# Regional Investment Performance Index and Regional Investment Potential Index as Regional Competitiveness Index in Indonesia

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***Abstract.***
*This paper aims to calculate the regional investment index as a regional competitiveness index in Indonesia. The index is the Regional Investment Performance Index (IKID) and the Regional Investment Potential Index (IPID). IKID shows how an are attractive investments are calculated relative to the size of the economy. IPID shows the factors that are expected to affect the attractiveness of a region to attract investors such as product domestic regional brutto, income per capita, inflation, export, import, unemployment rate, regional minimum wage, infant mortality rate, life expectancy, and human development index. The combine of the two indices produces four groups of provinces that are the front-runner, above potential, below potential and underperformers. For 6 years there was a shifting in the grouping of provinces. In 2008, six provinces that were grouped at the front-runner with high IKID and IPID, at the end of the study, there were only two provinces because of the decrease of IKID, e.g. Kep. Riau, Jakarta, and Bali. Some provinces with increasing IKID are shifted from groups' under-performers to above potential. IKID rising due to the increase of investment into the provinces especially in East Indonesia, such as North Maluku, Papua, and West Papua. Potential fisheries of eastern ocean Indonesia and the moratorium on permits foreign fishing ships attract investors to build facilities and infrastructure of the fisheries sector. Government regulation of the mining company's obligation to build a smelter natural resource is also driven by investment in the mining sector.*

***Keywords:*** *regional, investment, performance, potential, competitiveness*
*JEL: R530*

## 1. Introduction

Investment is one crucial component in financing the development of a country/region. The presence of domestic and foreign investment in a sector recognized can be stimulating the expansion of technology, efficiency, and productivity. The benefits that can gain from their investments pushed many regions to try to attract investment.

Several factors are considered before investing, such as government policy, socio-cultural, and economic conditions that can provide benefits for investors with low risk. Policymakers will attempt to make an investment policy on their region more attractive compared to the other areas. Determine factors of investments are divided into two elements, i.e., market-oriented factors, and nonmarket-oriented factors. Non-market factors of finance are the availability of skilled labor, availability of technology, and the level of corruption. Countries/Regions with the high skilled worker, the development of high-tech and low-level crime can attract investors, for example, in China, India, South Korea, and Taiwan.

World Economic Forum (WEF) summarizes the determinants of investment in an index called the global competitiveness index (GCI). GCI initially summarized the three main components, i.e., technology index, public institutions index, and the macroeconomic environment index with nine subindexes. Now, GCI developed into 12 subindexes is divided into basic requirements index, efficiency enhancers index, and innovation and sophistication factors index. This index is used to facilitate investors seeking an investment destination. The GCI rankings of Indonesia are always lower than Singapore, Malaysia, and Thailand in the period 2001-2016.

The low performance in investment because of the Indonesian economic conditions are not yet fully recovered from the crisis of 2008. The growth of Indonesia's economy continued to slow since 2011. In 2011 economic growth of Indonesia reached 6.17 percent per year but in 2015 just 4.79 percent (very provisional figures). However, the condition of Indonesia unevenly for all regions. When the Indonesian

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economic growth decline, some areas (e.g., Java, Bali and Nusa Tenggara, Sulawesi, and Maluku and Papua) grew above the national economic growth. So, the country risk is not identical to environmental risk.

**Table 1.** Gross Domestic Regional Bruto Growth Rate (2010=100), 2011-2015 (percent)

| | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|
| Sumatera | 6.19 | 5.75 | 4.95 | 4.58 | 3.54 |
| Jawa | 6.37 | 6.37 | 6.01 | 5.57 | 5.45 |
| Bali & Nusa Tenggara | 2.88 | 3.95 | 5.95 | 5.87 | 10.2 |
| Kalimantan | 6.45 | 5.72 | 3.95 | 3.29 | 1.31 |
| Sulawesi | 8.54 | 9.04 | 7.69 | 6.87 | 8.18 |
| Maluku & Papua | -0.57 | 3.2 | 7.71 | 4.64 | 6.62 |
| INDONESIA | 6.17 | 6.03 | 5.56 | 5.02 | 4.79 |

Source: Central Bureau of Statistics

Based on both the indexes and the differences in country risk and region risk, then the purpose of this paper is to calculate the investment performance index and investment potential for investment index in every province in Indonesia. Since the era of regional autonomy, each area in Indonesia competes to attract investment as much as possible to get into their respective territories. This article will identify some indicators supporting the competitiveness of the provinces in Indonesia. The local government tries expected to provide a comprehensive criterion for improving the investment climate in the future.

