Existence of Structural Disadvantage among socio-religious groups: Is it a reality? An Analysis of Indian Labour Market

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An Analysis of Indian Labour Market

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1. Introduction:

There are two major components for a country which define its production capacity and well-being of people. These are the social conditions and labour market scenario of the country. Both these components are further mutually interdependent on each other. To have a clear understanding of labour market situation one needs to have good understanding of the social conditions of the country and vice-versa.

The Indian labour market despite high growth rates of GDP during past two decades is still in the primitive phases of development as indicated by the majority of labour force being still dependent upon less productive and less remunerative informal sector (Kunal, et al. 2013). There is a major difference between informal sectors of developed and developing economies: in developed economies informal sector attracts entrepreneurs andemploymore skilled individualshence is more remunerative while the informal sector in developing countries like in India attract workers who are unskilled, less educated and are paid extremely low thanks to the over supply of workers relative to the demand. Lack of unity among them in developing countries have made them compromise under employment relations which do not follow the nationl labour legislation, income taxation, social protection or entitlement to certain employment benefits (ILO, 1972). The informal sectors mainly constitute workers who are engaged in micro enterprises, unpaid family members, casual labourers, migrant

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labourers, small or landless farmers, traditional artisans etc. The formal sector in developing countries arethe major producer of "good jobs"or regular salaried jobs and are preferred by the more educated (Borooah, et al. 2007)while the informal sector, is basically populated by those who are unable to find jobs in the formal sector. Earlier arguments which stated that the informal sector works as an initial stage for in-migrants before moving to the formal sector (Todaro, 1960) have become inconclusive (Biswajit, 1983, and Pedro and Erwan, 2006).Informal sector workers just stick to this sector because of lack of opportunities from the formal sector and therefore it constitutes more than 85% (NCEUS, 2008) of the work force. What is even more appalling is that the informal sector is expanding sharply after initiation of economic reforms (James and Robert, 2003), (ILO, 2008).

Given the unregulated and less productive nature of the informal sector (James and Robert, 2003), it could have serious implications for the economy and on those participating. Furthermore, due to lack of proper regulations of informal labour markets those working in this sector may be more likely to be exposed to more exploitation and differential behaviour. This differentiated behaviour could also be a reflection of the ills of caste system of Indian society which have been prevalent for centuries. This problem may get magnified when caste is compounded with religion.In such a scenario it is important to identify these groups which are probably facing this kind of differential treatment or disadvantage for long. Identification of these groups and magnitude of the differential treatment faced by them as compared to others would help policymakers to frame truly socially inclusivepoliciesas these groups may form the majorityof India's poor and disadvantaged. This paper attempts to identify whether any groups have been facing possible differential treatment by certain groups in the labour market. We would also would like to test whether poor education or development is a cause for such differential treatment.

With this introduction this paper is divided into 6 sections. Section 2 reviewsprevious literature. Section 3 explainsthe data source and methodology used for analysis followed by descriptive statistics and detailed analysis in sections 4 and 5 respectively. Finally, a section on discussion and conclusion in section 6.

2. Background and Contribution to Literature:

Importance of Informal sector in Indian Economy and possible existence of "structural disadvantage"

Migration model pioneered by Harris Todaro (1969) stated that migration involves atwo step phenomenon. Either migrants initially spend some time in the so-called urban informal sector or remain unemployed till one gets a job in formal sector. So, informal sector was considered as "the transition sector". But empirical studies done for developing countries which support this hypothesis are rare (Biswajit, 1983) and (Pedro and Erwan, 2006). According to the market segmentedhypothesis, the two sectors (Formal and Informal) are very different with respect to wage determination. Informal sector rewards human capital at a very low rate compared to formal sector. Giving rise to a wide real wage differential between the two. Under the market segmentation hypothesis approach, informal sector behaves just like "secondary sector" while formal as "primary sector". Secondary sector is characterized by "low wages, poor working conditions and unstable employment and little opportunity for advancement into higher paying jobs" while primary sector is characterized with "highly negotiated wages with economic security and rapid turnover leading to career advancement" (Leontaridi, 1998).Again, secondary labour market has a completely flat low wage profile while the primary market has a wage profile linked to the differentials in human capital. This makes informal sector a less attractive option. Therefore, jobs in formal sector have been defined as good jobs while that of informal sector as "bad jobs". This classificationinto good jobs and bad jobs is not with respect to skills required but with respect to "labour market

institutions such as labour unions and government laws such as minimum wage legislation and laws on in-migration" (Leontaridi, 1998). These institutions create a difference between "good" and "bad" jobs. Biswajit (1983) have tried to prove the validity of this in India and has concluded that market segmentation hypothesis is only partially valid in Delhi, India because informal sector entrants are attracted to Delhi due to the opportunities offered by the sector itself. But it is also true that there have been low mobility from informal to formal sector.

