

DYNAMICS IN BONDOWOSO REGENCY, INDONESIA

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ABSTRACT

The success of development process is determined by integration and synchronization between sector and region which require the similarity in vision. Bondowoso is one of regencies in East Java with one mission that is to increase utilization of agribusiness-based potential economy resource that is continuously competitive and independent. So it is required economic corridor development, especially the efforts to tackle poverty in Bondowoso regency.

The aim of the study was a) to identify the typology of economic growth of the regency; b) to identify sectoral displacement and the determination of leading sector in Bondowoso area; c) to identify investment attractiveness; d) to formulate the development of area economy corridor. The method of analysis used in this research is descriptive quantitative and qualitative method. This research uses descriptive analysis and some eclectic approaches that is Williamson's Index, Klassen Typology, Esteban-Marquillas Shift Share analysis, Static Location Quotient (SLQ), Dynamic Location Quotient (DLQ), and Analytical Hierarchy Process (AHP).

The results show that sectorally the agricultural sector is still the leading sector in Bondowoso regency. As the perception results of policy makers on investment attractiveness in Bondowoso, infrastructure aspect is the priority factor followed by economy aspect, labor aspect, social and political aspect and institutional aspect. The direction of economic corridor development in Bondowoso regency is based on the superior potential of each region and interregional relation. The distribution of economic corridor in central area of Bondowoso is more dominant in the trade sector development in line with the development of urban area. Southern and northern corridors have a core activity in manufacturing sector on the basis of the agricultural sector. And the eastern and western corridor are the development of agricultural sector, the development of geothermal energy and tourism due to passed by two mountainous areas, Hyang mountain range in western area and Raung mountain range in western area.

Keywords: Mapping, Growth, Economic Corridor, Poverty



Full Text Paper

INTRODUCTION

The success of development process in achieving the goals is determined by the integration and synchronization between sectors and regions within a country. The integration requires the similarity in vision, and there is no overlap in development programs between a region and other regions. Therefore, the existence of economic development planning can be considered as planning to improve the use of available public resources in a region and economic development of a region.

Equipped with the regulation of regional autonomy, Law No. 32/2004 on Local Government mandates clearly that there is local government authority in the development and management of the area independently and efficiently as well as facing problems for the welfare of society. At this meeting point, it is reasonable to issue policies and strategies of Local Government in developing its regional capacity in accordance with the potential and the regional capacity to be able to have a strong regional competitiveness. The pattern of development and management of the area also covers the development of strategic and integrated spatial region. The implementation of a regional autonomy provides motivation among regions in actualizing themselves as areas that have high economic growth through the development of local economic potential with the resource-based owned by the region as well as and taking advantage of opportunities for the purpose of improving the community welfare.

Indications of economic development in a region can be seen from the economic growth and equitable distribution of development and its impact on the support sectors from upstream to downstream in the economic institutional arrangement and conducive environment for the balance and sustainability in the future. Dynamic of changes in the economic structure is in line with global developments made by developing resources more effectively, so that they have not only comparative but also competitive advantages. Economic development is reflected in the high economic structural transformation such as the shift in economic structure from agriculture to non-agricultural sectors and high social

and ideological transformation, that is, the change in attitudes, institutional arrangement and ideology (Todaro, 2000).

Bondowoso Regency is one of regencies in East Java province which is geographically and demographically has significant potential in the economic development of the region. The *Long-term Regional Development Planning* (RPJPD) mentions that the development vision of Bondowoso Regency 2005-2025 is to realize Bondowoso Regency as an Advanced, Religious, Equitable and Prosperous Agribusiness region. One of the Development Missions is to improve the utilization of the economic resource potential on the basis of highly competitive and sustainably self-sufficient agribusiness. However, on the other hand, in the pattern of economic development, Bondowoso Regency still faces some major problems: 1) the issue of regional poverty; 2) low fiscal capacity; 3) The low quality of education; and 4) the geographical position of the region which is not passed by the main northern and southern coastal highway.

Based on the potential and the problems faced by Bondowoso Regency in economic development, this research aimed to a) identify the typology of economic growth of Bondowoso Regency; b) identify sectoral shifts and the determination of the leading sectors in the area of Bondowoso Regency; c) identify investment attractiveness; d) formulate a regional economic corridor development.

LITERATURE REVIEW

The theory of regional economic growth is one of the most important parts in regional economic analysis. This is because growth is one key element in economic development and has fairly clear policy implications. The main goal of this regional economic growth analysis is to explain why a region can grow quickly and another grows slowly. Besides, the analysis of regional economic growth may explain why there is imbalance in the economic development between one region and others (Sjafrizal, 2008: 85).

The term economic growth in general is often associated with the economic development and progress which is available in developed countries,

where the economic structure has been industrialized and does not undergo structural changes. Economic development is related to economic development and progress in developing countries undergoing the process of structural change from retardation to the direction of progress and modernization. Meanwhile, the economic growth is defined as the increase in Gross Domestic Product (GDP) regardless of whether the increase is larger or smaller than the rate of population growth and whether there is a change in the economic structure and social structure of society and institution.