The concept of National Competitiveness examines the ability of a national economy to grow. It measures by a set of factors, policies, and institutions that determine a country's level of productivity. National Competitiveness is central to a given country's ability to increase its quality of life. It has increased productivity results in higher yields on national investment, which in turn generates growth. Economic growth is a critical factor in improving the quality of life.

National Competitiveness is a relative concept. It is an approximation of a country's ability to grow and to compete with other countries for human capital, investments, and other resources. The World Economic Forum's annual Global Competitiveness Report is the standard measure of National Competitiveness. The World Economic Forum has published the Global Competitiveness Index developed by Xavier Sala-i-Martín in collaboration with the Forum. The GCI combines 114 indicators that capture concepts that matter for productivity. These indicators grouped into 12 pillars: (1) institutions, (2) infrastructure, (3) macroeconomic environment, (4) health and primary education, (5) higher education and training, (6) goods market efficiency, (7) labor market efficiency, (8) financial market development, (9) technological readiness, (10) market size, (11) business sophistication, and (12) innovation. These are in turn organized into three sub-indexes, in line with three main stages of development: basic requirements, efficiency enhancers, and innovation and sophistication factors (WEF, 2016)

The study of the regional investment competitiveness made by the Regional Autonomy Implementation Monitoring Committee (KPPOD) with the United States of Improvement and Development Agency (USAID) and The Asia Foundation. In 2003, 200 districts/cities of 29 provinces rated by KPPOD. The study examined the competitiveness of each region based on five categories of support: (1) institutions (institutions), (2) economic zone, (3) social-political culture of security, (4) physical infrastructure, and (6) labor. In its ranking of these time assessment indicators used together with a rating of 2002. Factors institutional is the most significant factor, which is 31 percent, 26 percent of social politics, 17 percent of the regional economy, employment and productivity 13 percent and 13 percent physical infrastructure (Sinar Harapan, 2003). In addition to considering the national macro conditions, investors also consider the impact on local government policies. Efforts to improve competitiveness influenced by several indicators that affect the level of investment competitiveness.

The results showed that during the implementation of regional autonomy, local governments try to make improvements in institutional governance, economic planning, and efforts to improve the welfare of the community. The institutional factors are indicators that are under the control of local governments. Low scores indicate that there is some problem related to the fundamental institutional aspects. Bureaucratic licensing, legal certainty and local regulatory still consider as an obstacle in doing business.

Labor factor has a significant impact on the business climate. Labor issues include the issue of minimum wages, skills, and productivity. For employers, the high salary does not matter if offset by increased productivity.

The regional economic indicators show that region with high competitiveness is the area is located around the centers of growth and supported by a factor of physical infrastructure, especially electricity. The supporting elements include the geographical location surrounded by centers of regional economic growth with the spillover from other regions. In addition to these factors, local governments need a strategy as a step to attract investors. These are required three strategic actions for the investment, i.e., attract, win, and follow-up (Rufaidah, 2007).

This strategy reaffirms that there is a changing paradigm in local economic development. Regional economic growth is the improvement of the integrated process based on the deal with the local stakeholders to improve capacity and performance in the regions (World Bank, 2002). There are five waves of economic development: (1) Growth Promotion Approach, (2) the increase of worldwide competition, (3) broadening of the foundation for active economic development, (4) sustainable economic development, and (5) providing market solutions and regional strategies for growth.

Porter (1979) shows the competitiveness model to describe the microeconomic business environment, which is called Porter's diamond. There are four-factor determinants of competitiveness. (1) input factor consisting of geographical conditions, natural resources, human resources, physical infrastructure, administrative infrastructure and innovation infrastructure, (2) the supporting industries are available, such as credit schemes, transportation, packaging, consulting services for SMEs, (3) the conditions of demand and opportunities existing market, and (4) the conditions of competition, as barriers to entry of the new firm.