Another important aspect is the size of the informal sector. The magnitude of the informal sector varies with the degree of development. James and Robert, (2003)and ILO (2008)have agreed to the fact that the magnitude of informal sector is inversely proportional to the growth of GDP of that economy.Therefore informal sector is characterized by having "bad jobs" with low pay and less incentive for employment growth. Given this fact, it is hypothesized that informal sector due to its nature and size may give enough scope for discrimination against economically and socially disadvantaged people. In literature this is termed as structural discrimination. According to Devahand Hana (2008) a group is structurally discriminated not only by the wilful acts of particular individuals but because ofaprevailing system of opportunities and constraints favours the success of one group over another group. In our paper we term this as structural disadvantage because that particular group is in a dis-advantageous position because of "a legacy of historical discrimination, contemporary state policies and practices and accumulation of disadvantage (Devah and Hana, 2008), (Fred, 1996)".Since there have been strict laws against discrimination in the Constitution ie Article 14, 15, 16 and 25, no one can legally do this. Given these laws are known to all, still if data suggests that discrimination prevails in society, it must be structural in nature. Instances of structural discrimination includes caste system in India or apartheid in South Africa. In both cases, laws and cultural institutions produced and imposed systematic

inequalities based on group membership (Devah and Hana, 2008),(Bordia, 2013).Structural disadvantage in labourmarkets could be due to active or passive reasons. When members from a particular are group is socially excluded from being hired given the same qualification it is defined as an active disadvantage while passive disadvantage occurs when a group is favoured lowering the self-confidence of certain sections. This has a negative impact on their performance(Sukhadeo and Katherine, 2007). Market failures created due to preferential treatment given to certain groups could lead to inefficient allocation of labour along with a fall in wages below the marginal product for those who are facing disadvantage. "By preventing free mobility of human labour, land, capital and entrepreneurship, the caste system creates imperfect segmented and monopolistic divisions in factor markets. This leads to gross inefficiency (Akerlof, 1976), (Scoville, 1991), Lal (1989) and Ambedkar (1936 and 1987)" (Sukhadeo and Katherine, 2007). Given this background for study, there is a need to identify groups which have been at a disadvantageous situation for long and advertising impacting the developing economy, in this case India. The case for India becomes even strongeras informal sector constitutes almost 85% of labor market. The magnitude of this disadvantageous behaviour would also be important for policymakers to bring out an inclusive growth. The most commonly used methods for measuring the magnitude of disadvantage is through a Blinder and Oaxaca decomposition. This has been used to account for gender wage discrimination in India. Kumar and Manisha (2008) used Oaxaca decomposition technique to calculate the earnings inequality among individuals belonging to different caste and religion. They concluded that over the period from 1987 to 1999 the earnings difference has declined while that between Muslims and Non-Muslims hasincreased. Much of the difference in earnings can be explained by the corresponding educational endowments and returns on ageMadheswaran and Attewell (2007) have found using NSS data that 15% of the wage gap between higher castes and scheduled castes/tribes in regular

salaried labour market in urban areas are purely due to discrimination and it is much more severe in the private sector. Vani (2005) also confirms the fact that "at least one-third of the average income/probability differences between Hindu and SC/ST households was due to the "unequal treatment" of the latter". Few other studies are Malathy and Duraisamy (2014), Sohini andBikas (2012), Louis and Konstantinos (2010), Barrry and Vasudeva (2005) and Simonetta et.al. (2013). Disadvantage could be a result of multiple factors but in our paper we have three variables i.e. education, presence of expanding informal sector and regional development. According to Ravi (1998)the majority of those going for long term migration belong to the General caste and OBCs. ST/SCs and Muslims rarely migrate. Rakesh Basant (2012) analysed patterns of Muslim participation in education and employment using three rounds of NSSO data i.e. 1999/00, 2004/05 and 2009/10 and confirmed the fact that the performance of Muslims are poor. The participation of Muslims in higher education is also equally poor. The dropout rates are also among the highest which increases significantly after middle school.Poor quality education and lack of appropriate skill forces most of ST/SCs and Muslims to stay back. Though a lot of literature has covered wage differential between genders and socio-religious groups, they have not included the concept of informal sector with respect to regional development. Our paper attempts to include this so that magnitude and trend of disadvantage with respect to respective socio-religious group can be calculated. Proper identification of groups are important to attain truly inclusive growth.

