

**REGIONAL PERSPECTIVE TO BUILD COMPETITIVENESS  
FOR INDONESIAN FISHERY SECTOR IN THE GLOBAL AND  
AUTONOMY REGIME**

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**ABSTRACT**

Indonesia is one of the world's largest exporters of tuna, seaweed, and other fishery products, but the national seafood industry is characterized by high-volume/low-value commodity production. Potential large gains can be made by enhancing the competitiveness and value-added of products. Development policy for fishery industrial development must be adapted to the growth and dynamics of the political, social, economic and regional autonomy demands. This paper discusses some of the region's role in fishery development, decentralization and globally as typology conformity of regions, local resource management, levels of hierarchy and coordination and institutional capacity in the implementation of various efforts towards the development of industry-based inter-regional balance.

**Keywords:** fisheries, regional autonomy, typology suitability, industrial development

**INTRODUCTION**

Nowadays, people live in an era of globalization where there is only one single market. It means countries have to compete with others for the attention and trust of the world's consumers, tourists, and investors. Acknowledging the challenge, Indonesia's President, Joko Widodo, plans to make Indonesia a global maritime axis. In order to be ready for the start of the ASEAN Economic Community (AEC) in early 2016, the Indonesian government decided to strengthen the country's maritime and fisheries sector. Indonesia has great potential in maritime and fisheries as it is the world's largest archipelago and has abundant natural resources.

The FAO State of World Fisheries and Aquaculture report, 2016 states that global total fisheries production (excluding aquatic plants) reached 167.2 million tonnes (Mt) in 2014, with 93.4 Mt from capture and 73.8 Mt from aquaculture. Global total capture fishery production in 2014 was 93.4 Mt, of which 81.5 Mt was from marine waters (a slight increase on the previous years) and 11.9 Mt from inland waters. World aquaculture production continues to grow and now provides half of all fish for human consumption. Excluding fish destined for non-food uses, a milestone was reached in 2014 when, for the first time ever, the world's population consumed more farmed fish than wild-caught fish.

The fisheries and seafood sector constitutes an important pillar of the Indonesian economy through export revenues, income generation, and employment. In 2015, the sector accounted for 3% of GDP and provided employment for 5% of the country's labor force of 113 million, especially in poorer regions with few alternative job opportunities. Indonesia is the fourth biggest aquaculture producing country, following China, India and Vietnam. Aquaculture production in Indonesia reached 6.98 million tonnes in 2015, consist of seaweed (4.3 million t), Milkfish (582,242 t), Tilapia (481,440 t), shrimp (414,014 t), catfish (340,674 t), carp (316,082 t), Pangasius (144,538 t), Gourami (59,401 t), grouper (12,561 t) and other species. The government of Indonesia has set a target to increase the aquaculture production to 9.4 million tonnes in 2016 (MMAF 2016).

Indonesia has been a nascent yet stable democracy and the fourth most populous country in the world. Despite continuous, multi-decade economic growth, approximately 11% of Indonesia's population are living below the poverty line. To lift people out of poverty, the Government of Indonesia (GOI) is promoting economic development projected to average at least 5% per year in order to reduce the poverty rate to below 4% by 2025, as mandated by the Indonesian Constitution, inter alia, that "every person shall have the right to enjoy a good and healthy environment." As global change becomes a reality, Indonesia continues to seek a balance between its current and future development and regional development.

In terms of regional development, territory is an important issue. A territory is a geographical unit with certain limits, where the components of the region functionally interact with each other. Some components such as biophysical region are natural, artificial resources (infrastructure), human and institutional forms. Thus the term territory emphasizes interaction between people with resources in others who are in the boundaries of a particular geographical unit. Therefore the term area (region) is very common, both in social studies and physical.

The diversity in defining the concept of "territory" is due to differences in the problems of the region or regional development objectives faced. In fact, there is no concept of "territory" is

actually widely accepted. Experts tend to let go of differences concept of territory and more focused on issues and objectives of regional development. In Indonesia, the differences were obvious in the use of the term "regional" and "area", where the definition of "region" is generally a territorial unit which has limitations and systems based on the functional aspects, while the definition of "region" is generally a territorial unit which has a limit or a system based on the administrative aspect.

Since the alteration of regional authority law (from law number 32/2009 to 23/2014), when the decentralization process shifted to provincial authority from district authority, they seek various ways to manage their own resources, to increase provincial government revenue (known as PAD, an abbreviation of *Pendapatan Asli Daerah* or Original Regional Revenue) (Rizal, 2016; Rizal, 2017). In the context of the development of the industrial sector in a region, which is spatially oriented strategy and regional is one of the key factors to support the central and local governments in formulating and implementing policy. Both of these are supported by an analysis of the construction industry (Kuncoro, M., 2002). The strategy is based on localization economies and urbanization economies are supported by cross-sectoral engagement both vertical and horizontal linkages (JICA, 2004a; 2004b; Fujita et al 1999; Fujita and Thiesse 2002).

Templates in the formulation of the strategy are the location of the concentration of economic activity and the specialization area. Specialization relatively well with the aggregate area or bilateral and is supported by an analysis of the spatial concentration of sectoral by not rule out the role of the natural advantages of each region (Ellison and Glaeser 1997; 1999; Midelfart-Knarvik et al, 2000).

Ramelan (1998) stated that in the global competition is getting sharper, a country is required to produce outputs efficiently if it is to remain sustainable. The efficiency of the national production can be achieved if the available national resources can be allocated effectively. Therefore, in developing the industrial sector in Indonesia, should be supported by appropriate industrial development strategies.