Long-term economic development with GDP or national income will bring about basic changes in the economic structure from traditional economy with agriculture as the primary sector to the modern sector which is dominated by non-primary sectors, especially manufacturing industry with dynamic *increasing return to scale* as the major motor driving economic growth.

Changes in the economic structure in development process have been realized by economists, even not only changes in economic structure. The structure of rural community turns towards urban community and industry (Kuncoro, 1997: 60). Changes in the economic structure can be defined as a set of changes linked to one another needed to support a process of development and sustainable economic growth. Changes in the role of economic sector in national income are caused by three factors (Tambunan, 2001: 59):

- a) The law of Engels; the higher income due to sustainable development will increase the consumption of industrial goods, and the consumption of agricultural products is relatively fixed;
- b) The changes in the structure of industrial production that is continuously compulsory and inductive. Compulsory means as a result of technology used continuously will enhance the productivity of economic activities and expand market and trading activities. Inductive means the advancement in create new industrial products that add alternative choices for industrial goods consumed or by technology industrial sector has diversification of industrial products;

- c) The emergence of comparative advantages in the agricultural sector products for developing countries, while developed countries have comparative advantages on the industry sector products.

METHODOLOGY

Types and Sources of Data

This research used descriptive qualitative and quantitative analysis. The type of data used was secondary data time series for the period 2007-2011 for all districts in Bondowoso Regency. The data were obtained from the relevant agencies such as Central Bureau of Statistics (BPS) and Regional Development Planning Board of Bondowoso Regency.

Method of Data Analysis

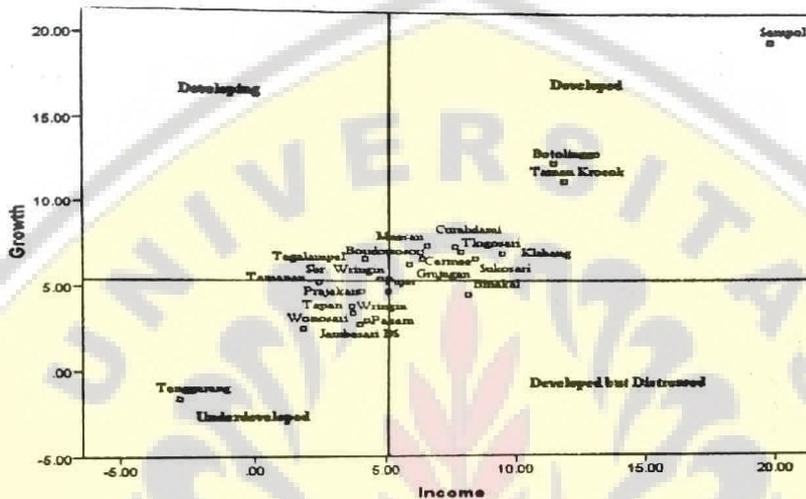
This research used descriptive analysis and some eclectic approaches such as Williamson index, Klassen typology, shift share analysis, static location quotient (SLQ) and dynamic location quotient (DLQ) and Analytical Hierarchy Process (AHP). The methods of analysis were used to provide a description of the regional typology of Bondowoso Regency, sectoral shifts, the determination of leading sectors, decisive investment attractiveness determinants and regional economic development corridor.

RESULTS AND DISCUSSION

Regional Typology

Spatially, disparities between districts in Bondowoso Regency have a Williamson index value of 0.20 which is included in the classification of regions with low disparities. It means that the equalization of development process has been running quite well even though there are some areas that still need policies in developing the region more intensively.

Some areas which are included in the classification of developed areas are, Districts of Sempol, Botolinggo, Taman Krocok, Curahdami, Tlogosari, Klabang, Sukosari, Maesan, Bondowoso, Grujugan, and Cermee. The area which is categorized as developed but distressed area is District of Binakal. Furthermore, the areas included in the category of rapidly developing areas are Tegallampel and Sumberwringin. The areas which are included in relatively underdeveloped areas are Pujer, Tamanan, Wringin, Prajekan, Pakem, Tapen, Wonosari, Jambesari DS, Tenggarang.



Source: Central Bureau of Statistics, Processed
Figure 4.1 Klassen Typology of Districts in Bondowoso Regency

The phenomenon that occurs in the regional typology in the area of Bondowoso Regency shows the poor connectivity or interactions of economic activities between regions, such as Bondowoso Town as an undeveloped area, which is not yet integrated with District of Tenggarang that is relatively underdeveloped although those areas are geographically close. Therefore, the policy in regional planning, especially the development of disadvantaged areas, needs to consider the connectivity between geographically adjacent regions which have similar characteristics either economically, socially or culturally.

Sectoral Shifts

The contribution of economic sectors in economic growth of Bondowoso Regency is determined by the sector allocation effect in the economy. Allocation effect is the component in shif-share that shows the sector specialization of each region to gain competitive advantages. The larger the value of the allocation effect, the better the local revenues are distributed among economic sectors with the advantages owned.

