

A Shift in the Structure of Economy and Synergy of University: Developing Potential through Research and Development Center of SMEs in Jember

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Abstract—Economic growth always correlate positively with the magnitude of the unemployment rate. This is caused by labor which one of important variable to keep growth in the real sector of the region. Meanwhile, the economic structure in districts of Jember showed an increase of economic activity began to shift towards the industrial sector and some other economic sectors, so they have an affects to considerations for policy makers to increase economic growth in Jember as an autonomous region in East Java Province. At the fact, SMEs is among the factors driving economic growth in the region. This is shown by the high amount of SMEs. However, employment in the sector grew slightly slowed. It is caused by a lack of productivity in SMEs. Through the analysis of the transformation of economic structure theory, and the theory of Triple Helix using descriptive analytical method Location Quotient and Shift - Share, found that the results of the economic structure in Jember slowly shifting from the agricultural sector to the industrial sector, because it is dominated by trade sector, hotel and restaurant sector. In addition, SMEs is the potential sector of economic growth in Jember. While to maximizing role and functions of the institution's Research and Development Center of SMEs, there are three points to be known, that are Business Landscape, Business Architecture and Value Added.

Keywords—Economic Growth, SMEs, Labor, Research and Development Center of SMEs.

I. INTRODUCTION

THE economic growth is an economic problem in the long term that become an important phenomenon in the entire country. Because it can describes the ability of a country to give the welfare of society in the country. Ciccone and Jarocinaki [2] explained that positive rate of economic growth in developed countries give a good life for their people. Meanwhile, economic growth is not separated from the problem of important variables that can affect a country's economic fluctuations. In addition, Hakim [3] explains that economic growth is also correlated with structural transformation between sectors. Thus it can be consideration for policy makers to promote economic growth in a country or region that are in the era of autonomy.

Jember is regency in East Java Province, Indonesia had experiencing rapid economic development, it is evident of economic growth rate in 2012 increased to 7.32% higher than economic growth in East Java province that is equal to 7.27% and national GDP 6.22% [4]. Nevertheless, the high rate of

economic growth does not rule out the possibility that there is a high unemployment rate as well. This is because, according to Bary [1] in addition to the factors of production, also have high levels of consumption as a driver of economic influence that led to domestic demand maintained. Based on the Central Statistics Agency (BPS) data in 2012 that the unemployment rate in Jember reach 20% of the total population. While Jember is a region that has a number of micro, small and medium enterprises (SMEs) is large enough that 43% of the number of business units. It means that most people have a livelihood in Jember SMEs sector. It is due to farmland that had been reduced as a result of the high rate of population growth.

In another side, Universities in Jember are another potential variable that can be used as a stimulant to increase economic growth and economic alternatives in resolving issues contained in Jember. In line with Etzkowitz and Leydesdorff [5], [9] that the evolution of the innovation system and the competition should be adopted through the relationship of the university - industry, which is reflected in the institutional arrangements of government relations. This is because the university is a system that provides and fortifies the teaching, research and alignment of science directly to the public. Thus it can provide real impact to the community both in the development of SMEs and human resources available in the region.

The explanation has been described previously calculated by methods Location Quotien (LQ) - Shift Share (SS). In addition, this paper has several goals which saw a shift in the economic structure that occurred in Jember, SMEs influences on employment and college synergize to solve the problems in Jember.

II. STUDY LITERATURE

A. Transformation of Economic Structures

Kuncoro [8] found that the transformation of production structure increase of direction with income per capita, the economy of country will shift from agricultural sector to the industrial sector. Meanwhile, according to Todaro [6] that shift in economic structure of a convergence of theories structural change as well as having a more modern manufacturing sector and the service sector is strong.

B. Characteristics of SMEs

According to Kuncoro [8] SMEs have three characteristics. *First*, there is no clear division of tasks between the areas of administration and operations. *Second*, lack of access to formal

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credit institutions, which in turn tend to rely on equity financing, family or moneylenders. *Third*, most of SMEs does not have the status of legal entity yet. OECD [7] in addition, these SMEs characteristics also need to improve the management capacity of the soft skills to absorb information and technology base.

C. The Concept of Triple Helix

The college in improving SMEs must be get more transform at the economic development sector in the region, although the effects of this transformation have been the subject of an international debate over the main role of universities in technology and knowledge transfer [5], [9], [10]. The emphasize concept of theory that innovation should have natural bottom-up. It means that an innovation should have pull not push. In addition, it is needed a role of Laissez-faire which can do as shock therapy of government intervention.

III. METHOD

This paper is using the methods of Location Quotient and Shift Share to show a shift rate as a measure of potential economic structure in the region, to find out sectors that have an impact on the economy of the research object. The author also combines data from the literature with the results of the interview, in order to find concepts and role of universities in the development of SMEs region through Research and Development Center of SMEs (R&DC SMEs) as an alternative solve to increasing employment opportunities in Jember.