In the development of national industry during this, the association between variables added value (absorption of labor, wage/salary/incentives, and indirect tax), fixed capital formation (land, buildings, machinery and tools, and vehicles), and the use of energy (oil and gas and electricity), very weak (insignificant). That is, during this "investment figures" that continues to grow and continues to depleted energy resources does not significantly increase the value added: unemployment remains widespread, people's purchasing power remains weak, and the government's fiscal capacity remains weak. One contributing factor is that the pattern of investment and development of energy resources in the development of national industry over

the years, less focused on the expansion, strengthening, and the balance, structural linkages between sectors (industrial linkages) or between regions (inter-regional linkages) in accordance with the spatial pattern basis of domestic resources has.

Directing the focus of development investments to the region-specific fishery and marine sector will drive the overall economic development with a high level of efficiency. Without the focus of such development, a large investment, though, will not be able to provide significant development impacts.

### **THEORETICAL FRAMEWORK**

The development strategy of the Fishery Industry in Indonesia is essentially an industrialization strategy is multi-dimensional and cross-sectoral/regional, intended to ensure the implementation of industrial development in accordance with the vision, mission, and objectives set. This strategy covers various aspects, among others:

First; unity and integrity among government, business, and society. This strategy prioritizes the harmony role in development between government, business, and the wider community, to realize the power of mutually supportive. The construction industry puts businesses and the community as the main actor, while government policy makers and act as a facilitator for the growth and development of the industry.

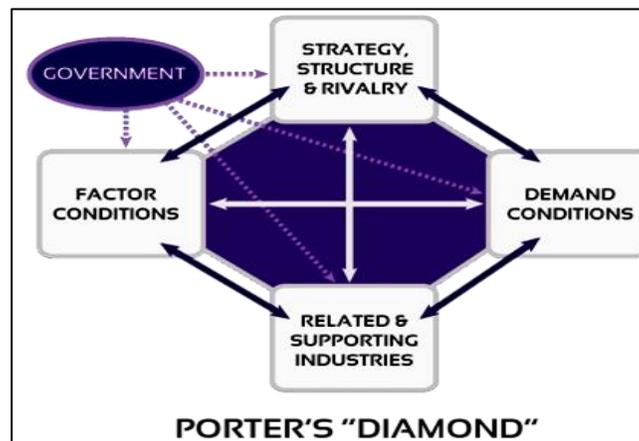
The government's policy includes direction setting of development and creation of business climate/investment conducive in order to provide equal opportunities for people to participate in the development of the industry. While the facilities given by the government include support for businesses and communities that are relatively less able to compete, to protect its interests both as producers, traders, and consumers.

Williamson added that the implementation of the strategy of the integration between government and society, requires increases in efficiency, productivity, professionalism and participation of all actors in the industry, which is driven the realization of coordination, integration, synchronization and simplification in synergy in utilizing existing resources.

Second; increasing role of small and medium industries in the context of economic empowerment. This strategy sought industry structuring, encouraging the development of small and medium industries towards a more balanced structure. In this regard, institutional development in the construction industry should be directed towards increasing the economic power of the people to realize the concern of the government to the people's economy. In addition, the role of the business community and the public, both as traders, producers, and

consumers' needs, also need to get the attention of a more balanced. North (1990) adds that industrial structure, regulation that encourages the growth of small industries require the establishment of a managed market mechanism, in which healthy competition can be guaranteed to those small and medium industries and the wider community can be empowered.

Another strategy proposed by Subiyanto (1997) and Ramelan (1998) which express about the importance of making use of comparative advantages and the creation of competitive advantage in order to face global competition. That view is supported by Kotler (1997; 2000) and Porter (1990). Kotler and Kertajaya stated that the industry's competitive advantage of a nation can be created with an increase in output are accompanied by increased productivity and efficiency (Kotler, P. Kertajaya, H.2000). It can be developed by the government's role to intervene in increased productivity, efficiency, and capabilities of national industry (Porter, M, E.1990). In addition, the government should play a role in improving the competitiveness of national industries in the global market (Kotler et al 1997).



**Picture 1: Porter Diamond Concept (Porter, 1990)**

According Rizal (2017), with the presence of Law No. 23/2014 (revision of Law No. 32/2004) on local government, followed by the national development program on improvement of regional development, changes in the development policy orientation of sectoral development policies under the authority of the central government into a spatially oriented development policy and regional. The development orientation changes with the increasing authority of local governments to regulate and manage the area based on the aspirations of society. In the industrial sector development, policy-oriented regional spatial and is one of the key factors to support the central and local governments to formulate and implement development policies (Kuncoro, M. 2002). In 2009, the Indonesian government has given attention to the perspective and the cluster

approach or approaches in the spatial concentration of national and regional policies to encourage the industrial sector and product specialization changing comparative advantage into a competitive advantage.

According to JICA (JICA, 2004a; 2004b) development strategy based industry clusters realized with the creation of added value, the expansion of employment and foreign exchange earnings optimized by placing the comparative advantages of natural resources, especially agro-industry and agribusiness as the leading sector, supported by supporting industries, as well as continuously develop competitive advantages to face global competition. With limited resources available, it is necessary to determine the industries producing superior products nationally and producer of the flagship product area.

The success of these strategies requires a priority approach (priority approach) is expected to create patterns of linkages between activities both within their own industry sector (horizontal linkages) or between industrial sectors with entire production and distribution network associated (vertical linkage). It is undeniable that the indispensable Competitive advantage needed in the face of the free market. However, it becomes a difficult question about Indonesia's ability to develop a competitive advantage, especially at this time Indonesia was recovering from the economic crisis.

