

# Determination Analysis of the Leading Sectors of the Economy of Bandung Raya Area

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**Abstract:** It is important for each region to determine its leading sector which acts as the first mover in which each of its changes has a multiplier effect on the economy as a whole. This study aims to analyze the leading sectors in Bandung Raya area. The analytical tool used in the determination of the leading sector in Bandung Raya area is Klassen Tipology and Location Quotient analysis, using time series data undefined from four regions in Bandung Raya during the period of 2011-2015. The result from the research is known that each region in Bandung Raya area has their own superior sectors. The city of Bandung and Cimahi City are very prominent in the information and communication sector, Bandung regency has the processing industry as the leading sector, and West Bandung Regency has the leading sector in the field of accommodation and drinking. There is one sector that has the same superior in the four regions in Bandung Raya area that is the education service's sector. The implication is that each region can develop the leading sector to promote the region and prosper from the people.

## 1 INTRODUCTION

The growth of several leading sectors or bases will determine the overall development of the region, resulting in increased revenues and consumption and investment. The increased revenue will increase demand for the leading sectors, which will also boost demand for non-leading sectors, which will also boost non-priority sector investment.

The policy of development strategy should be directed to policies that provide optimal impact for economic growth, increase in people's income that poverty decreases and job creation so unemployment can decrease, as well as improving the quality of human resources. The leading sectors gained through analysis can be the basis of consideration in future development planning. The regional development policy has established nodal regions, i.e. structural areas consisting of the core area with complementary adjacent areas.

Description of the conditions above one of them occurred in the area of Bandung, where the city of Bandung serve as the center of economic activity, because almost all infrastructure that support economic activities exist in the region of Bandung. As a result the rate of economic growth Bandung becomes higher than other regions incorporated into

Bandung Raya consisting of Bandung, Bandung Regency, Cimahi City, and West Bandung regency.

This can be seen from the data recapitulation realization of local revenue Bandung has a higher income in comparison local revenue other regencies / cities as Bandung Raya period 2010-2014. In 2010 local revenue Bandung reached Rp 442 billion and in 2014 has reached Rp 1.763 trillion (BPS Jawa Barat).

Based on the above, it is important for each region in Bandung Raya to determine the superior sector. Because, as the name suggests, the leading sector activities have the role of the first mover where every change has a multiplier effect on the aggregate economy. That is the importance of this research, which determines the leading sectors of each region as Bandung Raya.

Some of the previous studies related to this are Amir and Riphath's research in 2005 in East Java based on superior sector analysis and sectoral linkages recommended to make East Java an industrial center, trade center, and agricultural center. Fachrurrazy's research in 2009 in North Aceh Regency resulted from Klassen Tipology analysis, Location Quotient analysis and Shift Share analysis showed that the sector which is the leading sector in North Aceh Regency with criteria of advanced and fast growing sector, basic sector and competitive sector is agriculture sector.

This base theory or sector is based on J.S.Mill thinking that in solving the problem of growth and regional equity it is suggested that there is inter-regional trade, by realizing regional specialization. The rationale of the theory of economic basis according to Kadariah (1985: 70) is that the base industry produces goods and services both for markets within and outside the region, the sale of out-of-region results will bring income flows into the area. This revenue stream causes both increases in consumption as well as an increase in investment in the area, which in turn raises income and employment. And this study aims to analyze the leading sectors in Bandung Raya area.

## 2 METHODS

The analytical tool used for the determination of the leading sector in Bandung Raya area is (i) Klassen typology, used with the purpose of identifying the position of the district / city economic sector by taking into account the economic sector of West Java Province as reference area. Klassen Typology Analysis produces four sector classifications with different characteristics as follows (Sjafrizal, 2008: 180): Sector advanced and growing (developed sector) (Quadrant I); Sector advanced but stagnant (Quadrant II); Potential sector or developing sector (Quadrant III); and the underdeveloped sector (Quadrant IV). (ii) Location Quotient Analysis, Used to determine the base and non-base sectors in the regional economy of Bandung Raya in West Java Province. To get the Location Quotient (LQ) value using the method referring to the formula put forward by Bendavid-Val (Kuncoro, 2004: 183):

$$LQ = \frac{PDRB_{kab/kota,i} / \sum PDRB_{kab/kota}}{PDRB_{jabar,i} / \sum PDRB_{jabar}}$$

PDRB kab / Kota, i = GDP of sector i in the regency / municipality in a given year;  $\sum PDRB_{kab/kota}$  = Total GRDP in the Regency / City in a given year; PDRB jabar, i = GDP of sector i in West Java Province at a certain level;  $\sum PDRB_{jabar}$  = Total GRDP in West Java Province in certain year. Provided that the value of  $LQ > 1$ , it can be concluded that the sector is a base sector and potential to be developed as a driver of the economy and vice versa if  $LQ < 1$ .

