ANALYSIS OF THE ECONOMIC PERFORMANCE
IN SITUBONDO REGENCY (2009 – 2013)

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ABSTRACT

By using secondary data from Gross Regional Domestic Product (GRDP) of Situbondo Regency and East Java Province in 2009 to 2013 based on constant price obtained from Central Bureau of Statistics (BPS) and *Location Quotient* Analysis and *Shift Share*, this study is aimed to analyze the economic performance in Situbondo Regency in 2009 to 2013. The results of the analysis using the method of *Location Quotient* (LQ), two sectors that are included in the basic sector (LQ> 1) of Situbondo Regency are the agriculture and trade sectors, hotels and restaurants. Whereas the results of the calculations using *shift share* analysis show three sectors that are categorized in the competitive sectors, including agriculture, manufacturing and services sectors. All three sectors indicate a faster growth than the same economic sectors in East Java province. Thus, they have a high competitiveness and the potential to be developed to encourage the economic growth in Situbondo Regency.

Keywords: *Economic Growth, Analysis Location Quotient and Shift Share*

A. INTRODUCTION

Regional development is a sub-system and a inseparable part of the national development. One benchmark of the region's economic development is the existence of regional economic growth. The main purpose of an effort to boost economic growth in the region is the need to know first or potential resources in an area that can be expected to develop optimally. The main determinants of the economic growth of a region is also directly related to the demand for goods and services from outside the region (Arsyad, 2002). One of the economic indicators needed to measure the performance of the economic growth of a region is the Gross Domestic Product (GRDP).

GRDP is an important indicator in a region which can indicate the totality of the net production of goods/services which can then be used as a basis for planning and evaluating the regional development. In addition to that of economic growth, there is yet unknown sector of the economy that has the potential of competitiveness and base sector.

Without identifying any sectors that could potentially have basis and competitive competitiveness, the advantages are difficult to develop. The writer attempts to acknowledge the potential as well as the identification of regional economic sectors as guidelines in formulating the planning and executing the development to boost economic growth in the era of regional autonomy in Situbondo Regency.

B. LITERATURE REVIEW

Theories of Economic Development

Economic development is related to income per capita and national income. Income per capita is the average income of population in a region whereas national income is the production rate of goods and services created for an economic in a year period. The increase of income per capita and national income throughout periods can be used to understand economic growth rate and also to acknowledge the development of welfare of a population at certain region. The definition of economic development is a process that causes income per capita of a population in certain community to increase at long-term period.

Theories of Local Economic Development

Local economic development is a process where the local government and the population must manage the existing resources and establish a partnership between local government and private sector to create new employment and to stimulate the development of economic activity (economic growth) in certain region (Arsyad, 1999). Local economic development is a process-oriented. It is a process which involves the establishment of new institution, the development of alternative industry, and the improvement of worker capacity to manufacture better product, to identify new market and to create knowledge transformation (Adisasmita, 2005).

Theories of Economic Growth

Theories of economic growth can be defined as the explanation about factors that determine the increase of output per capita at long-term period, and the explanation about how factors are to be such in the growth process (Boediono, 1999). According to Kuznets in M.L. Jhingan (2002), economic growth is an increase of the ability of a nation (a region) to provide economic goods for the population. It can be manifested with the perpetual increase of national output along with the technological advance and the conformance of organization, attitude and ideology.

Economic Base Theory

Economic base analysis is concerning with the identification of base income (Richardson, 1977). Large number of base activities in a region may increase income flow to this region which then increases the request for goods and services in the region, which in turn, leads to the increase of the volume of non-

base activities. Economic base theory asserts that economic growth rate of a region is determined by the increase of export in the region. Industrial growth with local resources, including workers and exported raw materials, will help the production of local wealth and the creation of job opportunity (Arsyad, 1999). This assumption declares that a region has a leading sector if a region can win the competition of a sector against other sector such that it can produce export.