Table1. The Allocation Effect of Primary Sector in Bondowoso Regency

District	Agriculture	Mining & Quarrying
Maesan	CD-SPECIALIZED	CD-NOTSPECIALIZED
Grujugan	CD-NOTSPECIALIZED	CD-NOTSPECIALIZED
Tamanan	CA-NOTSPECIALIZED	CA-SPECIALIZED
Jambesari DS	CA-SPECIALIZED	CA-SPECIALIZED
Pujer	CD-SPECIALIZED	CA-NOTSPECIALIZED
Tlogosari	CA-SPECIALIZED	CD-SPECIALIZED
Sukosari	CA-SPECIALIZED	CD-SPECIALIZED
Sbr. Wringin	CA-SPECIALIZED	CD-SPECIALIZED
Tapen	CD-SPECIALIZED	CA-NOTSPECIALIZED
Wonosari	CD-NOTSPECIALIZED	CA-NOTSPECIALIZED
Tenggarang	CD-NOTSPECIALIZED	CA-NOTSPECIALIZED
Bondowoso	CD-NOTSPECIALIZED	CA-NOTSPECIALIZED
Curahdami	CA-SPECIALIZED	CA-NOTSPECIALIZED
Binakal	CD-SPECIALIZED	CA-NOTSPECIALIZED
Pakem	CD-SPECIALIZED	CA-NOTSPECIALIZED
wringin	CD-SPECIALIZED	CD-SPECIALIZED
Tegalampel	CD-SPECIALIZED	CD-NOTSPECIALIZED
Taman Krocok	CA-SPECIALIZED	CD-SPECIALIZED
Klabang	CA-SPECIALIZED	CA-NOTSPECIALIZED
Botolinggo	CA-SPECIALIZED	CA-NOTSPECIALIZED
Sempol	CA-SPECIALIZED	CA-NOTSPECIALIZED
Prajekan	CD-SPECIALIZED	CA-NOTSPECIALIZED
Cermee	CD-SPECIALIZED	CA-NOTSPECIALIZED

Source :Central Bureau of Statistics, 2007-2011, Processed

Notes : CA : *Competitive Advantage*; CD : *Competitive Disadvantage*

Some areas that have competitive advantages and are specialized in agricultural sector are Districts of Jambesari DS, Tlogosari, Sukosari, SumberWringin, Curahdami, Taman Krocok, Klabang, Botolinggo and Sempol. Moreover, for the mining and quarrying sector, the areas which have competitive advantages and are specialized are Districts of Tamanan and Jambesari DS.

Table 2. The Allocation Effect of Secondary Sector in Bondowoso Regency

District	Manufacturing	Gas and Water Supply	Construction
Maesan	CA-SPECIALIZED	CD-NOTSPECIALIZED	CA-NOTSPECIALIZED
Grujugan	CA-SPECIALIZED	CD-NOTSPECIALIZED	CA-NOTSPECIALIZED
Tamanan	CD-SPECIALIZED	CD-SPECIALIZED	CA-NOTSPECIALIZED
Jambesari DS	CA-NOTSPECIALIZED	CD-SPECIALIZED	CA-NOTSPECIALIZED
Pujer	CD-NOTSPECIALIZED	CD-SPECIALIZED	CD-SPECIALIZED
Tlogosari	CA-NOTSPECIALIZED	CA-SPECIALIZED	CD-SPECIALIZED
Sukosari	CA-NOTSPECIALIZED	CA-NOTSPECIALIZED	CA-NOTSPECIALIZED
Sbr. Wringin	CA-NOTSPECIALIZED	CD-SPECIALIZED	CD-SPECIALIZED
Tapen	CA-SPECIALIZED	CA-NOTSPECIALIZED	CA-NOTSPECIALIZED
Wonosari	CD-SPECIALIZED	CD-NOTSPECIALIZED	CA-NOTSPECIALIZED
Tenggarang	CD-SPECIALIZED	CA-NOTSPECIALIZED	CA-NOTSPECIALIZED
Bondowoso	CD-SPECIALIZED	CA-NOTSPECIALIZED	CA-SPECIALIZED
Curahdami	CD-NOTSPECIALIZED	CD-SPECIALIZED	CA-SPECIALIZED
Binakal	CA-NOTSPECIALIZED	CA-NOTSPECIALIZED	CA-NOTSPECIALIZED
Pakem	CA-NOTSPECIALIZED	CA-NOTSPECIALIZED	CA-NOTSPECIALIZED
Wringin	CA-SPECIALIZED	CA-SPECIALIZED	CA-NOTSPECIALIZED
Tegalampel	CD-NOTSPECIALIZED	CA-SPECIALIZED	CA-NOTSPECIALIZED
Taman Krocok	CA-NOTSPECIALIZED	CA-SPECIALIZED	CD-SPECIALIZED
Klabang	CD-SPECIALIZED	CD-SPECIALIZED	CA-NOTSPECIALIZED
Botolinggo	CD-NOTSPECIALIZED	CA-NOTSPECIALIZED	CA-NOTSPECIALIZED
Sempol	CA-NOTSPECIALIZED	CD-SPECIALIZED	CA-NOTSPECIALIZED
Prajejan	CD-SPECIALIZED	CA-NOTSPECIALIZED	CA-NOTSPECIALIZED
Cermee	CA-NOTSPECIALIZED	CD-SPECIALIZED	CA-NOTSPECIALIZED

Source : Central Bureau of Statistics, 2007-2011, Processed

Notes : CA : *Competitive Advantage*; CD : *Competitive Disadvantage*

Areas that have competitive advantages and are specialized in the manufacturing sector are Districts of Maesan, Grujugan, Tapen and Wringin and in electricity, gas and water supply sector are Districts of Tlogosari, Wringin, TegalAmpel and Taman Krocok. Specialized In construction sector are Districts of Bondowoso and Curahdami.