IV. DISCUSSION

A. The Configuration of Economic Structure Development in Jember

Jember is an area that has a potential variety to be developed in the province of East Java, Indonesia. So far, it has developed centers of economic activity that contributes greatly to the economic growth in the region. In addition, the event of organization Jember Fashion Carnival (JFC) is a strong driving force for economic activity in Jember. This is evidenced by the existence of the event can attract investors, both domestic and abroad to help build broader economy such as housing construction, hotels, restaurants, banking services, insurance services, to the economic activity of modern networking, enterprise-scale enterprises medium and large, as well as small-scale productive economic activity.

In line with the Draft Regulation Spatial Plan on 2011-2031 objectives of Jember that will realize the district industries, mining, agribusiness and tourism based by local potential, so it can give to sustainable balance regional development. Thus, it becomes a natural thing when developments in the transition period show there are economic structures in Jember

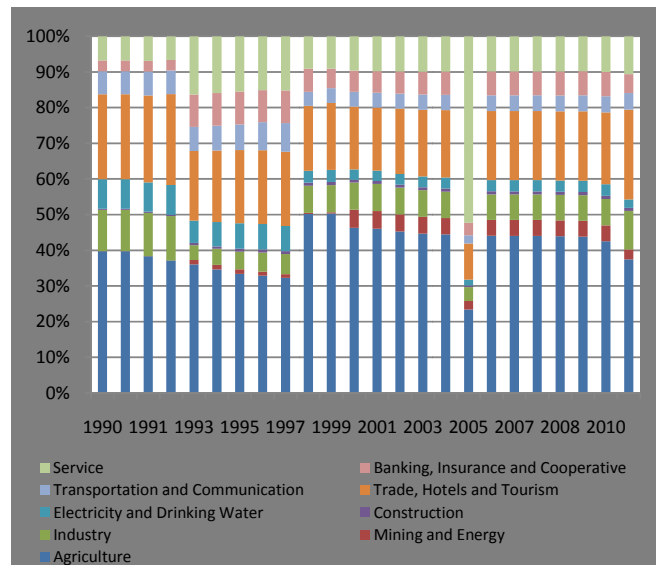


Fig. 1 Distribution of GDP developments Jember [4]

Meanwhile, economic growth in Jember in the last decade indicates that growth in economic activity seen from the increase in the industrial sector in the region. However, by looking at the sectoral distribution of contribution to GDP Jember there is a considerable imbalance in the agricultural sector decreased to 12.86%. Meanwhile, the industrial sector has increased to an average of 3.21%, it is slow growth classified compared to the fluctuations experienced by the agricultural sector. Thus, this indicates that the shift is relatively low and significantly between sectors.

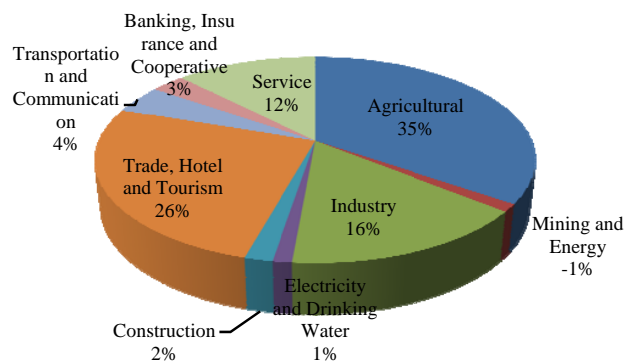


Fig. 2 Shift Share analysis of the economic sectors Jember

Based on the results of shift share analysis is known that the shift of economic structure in Jember not come from the agricultural sector to the industrial sector, but other sectors through which trade sectors, hotels and restaurants with a share of 26%. This is indicates that the development potential in Jember can be made through the sector compared to the industry sector which only gives a share of 16% smaller than the trade sectors, hotels and restaurants.

B. The Synergy of University through Research and Development Center of SMEs

One strategy in the development of the trade sector in Jember is through the development of SMEs located in the area. This is cause based on BPS in 2012 that SMEs in Jember is a potential sector in the completion of the existing unemployment. It is proved that the number of SMEs in Jember has a positive correlation to the level of employment.