To analyze economic base of a region, a technique that is usually used is *Location Quotient*. Indeed, *Location Quotient* is used to understand how big specialization rate is base sectors or leading sectors. In LQ Technique, various variables (factors) are used as the indicators of regional growth, for instance, job opportunity (workers) and Gross Regional Domestic Product (PDRB) of a region.

Gross Regional Domestic Product (PDRB)

The definition of PDRB, according to Statistic Central Bureau (2004), is the sum of value-addeds produced for all business regions in a certain region or representing the sum of all rates of final goods and services produced by all economic units in a certain region.

C. METHOD OF RESEARCH

This study uses secondary data that is Gross Regional Domestic Product (PDRB) of Situbondo Regency and East Java province from 2009 to 2013 on constant price obtained from BPS (Central Bureau of Statistics) . The method of this study are *Location Quotient Analysis and Shift Share*.

Location Quotient

Location Quotient is a method to calculate the relative comparison between the value-added contribution of a sector in a region (City/Regency) and that of similar sector in province or national scale. This technique is used to identify the internal potential owned by a region by dividing the region into two sectors, mainly base sector and non-base sector.

The calculation of LQ is using a formulation as follow:

$$LQ = \frac{yi/yt}{Yi/Yt}$$

Note:

LQ = *Location Quotient* Rate

yi = GRDP at Sector i in Situbondo Regency

yt = Total GRDP in Situbondo Regency

Yi = GRDP at Sector i in East Java province

Yt = Total GRDP in East Java province

Based on the calculation, LQ can be analyzed and concluded as following:

a. If LQ is bigger than one (LQ > 1), it is a base sector, potential for export, and more specialized on city/regency level than province level.
b. If LQ is smaller than one (LQ < 1), it is a non-base sector, and less specialized on city/regency level than province level.
c. If LQ equals to one (LQ = 1), the specialization on regency level is similar to province level.

Shift Share Analysis

Shift Share Analysis is a technique that is very useful in analyzing the change of local economic structure in comparison with national economic. This analysis is aimed to determine the performance or the work productivity of local economic in a certain region by comparing it with another region that is bigger.

The general form of the shift share analysis equation and its components are as follows :

Dij = Nij + Mij + Cij

Where :
i = Economic sectors studied (9 sectors).
j = Variable regions studied (Situbondo Regency).
n = Variable region of East Java province.
Dij = i sector changes in Situbondo Regency.
Nij = National growth sector i in Situbondo Regency.
Mij = Industry mix sector i in Situbondo Regency.
Cij = Advantage competitive sector i in Situbondo Regency

In this research regional variables used is GRDP denoted as (E). equation (1) above can be searched with this formulation as follows :

Dij = E*ij – Eij
Nij = Eij (rn)
Mij = Eij (rin-rn)
Cij = Eij (rij - rin)

Where :
Eij = GRDP sector i in Situbondo Regency early period analysis.
E*ij = GRDP sector i in Situbondo Regency late period analysis.
rij = growth rate sector i in Situbondo Regency.
rin = growth rate sector i in East Java province.
rn = average of growth rate GRDP in East Java province.

The average of growth rate GRDP in East Java province (rn) can be defined as follows

$$rij = \frac{E * ij - Eij}{Eij}$$
$$rin = \frac{E * in - Ein}{Ein}$$
$$rn = \frac{E * n - En}{En}$$

Where :
Ein = GRDP sector i in East Java province early period analysis.
E*in = GRDP sector i in East Java province late period analysis.
En = Total GRDP all sectors in East Java province.
E*n = Total GRDP all sectors in East Java province late period analysis.

Furthermore, regional economic growth of the proportional component shift (Pj) and differential shift (Dj) is used to see the changes in the growth of an activity in the study area to the activity in the reference area. While the provincial share (Ps) to see changes in the growth of an activity in the reference area to the total GRDP activity in the reference area.

In the case of Pj > 0, Situbondo Regency is more specialized on a sector that grows faster in province level. In the case of Pj < 0, Situbondo Regency is more specialized on a sector that grows slower in province level.

In the case of Dj > 0, the growth of sector i in Situbondo Regency is faster than similar sector in East Java province, and in the case of Dj < 0, the growth of sector i in Situbondo Regency is relatively slower than similar sector in East Java province.