Some Districts which have competitive advantages and are specialized in trade, hotel and restaurant sector are Districts of Bondowoso and Wonosari. This is in line with the increasing development of the town which starts to experience a shift to the tertiary or modern sector. Specialized in transportation and communications sector are Districts of Bondowoso and Klabang. The district specialized in Financial, leasing and business services sector is District Wonosari and In service sector is District of Bondowoso.

Table 3. The Allocation Effect of Tertiary Sector in Bondowoso Regency

District	Trade Hotels and Restaurants	Transportation & Communication	Finance, Real Estate & Business Services	Services
Maesan	CD-SPECIALIZED	CA-NOTSPECIALIZED	CD-NOTSPECIALIZED	CA-NOTSPECIALIZED
Grujugan	CD-SPECIALIZED	CA-NOTSPECIALIZED	CD-SPECIALIZED	CA-NOTSPECIALIZED
Tamanan	CD-SPECIALIZED	CD-SPECIALIZED	CD-SPECIALIZED	CD-NOTSPECIALIZED
Jambesari DS	CA-NOTSPECIALIZED	CA-NOTSPECIALIZED	CD-NOTSPECIALIZED	CD-NOTSPECIALIZED
Pujer	CD-SPECIALIZED	CA-NOTSPECIALIZED	CD-NOTSPECIALIZED	CD-NOTSPECIALIZED
Tlogosari	CD-SPECIALIZED	CD-SPECIALIZED	CD-SPECIALIZED	CD-NOTSPECIALIZED
Sukosari	CA-NOTSPECIALIZED	CA-NOTSPECIALIZED	CD-NOTSPECIALIZED	CD-NOTSPECIALIZED
Sbr. Wringin	CA-NOTSPECIALIZED	CD-NOTSPECIALIZED	CD-SPECIALIZED	CD-SPECIALIZED
Tapen	CA-NOTSPECIALIZED	CD-SPECIALIZED	CD-NOTSPECIALIZED	CD-NOTSPECIALIZED
Wonosari	CA-SPECIALIZED	CD-SPECIALIZED	CA-SPECIALIZED	CD-SPECIALIZED
Tenggarang	CD-SPECIALIZED	CD-SPECIALIZED	CD-SPECIALIZED	CD-SPECIALIZED
Bondowoso	CA-SPECIALIZED	CA-SPECIALIZED	CA-SPECIALIZED	CA-SPECIALIZED
Curahdami	CD-SPECIALIZED	CA-NOTSPECIALIZED	CD-NOTSPECIALIZED	CD-SPECIALIZED
Binakal	CD-NOTSPECIALIZED	CD-NOTSPECIALIZED	CA-NOTSPECIALIZED	CD-NOTSPECIALIZED
Pakem	CD-NOTSPECIALIZED	CD-NOTSPECIALIZED	CA-NOTSPECIALIZED	CD-NOTSPECIALIZED
Wringin	CD-NOTSPECIALIZED	CD-NOTSPECIALIZED	CA-NOTSPECIALIZED	CA-NOTSPECIALIZED
Tegalampel	CD-NOTSPECIALIZED	CD-NOTSPECIALIZED	CD-NOTSPECIALIZED	CA-NOTSPECIALIZED
Taman Krocok	CD-NOTSPECIALIZED	CD-NOTSPECIALIZED	CD-NOTSPECIALIZED	CD-NOTSPECIALIZED
Klabang	CA-NOTSPECIALIZED	CA-SPECIALIZED	CA-NOTSPECIALIZED	CD-SPECIALIZED
Botolinggo	CA-NOTSPECIALIZED	CD-NOTSPECIALIZED	CA-NOTSPECIALIZED	CD-SPECIALIZED
Sempol	CA-NOTSPECIALIZED	CD-SPECIALIZED	CA-NOTSPECIALIZED	CA-NOTSPECIALIZED
Prajejan	CA-NOTSPECIALIZED	CD-NOTSPECIALIZED	CA-NOTSPECIALIZED	CD-NOTSPECIALIZED
Cermee	CA-NOTSPECIALIZED	CA-NOTSPECIALIZED	CA-NOTSPECIALIZED	CA-NOTSPECIALIZED

Source :Central Bureau of Statistics, 2007-2011, Processed
 Notes : CA : *Competitive Advantage*; CD : *Competitive Disadvantage*