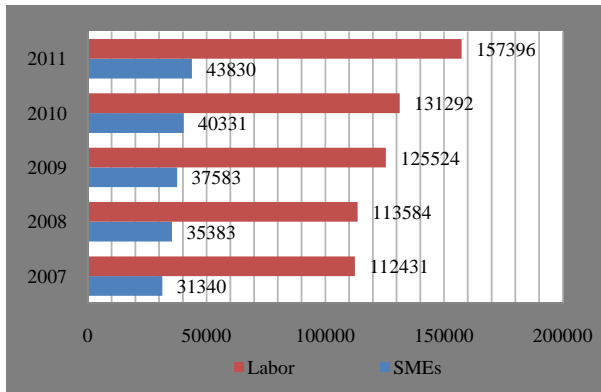


Fig. 3 The development of SMEs and employment in Jember [4]

Meanwhile, it is showed from the stakeholders that can be used as a step in development of SMEs in Jember, so far been relatively minimal. While the implementation agencies that will foster business units are also still often overlap and run independently by the field [8]. Meanwhile, according to Etzkowitz and Leydesdorff [5], [9] in this college can do more in improving the transformation of economic development in an area even though the effects of this transformation have already been the subject of an international debate over the proper role of universities in technology and knowledge transfer.

Research and Development Center of SMEs is a space to developing micro, small, and medium enterprise both in research related to prospects and future problems to business assistance. While college is an institution with the role and strategic position in the achievement of educational goals at the macro level, also can invite stakeholders in supporting the productivity of SMEs that will be the object. So, as the central empowerment and development potential of SMEs, which became the most important thing is how to create a network between companies to maintain the sustainability of the sector.

SME is an important sector in the economy moving. The effects of the lack productivity in sector can affect government policies in Jember through the flow of funds as an incentive for SMEs. In the long run it will have a positive effect to increase of productivity, but in the short term this will have negative effects for the independence of the SMEs. Thus the function of this institution is to minimize excessive government intervention in the sector of the business cycle, then sustainability of trade in Jember can be accomplished.

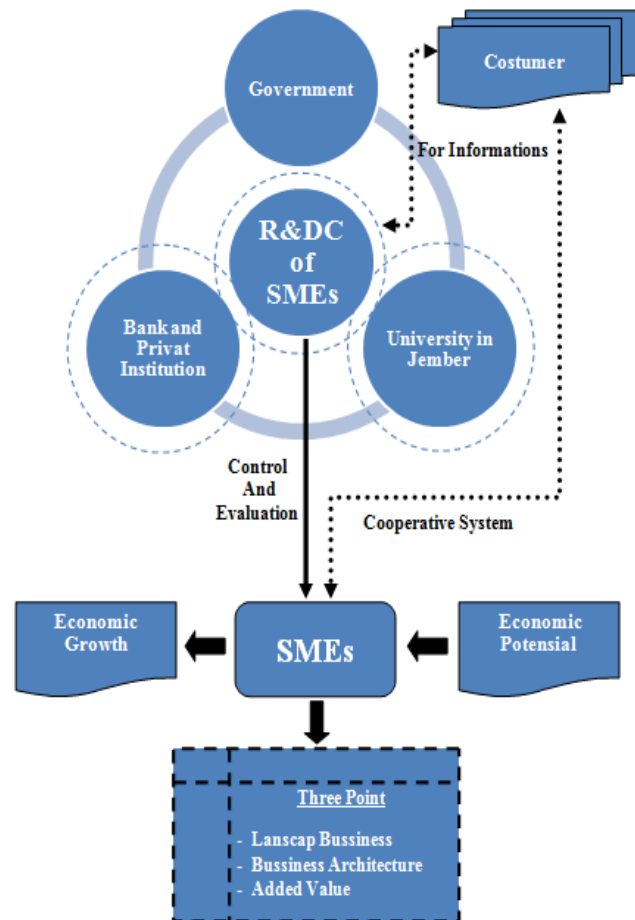


Fig. 4 Scheme of University Synergy through the Research and Development Center of SMEs

On Research and Development Center of SMEs there is several terms that should be considered are (1) Business Landscape that SMEs should be able to analyze future business overview of several factors, including changes in technology, the economic potential of the area, cycle competition, customers and conditions internally. (2) Business Architecture which is a plan to meet customer needs, maintain the market, as well as to attract customers to the business that is being implemented. (3) Value Added is something that needed to be considered in providing and maintaining the flavor of the business that is being elaborated to stakeholders such as body builder (Research and Development Center of SMEs), customers, and sponsorship. Thus, through some of these strategies will provide sustainability for the SMEs market by continuing to perform to the maximum synergy, so that the productivity of SMEs can contribute positively to economic growth in Jember either through intervention or without direct government intervention in the control of the sector.

V. CONCLUSION

Of the various explanations that have been described previously thus it can be concluded that in this paper through

analysis LQ-SS of the economic structure in Jember fairly slow shifting of the agricultural sector to the industrial sector. In this case, a shift of economic structure even greater dominance by trade, hotel and restaurant sectors compared to industry. In addition, the SMEs sector is a potential for economic growth in the period of the study had a positive correlation to the level of employment.

Another conclusion in this paper is that development potential of the region in synergy with SMEs can do college located in Jember through the institution's Research and Development Center of SMEs. Moreover, to maximize the role and function of these institutions, there are three points to be known that are Business Landscape, Business Architecture and Added Value.

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