



# Vocational Education and Training: A Prospective Source of Employment Generation

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## **Abstract**

The phases of Demographic Dividend of India attract the attention of the policy makers that the increasing labour force must demand employment so the policymakers have to ensure enough employment opportunities for the increasing youth labour forces. Employment is the need of the country without ensuring enough employment opportunities in the economy the vision of development can't be completed. In the current scenario India is moving towards capital intensive Production instead of traditional labour intensive production so for this improvement in the labour forces i.e. Skill Development is required which can be done by Proper Vocational Education and training. So this paper attempts to analyse the quantitative relationship between the total Enrolment in vocational courses and Total Employment of India using Sample Regression Model with the help of RBI and NSSO data. So we will analyse the Impact of Vocational Education and Training on Employment generation in India.

**Keywords:** Demographic Dividend, RBI, NSSO, Vocational Education and training, Employment

## 1.1 Introduction

Unemployment among the educated is a serious issue for a country like India which has a huge population and a large percentage of population is young .India is one of the few countries which have educated unemployment in large numbers. The main reason is the dearth of vocational and technical education which leads to skill mismatch in the job market. Quality and relevance of skill development is a major factor that can make India globally competitive as well as it can improve an individual access to decent employment. At present we have a unique problem in the Indian Labour Market employers do not get manpower with requisite skills and on the other hand millions of Job seekers do not get employment.

It was realised in the Twelfth Plan that skilling of labour force is necessary to harness the demographic dividend which India enjoys.. The employers continue to complain about the non availability of requisite number of skilled persons where the enrolment in technical education has increased. Skill Development can be a tool that can serve the purpose of inclusive and faster economic growth by generating more employment opportunities for the young population in India. India would be able to meet the growing need of technically trained manpower not only for the country itself but also for the aging advanced countries of the world.

Studies have shown that vocational education and training has a positive impact on employment and it is also helpful in enhancing wages of workers in all sectors viz. agriculture ,manufacturing and service sector but the impact is more pronounced in the manufacturing sector. Vocational education and training develops skilled manpower and it improves industrial productivity .India has also been focussing on vocational education along with general education in different five year plans . Jobs in the manufacturing sector often require certain skills and knowledge that cannot be obtained through general education .Vocationally trained students have a smooth transition to the labour market and they find jobs more easily as compared to students with a general qualification .The main reason for this is that occupation specific skills that these students possess make them more attractive to employers . Vocational education and training makes students directly productive in the labour market and thereby makes them attractive to employers .The experiences of countries like Denmark, Germany ,Austria show that there is a strong relationship between Vocational Education and training and productivity .These countries have a tradition of apprenticeship in VET .The .In these countries various types of qualifications whether general or

vocational obtained at various levels complement each other. .It can be said that VET in any form whether acquired at the workplace increases productivity of labour and thereby increases the chances of employment.

## 1.2 Review of literature

**Dearden et al. 2002** the individuals who are working in low profile jobs and have a less skill ability, Vocational education and training is very important for them. However, it is also noted that the wage premiums were found to be higher from academic qualifications than vocational qualifications in absolute terms. But with acquiring the vocational qualification this wage gap can be reduced

**Agrawal T. 2012** Based on 61st round of NSSO survey (2004–2005), only 4% of the population between 15 and 29 years had received formal vocational education & training (VET) and 8% of that age group had received non-formal VET. A vast majority of the population (89%) in that age group do not have any sort. He analysed from this data that the employment rate of vocational qualification is higher than the general qualification and it also found that the daily wages of vocation based qualified labour is higher than the general based educated labour.

**Eichhorst et al. 2015** found that Governments of industrialized countries provide vocational education and training through the educational system to improve the job opportunities of youth who do not possess the skills demanded of them in the labour market and the ability, funding or motivation to pursue higher education.

**Banerjee (2016)** in her analysis found that participation in the manufacturing sector was found to increase across all social groups with Vocational education and training.

**Agrawal and Agrawal (2017)** found evidence of higher returns to Vocational education and training as compared to general education. They further found that there is very strong relationship between Vocational education and training and employment or job opportunities.

## 1.3 Objective of the study

We start from the following objectives-

- To explore the Current situation of Employment and Vocational Education and Training in India.
- To analyse the Impact of Vocational education and Training on Employment Generation in India

## 1.4 Hypothesis of the study

$H_0$  = There is no significant relationship between enrolment in vocational Courses and Employment in India.