Districts in Bondowoso Regency in overall regional economic growth have positive growth, except Districts of Tenggarang, Pujer, Binakal and Pakem. Meanwhile, in regional share, the smallest district is District of Sempol with a value of IDR 9.496.58 million and the highest is Bondowoso Town with a value of IDR 74.872.20 million. Proportional Shift shows the sectoral distribution of districts toward the sectors growing in Bondowoso Regency which is mostly positive indicating that the economic sectors in districts have a large proportion to the rapidly growing sectors at regency level. Some areas with positive proportion are Districts of Maesan, Grujugan, Tamanan, Pujer, Tlogosari, Wonosari, Tenggarang, Bondowoso and Curahdami. Meanwhile, positive differential shift indicates that in aggregate level, sectors in districts have grown as fast as the

growth at district level. Differential shift also shows that the sector activities in an area are competitive. Some areas with positive differential shift value are Districts of Grujugan, Tamanan, Jambesari DS, Tapen, Bondowoso, Taman Krocok, Klabang, Botolinggo, Sempol and Cermee.

Table 4. Shift-Share Analysis of District Economic Sectors to Bondowoso Regency in 2007-2011 (Million Rupiah)

District	Regional Economic Growth	Regional Share	Proportional Shift	Differential Shift	Regional Shift Effect
Maesan	31,977.58	40,861.62	230.80	(9,114.84)	(8,884.04)
Grujugan	36,565.68	35,654.63	266.93	644.11	911.04
Tamanan	47,097.29	25,232.28	682.72	21,182.28	21,865.01
Jambesari DS	20,780.87	20,473.44	(463.37)	6,776.82	6,313.45
Pujer	(3,779.47)	34,954.29	276.15	(39,009.91)	(38,733.76)
Tlogosari	28,598.91	30,469.61	209.11	(2,079.80)	(1,870.70)
Sukosari	27,881.62	15,713.53	(1,266.95)	13,435.05	12,168.09
Sbr. Wringin	15,402.48	25,105.73	(395.67)	(9,307.58)	(9,703.25)
Tapen	34,936.20	34,630.79	(295.62)	601.03	305.41
Wonosari	32,296.07	36,281.34	565.00	(4,550.27)	(3,985.27)
Tenggarang	(2,812.52)	43,227.07	2,429.98	(48,469.57)	(46,039.59)
Bondowoso	97,615.66	74,872.20	5,960.86	16,782.59	22,743.46
Curahdami	16,250.15	22,921.60	118.89	(6,790.34)	(6,671.46)
Binakal	(9,440.89)	16,651.64	(545.29)	(25,547.24)	(26,092.52)
Pakem	(7,573.29)	20,387.13	(599.00)	(27,361.42)	(27,960.42)
Wringin	8,807.07	35,402.56	(1,198.98)	(25,396.51)	(26,595.49)
Tegalampel	9,552.07	18,507.65	(514.03)	(8,441.54)	(8,955.58)
Taman Krocok	32,272.55	12,514.94	(482.54)	20,240.16	19,757.61
Klabang	48,872.17	15,519.71	(345.18)	33,697.65	33,352.47
Botolinggo	44,215.01	12,921.68	(693.68)	31,987.01	31,293.33
Sempol	45,925.49	9,469.58	(579.06)	37,034.97	36,455.91
Prajekan	14,521.32	30,935.36	(1,402.92)	(15,011.12)	(16,414.04)
Cermee	72,387.36	29,035.20	(1,957.49)	45,309.65	43,352.16

Source :Central Bureau of Statistics, Processed

Leading Sector Mapping

Determination of leading sectors in Bondowoso Regency using analysis tools of static location quotient (SLQ) and dynamic location quotient (DLQ) provided an overview of base industry in a region in producing output for domestic and external demands, which in turn will contribute to regional income and employment. The results of mapping of economic sectors in Bondowoso Regency include 9 (nine) sectors divided into primary, secondary and tertiary sectors. Based on data from 2007 to 2011, mapping of the base economic sector in

Bondowoso Regency incorporates a combination of SLQ and DLQ analysis which gives sector classification into the leading sector if SLQ and DLQ have more than 1 (one), the mainstay leading sector if $DLQ > 1$ and $SLQ < 1$, prospective sector if $SLQ > 1$ and $DLQ < 1$ and less prospective sector if SLQ and DLQ have value of less than 1 (one).

Table 5. Mapping of Primary and Secondary Economic Sector of District in Bondowoso Based on *Static Location Quotient and Dynamic Location Quotient* Analysis in 2007 -2011

