

The Growth of the Population: Labor Potential Mapping in Pekanbaru Indonesia

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Abstract: The focus of this research is to develop and estimate labor needs in the city of Pekanbaru from 2011- 2015 in terms of the growth of the population during a five-year period which increased by 2.22%. Population of working per sector in each field is of 3.64% and economic growth of 6.44% with unemployment rate 7.46%. This shows that existence yet proper planning to address the problem of employment in Pekanbaru. The method used was a Manpower Utilization Approach using labor force participation (TPAK). The estimated needs of the population that works using "Manpower Requirement Approach" using the economic growth and employment by using a linear regression and the elasticity approach. The results of the research showed the workforce according to age and gender of the productive age group was dominated by men of 76.16 percent smaller than female productive group 72.33 percent. It was proved the work absorbed was more on a large proportion of the trade sector reaching 0.14 percent. If seen the inventory of labor although this figure was down from 305,825 people and dropped to 280,905 people so that the unemployment rate dropped from percent to 13.70 7.46 TPAK percent with the increase from 60.97 percent to 63.14 percent. So it can be concluded that there was no balanced figure between the shares of labor supply with labor supply, but this effort was already resulting with the fall in the unemployment rate.

Keywords: Workforce Planning, mapping Work, the potential workforce

1. Introduction

Population problem is inseparable with manpower issues. If the rate of population growth is high, the provision of employment will also be high. Offering high labor without being offset by enough employment opportunities will lead to unemployment. The increasing number of job seekers will then encourage local governments to create various programs alleviating unemployment, one of which opens the job seeker market which is then synchronized with various companies that need productive and active workers.

During the period of 5 years the number of job seekers continued to increase especially for senior high school level and above, but this was not comparable with the number of job posting. The Labor Force Participation Rate is steadily increasing from 60.97% in 2011 to 63.04% in 2015 indicating that the demand of job seekers in Pekanbaru is higher, it caused 7.46 % growth of unemployment number in 2015 in Pekanbaru which was dominated by high school and above. Before, it was only a few sectors excellent for job seekers, and in consequence of, there was no equity in labor market. The most intensive labor sector in Pekanbaru was the trade and community services sector. This created imbalance among the nine available sectors.

Under these conditions it is worth mapping potential manpower due to a work force balance between labor demand and labor supply so as to reduce the number of unemployment. Therefore, the research was done in several ways, namely: (1) Location Equation (LQ) with the calculation of labor trend done by looking at the comparison between labor in sector (i) in Pekanbaru City to total labor of all sectors: (2) Calculating labor absorption by comparing the difference between labor (ΔTK) of labor absorption in year t (TT) and employment in year t-1 (TKt-1) with Economic Growth Rate (LPE). (3)



To analyze the trends and potential of labor was done by connecting between the labor trend with the potential workforce to obtain the conclusion between the trend and the potential of labor was directly proportional. During the period of five years, the population of Pekanbaru City continued to grow by 1.78%, but it was not accompanied by the growth of the number of population working per sector of business during the period of five years reaching 3.64%. The growth rate of GRDP in Pekanbaru City during the five-year period tend to decrease from 2011, GDP growth of 7.54%, the highest growth occurred in 2012 where GDP growth was of 7.82%. It can be understood because Riau, especially Pekanbaru city became the center of the 18th PON in September 2012.

The rate of economic growth in Pekanbaru city has accelerated in 2014 compared to the growth of 2013. Pekanbaru's GDP growth rate in 2014 reached 6.79%, while in 2013 amounted to 5.73%. The highest economic growth was achieved by the Company Services category of 20.33%. The growth rate of PDRB Pekanbaru in 2015 was 5.43%, the highest economic growth was achieved by other service categories by 19.93%, While all other economic categories of GDP in 2015 recorded a positive growth.

Viewed from the number of job seekers it was found that there was no proportional balance of job opportunities posted. It could be caused by several things, one of which, more people pursued their educations. In fact, by looking at this phenomenon, it should have been considered to make mapping of potential labor in order to facilitate synchronization between the labor market and the potential of human resources. It is because the availability of synchronization management patterns between labor market and labor can also serve to measure the distribution of experts in each region and it is very important to provide in order to reduce open unemployment. The planning is focused on mapping the types of jobs and prospective formal sector workers. To support the creation of a formal sector employment market, employment mapping and labor availability in one area must be provide by employment regulations per sector to smooth the course of investments that will certainly absorb labors. (Maryanti S. , 2016)