There exists a gap in literature regarding this aspect. This paper also attempts to answer the following questions.

1) Whether any disadvantages exists in the labour market? If it exists what is its trend?
2) Whether education, development or existence of informal sector is an important factor explaining this disadvantage?

3. Data and Methodology:

National sample surveys employment and unemployment data for the 50th (93/94), 61st (2004/05) and 68th (2011/12) rounds has been used to perform an analysis. The weekly total wage for activity serial number one has been considered. The weekly earnings are deflated to derive real earnings using the Consumer Price Index of Industrial Workers (base year = 2001) for the respective rounds to take care of the inflation. Reclassification of the social religious groups has been done which is as follows:

1) Upper Hindus - **HU** (Hindus from the general category and OBC's)[3],
2) Muslims- **MUS** (Muslims from all categories),
5) Other religious- **ORM** Minorities (ORM).
3) Lower Hindus-**HL** (Hindus SC/STs),

Muslims were not divided as Lower and Upper as this division would reduce the number of observations under either of categories.

The education status was classified into three main categories: 1) Illiterates, 2) Upto Middle education and 3) Secondary and above. The three main categories were done to avoid the problem of low sample . The states were classified into three groups i.e. Developed, developing and least developed states as per following equation

Grouping Criteria = (Average of PCNSDP over 20 years for each state + Standard Deviation of PCNSDP over 20 years for each state)[4].

The categories of states also represents the stages of economic growth, wherein developing states are the ones still in transition phase with those developed have already reformed and

[3]General Category and OBC's were combined because in 50th round OBCs were subsumed in General Category. It was only in 61st round OBCs were given a different status.

[4]Per capita income is measured by per capita net state domestic product (PCNSDP) at factor cost at 2004-05 constant prices

If (Average + Standard Deviation) >= 37517 then the state is to be considered as Developed States, If (Average + Standard Deviation) >25064 but <37517 then the state is to be considered as Developing States, If (Average + Standard Deviation) <= 25064 then the state is to be considered as Least Developing States (Barrow &Salai-I-Martin (1995)

have reached a high growth trajectory. Least developed are the ones not yet developed (see Table 1).

" insert table 1 below"

The casual and salaried workers were adapted from NSS. This was to account for the difference in wages earned by workers employed in formal and informal sectors.

We use Mincerian equation of real earnings on factors related to age, education, development and regular/salaried wage for each socio-religious group. Then this was used to decompose the wage gap between respective groups keeping Hindus Upper (HU) as benchmark category.

The Mincerian form (Mincer, 1974) of earnings equation was assumed as follows:

$$LnE_i = \alpha_0 + \alpha_1 age_i + \alpha_2 age_i^2 + \alpha_2 (illiterate)_i + \alpha_3 (uptomiddle)_i + \alpha_4 (Developing\ States)_i + \alpha_5 (LeastDevel\ opedStates)_i + \alpha_6 (\text{Re}\ gularWage)_i + \varepsilon_i$$

Where E_i is the real daily wage of the i^{th} individual which is taken as a function of age and age^2 (proxy for accumulated experience), level of education attained. [5] The Mincerian earning equation is also controlled for Indian States which have been classified into a) developed states, b) developing states and c) least developed states and for casual orsalaried individuals by using dummies respectively. We do not include "secondary and above", "developed states" and "casuaal wage workers" in the earnings equation so as to avoid multicollinearlity. The effects of which are subsumed in the constant term.Here the reference category is an individual who has completed "secondary or above" education level and working in a

51) Illiterates,2) Till middle and 3) secondary education and above.

developed state as a salaried worker.ThisMincerian equation was run for all four major socio-religious groups.

The estimates from above Mincer equationareare provided in the table 3 (appendix). Durbin–Wu–Hausman test was conducted to account for endogeneity. Endogeneity leads to bias in coefficients. The results show possible endogeneity issues with the inclusion of regular wage worker dummy. But still we consider this equation as by inclusion of this dummy variable greatly improves estimation.All numbers in the table 3 have been explained with respect to this category. Then the real wages of respective groups were compared and wage gaps calculated. The main objective of calculating the wage gap was to decompose it into two main effects: endowments effects and coefficients effect. The Coeffecient effects indicates possible structural dis-advantage.