D. RESULT AND DISCUSSION

Analysis *Location Quotient*

LQ analysis is used to determine which economic sectors belong to base or export potential and which are included in not base sector. This can be seen if LQ figures show more than one (LQ > 1), it means the sector is a sector basis. Then, if the results show less than 1 (LQ <1) it means that the sector is not a sector basis. The result of the calculation Location Quotient (LQ) of Situbondo Regency for 5 years (2009-2013) can be seen from the following table 1 calculation:

Table 1: **Calculation of LQ**

Sectors	Years					Average
	2009	2010	2011	2012	2013	
Agriculture	2,12	2,18	2,19	2,19	2,21	2,18
Mining	0,91	0,90	0,88	0,89	0,88	0,89
Manufacturing Industry	0,39	0,40	0,40	0,41	0,40	0,40
Electricity & Water Supply	0,69	0,66	0,66	0,66	0,66	0,66

Construction	0,91	0,90	0,88	0,89	0,86	0,89
Trade, Hotels & Restaurants	1,12	1,11	1,11	1,12	1,10	1,11
Transportation & Communication	072	0,69	0,68	0,67	0,63	0,68
Banking & Others Financial Intermediaries	0,06	0,64	0,65	0,66	0,61	0,52
Services	0,95	0,95	0,97	1,01	1,00	0,98

Source : BPS – Statistics Of Situbondo Regency 2009-2013 (processed)

The table shows the average value of LQ. What is meant by LQ average value is the average value of LQ sector i during the observation period 2009-2013. Results LQ average value is used to avoid bias annual value LQ sector, so the LQ average value is used to calculate the value of LQ sector.

From the table above, it can be seen that the LQ Situbondo district has two basic sectors, the sector that are agriculture sector and trade, hotels & restaurant sectors with the calculation of 2,176 in the sector of agriculture, 1,11 in the sectors of trade, hotels & Restaurant. Situbondo district is known for its agricultural sector. Besides, Situbondo Regency is located in the middle of transportation path of the Java-Bali, making Situbondo available for many resting places such as hotels, guest houses and so on for the tourists as well as restaurants.

The sectors that were not a sector basis during the 2009-2013 period were six sectors namely: mining sector with average value amount 0,89, manufacturing industry 0,399, electricity & water supply 0,664, construction 0,887, transportation & communication 0,678 and banking & others financial intermediaries 0,520.

Shift Share Analysis

Shift share analysis is a very useful technique to analyze changes in the economic structure area compared to the national economy. This analysis aims to determine the performance or productivity of the competitive sector that has the potential competitiveness of the region economy by comparing it with the greater area. The Shift Share Analysis is also used to determine the growth of economic process an area with important variables such as employment, population and income. This study used the income variable, namely the GRDP to describe the total growth of Situbondo Regency. GRDP growth (G) can be decomposed into the component shift and share components, namely:

a. Components of the National Share (Ns) is the number of increasing GRDP of Situbondo Regency if growth is equal to the rate of GRDP growth in East Java province during the study period.
b. Components Shift Proportional (Pj), measures the net amount of Situbondo shift caused by the composition of the GRDP sectors Situbondo changed. If Pj > 0, it means Situbondo specializes in sectors that, at the level of East Java Province, grew relatively rapidly and if Pj < 0, it means Situbondo specializes in sectors which show slower growth or declining in East Java province level.

c. Components Differential Shift (Dj), measure the net shift caused by sectors of specific industry growing faster or slower in Situbondo compared to East Java province caused by locational internal factors, such as the resource that will either have Differential Shift positive Component (Dj> 0), or if it locational disadvantage would have a negative Component Shift Differential (Dj < 0).

The result of the calculation of shift-share analysis are showed in table 2 below. The table shows the results of analysis of provincial share (PS), proportional shift (Pj), differential shift (Dj) and the total value of ΔG.