2. A Closer Look on Labor Potential Mapping

Until the end of 2015 the number of job seekers who have yet been placed was 17.609, vacancies not yet posted were 1,809, vacancies posted were 1,500. More than half of the productive age population in Pekanbaru City with the age of 15 years and above were considered labor force by means of: a 10- year workforce that were employed before, were, either then, worked or temporarily unemployed were triggered by certain problem. This can be seen from the volume of the Labor Force Participation Rate (LFPR) in 2015 which was worth 63.04%, slightly rose up from the previous year (61.30%), the condition of LFPR was as the ratio of the labor force to the amount throughout the working age population of the workforce population of which 92.56 percent worked and the rest were unemployed. The rate of male LFPR was 78.80 percent higher than female LFPR (46.59 percent). One of the factors causing this was that women still played important role as housekeepers.

Compared to the previous year, the employment condition in Pekanbaru City had improved considerably, indicated by the unemployment rate which dropped from 9.20 percent in 2014 to 7.46 percent in 2015. From educational level point of view, the highest unemployed was still dominated by the big trading, retailss, restaurant and hotel sector which amounted to 44.83 percent. The second position was occupied by social services, like social and individual sectors at the rate of 24.88 percent.



Figure 1: Unemployment in Pekanbaru City, 2008-2014.

Local people in Pekanbaru have a fairly good motivation towards the importance of education. This could be seen from the School Participation Rate (SPR) of the population aged 7-12 years (ideal age for elementary school) which reached 98.40 and SPR of population aged 13-15 years (ideal age junior school) which reached 97.00. Meanwhile, the participation of the population aged 16-18 years (ideal age to sit in high school) was still relatively low, 79.02%. Educational quality was measured from expectation intake and the length of academic year. Based on New Method HDI Kota Pekanbaru, School Expectation Figures in 2015 amounted to 14.86. In the future, it is expected that children at a certain age will experience formal education for almost 15 years or will have been sitting on semester 5. The average length of school in Pekanbaru City in 2015 amounted to 10.97 meaning that the average citizen of Pekanbaru City has gone to school for 11 years (up to grade 2 high school). The number of the graduates based on the level was as follows: Elementary school 9.73 per cent, junior high school 16.20 per cent, senior high school 42.78 per cent, Diploma (DI / DII / DIII) 6.64 per cent, university 19.63 percent and uncertified 5.02 percent.

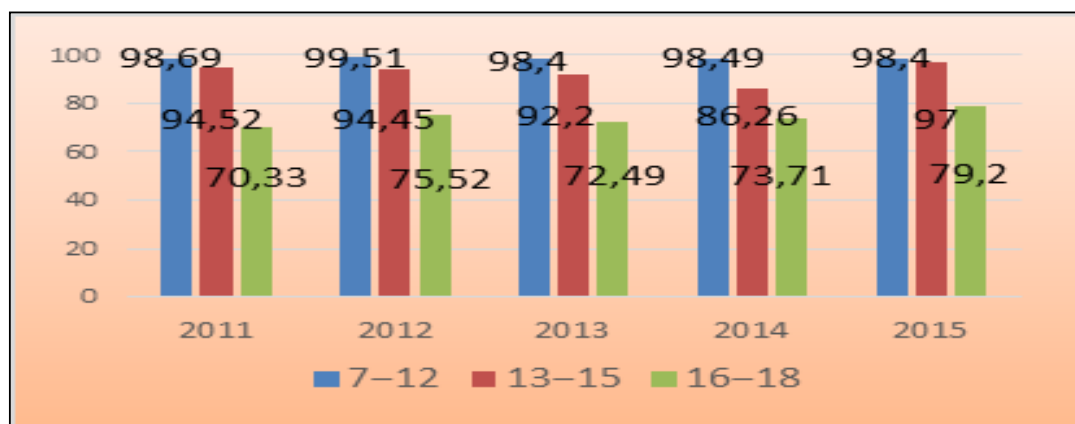


Figure 2. School Age Population - Pekanbaru, 2011-2015.

From the results of the research it was found that the number of school-age population continued to increase as well as the number of job seekers, but this was not matched by the number of employment and the equitable distribution of labor in every sector of the field of business. Over the course of five years, the most heavily employed sector was the trade and community services sector with the capacity of reaching $\pm 200,000$ workforce. Considering this condition, it was necessary to make mapping of the potential labor to generate total labor supply displayed in 2011 which increased by 4.89 percent per year where the number of female workers per year increased by 4.62 percent and 5.15 percent per year for men. This indicated greater participation of both groups to work. The holders of Elementary diploma increased by about 59.46 percent per year. For junior high school equivalent and high school equivalent and vocational (SMK) tent to increase respectively 69.69 percent per year and 72.08 percent per year. The tendency for the increase of workforce according to the level of education occurred at the level of Bachelor's degree reaching at 27.91 percent per year but this

number was not as large as the workforce with junior and senior high school level. This indicated that there has been an increase in the quality of labor in Pekanbaru City.

