ though the level of involuntary unemployment cannot be definitely predicted. It depends on the relative size of the areas Z_1LZ_2 and $Z_1'L'Z_2$.

We thus find an increase in reservation wage rate raises voluntary unemployment but the impact on involuntary unemployment cannot be definitely predicted.

4. Concluding Remarks

In this paper we have shown that occupational prestige or job status may induce people to remain unemployed even when jobs are available. On the basis of some empirical facts and figures obtained from a pilot survey on voluntary and involuntary unemployed persons among educated youth in the city of Kolkata, India, a stylized model has been constructed which shows that with uniform distribution of demand across occupations, voluntary unemployment is likely to emerge for jobs with very low occupational prestige. However, it has been shown that for jobs with very high prestige excess demand is likely to emerge due to shortage of high skills. Finally we have shown that for jobs in the middle it is likely that there is emergence of involuntary unemployment. The paper shows that measured unemployment always has a voluntary component. In fact an increase in reservation wage increases voluntary unemployment though the impact on the level of involuntary unemployment cannot be finitely predicted. This paper can thus be treated as a new contribution in the sense that it deals with an economic analysis of occupational prestige and unemployment which has its roots in the field of sociology.

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