$H_1$  = There is a significant relationship between enrolment in vocational Courses and Employment in India.

## 1.5 Research Design

### 1.5.1 Collection of data

The study is fully based on secondary data which is collected from the Reserve bank of India, CSSO, NSSO, Ministry of Employment Govt. of India, Ministry of Human Resource Development Govt. of India etc.

### 1.5.2 Research Methodology

The study finds the cause and effect relationship between Enrolment in vocational education and Employment generation in India .where the Enrolment in vocational education is independent variable and employment is dependent variable so we will use Simple Regression technique to find out the Impact of vocational education and training on Employment in India. We used SPSS software to show this result.



For this analysis the, model is:

$$y = \beta_1 + \beta_2 X + \mu$$

$y$  = (Dependent variable) (Employment in India )

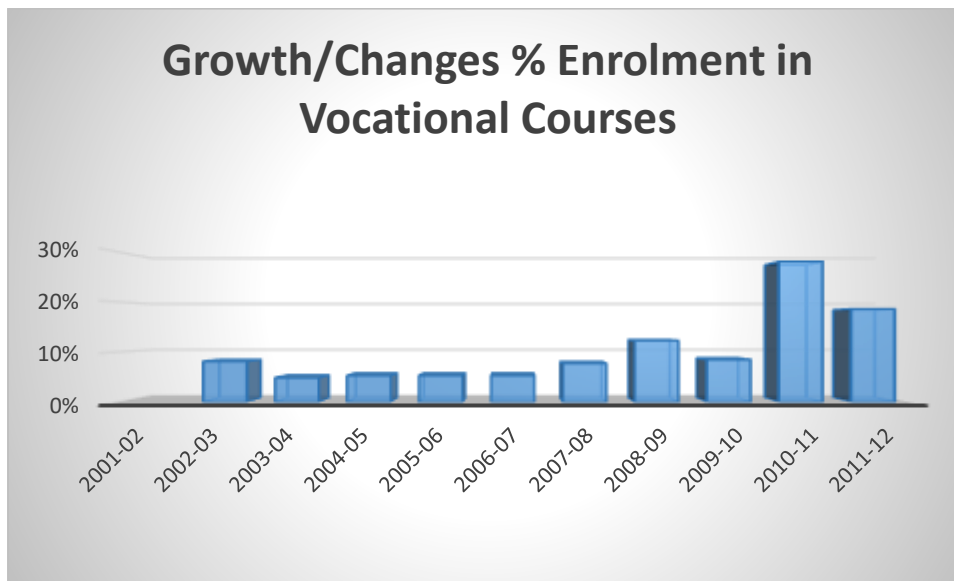
$X$  = explanatory or independent variable (Enrolment in Vocational Courses)

$\beta_1$  and  $\beta_2$  = parameters or slope of coefficients.

$\mu_i$  = residual or error terms.

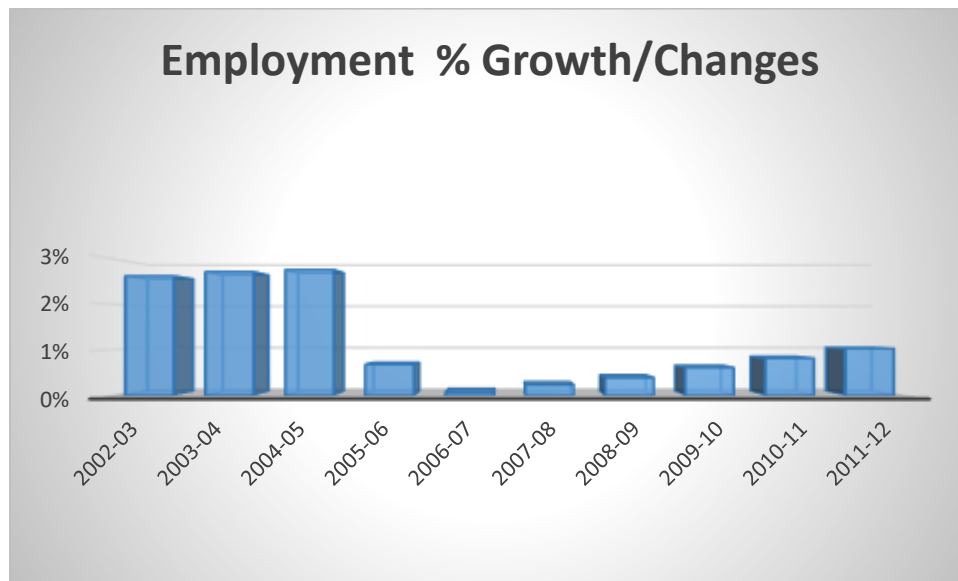
## 1.6 Vocational Education and Employment