In order to decompose the wage gap we use Blinder Oaxaca methodology. The decomposition is necessary in order to explain the reasons for huge differences in wages across socio-religious groups.

Blinder and Oaxaca (B-O) Decomposition

We use the estimated Mincerian equations for respective groups to decompose the wage gap into endowment effects (or characteristics) and coefficients effects. Specifically, we use Oaxaca decomposition (Oaxaca, 1973) algorithm. Blinder and Oaxaca (1973) were first economists who estimated the wage gaps between groups of individuals and their causes. Basically, Blinder and Oaxaca (B-O) decomposition technique has been used to measure wage differentials between men and women, and between black and white.

Following form of algorithm was considered:

$$Ln\,\bar{E}_h - Ln\bar{E}_l = \overline{X_l'}(\widehat{\beta_h} - \widehat{\beta_l}) + (\overline{X_h} - \overline{X_l})'\widehat{\beta_l} + (\overline{X_h} - \overline{X_l})'(\widehat{\beta_h} - \widehat{\beta_l})$$

Where $Ln\bar{E}$ is the predicted mean (log) earning; h and l refers to the groups with higher and lower earnings, respectively; $\bar{X}$ is the mean vector of earnings determining variables (education, age, experience, state categories, work status), $\hat{\beta}$ is a vector of the estimated returns to the earnings determinants and the last term represents the interaction effect.

If an individual belonging to different groups and having similar endowment in terms of personal characteristics such as sex, and race but still receive lower wages than other then it is due to unexplained factors also called coefficients effects. This we term as structural disadvantage. In our paper we assume that there may exists certain socio-religious group/s which may be experiencing disadvantagesatthe hands of others. Due to lack of data regarding many qualitative aspects important for wage determination the measured discrimination is over estimated. Hence, we use the term structural disadvantage.

4. Descriptive Statistics

The Mean age of workforce which used to range from 33 years to 36 years in 1993/94 have increased to 34 years to 38 years (see Table 2). The workforce belonging to MUS are relatively young compared to ORM and HU. High rates of education attainment among HU and ORM have pushed their working age higher averaging about 37 years in 2011/12. This is evident by the higher proportion of work force in education group “edu3” . On the other hand, majority of MUS and HL are less educated. Between these two, MUS are in a slightly better position in terms of proportion of those attained secondary or higher education in 2011/12. But overtime, an increasing proportion of HL are attaining higher education. This proportion has increased from 16% in 2004/05 to 27% in 2011/12.

As per the aveagereal weekly wage in concerned. ORM followed by HU receives the highest wages across all three NSS rounds. HL receives the lowest among all religious group. This could be due to other low performing socio economic factors. The pitiable conditions of HL are also evident from the highproportion of them involved in casual/informal jobs. All other religious groups have significantly higher proportion of salaried individuals. A stark difference can also be seen in the distribution of working population among religious groups across various development categories of state. Ravi(1998) has claimed in his research that long term migration is mostly done by labourers belonging to higher classes/castes. Since most of labourers belonging to high caste shift to developed states, then it can be claimed that they normally move in search of long term formal job appointments. Therefore those left in developing or least developed states are normally engaged in informal contracts and as per Ravi (1998) individuals belonging to lower caste normally don't migrate or even if they migrate it is for short period of time. Then it can be comfortably concluded that majority of HL or MUS are employed in developing and least developed states. This also comes up in descriptive statistics (Table 2).

"Insert table 2 below"

In 2011/12, majority of HL worked in least developed states while majority of MUS worked in developing states. A higher proportion of workforce belonging to HU and ORM normally worked in developed states. Developed states are normally better equipped to provide better working conditions, health benefits, pension, insurance etc. and have a large formal sector as compared to least developed states.Therefore, with this explanation majority of ORM and HU are well off as compared to MUS and HL. Between MUS and HL, on an average majority of MUS work in developing states, while majority of HL work in least developed states.

Developing states though not as good as developed states but are still better equipped than least developed states in terms of social protection and size of formal labour market. The classsifiction of developed, developing and least developed states were done in order to factor in the size of formal labour market in defferent development scenarios. So, ***MUS are better than HL but still performing worse than HU and ORM. This finding is consistent with the Sachar Committee's report (2006).***

Also, majority of MUS and HL are still employed in the informal sectors as indicated by the percentage involved in casual labour. Almost 57% and 79% of the labour force belonging to MUS and HL respectively were working as casual labourers in 1993/94. This proportion fell down to 50% and 62% respectively for MUS and HL in 2011/12. That means the proportion of regular salaried workers belonging to MUS and HL are increasing. This is a good sign. This may be due to the favourable policy of reservation in formal institutions.