The data used are time series data from four regions in Bandung Raya area covering Bandung, Bandung Regency, Cimahi City, and West Bandung

Regency during the period of 2011-2015 with constant 2010 prices.

## 3 RESULTS AND DISCUSSION

Based on the calculation analysis using Klassen Typology and Location Quotient (LQ), it is known that in Kota Bandung sector that enter quadrant I advanced and fast growing sector and LQ value more than one there are 7 sectors, they are information and communication sector; Construction; Large and Retail Trade, Car Repair and Motorcycles; Transportation and Warehousing; Provision of Accommodation and Drinking; Real Estate; And the Company Services sector. Of the seven sectors that become the leading sector of the highest value is the information and communication sector.

The information and communications sector in Bandung is the most superior sector based on the growth of economic growth with the highest growth rate compared to other sectors in 2011, 2013, 2014 and 2015. And in 2015, economic growth reaches 16.47%. More than that it is known that the economic growth of Bandung in 2011 to 2015 is higher than the economic growth of urban districts in Bandung Raya area.

Although the information and communication sector is the most superior sector of the other in the city of Bandung, but when viewed from the percentage distribution of Gross Regional Domestic Product (GRDP) known that the city of Bandung in general the structure of the economy dominated by field of business categories of large and retail trade, car repairs and Motorcycles and the category of processing industries. Distribution of PDRB percentages broken down by these categories and sub-categories shows the role of each sector to GRDP as a whole.

Based on the above results visible for the city of Bandung which is also the capital of West Java province has occurred higher shift again starting to go as a service city. No wonder if later Bandung became the core city to metropolitan Bandung Raya.

Relative results are also obtained by the City of Cimahi that based on the analysis of Klassen Typology and Location Quotient (LQ) is known that in the City of Cimahi sector entering the first quadrant of advanced sector and grow rapidly and LQ value more than one there are 5 sectors, Information and communication of the highest value; Followed by education services sector; Financial Services and Insurance; Large and Retail

Trade, Car Repair and Motorcycles; And Administration, Defense and Social Security sectors.

Viewed from the structure of the economy, some people of Cimahi City are based on industry, especially textile and apparel industry. This can be seen from the contribution of agriculture to the preparation of GDP Cimahi City until 2015 by 46 percent.

For Regency of Bandung based on analysis of Klassen Tipology and Location Quotient (LQ), it is known that in Kabupaten Bandung sector that enter quadrant I advanced and fast growing sector and LQ value more than one there are 2 sectors, that is covering processing industry sector and real estate sector. This is indeed supported by geographical conditions that make Bandung suitable as a region of processing industry, the manufacturing sector is the main contributor in the economy (PDRB) Bandung regency.

While for West Bandung Regency, based on analysis of Klassen Tipology and Location Quotient (LQ) it is known that in West Bandung regency sector that enter quadrant I advanced and fast growing sector and LQ value more than one there are 3 sectors, that is covering sector of Provision of Accommodation and Eating and drinking; Real Estate, and Electricity and Gas Procurement sector.

Policymakers must be right in making decisions. Identification of investment priorities within these potential sectors and implementation of a comprehensive regional development policy plan would definitely accelerate the economic growth of Banyuwangi (M. Khusaini, 2015). And Zizi Goschin (2014) the results from the shift-share analysis suggest that the developed regions can recover more easily from the crisis, due to their economic potential, and the regional disparities are likely to deepen unless appropriate regional policies are enforced.

In the future, the development of Metropolitan Bandung Raya as Metropolitan Modern is based on urban tourism, creative industry, and science, technology, and art. Where the focus of development is (i) Bandung is defined as the core city with its main activities are trade and services sector, creative and high tech industries, and tourism. (ii) Kota Cimahi as the core city with its main activities is trade and services sector, creative and high technology industries. (iii) Bandung Regency with its main activities is the development of non-polutif industrial sector, agriculture and plantation. (iv) Regency of West Bandung main activity is non-polutif industrial sector, agriculture,

creative industry and high technology. And (v) Sumedang Regency is equipped with supporting facilities and centers of higher education in Jatianangor, agribusiness, and non-qualified areas.

## 4 CONCLUSIONS

The economic activities within which there are excellent sectors are highly dependent on the characteristics of the region apart from the potential of its natural and human resources. The city of Bandung and Cimahi City are very prominent in the information and communication sector, Bandung regency has the processing industry as the leading sector, and West Bandung Regency has the leading sector in the field of accommodation and drinking. There is one sector that has the same superior in the four areas in Bandung Raya area is the education services sector. And the districts / cities that have economic growth and GRDP per capita is higher than the growth rate and GRDP per capita of West Java Province is located in the first quadrant is the city of Bandung and Kota Cimahi

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