***High rates of Youth and Graduates Unemployment in Malaysia***

**Introduction:**

In this assignment, we prepared a data preparation. The file create\_data.sav (SPSS file) or create\_data.xlsx (excel file) contains data on 25 observations and included five variables. The following variables are Educ, Gender, Age, Unemp, Skills, and Wages. Based on the judgemental analysis, we choose Unemployment level is dependent variable and rest are the independent variables.

1. Data Analysis:

a. SPSS– coding, tabulated tables for mean and standard deviation, etc.

Code:

DESCRIPTIVES VARIABLES = Educ Gender Age Unemp Skills Wages

/STATISTICS = MEAN STDDEV MIN MAX SKEWNESS

/SORT=NAME (A).

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Descriptive/Summary Statistics** | | | | | | | |
|  | N/Obs. | Min | Max | Mean | Std. Dev. | Skewness | |
| Statistic | Statistic | | Statistic | Statistic | Statistic | Std. Error |
| Age | 25 | 15 | 27 | 20.68 | 3.902 | .116 | .464 |
| Education Level | 25 | 0 | 1 | .48 | .510 | .085 | .464 |
| Gender | 25 | 0 | 1 | .48 | .510 | .085 | .464 |
| Technical Skills | 25 | 0 | 1 | .56 | .507 | -.257 | .464 |
| Unemployment | 25 | 1.30 | 5.50 | 3.4080 | 1.28417 | .060 | .464 |
| Wage Rate (INR) | 25 | 10000.00 | 28000.00 | 16680.0000 | 5869.90914 | .581 | .464 |

b.

**Charts:**

* Unemployment & Technical Skills:

Graph 1:

* Wage Rate and Education Level:

Graph 2:

* Technical Skills and Wages:

Graph 3:

* Wage and Age:

Graph 4:

In this chart section, we just make a bar graphs for categorical and numerical variable. As we see that graph 1, if young and graduates technical skill is low, then it will difficulty to get the job, so the unemployment level is high for “low level of skills” whereas low for “high level of skills”. For graph 2, if education level is higher, young and graduates will get the higher wages otherwise low wages. For graph 3, if technical skills are good or high then wages will higher otherwise, they will get low wages. For graph 4, if graduates’ student is graduates and young then the productivity of young employees is more efficient than the older employee, so young employees get higher wages.

**Dashboard:**

The file ***create\_data.xlsx*** contains the data and required dashboard.

**2.**

**Table: Description of the variables**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable Name** | **Description** | **Variable Type** | **Coding** |
| Educ | Education of the young and graduates | Nominal | 0 = Low  1 = High |
| Gender | Gender | Nominal | 0 = Female  1 = otherwise, Male |
| Age | Age in years | Scale | N/A |
| Unemp | Unemployment | Scale | N/A |
| Skills | Technical skills of young and graduate’s student | Nominal | 0 = Low  1 = High |
| Wages | Employees’ wages | Scale | N/A |

*Note: N/A = Not Applicable*

**Table: Summary Statistics**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Summary Statistics** | | | | | | | | |
|  | N/Obs. | Range | Mean | | Std. Dev. | Var. | Skewness | |
| Statistic | | | Std. Error | Statistic | | | Std. Error |
| Education Level | 25 | 1 | .48 | .102 | .510 | .260 | .085 | .464 |
| Gender | 25 | 1 | .48 | .102 | .510 | .260 | .085 | .464 |
| Age | 25 | 12 | 20.68 | .780 | 3.902 | 15.227 | .116 | .464 |
| Unemployment | 25 | 4.20 | 3.4080 | .25683 | 1.28417 | 1.649 | .060 | .464 |
| Technical Skills | 25 | 1 | .56 | .101 | .507 | .257 | -.257 | .464 |
| Wage Rate (INR) | 25 | 18000.00 | 16680.0000 | 1173.98183 | 5869.90914 | 34455833.333 | .581 | .464 |

**3. Forecasting**

For this section, we again create a quarterly data for forecasting, and this is the time series chart for unemployment rate (see below).

In this graph, the bule line is unemployment rate (in per cent) of Malaysia, and the orange line is the centred moving average, and the green line is forecasting of quarterly unemployment rate. As we see the trend of unemployment line/structure, the structure is constant in the quarter 1 to 3 for every year, and in the fourth quarter of every year the line is fall down. Further, forecasting line shows the same trend as unemployment rate line. Also, the orange line that is CMA (4)-Central Moving Average is baseline. Hence, based on the historical data we forecast the future trend and the above evidence says that the next four quarter unemployment rate are expected to follow the forecasting line. Hence, the forecasts incorporate both the general trend of the original data and its quarter two.

# References

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