These four factors are interrelated and influence each other. Efforts to increase the competitiveness of the economy is essential to improving the four factors above with strengthening the economic agenda and promote the process of innovation in a specific business environment. The efforts need to be comprehensive. One of the highlights of the Local Economic Development is increasingly intense pressure on the urgency of improving the competitiveness and knowledge/technology/innovation in Local Economic Development (Meyer-Stamer, 2003b; Helmsing, 2001; Munnich, 1995; Munnich et al., 2002).

In the local economic development tendency, there are five essential changes. (1) Rapid development in the fields of science and technology, such as telematics, biotechnology, and new materials, which are expected to change various aspects of life, especially the world economy. Knowledge has an increasingly significant role in many areas of human life. (2) The trend of globalization is changing the international association. Globalization is expanding in various fields and diverse fields into global issues, such as human rights, democracy, international trade, intellectual property rights, and standardization. (3) The tendency toward changes in the international economy towards the era of the knowledge-based economy, which requires strengthening knowledge and innovation capabilities as crucial elements of success in the competition for development and global partnership. (4) The rising trend of networking in various productive activities, both in the public sector, business, and society. And (5) The tendency of the regional development management system is more decentralized. It means that the central government transfers to local governments will be even higher. Participatory processes and public-private partnerships in regional development becomes a critical success.

## 2. Data

This study uses data from 33 provinces in Indonesia from 2008-2013. This period was chosen due to data availability. Data sourced from the Indonesian Central Statistics Agency.

## 3. Methodology

### *3.1 Measurement of Regional Investment Performance Index*

To measure the regional investment performance index and the regional investment potential index will be used as a method also used by UNCTAD in the publication of the World Investment Report (WIR) with adjusted. Regional Investment Performance Index (IKID) or inward investment performance index is an index that shows how the region attracts investments. The index calculates relative to the size of the economy of an area, i.e., the ratio of domestic investment against the total investment to the percentage of Gross Regional Domestic Product (GRDP) of the total Gross Domestic Product (GDP). The formulation used is: central government transfers to local governments will be even higher. Participatory processes and public-private partnerships in regional development becomes a critical success.

$$IKID_i = \frac{PMTDB_i/PMTDB_j}{PDRB_i/PDRB_w}$$

IKIDi is Regional Investment Performance Index in region i, PMTDBi is Gross fixed capital formation in region i, PMTDBj is total Gross fixed capital formation in province j, PDRBi is Gross Regional Domestic Product in region i, and PDRBw is Gross Regional Domestic Product in province j. If the index greater than 1 indicates that a region receives more investment relative to the size of its economy. If the index is smaller 1 shows that an area gets less investment relative to the size of its economy.

### *3.2 Measurement of Regional Investment Potential Index*

Regional Investment Potential Index (IPID) is an index indicating the factors that expected affect the attractiveness of the economy in attracting domestic investors/foreigners. Potential index based on ten economic and social variables. This index is the sum of the values (normalized to generate a value between 0, for the province with the lowest value, to 1, for the highest value). The variables used were:

1. The GDP per capita, with the expectation that the economy with higher incomes was able to attract relatively more investment to drive innovation and differentiation of products and services.
2. The GDP is a proxy for economic growth.
3. The inflation rate is an indicator of financial stability and business risk.
4. Export to an area to show the openness of the economy and competition.
5. Imports from the region to demonstrate the openness of the economy and competition.
6. The population is an indicator of the availability of labor.
7. Provincial Minimum Wage (UMP) as an indicator of input costs and competitive production costs. UMP prepared by considering Physical Requirements Minimum in each province.
8. Life expectancy as indicators of the availability of health facilities in the community.
9. The literacy rate is an indicator of quality human resources.
10. The Human Development Index (HDI) includes three indicators of life expectancy, literacy rate, and the average level of expenditure has adjusted.

## 4. Results and Discussion

### *4.1 Regional Investment Performance Index*

During the observation period of 6 years no province that always has the Regional Investment Performance Index (IKID) is greater than 1. There are five provinces with IKID numbers greater than 1 for the last 3 years in a row with an increasing trend, namely West Java , Banten, West Kalimantan, North Maluku and West Papua. This indicates that all five provinces are able to attract investment is relatively more than the other provinces. West Java and Banten start of the destinations of investment in the manufacturing sector. As the buffer area of Jakarta, the two provinces have started slider Jakarta as the area of the main foreign investment.