Before you can answer that question needs to be recognized in advance the potential of the region in creating a competitive advantage. Based on the description that has been mentioned, the strategy for creating a competitive advantage can be achieved with industrial development policy cluster base (spatial concentration). It is therefore considered important to analyze the spatial concentration of the industry to recognize the potential of the region with a case study of Indonesia.

### **1. Definition of Concentration Areas (Spatial)**

The Spatial concentration of economic activity shows that industrialization is a process that is selective and occurs only in certain cases when viewed in terms of geography. For example: in the United States, the majority of industries has long been concentrated in a location called "industrial belt" (Krugman, P.1991). The Spatial concentration of industry (Industrial clustering), which are known in the industrial area in England Axial belt (Kuncoro, M.2000). In addition, spatial concentration can be found in industrial clusters, high technology in Silicon Valley (Ellison and Glaeser, 1997), the spatial concentration on the city waterfront as a result of natural factors (Fujita and Mori, 1996), as well as the spatial concentration that occurs as a result of agglomeration urban (Fujita and Thiesse, 2002).

Spatial concentration has become an interesting study that popular. Interestingly, in most developing countries, population distribution and concentration of industries are concentrated in major cities such as Bangkok, New Delhi, Sao Paulo and Jakarta, which make a spatial system based on the accumulation of capital and labor in urban agglomerations (Kuncoro, M., 2002). There are various different understandings of the spatial concentration. The generally accepted notion put forward by Fujita stating that spatial concentration is a grouping of each industry and economic activity spatially, where the industry is located in a specified area (Fujita et al, 1999). Spatial concentration indicates the share of a region and the location of an industrial distribution. Where a spatial distribution of an industry is uneven, and there are areas that dominate the industry be located, then it shows that the industry is concentrated spatially in the region (Aiginger and Hansberg, 2003).

According to the OECD, the spatial concentration indicates that the industry is not located evenly on the entire region, but clustered close together in certain parts of the region (OECD, 2000). Definitely put forward before competing views Krugman states that spatial concentration is an aspect that is emphasized of economic activity geographically and very important determination of the location of industry, Krugman states that the concentration of economic activity spatially, there are 3 things are interrelated, namely the interaction between scale economies, transportation costs and demand. To gain and increase the strength of economies of scale, companies tend to concentrate spatially and serve the entire market of a location. Meanwhile, to minimize transportation costs, these companies tend to be located in areas that have a large local demand, but local demand large tend to be located around the concentration of economic activity, such as industrial areas and urban (Krugman, 1991).

There are a variety of empirical observations about the concentration of industrial and economic activity spatially where in the literature are often found the term agglomeration, clusters and urban. The existing literature does not clearly distinguish these terms even understanding often collides with the notion of spatial concentration itself. This view is based on the view expressed by Fujita and Thiesse (2000: 1) which states that the definition of spatial concentration is more ambiguous than the notion agglomeration that is used to describe different phenomena. According to Fujita and Thiesse (2002: 20), the idea of agglomeration starting from location theory put forward by Weber, which the study conducted by Weber focuses on firm location and explain the formation of industrial clusters. For more details, the next section will explain the clusters and agglomeration; how the spatial concentration and its association with specialization.

## **2. Industrial clusters.**

According to Porter, is a firm-firm cluster that is spatially concentrated and intertwined in the industry. Firm-firm in spatially concentrated industries is also associated with institutions that can support the industry as practical. The Cluster includes the collection and the associated firm in the industry that is important in the competition. Cluster always flow toward expanding marketing channels and consumers, do not miss all the paths to manufacturers of complementary products, and firm in related industries, both in terms of the expertise, technology, and inputs. In cluster also included the government and other institutions (Porter, M, 1990; 1998a; 1998b).

That view is supported by Nadvi and Schmitz (1994), which cluster identified as a geographic concentration are formed from backward linkages, forward linkages, vertical linkages and labor linkages. The linkage was based on "market and non-market exchanges" of goods, services, information and human resources, which the government and private institutions shortly support economic agents in the cluster.

Raines (2002) adds that the cluster interprets tissue to form and become stronger by itself not only by the firm in the cluster, but by other relevant organizations to create collaboration and competition at the highest level so as to increase competitiveness based competitive advantage.

### **3. Industrial agglomeration**

Based on the classification proposed by Head and Mayer (2003), agglomeration contains two meanings. The first notion is the process undertaken jointly in performing spatial mobility. The second notion a form of locational, especially how spatially concentrated economic activity. In general, in the "New Economic Geography", an observation of an agglomeration begins with the observation of the shape of agglomeration and discuss the process of how it happened.

The definition that has been stated complementary understanding stated by Fujita stating that agglomeration is a process of a grouping of economic activity spatially happened and formed cumulatively by some logical reasoning (Fujita et al 1999: 1). The view is furnished by Ellison and Glaeser (1997) which states that the agglomeration does not always happen in one industry, agglomeration can occur in several different industries and are not related. Agglomeration may be tantamount to a cluster if only occur in an industry, but the industry agglomeration is more directed to the explanation of the formation or development of a cluster.

In general, it can be concluded that the agglomeration relates to the concentration of some supporting facilities that serve both the industries and urban clusters, where the existence of the facility affect the occurrence of spatial concentration. According to Armstrong and Taylor (2001: 105), the facilities in question include:

- Transportation and "commuter" facilities.
- The labor market is organized and the availability of labor with diverse expertise.
- Government services and public facilities.
- Commercial services.
- Market-oriented activities.
- The spatial concentration of the organization is consistent in the search and development of new products.