District	Agriculture	Mining & Quarrying	Manufacturing	Gas and Water Supply	Construction
Maesan	less prospective	less prospective	leading	less prospective	mainstay
Grujugan	less prospective	less prospective	leading	less prospective	mainstay
Tamanan	mainstay	leading	less prospective	prospective	less prospective
Jambesari DS	prospective	leading	less prospective	prospective	leading
Pujer	prospective	leading	less prospective	prospective	leading
Tlogosari	prospective	prospective	mainstay	leading	prospective
Sukosari	leading	leading	mainstay	less prospective	less prospective
Sbr. Wringin	prospective	leading	less prospective	prospective	leading
Tapen	prospective	mainstay	leading	less prospective	mainstay
Wonosari	less prospective	less prospective	leading	less prospective	mainstay
Tenggarang	mainstay	mainstay	prospective	less prospective	mainstay
Bondowoso	less prospective	mainstay	prospective	less prospective	leading
Curahdami	prospective	less prospective	less prospective	leading	leading
Binakal	prospective	mainstay	leading	less prospective	less prospective
Pakem	prospective	mainstay	prospective	leading	less prospective
Wringin	prospective	prospective	prospective	leading	less prospective
Tegala...pd	prospective	less prospective	less prospective	leading	leading
Taman Krocok	leading	prospective	mainstay	prospective	leading
Klabang	prospective	leading	less prospective	less prospective	less prospective
Botolinggo	leading	mainstay	less prospective	prospective	mainstay
Sempol	leading	mainstay	less prospective	leading	mainstay
Prajejan	prospective	mainstay	prospective	mainstay	less prospective
Cermee	prospective	less prospective	mainstay	prospective	mainstay
Regency	leading	less prospective	mainstay	less prospective	mainstay

Source :Central Bureau of Statistics, Processed

Of the overall results of mapping of the primary economic sectors in Bondowoso Regency, agricultural sector is still the leading, mainstay and prospective sector. The areas with less prospective agricultural sector are Districts of Maesan, Grujugan, Bondowoso and Wonosari where in these regions there has been a sectoral shift to tertiary sector, particularly trade. Mining and quarrying is

the leading sector in DistrictsofTamanan, Jambesari DS, Pujer, Sukosari, SumberWringin and Klabang. For the secondary sector, manufacturing industry is the leading sector in Districts of Maesan, Grujugan, Tapen, Wonosari and Binakal. For electricity, gas and water supply is available in DistrictsofTlogosari, Curahdami, Pakem, Wringin, Tegalampel and Sempol. Construction is the leading sector in Districts of Jambesari DS, SumberWringin, Bondowoso, Curahdami, TegalAmpel and Taman Krocok.

Table 6. Mapping of Tertiary Economic Sector of District in Bondowoso Based on *Static Location Quotient* and *Dynamic Location Quotient* Analysis in 2007 -2011

District	Trade Hotels and Restaurants	Transportation & Communication	Finance, Real Estate & Business Services	Services
Maesan	prospective	mainstay	lessprospective	mainstay
Grujugan	prospective	mainstay	lessprospective	mainstay
Tamanan	prospective	prospective	prospective	lessprospective
Jambesari DS	lessprospective	leading	lessprospective	lessprospective
Pujer	prospective	mainstay	lessprospective	lessprospective
Tlogosari	prospective	lessprospective	prospective	lessprospective
Sukosari	mainstay	lessprospective	lessprospective	lessprospective
Sbr. Wringin	lessprospective	lessprospective	lessprospective	prospective
Tapen	leading	prospective	lessprospective	lessprospective
Wonosari	leading	lessprospective	leading	prospective
Tenggarang	prospective	leading	prospective	prospective
Bondowoso	leading	prospective	leading	prospective
Curahdami	prospective	lessprospective	lessprospective	lessprospective
Binakal	lessprospective	lessprospective	mainstay	lessprospective
Pakem	lessprospective	lessprospective	mainstay	lessprospective
Wringin	lessprospective	lessprospective	lessprospective	lessprospective
Tegalampel	lessprospective	lessprospective	lessprospective	mainstay
Taman Krocok	lessprospective	lessprospective	lessprospective	lessprospective
Klabang	lessprospective	prospective	lessprospective	prospective
Botolinggo	lessprospective	lessprospective	mainstay	lessprospective
Sempol	lessprospective	prospective	lessprospective	lessprospective
Prajekan	lessprospective	lessprospective	lessprospective	lessprospective
Cermee	mainstay	lessprospective	lessprospective	mainstay
Regency	lessprospective	lessprospective	lessprospective	mainstay

Source :Central Bureau of Statistics, Processed

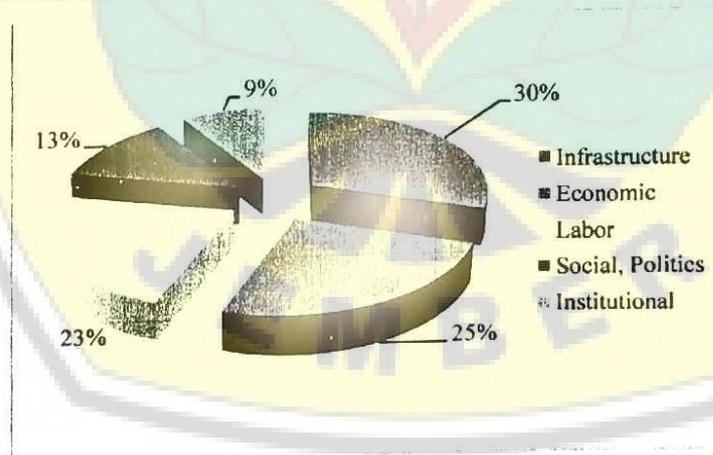
Meanwhile, for tertiary sector, only service sector becomes the mainstay in Bondowoso Regency, especially for tourism sector with cultural and geographical

tourism icon which is famous for domestic and international tourists like natural tourism of Ijen Crater with sulfur mining. Moreover, other tertiary sectors such as trade, hotel and restaurant, transportation and communication, financial and business services are still less prospective to be the leading or mainstay sectors.