Bali, West Nusa Tenggara and Central Kalimantan also still have IKID more than one during the last 3 years but with a downward trend. As a tourist destination, investment in Bali and Nusa Tenggara Barat directed to support the tourism sector and tourism sector. Construction of Bali and Nusa Tenggara Barat oriented towards improving the competitiveness of each sector in the global market. Bali is a small province with human and natural resources that are limited but have Keungggulan various cultures. Bali a tourist destination because it has a culture and value systems are unique, exotic nature, friendly locals, and the social environment and lifestyle are governed by tradition, architecture, art and religion. As a tourist destination Bali local government is able to create a conducive business climate that encourages the government and the business community investment opportunities and partnerships. This is also shown by the increasing volume of export of various commodities originating from Bali.

Table 4. Regional Investment Performance Index by Province, 2008-2013

| No. | Provinsi | IKID (PMA) | | | | | |
|---|---|---|---|---|---|---|---|
| | | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
| 1 | ACEH | 0.000 | 0.475 | 0.019 | 0.079 | 0.483 | 0.231 |
| 2 | SUMUT | 0.161 | 0.241 | 0.210 | 0.726 | 0.493 | 0.580 |
| 3 | SUMBAR | 0.107 | 0.001 | 0.028 | 0.068 | 0.175 | 0.183 |
| 4 | RIAU | 0.678 | 0.516 | 0.122 | 0.252 | 1.114 | 1.115 |
| 5 | KEPRI | 0.627 | 1.162 | 0.555 | 0.611 | 1.163 | 0.592 |
| 6 | JAMBI | 0.316 | 0.478 | 0.293 | 0.125 | 0.788 | 0.145 |
| 7 | SUMSEL | 0.344 | 0.181 | 0.402 | 0.999 | 1.120 | 0.593 |
| 8 | BABEL | 0.023 | 0.420 | 0.278 | 1.536 | 0.496 | 0.161 |
| 9 | BENGKULU | 0.234 | 0.026 | 0.414 | 0.591 | 0.330 | 0.434 |
| 10 | LAMPUNG | 0.261 | 0.173 | 0.110 | 0.237 | 0.270 | 0.227 |
| 11 | JAKARTA | 3.761 | 2.852 | 2.238 | 1.392 | 0.938 | 0.506 |
| 12 | JABAR | 1.174 | 1.226 | 0.723 | 1.364 | 1.187 | 1.716 |
| 13 | BANTEN | 0.803 | 3.252 | 2.401 | 2.809 | 2.789 | 3.275 |
| 14 | JATENG | 0.108 | 0.090 | 0.044 | 0.108 | 0.118 | 0.194 |
| 15 | YOGYA | 0.116 | 0.077 | 0.032 | 0.013 | 0.374 | 0.112 |
| 16 | JATIM | 0.201 | 0.253 | 0.712 | 0.436 | 0.600 | 0.755 |
| 17 | BALI | 0.418 | 1.600 | 1.327 | 1.910 | 1.509 | 1.047 |
| 18 | NTB | 0.102 | 0.027 | 1.513 | 2.915 | 3.397 | 2.228 |
| 19 | NTT | 0.022 | 0.064 | 0.042 | 0.050 | 0.064 | 0.062 |
| 20 | KALBAR | 0.194 | 0.186 | 0.774 | 1.898 | 1.200 | 1.679 |
| 21 | KALTENG | 0.503 | 0.053 | 4.002 | 3.300 | 2.516 | 1.951 |
| 22 | KALSEL | 0.001 | 1.137 | 0.908 | 1.018 | 0.812 | 0.671 |
| 23 | KALTIM | 0.016 | 0.146 | 1.267 | 0.557 | 1.644 | 1.008 |
| 24 | SULUT | 0.299 | 0.646 | 1.699 | 1.360 | 0.225 | 0.268 |
| 25 | GORONTALO | 0.000 | 0.000 | 0.037 | 0.487 | 1.072 | 0.657 |
| 26 | SULTENG | 0.014 | 0.039 | 1.082 | 2.346 | 3.940 | 3.468 |
| 27 | SULSEL | 0.084 | 0.313 | 1.188 | 0.198 | 1.002 | 0.671 |
| 28 | SULBAR | 0.000 | 0.000 | 1.084 | 0.131 | 0.004 | 0.038 |
| 29 | SULTRA | 0.007 | 0.064 | 0.165 | 0.163 | 0.262 | 0.535 |
| 30 | MALUKU | 0.000 | 0.000 | 0.094 | 0.316 | 0.180 | 0.962 |
| 31 | MALUT | 0.000 | 0.403 | 11.158 | 4.899 | 2.690 | 6.843 |
| 32 | PAPUA | 0.020 | 0.026 | 0.252 | 0.339 | 0.239 | 0.205 |
| 33 | PABAR | 0.126 | 0.015 | 2.026 | 7.539 | 5.760 | 14.603 |