The concept of agglomeration economies is sourced from a real phenomenon and preceded by a theory proposed location Weber (Fujita and Thiesse, 2002: 1-23). According to Weber, there are three factors that the reason the firm in determining the location of industry, namely:

**A) Difference in transportation costs.**

Manufacturers tend to find a location that provides the advantages of saving transportation costs and could lead to efficiency and effectiveness of production. In a broader perspective, Coase (1937) argued about saving transaction costs (transportation costs, transaction costs, contractor costs, costs of coordination and communication costs) in determining the location of the company.

**B) Difference in wage costs.**

Manufacturers tend to find a location with the level of labor costs are lower in economic activity, while employment tends to look for locations with higher wages. The existence of a region with a high level of wages encourages workers to be concentrated in the region, this phenomenon can be found in large cities with a high diversity of the city such as Jakarta and specialized as Holy and Kediri.

**C) Saving agglomeration.**

Agglomeration savings are the savings are spatially concentrated economic activity. The savings can occur in the same industry or several different industries. Hoover (Fujita and Thiesse, 2002: 266-267) states that there are two kinds of savings in the form of savings agglomeration localization and urbanization savings. Saving localization occurs because the spatial concentration in the same industry, which includes savings that occur overall transfer firm in the industry are related to one another. Resulting in a lowering of production costs in an industrial firm when the total production of the industry increased (economies of scale).

Saving urbanization occurs when industries in a region associated and accumulate in various levels of overall economic activity. Saving urbanization encourages the creation supporter of overall economic activity and create profits cumulative for the entire industry by thinking Hoover about localization economies and urbanization economies, Glaeser et al (1992) classify about two kinds of knowledge spillover, namely within industry spillover, and inter-industry spillover:

Intra-industry Spillover Spillover is the knowledge that occurs in an industry that was developed based on the premise Romer. While Interindustry Spillover, developed by Jacob, a knowledge spillover that occurs between related industries in one location. Jene Jacob (1969) developed a Hoover thinking about saving urbanization. Jacob stated that occurs between the positive externalities in the form of interindustry spillover industry commonly known as Jacobs externalities as a result of the concentration and association industries in the region. Henderson (1994) complements the ideas developed by Jacob and stated that R & D positive influence for Jacobs externalities.

Opinions expressed Hoover about saving localization support Marshal opinion stating that the savings localization occurs because the firm in the same industry benefit from forming clusters, and concentrated in the same location. Marshal (Krugman, 1991: 36-67) put forward the idea of externalities of spatial concentration of industry and explains why manufacturers tend to be located close to other manufacturers in the same industry. According to Marshal, the spatial concentration is driven by the availability of labor specialization where the gathering of the company at a given location will encourage the gathering of specialized labor, thus benefiting the company and the workforce. In addition, the gathering of the company or industry interlocking can improve efficiency in meeting the needs of specialized inputs better and cheaper. Lastly, Marshal stated that the distance is reduced in the presence of spatial concentration would facilitate the flow of information and knowledge (knowledge spillovers) at that location.

Marshal thinking about the flow of information and knowledge developed Arrow (1962) about knowledge spillover, followed by their learning by doing. The views marshal and the Arrow of knowledge spillover that occurs in the monopolistic industrial structure becomes the basis for an endogenous growth theory developed by Romer (1986). So externalities in the form of knowledge spillover and a spillover within the industry, which is a blend of thought Alfred Marshal, Kenneth Arrow, and Paul Romer also called MAR (Marshall-Arrow-Romer) or Dynamic Externalities Externalities. Table 1 summarizes the various externalities based on the classification drawn up by Glaeser et al (1992) and is equipped with a classification compiled by Haris and Kells (1997).

**Table 1: Spillover Classification**

	Competitive Industry	Monopolistic Industry
Industry Cluster	Porter	MAR
Diverse Industrial Base	Jacob	-

Source: Glaeser et.al (1992); Harris and Kells, (1997)

On the other hand, Porter (1998) suggested a slightly different idea about within industry spillovers. According to Porter, the source of knowledge spillover is innovation driven by competition in the industry. Thought Porter developed by Best (1999) who argued that competition would encourage entrepreneurship that will encourage innovation and technological spin-offs. With the innovation, there will be a variation of skills and technology so that every company in the cluster will be more specialized and intertwined with each other.

**4. Centripetal and centrifugal Effect**

Fujita et al (1999: 1-12) stated that within the industry and inter-industry spillover is one of the main drivers of industrial agglomeration or clustering. The occurrence of agglomeration caused by mechanisms caused by a trade-off between centripetal forces and centrifugal forces. Centripetal forces or agglomeration forces are forces that encourage spatial concentration, while centrifugal forces or dispersion forces are opposing forces and encourage spatial distribution. Classification of centripetal forces and centrifugal forces by Fujita (1999) are summarized in Table 2.

**Table 2. Centripetal and Centrifugal**

Centripetal strength	Centrifugal strength
Linkages	Immobile factor
Thick market	Land rent and commuting
Knowledge spill-over and other	Congestion and other pure
Poor external economies	Dis-economies

Source: Fujita et al 1999

Fujita explained that basically, the idea of the agglomeration is based on two things: first, the importance of increasing returns due to economies of scale (increasing returns to scale) and transportation costs, which circles backward linkages and forward linkages are logical arguments that explain the occurrence of agglomeration. This may explain why they are located adjacent to each other. The second reason is immobility some resources, eg land/soil and in some cases is a workforce that acts as centrifugal forces (Fujita et al, 1999: 345).