The employment in a country is highly related to the level of education in a country . The returns to education are evident in the form of decent employment opportunities , increased wages, and a decent standard of living .Vocational education in particular is seen as a tool to secure employment in the job market .The changing structure of the economy requires the human resource to be well adapted to the needs of the economy as is well known human resource is the most important factor of production . Therefore this factor must possess those qualifications that the economy require from time to time. Vocational Education provides those skills to the labour force that make them suitable for work . This fills the gap between demand and supply of the right kind of labour , possessing the required skills. Vocational Education ,if provided , in the right way will be able to generate employment for the youth of the country. This kind of education is becoming popular day by day .The enrolment in such courses which provide skill based education is increasing in recent years. As has been analysed in the subsequent pages The enrolment in vocational educational courses has increased and so has employment . This paper attempts to find out the relationship between vocational education and employment and therefore The growth percentage of enrolment in vocational education and growth percentage of employment has been taken .to analyse the relationship between vocational education and employment .

**Figure 1.1**

*Source: NSSO 2016.*

The figure 1.1 shows the percentage of increase in enrolment in vocational courses i.e. change in total enrolment in vocational courses over the years. The figure shows the percentage change in enrolment in vocational courses from 2001-2002 to 2011-2012. It is observed from the figure that enrolment in vocational courses has been increasing in these years. In the year 2002-2003 the enrolment in vocational courses has increased by 8%. In 2003-04 it has increased by 5%. In 2004-05 the percentage increase is somewhat greater as compared to the previous year and enrolment in vocational courses has increased by 5.29%. Then in the subsequent years the percentage increase in enrolment shows a nominal change or increase but the trend is upward i.e. the enrolment is increasing in these years. In 2005-06 the increase percentage is 5.39% and in 2006-07 it is 5.45%. The year 2007-08 registered a huge change in enrolment and here we see that enrolment in this year has increased by 8%. The year 2008-09 is the year which has the most number of enrolments in vocational courses and this year witnessed a huge percentage increase in enrolment, the increase percentage in this year is 12%. In 2009-10 the percentage increase is 8% which is lower than the previous year. Again the year 2010-11 registered a huge increase in enrolment in vocational courses and this year the enrolments in vocational courses increased by 28% which is the highest growth percentage among the given years. A significant change or growth percentage in enrolment is also seen in the year 2011-12 but it is lower than the previous year. Overall it can be concluded that the enrolment in vocational courses has been increasing since 2001.

**Figure 1.2**

Source: KLEMS data RBI 2016.

Figure 1.2 shows the growth percentage of employment or we can say percentage change in employment is shown. Starting from the year 2002-03, it is seen that the percentage growth in employment is 2.6 %..Employment in the year 2003-04 grows by a slightly higher percentage which is 2.8 % and is greater than the previous year. The year 2004-05 also witnessed a positive change and employment in this year increased by 3 percentage which is a significant positive change. The percentage increase in employment in the year 2005-06 is 1 % which is lower than the previous three years .2006-07 witnessed a low percentage increase in employment which is 0.007% . In 2007-08 the percentage increase in employment is 0.0023 %. The year 2008-09 shows percentage increase of 1 % in employment which is greater than the increase I the previous year. In the subsequent years the growth percentage of employment has increased .In 2009-10 the increase percentage in employment is 1% In 2010 -11 the increase percentage is 1.05 %.The year 2011-12 shows a significant percentage increase in employment which is 1.10 %

## 1.7 Empirical Analysis

**Table No. 7.1**

<b>ANOVA</b>						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.009	1	.009	18.303	.002 <sup>b</sup>
	Residual	.004	9	.000		
	Total	.013	10			
a. Dependent Variable: Employment						
b. Predictors: (Constant), Vocational Education						

Table no. 7.1 which analyses variance between the data of total Enrolment in Vocational Courses and the Total Employment from 2001 to 2012 the value of P ( $P < 0.05$ ) and  $F_{1,09} = 18.303$  reveals that that this regression is significant the value of total Enrolment in Vocational Courses in this case is taken as independent variable. This test is calculated at 5% degree of freedom.