Table 2: **Result of *Shift Share* Analysis of Situbondo Regency**

Sectors	National Share	Proportional Shift	Differential Shift	Total G
Agriculture	332,701.24	-220,754.93	54,604.58	166,550.89
Mining	21,162.15	-5,511.39	-6,827.80	8,822.96
Manufacturing Industry	101,424.56	-20,299.08	15,163.72	96,289.19
Electricity & Water Supply	9,118.12	-1,359.61	-680.95	7,077.56
Construction	29,908.11	5,488.92	-9,199.81	26,197.22
Trade, Hotels &Restaurants	340,023.82	150,913.16	-30,727.31	460,209.68
Transportation & Communication	51,675.41	31,056.29	-32,299.86	50,431.84
Banking & Others Financial Intermediaries	35,837.99	5,350.75	-3,979.38	37,209.36
Services	87,714.30	-26,053.57	18,658.73	80,319.46

Source : BPS – Statistics Of Situbondo Regency 2009-2013 (processed)

Based on the analysis in table 4.3, the value of proportional shift (Pj) are positive and some are negative. If it shows a positive value, it means that Situbondo economy specializes in the same sector that is growing rapidly in East Java provincial level. Meanwhile, if the value of (Pj) is negative then it means that the economy Situbondo specializes in the same slow growing sector of East Java provincial level.

Sectors which have a value proportional shift (Pj) positive include 1) Construction Sector; 2) Trade, Hotels & Restaurants Sector; 3) Transportation & Communication Sector; and 4) Banking & Others Financial intermediaries Sector. Meanwhile, the sectors that have a value proportional shift (Pj) negative include 1) Agriculture Sector; 2) Mining Sector; 3) Manufacturing Sector; 4) Electricity & Water Supply; and 5) Services Sector. the value differential shift (Dj) sectors of the economy in Situbondo during the study period in the year 2009 to 2013 showed positive and negative results. If positive, it means that sector in Situbondo is growing faster than the same sector in East Java province level. Meanwhile, if the value of (Dj) is negative, it means that the sector is growing more slowly than the same sector in East Java province level. Sectors that have the value differential shift (Dj) positive in Situbondo include 1) Agriculture Sector; 2) Manufacturing Industry Sector; and 3) Services Sector. However, the economy in Situbondo

district which has a value differential shift (Dj) negative includes 1) Mining Sector; 2) Electricity & Water Supply Sector; 3) Construction Sector; 4) Trade, Hotels & Restaurants Sector; 5) Transportation & Communication Sector; and 6) Banking & Others Financial intermediaries Sector.

E. CONCLUSION AND RECOMMENDATION

Conclusion

According to the results and discussion of this study, the writer makes conclusions about the economic performance in Situbondo Regency 2009 – 2013. They are:

1. The result of LQ analysis indicates that the agriculture sector and trade, hotel and restaurant sectors are base sectors. Agriculture sector and trade, hotel & restaurant are the biggest contributor to the GRDP growth of Situbondo Regency. It means that, both sectors can fulfill the needs in their region and either goods or services of the sectors can be exported to other regions. Moreover, they also can potentially boost economic growth in the area of Situbondo Regency, because it has more than one LQ value.

2. The result of *shift share* shows that there are some sectors with competitive advantages. There are agriculture, manufacturing and services sectors. Those sectors have the positive value of differential shift so they are potential to be developed as a supporting economic growth in Situbondo Regency.

Recommendation

Based on the conclusion and the discussion above, the authors suggest a few things to the related parties namely:

1. Government of Situbondo Regency needs to establish development policies with the priorities of the leading sectors or basis sectors with some consideration and attention to the non base sectors proportionally due to the increasing role of the non base sectors with the expectation that the sector can grow into a base sectors and in the end all economic sectors can jointly support the potential for the economic growth in Situbondo Regency.
2. Revitalizing of all sectors is needed starting from base sector and non base sector. Besides, productivity and professionalism in managing the potential sectors should be developed in order to have a competitive advantage to increase the revenue in the area either district or province.
3. The investors who want to invest in Situbondo Regency can use the result of this research as a guide in determining which sectors have the potential to be developed.

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