The ideas put forward by Fujita et al (1999) support the ideas put forward Porter of related and supporting industries. Porter stated about the importance of inter-firm linkages in the industry in value creation. Mechanism inter-firm linkages in industry linkages can be vertical or horizontal linkages. Vertical linkages are linkages between the firm from upstream to downstream. While the horizontal linkage is a linkage in companies that have the same role in both the industry and has a parallel position. The greater inter-firm linkages in the industry will further encourage concentrated spatially firming in the industry (Porter, 1990).

Porter (1998) adds about the importance of support for the industry. That support could be support from the relevant institutions, active participation of the government, external environmental conditions both good and good business climate. With the support of the firm-firm in the cluster will experience increased performance and efficiency that would encourage outside firm-firm clusters merge into the cluster.

## **DISCUSSION**

The development of the dynamic strategic environment that directly or indirectly affect the development of national industry, therefore environmental factors, both on a national and global scale, as well as the trend in the future, need to be reviewed and considered. On a national scale industrial be desired and want to build is expected to accommodate the aspirations and expectations of the masses, but on the other hand, a national industry that is built will not escape the effects of competition and ups and downs of the global economy.

With the anticipation of the state of the environment, the National Industrial Development Policy, the national industry is expected to be able to maintain its existence and grew up in the arena of climate and global economic competition increasingly sharp.

### **1. Environment Home Affairs**

Domestic environmental, social, economic, and political, has undergone many changes and some important agenda to address them can be accounted for as follows.

#### **1.1. Impact of World Economic Crisis**

The economic crisis is protracted been draining a lot of energy and sacrifice of the people, even many businesses go bankrupt, unemployment increased, the environment deteriorating, the infrastructure can not be treated with optimal, low utilization of the installed capacity of the industry, export capabilities are limited and still high dependency against imported goods. Things above, coupled with the low efficiency of development due to the high culture of

corruption, resulting in high costs still high economic counter-productive to the formation of the competitiveness of domestic industrial products, as well as the level of utilization of the authorized capital of economic and industrial development. The trend, of course, must end immediately, if they do not want Indonesia will become the market of other countries, due to continued weak production capabilities.

### **1.2. Business Environment is Not Conducive**

Legal certainty, consistency of policy and employment issues, is a very important factor in shaping a healthy business climate and conducive to encourage economic growth and attract investment. The emergence of the tendency of an increasingly poor quality of these factors on lately become very serious attention from investors. Meanwhile, many employers consider that the current interest rate is already much reduced although still high. Entrepreneurs in the country who rely on banks in the country will compete with companies whose capital from abroad which interest ranging from 5%. For that need to be made consistent measures and planned in the near future to fix it, so that the domestic business climate more conducive.

### **1.3. Bureaucracy professionalism**

The paradigm change coaching by the bureaucracy of the business industry, from the cultural authorities towards cultural public services are facilitated at this point is still felt in the transition process. This condition over time policy reform measures from the administration's political system towards decentralization towards regional autonomy. Thus the desire to realize a clean bureaucracy, professional, transparent, pro-business, and facilitate urgent to be implemented.

### **1.4. Change Governance System from a centralized to a decentralized/regional autonomy**

The System Indonesian Government has changed once tended centralized to decentralized or autonomous regions. This brings positive and negative impact on the implementation of government programs and overall development. The positive effect is each region can develop their creativity, as well as build the area in accordance with the aspirations and needs of local communities. It is expected there will be acceleration and precision of development in various areas so that cumulatively will improve momentum and quality of national development. If this trend became stronger, the movement of national development in various regions of the Republic of Indonesia will be more rapid, so that the welfare of the people who become the national agenda will be faster can be realized.

The negative impact of this autonomy is the coordination between central and local governments require more time and effort, compared to the past. That must be avoided is the respective

regions further highlight the interests of the region, compared to the overall national interest. Therefore, the government needs to encourage and foster synergy between regions, making it useful nationally, especially given the diversity of the resource potential in the area of industrial sectors (natural resources, labor, infrastructure).

### **1.5. The love fading Against Domestic Production**

The era of globalization, trade no longer recognizes boundaries of a country, so that there will be increasingly intense competition between domestic products and foreign products. The phenomenon is happening now is part of the Indonesian people tend to be more like imported products. Communities choose imported products other than for reasons of quality, it is also because the design and the price are very competitive. The condition is further reinforced by the development of information technology in society will be increasingly sophisticated, increasingly affecting people's consumption pattern formation.

Today, many imported products circulating in the domestic market, began to shift the same products originating from local industry. The Rapid flow of imported goods is not only the impact of the free market, but also because it is influenced by consumers who are still mentally cultured "import-minded" that need to immediately find a way out. One of the reasons was the public not optimized to get satisfactory information about the product in the country, in addition to the price factor and the quality.

### **1.6. Global environment**

As well as the domestic environment, the international environment has also changed quite fundamentally. Some international trends that influence the development of national industry, it can be noted as described below.

#### **A. Issues and Practice of Economic Globalization and Liberalization**

In the 21st century, the issue of globalization and liberalization and practices increasingly sticking. The decisions of international economic institutions, such as the WTO, have been driving the pace of globalization and liberalization of the world economy. Much controversy which is still being debated between the developed and developing countries, and practices relating to issues of globalization. On the one hand, the developed countries want developing countries to open market access for the products of developed countries, but on the other hand developed countries to protect against their agricultural products through a relatively large subsidy. This raises the likelihood that globalization and economic liberalization more provide better opportunities for the developed countries compared to developing countries.