Source: Data processed

During the 2011-2013 West Papua province into a region with the highest ranking IKID. This shows that the Eastern Indonesia has started to become the destination of foreign investment. Master Plan for the Acceleration and Expansion of Indonesian Economic Development (MP3EI) became one of the factors driving foreign investment.

Development of investment in Papua Barata was in four Special Economic Zones (SEZ) Merauke, Sorong, Teluk Bintuni and Raja Ampat. Four economic zones in West Papua that have the potential of specific sectors to be developed. Merauke economic area can be developed for investment in the agriculture and processing industry, the economic region Sorong to the maritime industry and its processing, Bintuni Bay region's economy smelter and petrochemical industries, as well as economic zones Raja Ampat for the tourism sector.

The second area is also a favorite investment destination of North Maluku province. This province over the last 4 years has a greater IKID 1 although with a downward trend. North Maluku is the area that became the center of the main fisheries in the eastern part of Indonesia, became the target of foreign investors to invest. In connection with the policy concerning the moratorium marine by the government, the fishing industry and national marine began bergeliat. In addition to the larger fishing production, foreign countries are also increasingly interested in investing in infrastructure development in the downstream sector of fisheries and marine products in Indonesia. Foreign investors began to see the potential for marine Indonesia. Some countries have also expressed interest to invest in the construction of various facilities and infrastructure fishery so-called "cold chain system" as coolstorage facilities, integrated processing plant or investments in the industrial sector downstream fisheries how the area that became the target of foreign investors to invest is the area that became a center for fisheries, primarily in the area of eastern Indonesia, such as in Maluku, North Maluku, Papua and West Papua.

In addition to the fisheries sector, the mining sector in Maluku Utara (North Maluku), also attracting investment, especially the construction of the natural resources of nickel smelter. Conditions smelter development of natural resources into driving the rise of investment in this sector. Law (UU) No. 4 the Year 2009 on Mineral and Coal carries the spirit of value-added products in domestic mining. Holders of the work contract that it operates production shall carry out purification in the country no later than five (5) years since the Act No. 4 of 2009 was enacted.

### 4.2 Regional Investment Potential Index (IPID)

The data used to calculate the index covers 10 areas of investment potential economic data and social. The exclusion of data availability of infrastructures, such as roads, electricity, water, and other infrastructure facilities of weakness resulting in index numbers. Based on available data, only 33 provinces are counted, while the province of North Borneo could not be included in this study.

The index number obtained showed the potential of each region to receive investments. The higher the index number the higher the potential investment to enter. Each data value is 0 for bad and one for high. For example good inflation is low inflation, the region with the lowest inflation will be worth 1 and derah with the highest inflation worth 0 in contrast to the GDP per capita. Areas with the highest per capita GRDP is 1 and the area with the lowest PDRB worth 0. The total index number is 10 figures menjumlahan subindex of 10 data.

The results of the calculation of the index investment potential of the region (IPID) during the period 2008-2013 in 33 provinces as shown in Table 6 and Table 7.