**Table No. 7.2**

### Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	18.428	.352		52.423	.000
	Vocational Education Enrolment	.096	.022	.819	4.278	.002

a. Dependent Variable: Employment

Table No. 7.2 examines the B value of the independent variable which is positively related and the regression coefficient of Vocational Education Enrolment is 0.096 The sample regression equation is as follows

$$Y = 18.428 + 0.096 X$$



Means this equation says that if one unit change takes place in the Enrolment in vocation Courses than the Employment of India will change 0.096 times. So there is correlation between Total Enrolment in Vocational courses and total Employment of India.

**Figure 1.3**

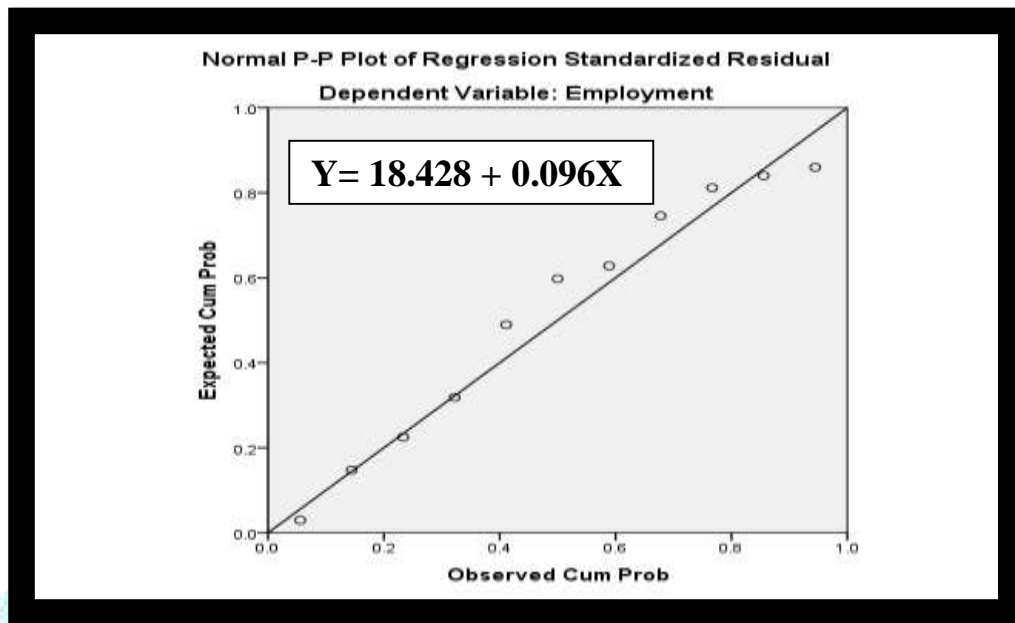


Figure 1.3 shows The scatter diagram and represent true population regression line the regression line in this diagram known as the simple regression line. It can be positive or negative the sign depending on the sign of the term of numerator, in our case it is positive and significantly measures the covariation of total Enrolment in Vocational courses and total employment in India.

**Table No. 7.3**

### Diagnostic Statistics

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.819	.670	.634	.02170	.401
a. Dependent Variable: Employment					
b. Predictors: (Constant), Vocational Education Enrolment					

Table No. 7.3 shows correlation  $R = 0.819$  of the significant predictor i.e. Vocational Education Enrolment as we analyse this table we see from the model, that the Vocational Education Enrolment influenced the total Employment of India which explains 81 % viability in the total Employment of India. The  $R^2$  Explain 67% variation i.e. Vocational Education Enrolment is one of the major factor that influenced the total Employment of India. The Adjusted  $R^2$  also reported that the

independent variable i.e. Vocational Education Enrolment explain 63 % variation in the total Employment of India. Durbin- Watson test is 0.401 which means this is a very positive autocorrelation in between. From this analysis it is clear that Vocational Education Enrolment in this case contribute to total Employment of India.

## 1.8 Conclusion and Result

So it may be said that this study is significant study and the Null Hypothesis ( $H_0$ ) is rejected in this case and alternative Hypothesis ( $H_1$ ) is accepted there is significant relationship between the total Employment of India and Total Enrolment in Vocational Education Courses. It is also found that Employment also depends upon so many economic factors means there are so many factors which determine the level of employment in any country and vocational education and training in one of them so the result shows that vocational education and training has 9 % impact on employment generation in India.

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