Indonesia as a member of the world community must also concern with the above issues, especially the need to advance the national economy. Therefore, the development trend of globalization must be observed proportionally, so it does not harm the interests of Indonesia. As a member of the Group of 77 countries, Indonesia, and other developing countries should continue to make efforts, including lobbying to various institutions and other countries same concerned. The move was intended to allow justice and the market balance in the world economy can be achieved through the WTO flag, or at least not to harm the interests of developing countries. Thus in the formulation of national industrial policy, need to pay attention to the tendency of the above, so that the national industrial development policies capable of anticipating, and in line with the development of the future world.

### **B. Terrorism issues**

International development in the 21st century is also marked by the rampant incidence of terrorism in various parts of the world. This can negatively impact on the investment climate or the business climate in various countries, so that also disrupt the world economy as a whole, including the Indonesian economy. Various impacts felt by the world economy include increasing insurance premiums for the industry and transport, the increasing variety of security expenses, decreasing the volume of world trade, and so forth, all of which lead to increased costs in various industries around the world. Conditions and trends above should receive attention in proportion in the formulation of national industrial development policy.

### **C. International agreements**

Various agreements made Indonesia with international economic institutions, such as the International Monetary Fund, World Bank, WTO and multilateral agreements and treaties, and whether in bilateral MOU or Memorandum of Understanding is not binding and that are already binding or binding. Agreement various regional and multilateral, between Indonesia and other international institutions such as APEC, ASEAN, etc., have been and will continue to affect the travel and portraits of the Indonesian economy in the future.

As an example of the free market (MEA), has been and will continue to influence national economic portrait. The MEA agreement brings fresh air or a positive impact with the opening of new markets for Indonesian products in the ASEAN region.

But this will happen when the Indonesian products, including products of a national industry, have strong competitiveness compared to other ASEAN countries' products. If the product Indonesia unable to compete, then the market openness of the ASEAN region is no benefit to the national industrial products. What will happen is the product Indonesia die at home. The main

issue of the existence of international agreements is the economic competitiveness. National industry inevitably, ready, not ready to be pushed hard, so that defeat, or at least match the competitiveness of other countries. Therefore, an important issue that must be accommodated in the national industrial development policy is how to increase the competitiveness of the national industry, and not leave anything commitments to other countries if we do not believe that in the long run, we are in a loss position.

Another problem often faced by exporters is the imposition of technical barriers to trade (Technical Barrier to Trade / TBT) and the provision of health, security, safety, and environmental issues often pose barriers to trade. Such an action is usually done by developing countries to protect their domestic consumers. In addition, national entrepreneurs are also often hampered by allegations of dumping and subsidies on industrial products.

In order to reduce the negative impact on developing countries, the need for the commitment of all member states to undertake positive steps to ensure developing countries get a share in the growth of international trade in accordance with the needs of their economic development, and to implement fully the agreements and the WTO agreement is a great opportunities reduce inequality in levels of economic development between developing and developed countries. Within the framework of multilateral, opportunities in the field of foreign trade wide open with their trade preferences that are unilateral from developed countries to developing countries in the framework of the Generalized System of Preferences (GSP) and the agreement of developing country members of the Global System of Trade Preferences Among Developing Countries (GSTP) to give each other mutual beneficial trade preferences.

#### **D. The emergence of the New Economic Giant and the Export Countries Strong**

Towards the development of the world market, last 10 years have demonstrated that the product markets are characterized by technology-intensive industries experiencing rapid growth. In contrast, industrial products are characterized by labor-intensive and natural resource solid growth much lower. Unfortunately, Indonesia's export processing industry are based on the natural resources of his world import growth is relatively low.

International developments in the early 21st century are also marked by the emergence of new economic giants, such as the People's Republic of China (PRC), as well as countries with economy and exports are growing rapidly, such as Malaysia, Thailand, and Vietnam. The emergence of new economic giants such as China, on the one hand, an opportunity for Indonesia to expand and diversify export destinations. However, additional export opportunities for the domestic product is, it will not matter if the economic competitiveness of the national industry is low, or inadequate.

Conversely, on the other hand, the emergence of the new economic giant is also a threat and its own pressure on domestic products, both on the international market (exports) as well as in the domestic market. During the years 2002-2015, China and Vietnam convincingly outperformed Indonesia, especially in the top 30 of our non-oil export commodities, including textiles, furniture, garments, and footwear. China is the main competitor for many developing countries because it is generally able to produce in bulk at competitive prices. For the US market, for example, China is able to boost its market share by nearly threefold, while Indonesia would lose market share to 70 percent.

## **CONCLUSION**

For Indonesian fishery sector, In the future, it is necessary efforts to increase the effectiveness of resource-based industrial development in the region that should be based on aspects of compatibility between industrial strategy with the typology of areas that have characteristics different from one region to another region. An industrial development policy that is in the programs of regional development, it must adhere to the principle of institutional linkages and mutually reinforcing cooperation between regions, so that local governments have run outward looking strategy. Because it is important to correct the regional industrial development policy has been highly colored by administrative boundaries and only inward (inward-looking strategy).

Programs of industrial development in the future should pay attention to aspects of the development of the demand side of trade, market development, and the comparative advantages of the region, in order to compensate for program development region during these only focused on the production of primary products (without dairy products), which result in no added value for the development of jobs and improving the economy of the region (see below models approach on alternative models of competitiveness regions).