Table 6. Regional Investment Potential Index by province, 2008-2013

| No. | Provinsi | IPID | | | | | |
|---|---|---|---|---|---|---|---|
| | | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
| 1 | ACEH | 3.6040 | 3.5179 | 3.7379 | 3.3677 | 3.2561 | 3.3060 |
| 2 | SUMUT | 4.5953 | 4.6165 | 3.9806 | 4.2621 | 4.0969 | 3.5443 |
| 3 | SUMBAR | 3.6860 | 3.8864 | 3.5942 | 3.4175 | 3.6288 | 2.9693 |
| 4 | RIAU | 5.1345 | 5.0104 | 4.5705 | 4.7751 | 5.0444 | 4.5735 |
| 5 | KEPRI | 4.9273 | 4.8479 | 4.2817 | 4.5169 | 4.1411 | 3.9321 |
| 6 | JAMBI | 3.6742 | 3.6671 | 2.9666 | 3.7368 | 3.5095 | 3.6167 |
| 7 | SUMSEL | 3.9215 | 4.0507 | 3.9306 | 3.6990 | 3.7611 | 3.7875 |
| 8 | BABEL | 3.2962 | 3.8411 | 3.1554 | 3.4362 | 3.0186 | 3.6614 |
| 9 | BENGKULU | 3.2866 | 3.3465 | 2.8739 | 3.1738 | 2.8994 | 2.8472 |
| 10 | LAMPUNG | 3.1553 | 3.2462 | 2.9559 | 3.5046 | 3.7441 | 3.6755 |
| 11 | JAKARTA | 8.8329 | 8.8569 | 8.6335 | 8.4692 | 8.2970 | 8.2297 |
| 12 | JABAR | 4.5529 | 4.6208 | 4.7082 | 4.5493 | 4.2595 | 4.8136 |
| 13 | BANTEN | 3.1975 | 2.9989 | 3.2329 | 3.2004 | 3.0171 | 3.2885 |
| 14 | JATENG | 4.7417 | 4.4693 | 4.3570 | 4.3675 | 4.3588 | 4.2806 |
| 15 | YOGYA | 4.9037 | 4.7190 | 4.4332 | 4.5410 | 4.0883 | 4.6299 |
| 16 | JATIM | 5.5504 | 5.3285 | 5.1250 | 4.9039 | 5.0476 | 5.6875 |
| 17 | BALI | 4.7952 | 4.3637 | 4.2879 | 4.3741 | 4.2209 | 4.3423 |
| 18 | NTB | 1.8974 | 1.9836 | 1.3430 | 1.3010 | 1.5072 | 1.5738 |
| 19 | NTT | 2.9257 | 2.2194 | 2.2805 | 2.4839 | 2.2810 | 2.0522 |
| 20 | KALBAR | 3.3004 | 2.9810 | 2.7605 | 2.6683 | 2.3925 | 2.8618 |
| 21 | KALTENG | 4.2548 | 4.5351 | 3.7853 | 3.9295 | 3.6881 | 3.9391 |
| 22 | KALSEL | 3.2476 | 3.0850 | 2.9197 | 3.1167 | 2.6603 | 3.4370 |
| 23 | KALTIM | 5.5787 | 5.5760 | 5.4709 | 4.5285 | 5.4179 | 5.6603 |
| 24 | SULUT | 4.7172 | 4.6652 | 4.4518 | 4.8430 | 3.9396 | 3.9314 |
| 25 | GORONTALO | 3.0238 | 2.5507 | 2.5545 | 2.5194 | 2.2981 | 2.9577 |
| 26 | SULTENG | 3.0290 | 2.9584 | 2.8172 | 2.5683 | 2.3080 | 2.8531 |
| 27 | SULSEL | 3.3482 | 3.4228 | 3.4436 | 3.5292 | 3.0207 | 3.9013 |
| 28 | SULBAR | 3.3398 | 3.6120 | 3.5502 | 2.9647 | 3.2785 | 2.5661 |
| 29 | SULTRA | 2.8663 | 2.9542 | 3.4795 | 2.8255 | 2.6774 | 3.5589 |
| 30 | MALUKU | 2.7824 | 2.0242 | 2.0994 | 2.5870 | 1.7379 | 1.6707 |
| 31 | MALUT | 2.8327 | 1.9904 | 2.1910 | 2.4677 | 1.7905 | 2.5773 |
| 32 | PAPUA | 3.5856 | 3.8676 | 3.9293 | 3.4721 | 3.6232 | 2.4189 |
| 33 | PABAR | 2.7915 | 2.7569 | 3.4004 | 3.1182 | 2.5934 | 3.2550 |

Source: Data processed

During the 2008-2013 period, ranking first is always occupied by Jakarta, followed by East Java, East Kalimantan, West Java, and Yogyakarta. The fourth area after Jakarta has the same relative value index. Jakarta, West Java increased potency rankings quite rapidly because of the possibility of investing up from rank 11 in 2008 to rank fourth in 2013. Jakarta as a province where the state capital is located becomes its own attraction for investment, in addition to socio-economic conditions that are conducive to investments.