Trade, hotel and restaurant sector is the leading sector in Districts of Tapen, Wonosari and Bondowoso. Transport and communication sector is leading in Districts of Jambesari DS and Tenggarang. Financial and business services sector is leading in Districts of Wonosari and Bondowoso. The services sector as the mainstay sector in several districts such as Maesan, Grugugan, Tegal Ampel and Cermee is prospective in Districts of Sumber Wringin, Wonosari, Tenggarang, Bondowoso and Klabang.

Determinants of Investment Attractiveness

Investment as the engine of growth on demand side and as the source of financing is an important factor in regional economic development. Investment is defined as expenditures for the purchasing capital goods to increase production capacity in the economy. The success and continuity of the development of regional investment in creating multiplier effect in the economy cannot be separated from or important determinant factor in establishing more conducive investment climate.



Notes :Consistency index of 0.01
Source: Primary data, processed

Figure 2. First Level Value of Determinants of Regional Investment Attractiveness in Bondowoso Regency

Determinants of investment in Bondowoso Regency cover several aspects, among others, institutional arrangement, social and political conditions, economic conditions, infrastructure and employment. Based on the results of the policy maker's perception in Bondowoso Regency, infrastructure aspect is a priority factor in comparison with other aspects indicated by priority weight value of 30.4%, followed by economic aspect 25.5%, work force aspect 22.9%, social and political aspects 12.7% and institutional aspect 8.5%. This shows that investors or businesses will pay attention to the infrastructure aspect in Bondowoso Regency in rotation of goods and services flow in the economy. The adequate availability of infrastructure which has characteristics of Bondowoso area will create its own stimulus in improving the economic attractiveness of local communities and other communities to invest Bondowoso Regency.



Notes :Consistency index of 0.01

Source: Primary data, processed

Figure 3. Second Level Value of Determinants of Regional Investment Attractiveness in Bondowoso Regency

The availability of adequate infrastructure becomes the major determinant in increasing the attractiveness of investment in Bondowoso Regency. The availability of physical infrastructure includes roads, modes of transportation and other physical infrastructure that aims to support and facilitate business development activities. The availability of physical infrastructure is followed by an increase in the quality of infrastructure with priority weighting of 13.8%.

The Economic aspects are the second priority in determining the attractiveness of investment in Bondowoso Regency. Potential of economic resources owned by Bondowoso Regency becomes the main capital in regional economic development, especially in developing the leading commodities that become the brand image of Bondowoso Regency. This concept is based on the development of leading sectors, which are supported by the development potential of the commodities, the study of the economic structure and regional financial performance. The economic structure instrument discussed is by identifying the market structure in an effort to expand market share both domestically and internationally. Meanwhile, the regional financial instruments include effectiveness and efficiency of the use of regional finance in realizing economic development for the community, especially for the business units that require capital, marketing and promotion aspects.

Another important aspect in building the determinants of investment attractiveness in Bondowoso Regency is labor in terms of the availability of quantity and quality of labor. In terms of quantity, Bondowoso Regency has the advantage of the availability of the quantity of labor, but in terms of quality, the Human Development Index (HDI) of Bondowoso Regency is still low; therefore, it is necessary to improve the quality of human resources through formal and informal education. In keeping the harmonization of work relations, the roles of labor unions, companies, labor and Local Government are the unity of components which are synergetic in improving job optimization and mutually beneficial cooperation, especially in the resolution of labor conflicts including in the determination of District Minimum Wages (UMK).

Another important aspect which also determines the attractiveness of investment is the assurance of the security conditions in supporting the investment. This condition is followed by political, cultural, conditions and legal certainty through Regional Regulations which support and are backed by the capacity of government officials as well as the accessibility of venture capital through financial institutions.

Economic Corridor Development

Determination of economic corridor in Bondowoso Regency is divided into 5 (five) economic corridors which consider the spatial aspects of the area with the excellent potential specialization owned by each corridor and becomes the basis for determining the principal theme in the regional development in each economic corridor. Zoning within each corridor is based on the characteristics of the area, among others, geographic proximity, culture, population and infrastructure in socio-economic mobility and excellent potential. All determining aspects of regional development in intra- or inter-connected corridor are integratively connected to regional connectivity. The directions of economic corridors in Bondowoso Regency are as follows:

1. Economic Corridor of Bondowoso Regency in central part with the growth pole in Bondowoso Downtown and the surrounding regions i.e. Districts of Tegalampel, Curahdami, Tenggarang, Wonosari, and Taman Krocok. Direction of the development of economic corridors emphasizes on primary economic activities, that is, trade, hotel and restaurant services, production of rice and corn and processing industry. The main theme in the development of economic corridors in the central part is "Developing Trade and Services Center with Mainstay Production of Food Crops and Processing Industry".
2. The economic corridor of southern part of Bondowoso Regency with the growth pole in District of Maesan and the surrounding regions i.e. Districts of Tamanan, Grujungan, Jambesari DS and Pujer. Direction of economic corridor development is based on the main economic activity i.e. manufacturing industry and agricultural production. The main theme of economic

development of the southern corridor is "Developing Agricultural Products-Based Manufacturing Industry".