During this time, generally, the development of the industry has not described the mutually reinforcing linkage, synergy between regions to one another, because in general industrial development programs are focused on improving comparative advantages and competitive area. For the development of local industries and regional development that can reduce the level of disparity between regions, the necessary process of socialization and improvement of local human resource capability to be able to understand the level of the characteristics of each region with the types of industry requirements in accordance with the characteristics of the region. To support these efforts, the necessary industrial policy strategy is more directed to the typology of regional growth to achieve a balanced development approach.

Studies on the formation direction of industrial development policy and regional development must be adapted to the growth and dynamics of the political, social, economic as well as the

demands of regional autonomy, among others: conformity of regional typology/characteristics of the region, reviewing aspects of the management of local resources, in particular, the level of hierarchy and coordination and capacity institutions in the implementation of various industrial development and linkages between regions as an effort towards industrial development optimal and impartial development of the region.

## **REFERENCE**

- Aiginger, K. and Hansberg ,E (2003). "Specialization versus Concentration: A Notes of Theory and Evidence". SIEPR Working Paper.
- Amstrong, H. and Taylor, J (2001). "Regional Economics and Policy". Blackwell Publisher.
- Best, M. (1999). "Cluster Dynamics in Theory and Practise: Singapore/Johor and Penang Electronics". UNIDO/ISIS".
- Blakley, E., (1989). "Planning Local Economic Development: Theory and Practices California: Sage Publication, Inc.
- Carlton, D. , 1983, "The Location and Employment Choices of New Firms: an Econometric Model with Discrete and Continuous Endogenous Variables" Review of Economics and Statistics 65 : 440-449.
- Coase, R. (1937). "The Nature of the Firm". *Economica*. Vol 4. No 3, pp 386-405
- Danani, S (2000). "Indonesia: Strategic for Manufacturing Competitiveness" United Nations Industrial Development Organizations. UNDP/UNIDO Project No. NC/INS/99/004.
- Deichmann, U., Kaiser, K., Lall, S and Shalizi, Z (2005) "Agglomeration, Transport, and Regional Development in Indonesia". World Bank Policy Research Working Paper 3477, January 2005
- Deidda, S., Pacci, R & Ussai, S. (2002). "Spatial Externalities and Local Economic Growth". CRENOS Working Paper 02/06
- Deperindag. (2001). "Strategi Pembangunan Industri 2001". Jakarta: 2001.
- Ellison, G. and Glaeser, E. (1999). "The Geographic Concentration of Industry: Does Natural Advantage Explain Agglomeration?" *American Economic Review*. Vol 89. pp 311-316
- Ellison,G. and Glaeser, E. (1997). "Geographic Concentration in US Manufacturing Industries: A Dartboard Approach". *Journal Political Economy*. Vol. 105. pp 889-927

- Forni M. and S. Paba (2001), Knowledge Spillovers and the Growth of Local Industries, CEPR Discussion Papers in. 2934.
- Fujita, M. and T. Mori. (1996). "The Role of Ports in Making of Major Cities: Self Agglomeration and Hub Effect". *Journal of Development Economics*. Vol 49, pp.93-120
- Fujita, M. and Thiess, J.F. (2002). "Economics of Agglomeration: Cities, Industrial Location, and Regional Growth". Cambridge: Cambridge University Press.
- Fujita, M., Krugman, P., and Venables, A.J. (1999). "The Spatial Economy: Cities, Regions, and International Trade". Cambridge and London: The MIT Press
- Glaeser, E. and Khan, M (2003). "Sprawl and Urban Growth". Harvard Institute of Economic Research Discussion Paper No. 2004.
- Glaeser, E. and Kohlase, J (2003). "Cities, Regions and the Decline of Transport Costs". Harvard Institute of Economic Research Discussion Paper No. 2014.
- Glaeser, E. Kallal, H. Scheinkman, J. and Scheleifer, A (1992). "Growth in Cities". *Journal of Political Economy*. Vol 100, pp 1126-1152.
- Gordon ,I.R. and McCann, P. (2000). "Industrial Clusters: Complexess, Agglomeration and/or Social Network?" *Urban Studies*. Vol 37. pp 513-532
- Harris, M & Stuart, K. (1997). "Knowledge Spil lover, Location and Growth: Theory and Evidence". Melbourne Institute Working Paper 6/97
- Harrisons, B. (1992). "Industrial Districs: Old Wine in New Bottles?" *Regional Studies*, Vol 26. pp 469-483
- Hartarto, A. 2004. *Strategi Clustering dalam Industri Indonesia*. Yogyakarta: Penerbit Andi.
- Head, & Mayer, T. (2003). "The Empirics of Agglomeration and Trade". *Cepii K Working Paper No: 2003-15*
- Head, King,. Mayer, T., & Ries, J. (2002). "Market Size and Agglomeration". *CEP Working Paper*.
- Henderson, V (1994) "Externalities and industrial Development". *NBER Working Paper No. 4730*.
- Henderson, V., Kuncoro, A. and Turner, M. (1995), "Industrial Development in Cities". *Journal of Political Economics*, 103, 1067-1090.
- Hill, H. (1988). "Foreign Investment and Industrialization in Indonesia" Singapore: Oxford University Press.