In the period of 2013, the area has a low rating for potential investment is always occupied by the West Nusa Tenggara province, followed by Maluku, East Nusa Tenggara, Papua and West Sulawesi. Papua decreased the highest rank than others.

Areas that experienced an increase in high enough rating is Southeast Sulawesi, Lampung, West Papua, West Java, and Bangka Belitung. Areas that experienced downgrades are Papua, West Sulawesi, West Sumatra, North Sumatra, and Riau Islands.

**4.3 Matrix Investment Performance Index and Potential Index Investing**

Of the two indices that have been calculated, if combined would be acquired four provinces categories, namely (1) the front-runner - the province with the potential index and the index of high performance; (2) above potential - the province with an index of high potential and low performance index; (3) below potential - provinces with low potential index and the index of high performance; and (4) under- performers - the province with the potential indices and index low performance.

From the result of merging the two indices obtained the results as shown in Table 5:27. There are differences in the composition of the group of provinces in each box for 2 the period. The number of provinces which enter the group of front-runners has decreased from six provinces only to stay two provinces of West Java and Central Kalimantan, and others shifted to another group. Riau Islands, Jakarta, and Bali shifted to the group due to the decline IKID above potential. This means investment in these provinces is relatively less than others.

They are grouped above potential changes from 7 provinces to 13 provinces, in addition to Kep. Riau, Jakarta, and Bali, there are three provinces more shifted to this group. West Sulawesi, Southeast Sulawesi and Papua in 2008 originally under performers in the group and in 2013 shifted to the potential for rising above IPID. Rising IPID means increasing the performance of the regional economy that can attract foreign investment.

In the group below potential, only Banten IPID still survives in low and high IKID. South Sumatra shifted to under-performers because IKID is down. Meanwhile, West Nusa Tenggara, West Kalimantan, Central Sulawesi, North Maluku and West Papua shifted from groups under-performers into groups below potential due to rising investment performance, new foreign investment to the provinces are relatively higher.

Table 8. Number of Provinces based on the ranking IPID and IKID

| IKID | IPID 2008 | | | IPID 2013 | | |
|---|---|---|---|---|---|---|
| | low | high | Total | low | high | Total |
| low | 18 | 7 | 25 | 12 | 13 | 25 |
| high | 2 | 6 | 8 | 6 | 2 | 8 |
| Total | 20 | 13 | 33 | 18 | 15 | 33 |

The number of provinces that enter the group under IKID performers with low and low IPID decreased from 18 provinces to 12 provinces. The 10 provinces still remain in this group, namely Aceh, North Sumatra, West Sumatra, Jambi, Bangka Belitung, Jambi, East Kalimantan, East Nusa Tenggara, Gorontalo and South Sulawesi. While the other two are the first in the group Riau front-runner and South Sumatra, which was originally in the group below potential.

Table 9. Matrix Regional Investment Performance Index (IKID) and the Regional Investment Potential Index (IPID), 2008 and 2013

<table>
<tr><td colspan="2" rowspan="3"></td><td colspan="2">IPID 2008</td><td colspan="2">IPID 2013</td></tr>
<tr><td>high</td><td>low</td><td>high</td><td>low</td></tr>
<tr><td>FRONT-RUNNER</td><td>BELOW POTENTIAL</td><td>FRONT-RUNNER</td><td>BELOW POTENTIAL</td></tr>
<tr><td rowspan="2">IKID</td><td>high</td><td>Riau, Kep. Riau, Jakarta, Jabar Bali, Kalteng</td><td>Sumsel, Banten</td><td>Jabar, Kalteng</td><td>Banten, NTB, Kalbar, Sulteng, Malut, Pabar</td></tr>
<tr><td>low</td><td>ABOVE POTENTIAL<br>Lampung, Jateng, DI Yogya, Jatim, Kalsel, Sulut, Maluku</td><td>UNDER PERFORMERS<br>Aceh, Sumut, Sumbar, Jambi Babel, Bengkulu, NTB, NTT, Kalbar Kaltim, Gorontalo, Sulteng, Sulsel Sulbar, Sultra Malut, Papua, Pabar</td><td>ABOVE POTENTIAL<br>Kep. Riau Lampung Jakarta, Jateng, DI Yogya, Jatim, Bali, Kalsel, Sulut, Sulbar, Sultra, Maluku, Papua</td><td>UNDER PERFORMERS<br>Aceh, Sumut Sumbar, Riau, Jambi, Sumsel, Babel, Bengkulu, NTT, Kaltim, Gorontalo, Sulsel</td></tr>
</table>

One of the things that must be considered in an effort to attract inward investment is the availability of infrastructure. The Global Competitiveness Report 2016/2017 report put Indonesia into position 54. Achievement of Indonesia in relatively good efficiency and innovation in the appeal of other Asean countries, while the achievement of the basic conditions is ranked 82. The basic components include institutional factors, macroeconomic conditions, infrastructure and health and basic education.