In the next section we try to locate significant factors which may affect the weekly earnings of the various socio-religious groups across NSS periods of 1993/94 to 2011/12.

5. Analysis

In this section we analyse the signs and magnitude of explanatory variables of the Mincerian equation ie. age, experience, education, development, casual/regular salary work status which is likely to explain the real weekly wage across socio-religious groups and periods from 1993/94 to 2011/12. We hypothesize that all the explanatory variables would contribute positively to the real weekly wage.

1) Age plays a positive and significant role in determining real wage for almost all the religious groups and for all the NSS rounds. The inverted "U" shaped relationship between the earnings and age explains the development of human capital (Gray (1993),

Ben (1967) and Mincer (1974)) wherein at initial stage (upto certain middle age) the productivity increases at a higher pace due to gain in experience but thereafter flattens off eventually declining at a faster pace post retirement. The inverted "U" shape is significant for all the religious groups.

2) The returns from education are represented by the coefficient of respective education categories in table 3 (Appendix)[6]. Illiterates get lower real wages across all religious groups compared to those educated with secondary and aboveie benchmark category. Similarly, real wages were also lower for those having middle level schooling. The trend was similar for all the NSS rounds (ILO, 2008). This follows from the human capital theory where labours are rewarded as per their skill and education. It's assumed that labourers who are more educated would be more productive.

3) Now we analyse the effect in real weekly wages across religious groups if one works in developed, developing or least developing states/regions. Clearly it can be seen that if a salaried worker working in developed states and migrates to a lesser developed state ie: developing states, his/her wage falls across all religious groups in all NSS periods. On an average, fall in real weekly wage is even greater if an individual migrates from a developed category of states to a group of least category of states. Least developed states have less specialized activities compared to developed states and therefore on an average real wages are slightly lower as compared to the developed state. This means that the formal labour market is smaller as that of in developed states.

4) Now we see the effect on an individual's real weekly wage if his status changes from salaried to casual worker. The negative and significant effect in real weekly wage is observed in all the rounds across all religious groups. Salaried workers are employed in

[6]Here we are considering the modulus of the returns, since the benchmark category is of an individual who has secondary or higher education.

the formal sector while casual workers normally are employed in informal sector. The explanation for lower real wages follows from the theory of market segmentation.

Finally we consider real weekly wage of salaried[7] workers working in developed states across religious groups for all periods. Here we find that the average real weekly wage for the salaried workers who are educated upto secondary or above and working in a developed state are highest for HL followed by ORM and lowest for HU. This is consistent across all periods. According to the descriptive table 2, majority of HU are working in formal sector as indicated by proportion of salaried workers while relatively less proportion are from HL. So there exists tough competition among HU while less or relatively lower competition among those belonging to HL. Moreover, HL gets reservation in formal sector of developed states where HU have to face tough competition in order to enjoy such benefits leading to a higher wage for HL relative tothat of HU. ORM gets more because they are better skilled and educated compared to HU and MUS.

"Insert Table 3 here"

Now we attempt to explain the wage gap between various socio-religious group using Blinder Oaxaca decomposition.

"Insert table 4 here"

The real weekly wages are significantly different between all religious groups. HU receive relatively higher wage on an average as compared to Muslims and HL but lower than ORM. The real wage gap was decomposed into endowment effects, coefficient's effect and interaction effect. The endowment effect is also called explained effect while the combination of coefficient's effect and interaction effect is called unexplained effect.

[7]We have considered the exponential of the constants since the real weekly wage was logged in the Mincerian equation.