- Hofman, B. and Kaiser, K., (2004). "The Making of Big Bang and its Aftermath: A political Economy Perspective". Georgia: Andrew Young School of Policy Studies. Georgia State University.
- Hugo, G., Hull, T., Hull, V., and Jones, G. (1987). "The Demographic Dimension in Indonesian Development". Singapore: Oxford University Press.
- JICA (2004a). "Studi Penguatan Kapasitas Klaster UKM di Indonesia: Laporan Akhir". Studi JICA Untuk Penguatan Kapasitas Sentra-sentra UKM di Indonesia.
- JICA (2004b). "Petunjuk Pengembangan Klaster: bagi Klaster Fasilitator". Studi JICA Untuk Penguatan Kapasitas Sentra-sentra UKM di Indonesia.
- Kim, S. (1995) "Expansion of Markets and the Geographic Distribution of Economics Activities: The Trends in U.S. Regional Manufacturing Structure 1860-1987". The Quarterly Journal of Economics. November. No 110. pp 881-908.
- Kolehmainen, J. (2002). "Territorial Agglomeration as a Local Innovation Environment". MIT Industrial Performance Center. Working paper. 03002
- Kotler, P. and Kertajaya, H. (2000). "Repositioning Asia: From Bubble to Sustainable Economy". Singapore: John Wiley & Sons.
- Kotler, P., Jatusripitak, S. and Maesincee, S (1997). "Marketing of Nations". New York: The Free Press.
- Krugman, P. (1991). "Geography and trade". Cambridge: MIT Press.
- Kuncoro, M. (2000). "Beyond Agglomeration and Urbanization". Gajah Mada International Journal of Business. September 2000. Vol.2.No.3, pp.307-325.
- Kuncoro, M. (2002). "Analisis Spasial dan Regional". Jogjakarta: AMP YKPN.
- Kuncoro, M. (2004). "Otonomi dan Pembangunan Daerah: Reformasi, Perencanaan, Strategi, dan peluang". Jakarta: Penerbit Erlangga.
- Lafourcade, M. And Mion, G. (2003). "Concentration, Spatial Clustering and Size of Plants: Disentangling the Sources of Co-location Externalities". CORE Working Paper
- Lucas, R. (1988). "On the Mechanics Economic Development". Journal of Monetary Economics. Vol 22. pp 3-22
- Marshall, A. (1920) "Principles of Economics", London: Mcmillan

- Maurel, F and Sedillot, B. (1999). "A Measure Geographic Concentration In French Manufacturing Industries". *Regional Science and Urban Economics*. Vol. 53. pp469-481.
- Midelfart-Knarvik, K.H., Overman, H, G., Redding, S, J., and Venables, A, J. (2000). "The Location of European Industry", Report prepared for the Directorate General for Economic and Financial Affairs, European Commission, Brussels.
- MMAF (2016). Capture Fisheries Statistics of Indonesia by Province, *Directorate General of Capture Fisheries*, Ministry of Marine Affairs and Fisheries, Jakarta.
- Murty, S. 2000. Regional Disparities: Need and Measures for Balanced Development. In Shukla, AL. Ed., *Regional Planning and Sustainable Development*.
- North, D. (1990). "Institutions, Institutional Change and Economic Performance". New York: Cambridge University Press.
- OECD, (2000). "The Competitiveness of European Industry: The 1999 Report". Working Document of the Services of the European Commission.
- Porter, M .E. (1990). "The Competitive Advantage of Nations". New York: The Free Press.
- Porter, M. E. (1998b). "On Competition". Boston: Harvard Business School Publishing.
- Porter, M.E (1998a). "Clusters and New Economics of Competition". *Harvard Business Review*, November-December (6), 77-91
- Raines, P. (2002). "Local or National Competitive Advantage". *European Policies Research Centre*, University of Strathclyde, Glasgow.
- Ramelan, R. (1998). "Industri Berbasis Ilmu Pengetahuan dan Teknologi: Landasan Pembangunan Daya Saing Nasional di Masa Depan". *Perencanaan Pembangunan*. No 11/ Maret 1998. pp 33-43.
- Ray, D and Blankfeld, R (2002). "Reforming Indonesia's Ports". paper prepared for Indonesian Ministry of Industry and Trade, Partnership for Economic Growth Project.
- Rizal, A. (2016). *Economic Valuation of Coastal and Marine Resource of Mentawai island*. Faculty of fishery and Marine Science. Padjadjaran University. Jatinangor.
- Rizal, A. And Lantun P, Dewanti. (2017). Using economic values to evaluate management options for fish biodiversity in the Sikakap Strait, Indonesia. *Biodiversitas Journal*. Vol. 18, Issue 2, April 2017, Pages 575-581.
- Romer, P. (1986). "Increasing Return and Long Run Growth". *Journal of Political Economy*. Vol 94. pp 1002-1038

- Saad, Ilyas. (2003). "Implementasi Otonomi Daerah sudah mengarah pada Distorsi dan High Cost Economy". SMERU Working Paper.
- Sitanggang, I, R dan Nachrowi, N, I (2004). "Pengaruh Struktur Ekonomi pada Penyerapan Tenaga Kerja Sektoral: Analisis Model Demometrik di 30 Propinsi pada 9 Sektor di Indonesia". Makalah disampaikan pada Seminar akademik Tahunan Ekonomi I yang diselenggarakan oleh ISEI bekerjasama dengan PPSIE FE UI, di Jakarta 8-9 Desember 2004.
- Sjoberg, O and Sjöholm, F (2001). "Trade Liberalization and the Geography of Production: Agglomeration, Concentration and Dispersal in Indonesia's Manufacturing Industry" Stocholm School of Economics Working Paper No 138.
- Van de Soest, Gerking and van Oort (2002) "Knowledge externalities, agglomeration economies and employment growth in Dutch cities". Center discussion paper, 2002-41.
- Williamson, O. E. (1985). "The economic institution of Capitalism: Firms, Markets, Relational Contracting". New York: The Free press.
- World Bank. (2003). "Kota-Kota dalam transisi: Tinjauan Sektor Perkotaan pada Era Desentralisasi di Indonesia ". Working Paper No.7.