Table 10. Global Competitiveness Index Rating ASEAN countries, 2016-2017

| Countries | Total | Basic Requirement | Efficiency | Innovation |
|---|---|---|---|---|
| 1. Singapura | 2 | 1 | 2 | 12 |
| 2. Malaysia | 25 | 26 | 24 | 20 |
| 3. Thailand | 34 | 44 | 37 | 47 |
| 4. Indonesia | 41 | 52 | 49 | 32 |
| 5. Philipina | 57 | 65 | 58 | 53 |
| 6. Brunei Darussalam | 58 | 50 | 87 | 78 |
| 7. Vietnam | 60 | 73 | 65 | 84 |
| 8. Cambodia | 89 | 96 | 97 | 118 |
| 9. Laos | 93 | 99 | 104 | 93 |
| 10. Myanmar | n/a | n/a | n/a | n/a |
| 11. Timor Leste | n/a | n/a | n/a | n/a |

Source: World Economic Forum (WEF)

The crisis that hit Indonesia makes the creation of basic conditions for attracting investment is not running smoothly, both at the center and in the provinces. The budget allocation for infrastructure is only enough for maintenance. Not enough funds for improving the quality of human resources are healthy and educated. Regional autonomy is also considered to extend the chain of bureaucracy and raise costs at every vertex. So that the improvement in the macroeconomic conditions and the stable was not quite able to encourage the inflow of investment, both domestic and foreign. Need more on efforts to make it happen.

In order to improve and create a favorable investment climate and in line with the direction and policies of national development, the steps that have been made are: (1) simplifying the process and procedures for granting licenses and agreements in the framework of the investment; (2) open wide areas previously closed or restricted to foreign investment; (3) provides a variety of incentives, both tax and non tax; develop areas for investment with various facilities on offer; (4) enhance various laws by a regulation issued new legislation which guarantees a healthy investment climate; (5) enhance the law enforcement and dispute resolution are effective and fair; (6) enhance the duties, functions and authority of the relevant agencies to be able to provide better services; and (7) opens the possibility of a larger foreign shareholding.

## 5. Conclusion

This paper calculates the Regional Investment Performance Index (IKID) and the Regional Investment Potential Index (IPID). IKID shows how an area attractive investments are calculated relative to the size of the economy, ie the ratio of the share of FDI coming into the economy of the world against the GDP share of the total GDP. IPID shows the factors that are expected to affect the attractiveness of a region to attract investors. Both indexes are expected to provide a preliminary description of investors' areas that have an investment performance index which indicates the potential for profitable investment. The result of the merger of the two indices produces four groups of provinces, the front-runner, above potential, below potential, and under performers.

For 6 years there was a slight shift in the grouping of provinces caused by up / down IKID and up / down IPID. There are six provinces that were originally located at the front-runner with IKID and IPID high end of the study period there were only staying two provinces because of IKIDnya down, eg Kep. Riau, Jakarta, and Bali. Conversely there are also provinces that rose IKIDnya thus shifted from groups under-performers be above potential. IKID rising due to the increase of investment into the propinvi-propinvi especially in Eastern Indonesia, North Maluku, Papua and West Papua. Incoming investment, especially in mining and fisheries sectors. Potential fisheries in the waters of eastern Indonesia and the moratorium on permits foreign fishing boats make fishing to be excellent potential for investors to build facilities and infrastructure of the fisheries sector. Government regulation of the mining company's obligation to build a smelter natural resources is also a driver of investment in the mining sector.

IKID necessary to encourage increased investment increasing, and therefore required a variety of investment policy packages is essentially an investment incentive. Setup required basic conditions were nice and supportive environment for the improving macroeconomic conditions to be attractive for investment, such as ease of licensing and legal certainty.

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