1) The endowment effect explains almost 100% of the real wage gap between HU and MUS across all NSS rounds while it explains only 86% - 76% between HU and HL. On the other hand it explains 21% -50% between HU and ORM. The residual is due to unexplained factors. The residual is also called as unexplained effects. This has been termed as structural disadvantage in our paper. This effect does not exist between HU and MUS across all NSS rounds but it significantly increases between HU and HL from 1993/94 to 2011/12. That means HL are in the "dis-advantageous" position relative to HU. Whereas HU is considered to be in a dis-advantageous position relative to that of ORM across all NSS rounds, but the magnitude is falling.
2) The endowment explains factors which are responsible for the wage gap not due to structural disadvantage. Education was the important factor which explained on an average 35% to 56% of the difference in wage gap between HU with MUS and HU with HL across all periods. This explains that MUS and HL are not able to get quality education which forces them to take up low paying jobs.MUS have been trained in madrasaas (religious insitutions) where the curriculum avoids inclusion of subjects which are popular in job markets thus making them ineligible for jobs in formal institutions. HL are educated in public schools which dos not impart good quality education as teaches rarely turn up for classes. This hampers the skill development of students belonging to HL and MUS. 30%-50% of the wage difference against HL and MUS was due to the location specific reasons ie. developing state while this could explain 22% to 100% of the wage gap of HU and ORM in 1993/94 and 2011/12 respectively. This means if MUS and HU migrates to a developed state given other factors constant then their real wages would be comparable to that of HU and ORM respectively. Casual status of an individual explains 30% to 50% of the wage gap against MUS and HL across all periods. This proves that on an average MUS and HL work in informal sector and therefore shift to

formal institutions would increase their wage to that of HU. Age also explains almost 50% to 90% of wage difference against HL. This represents that HL are young as compared to HU and therefore they receive lower wage.

Therefore, overall we could see except ORM none of the religious groups are better endowed with respect to the benchmark category HU. This means HU and ORM are well endowed with quality education and better working conditions with respect toMUS and HL. This high endowment explains a major part of the high wage received by them.

3) Now we compare the residual effect which we term in our paper as structural disadvantage which is defined if a group is structurally discriminated not only by the wilful acts of particular individuals but because the prevailing system of opportunities and constraints favours the success of one group over another group. There exists no structural disadvantage against MUS but significantly increasing disadvantage against HL. Most of HL are employed as causal labourers in informal sector and therefore is worse off in this sense. They are not hired in formal institutions because the employers consider them unsuitable to private institutions. This explains by almost 100%. Whereas most of HL are in least developed states and therefore seen as incapable of performing effectively in developed states. This only existed in 1993/94 but have vanished completely. Discrimination against HU with respect to ORM was due to experience. HU is normally considered in-experienced as compared to ORM and this explained almost 100% of the difference. But the magnitude of this factor have been reducing overtime and in 2011/12 it just explained 30% of wage gap.

6. Conclusion:

The labour market in India has been segmented into formal and informal sector. More than 85% of labour force is engaged in informal sector. Since informal sector does not follow

labour laws such provision of minimum wage and social security, there is enough scope for differential treatment against certain weaker sections of society. This can be due to "a legacy of historical discrimination, contemporary state policies and practices and accumulation of disadvantage (Pager and Shepherd, 2008). This paper tried to locate such groups which were treated differently. It also attempts to measure the magnitude and identify trend across 1993/94 to 2011/12. Finally, it also attempted to look for factors which could explain this differential treatment or so called structural discrimination. After a cursory look through the data, we found that majority of HL and MUS are illiterate and very few have studied upto higher education while it was just opposite for ORM and HU. But the increasing trend of HL becoming highly educated gives some positive hopes. More than majority of HU and ORM while fewer MUS and HL work in formal sectors in developed states. Most of MUS and HL are employed in the informal sector of developing and least developed states. This gives a clue to the pitiable conditions of most of MUS and HL lived and worked in. Devoid of minimum wage and social protection might have made their living standards poor. HL had the highest proportion having casual status. But the good news is that wages of an average HL have been the highest or close to highest in developed states across all rounds and socio-religious groups. This may have been due to the reservation policy. Finally coming back to the measurement of the wage gap and explaining its factors. 100% of the difference in real wages between HU and MUS was due to the endowment effect. Good quality education explained most part of it. According to data they are not facing any structural disadvantage by HU and therefore would be better off with better quality education. Rest of the difference was again due to location specific reasons and because they worked in informal sector. Good quality education would go a long way to improve their chances for better opportunities in formal sector. While against HL there existed an increasing structural disadvantage trend. This is a worrying issue. Almost 50% of the wage gap was due to structural disadvantage and

rest was due to endowment effect. Majority of endowment effect can be explained due to low quality of education. Being employed in informal sectors as casual labourers and working in least developed states could explain most of the difference in wage gap due to structural disadvantage. Suggesting that HL are in a disadvantageous position working in an informal sector and belonging to a lesser developed regions of the country. ORM are the most well off and get paid on an average higher than HU. They are better educated and have regular salaried jobs.