3. Economic Corridor of the eastern part of Bondowoso Regency with the growth pole in District of Sumber Wringin and the surrounding regions i.e. Districts of Sukosari, Tlogosari and Sempol. Direction of the economic development rests on the main economic activity of Production of Coffee Crops and Horticulture, Mining and Tourism. The main theme of the economic development of the eastern corridor is "Developing Agropolitan Region for Crops and Horticulture, Utilization of Geothermal Energy, and Tourism".
4. Economic Corridor of the northern part of Bondowoso Regency with the growth pole in District of Prajekan and the surrounding areas i.e. Districts of Botolinggo, Klabang, Cermee and Tapen. Direction of economic development rests on the main economic activities of agricultural production and processing industry. The main theme of economic development of the northern corridor is "Developing Agricultural Products and Manufacturing Industry".
5. The economic corridor of the western part of Bondowoso Regency with the growth pole in District of Wringin and supporting regions i.e. Districts of Pakem and Binakal. Direction of economic development rests on the main economic activities of production of agricultural products, manufacturing industry, mining and natural gas utilization. The main theme of economic development of the northern corridor is "Developing the Agricultural Products, Manufacturing Industry, Mining and Utilization of Geothermal Energy and Integrated Tourism Resort".

CONCLUSION

Some conclusions of the results of this research are:

1. Spatially, disparities between districts in Bondowoso Regency are low. It means that the equalization of development process has been running quite well even though there are some areas that still need policies in more intensively developing the regions.

2. In aggregate level, economic growth of districts in Bondowoso Regency is positive, except District of Tenggarang. Proportional Shift shows the district sectoral distribution toward the growing sectors in Bondowoso Regency is positive where the agricultural sector is still the leading sector.
3. The aspect of infrastructure is a priority factor in influencing the attractiveness of investment in Bondowoso Regency followed by economic, labor, social and political and institutional aspects.
4. Development of economic corridors in Bondowoso Regency is divided into 5 (five) economic corridors that consider the characteristics of each region i.e. geographical proximity, culture, population and infrastructure availability in socio-economic mobility and excellent potential.

REFERENCES

- Adam, Latief. 1994. *Aplikasi Model Shift Share Analysis di Propinsi Sulawesi Utara: Jurnal Ekonomidan Pembangunan Vol II No.1*. The Indonesian Institutes Of Sciences (PEP I IPI). Jakarta.
- Anwar, Moh. Arsyad. 1987. *Teori Ekonomi Dan Kebijakan Pembangunan*. Dalam Hendra Asmara, Jakarta: PT Gramedia.
- Arsyad, Lincoln. 1999. *Ekonomi Pembangunan*. Yogyakarta: Bagian Penerbitan STIE YKPN.
- BPS.2007-2014. *Bondowoso Dalam Angka*. Kabupaten Bondowoso.
- BPS.2007-2011. *PDRB Kabupaten Bondowoso Menurut Kecamatan*. Kabupaten Bondowoso.
- Kuncoro, Mudrajad. 1997. *Ekonomi Pembangunan Teori, Masalah dan Kebijakan*, Edisi 3 dan 4, Yogyakarta: UPP AMP YKPN.
- Kuncoro, Mudrajad. 2004. *Otonomidaerah dan Pembangunan daerah: Reformasi, perencanaan, strategidan Peluang*. Penerbit Erlangga, Jakarta.
- Peraturan Daerah Kabupaten Bondowoso Nomor 10 Tahun 2010 Tentang Rencana Pembangunan Jangka Panjang Daerah (RPJPD) Kabupaten Bondowoso Tahun 2005-2025.
- Peraturan Daerah Kabupaten Bondowoso Nomor 5 Tahun 2009 Tentang Rencana Pembangunan Jangka Menengah Daerah (RPJMD) Kabupaten Bondowoso Tahun 2009-2013.
- Sjafrizal, 1997. "Pertumbuhan Ekonomidan Ketimpangan Regional Wilayah Indonesia Bagian Barat." *Prisma*, 3 Maret.
- Sjafrizal. 2008. *Ekonomi Regional (Teori dan Aplikasinya)*. Padang. Baduose Media.

- Soepono, Purwo. 1993. *Analisis Shift Share dan Aplikasi: Perkembangan Dan Penerapannya, Jurnal Ekonomi Dan Bisnis Ekonomi Indonesia*, BPFE, Yogyakarta.
- Tambunan, Tulus T.H. 2001. *Industrialisasi Di Negara Sedang Berkembang; Studi Kasus Indonesia*. Jakarta: Ghallak Indonesia.
- Tie kianmie, 1981. *Pembangunan Ekonomi Dan Pemerataan: Beberapa Pendekatan Alternative*. Jakarta LP3ES
- Todaro, M.P. 2000. *Economic Development, Seventh Edition*, New York, Addition Wesley Longman, Inc.