To analyze the need for manpower in Pekanbaru it needs to analyze the development of working population by age, sex, field of business, main job status and education level. It needs to show an increase of 12.72 percent per year for men and 11.93 percent per year for women, where the proportion of working population was dominated by productive age groups of both men and women, while for the younger age group was more dominated by women's group. This indicated that the number of working population was mostly dominated by men because men were the backbone of the family in terms of financial support. The lack of employment for the mining sector was also due to the fact that this sector required expertise and high education level while the education level of Pekanbaru residents for undergraduate level was not too large compared to primary, junior and senior high school graduates that was only 4.75 percent.

Nevertheless, the number of Pekanbaru residents work as laborers was more of which 2.18 percent male, and 2.15 female. 0.76% of male, 0.79% female residents run their own businesses. There was still a large number of workers who was not absorbed business field so that the residents tent to do their own business such as trading sector with the contribution of PDRB that increased by 25.65 percent. Woman's labor force was more absorbed than man because the trade sector was more attractive in accordance with the pattern of work participation and the level of education of the workforce for women with higher education level of 15.42 percent and undergraduates was only 4.75 percent, for male labor at senior high school level was 10.55 percent and 11.74 percent of scholars. The higher the education, the greater the opportunity will be.

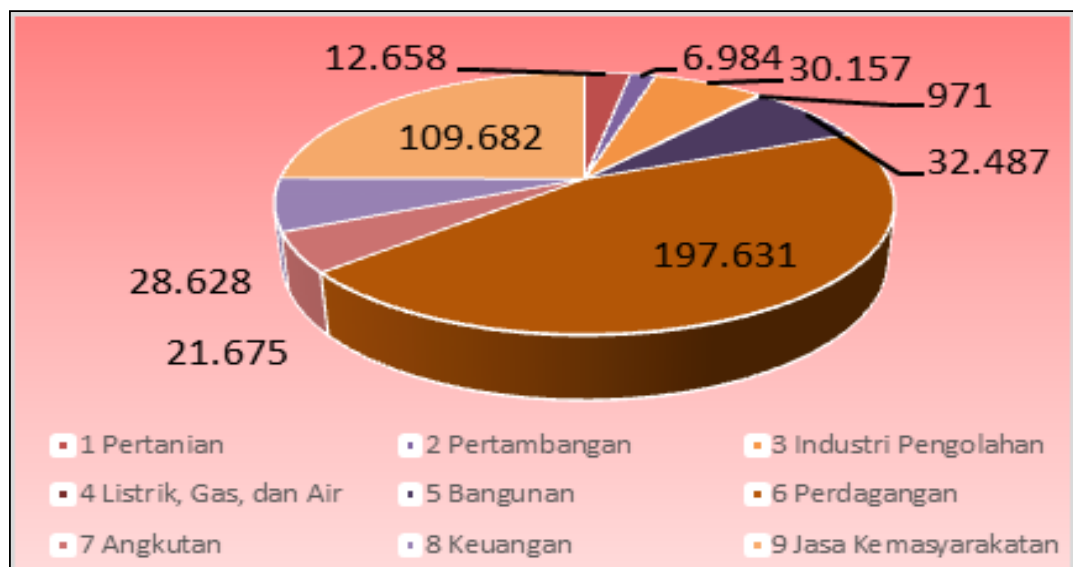


Figure 3: Percentage of Working Population- 2015.

The number of labor supply by age group and sex has increased by 4.89 percent with the growth rate of female workforce by 4.62 percent and 5.15 percent male labor. The increase of labor supply by education level was dominated by junior high by 69.69 percent and 72.08 percent at the level of senior high school, while for scholars it was only 27.91 percent and for elementary school level decreased by -38.81 percent. This indicates that 12-year compulsory education program should be maximized.

Labor demand by age and sex is dominated by male productive age group of 76.16 percent. This amount is smaller than the productive group of women, 72.33 percent. Absorption power of workforce was more on large trading sector with the proportion reaching 0.14 percent. In one hand, there was an excess of labor supply even though it decreased from 305,825 people to 280,905 people. It also caused unemployment rate to drop from 13.70 percent to 7.46 percent with the LFPR rising from 60.97 percent to 63.14 percent. It showed unbalanced between labor supply and workforce, but this effort has paid off with the decline in unemployment.

3. References

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