Therefore finally, we were able to answer the research question with which we started. Disadvantages which we called structural disadvantage against a particular group does exist in India especially against HL relative to HU and against HU relative to that of ORM. But what is a cause for worry is that the dis-advantage against HL has been increasing overtime whereas against HU has considerable fallen. Increase of better quality of middle and higher education along with more reservations for ST/SCs in formal institutions can lead to decrease in the magnitude of structural dis-advantage.

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Tables

Table 1: Classification of States

State Classification		
Developed	**Developing**	**Least Developed**
Goa	Andhra Pradesh	Assam
Gujarat	Arunachal Pradesh	Bihar
Haryana	Jammu & Kashmir	Jharkhand
Himachal Pradesh	Karnataka	Madhya Pradesh
Kerala	Meghalaya	Chhattisgarh
Maharashtra	Tripura	Manipur
Nagaland	West Bengal	Orissa
Punjab		Rajasthan
Sikkim		Uttar Pradesh
Tamil Nadu		
Uttarakhand		
Andaman & Nicobar Islands		
Chandigarh		
Delhi		
Pondicherry		

Source: As per author's calculation

Table 2:Descriptive Statistics for 1993/94, 2004/5 and 2011/12 across religious groups (HU. MUS, ORM, HL)

	1993/94				2004-05				2011-12			
	HU	MU	ORM	HL	HU	MU	ORM	HL	HU	MU	ORM	HL
	Mean (S.D)	Mean (S.D)	Mean (S.D)	Mean (S.D)	Mean (S.D)	Mean (S.D)	Mean (S.D)	Mean (S.D)	Mean (S.D)	Mean (S.D)	Mean (S.D)	Mean (S.D)
Age	35.29 (11.62)	33.38 (11.89)	35.36 (11.26)	34.15 (11.99)	35.81 (11.61)	33.59 (11.96)	36.68 (11.19)	34.68 (11.80)	37.37 (11.44)	34.89 (11.74)	38.11 (11.09)	36.07 (11.65)
Real weekly wage	627.44 (723.67)	442.79 (457.35)	686.37 (659.34)	292.90 (351.92)	840.88 (1140.24)	651.50 (725.01)	1092.86 (1100.26)	483.39 (583.19)	1352.99 (1602.91)	1059.87 (1154.86)	1707.67 (4760.73)	853.69 (950.40)
Salaried wage earner[d]	0.56	0.43	0.58	0.21	0.56	0.46	0.65	0.31	0.61	0.50	0.69	0.38
Casual WageEarner[d]	0.46	0.57	0.42	0.79	0.44	0.34	0.55	0.69	0.39	0.50	0.31	0.62
Developed State[d]	0.42	0.29	0.65	0.30	0.46	0.29	0.63	0.35	**0.45**	0.27	**0.58**	0.34
Developing State[d]	0.27	0.30	0.23	0.26	0.25	0.39	0.23	0.26	0.23	0**.43**	0.29	0.26
Least Developed State[d]	0.31	0.41	0.12	0.45	0.29	0.32	0.14	0.39	0.31	0.30	0.13	**0.40**
Illiteracy[d]	0.29	0.42	0.25	0.62	0.23	0.31	0.16	0.44	0.15	0.24	0.10	0.31
Primary Education[d]	0.34	0.40	0.35	0.29	0.38	0.45	0.38	0.40	0.34	0.42	0.32	0.42
Secondary and above[d]	0.37	0.18	0.40	0.09	0.39	0.24	0.46	0.16	0.50	0.34	0.58	0.27

*(**)[***]{****} Significant at the 10%(5%)[1%]{0.1%} level of alpha error probability, values in brackets are standard deviations.

[d] Dummy variable.

Source: As per author's calculation

Table 3: Determinants of Mincerian equation

Dependent Variable : logged real wage (INR)	**1993/94**				**2004/05**				**2011/12**			
	Hindu Upper	Muslim	ORM	Hindu Lower	Hindu Upper	Muslim	ORM	Hindu Lower	Hindu Upper	Muslim	ORM	Hindu Lower
Age	0.066****	0.066****	0.05****	0.042****	0.066****	0.060****	0.055****	0.048****	0.062****	0.069****	0.06****	0.042****
Agesq	-0.001****	-0.001****	-0.001****	-0.001****	-0.001****	-0.001****	-0.001****	-0.001****	-0.001****	-0.001****	-0.001****	-0.001****
Illiterate[d]	-0.979****	-0.772****	-0.663****	-0.772****	-1.097****	-0.928****	-0.94****	-0.891****	-0.903****	-0.755****	-0.763****	-0.775****
UptoMiddle[d]	-0.575****	-0.477****	-0.488****	-0.493****	-0.654****	-0.593****	-0.578****	-0.531****	-0.624****	-0.546****	-0.561****	-0.528****
Developing States[d]	-0.015	-0.038	-0.104****	-0.016	-0.108****	0.056**	0.11****	-0.086****	-0.083****	0.037*	0.102****	-0.048****
Least Developed State[d]	-0.024**	-0.025	-0.142****	-0.068****	-0.046****	-0.045**	-0.185****	-0.037***	-0.096****	-0.076****	-0.137****	-0.057****
Casual work status[d]	-0.694****	-0.511****	-0.619****	-0.743****	-0.629****	-0.464****	-0.68****	-0.664****	-0.495****	-0.288****	-0.527****	-0.416****
Const.	4.693****	4.81****	5.102****	5.090****	4.816****	5.097****	5.091****	5.102****	5.345****	5.373****	5.414****	5.703****
F statistic	4857.11	371.16	412.55	1104.55	5998.85	837.32	1078.87	2334.20	3217.60	571.00	569.28	1258.98
R square	0.452	0.282	0.316	0.270	0.510	0.424	0.496	0.430	0.394	0.335	0.381	0.338
No. of obs.	41226	6609	6274	20949	40300	7962	7690	21665	34682	7935	6475	17281

Source: As per author's calculation, Note: d Dummy variable.

Table 4: Oaxaca decomposition

Log(real weekly earnings)	1993/94			2004/05			2011/12		
High	HU	HU	HU	HU	HU	HU	HU	HU	HU
Low	MUS	HL	ORM	MUS	HL	ORM	MUS	HL	ORM
Difference	**0.256**	**0.601**	**-0.118**	**0.158**	**0.461**	**-0.282**	**0.177**	**0.371**	**-0.220**
Endowments (E)	0.260	0.518	-0.026	0.223	0.390	-0.113	0.200	0.282	-0.108
Age	0.135	0.050	0.001	0.142	0.054	-0.029	0.181	0.056	-0.034
Age squared	-0.098	-0.036	-0.004	-0.092	-0.036	0.014	-0.126	-0.035	0.019
Illiterate	0.110	0.251	-0.005	0.086	0.183	-0.031	0.071	0.112	-0.025
Upto Middle	0.029	-0.018	-0.001	0.039	0.015	-0.009	0.045	0.047	-0.015
Developing	0.001	0.000	-0.004	-0.008	0.002	0.002	-0.007	0.002	-0.005
Least developed	0.003	0.008	-0.027	0.001	0.003	-0.026	0.000	0.004	-0.025
Salary worker	0.080	0.264	0.013	0.055	0.170	-0.033	0.037	0.096	-0.024
Coefficient (without constant) (C)	0.047	0.424	0.294	0.138	0.308	0.096	-0.072	0.388	-0.056
Age	-0.018	0.805	0.564	0.206	0.612	0.406	-0.236	0.723	0.088
Age squared	0.104	-0.239	-0.234	-0.004	-0.147	-0.192	0.184	-0.266	-0.038
Illiterate	-0.087	-0.125	-0.084	-0.051	-0.085	-0.028	-0.035	-0.037	-0.016
Upto Middle	-0.039	-0.025	-0.030	-0.027	-0.050	-0.028	-0.033	-0.041	-0.019
Developing	0.007	0.000	0.021	-0.065	-0.006	-0.049	-0.051	-0.009	-0.053
Least developed	0.001	0.019	0.014	0.000	-0.004	0.020	-0.006	-0.015	0.005

Casual work status	0.080	-0.012	0.043	0.080	-0.012	-0.033	0.106	0.032	-0.022
Constant (Co)	-0.124	-0.397	-0.409	-0.281	-0.286	-0.275	-0.028	-0.358	-0.068
Interaction (I)	0.073	0.055	0.023	-0.143	0.049	0.010	0.076	0.059	0.012
E /(E+C+Co+I)*	101.5	86.3	21.9	141.1	84.7	40.1	113.2	76.1	49.1

Source: As per author's calculation, * % of endowments in total wage gap, the residual of which has been termed as the magnitude of structural dis-advantage.