# 04. Analysis of macroeconomics and diagnostic of economic growth of Surabaya

*By* Ignatia Martha Hendrati

WORD COUNT 8195
TIME SUBMITTED 28-MAR-2019 10:00AM
PAPER ID 45539745

Journal of Economics, Business, and Accountancy Ventura Vol. 17, No. 3, December 2014, pages 313 – 324

# Analysis of macroeconomics and diagnostic of economic growth of Surabaya

Ignatia Martha[1]

[1] University of Pembangunan Nasional "Veteran" Jawa Timur, Raya Rungkut Madya Street Surabaya 60294, East Java, Indonesia

ARTICLE INFO

**Article history:**
Received 17 September 2014
Revised 20 November 2014
Accepted 19 December 2014

**JEL Classification:**
O11, O12

**Key words:**
Macroeconomics,
Microeconomic,
Economic Growth,
GDP,
Surabaya.

**DOI:**
10.14414/jebav.14.1703001

ABSTRACT

Surabaya is the second largest city in Indonesia after Jakarta. As one of the growing metropolitan city, Surabaya has great potential for investors to invest and do business. The incoming investment can lead the economy towards a more modern and improve the economic status of the city as a center for national economic growth, as well as can reduce the poverty. However, the development of which has been implemented still has many challenges, especially for the industrial sectors failed to raise and move the trade and services sector as a stimulant for other economic activities. The report further analyzes the current macroeconomic conditions and the related challenges as well as the opportunities that exist indicating that the Surabaya city developed rapidly with all the dynamics that exist in it. Surabaya city developed into the city followed by the development of the service and trade sectors with impressive property. However, the study also found some obstacles. Thus, it should be prioritized and addressed effectively to help this city grow even higher. The main barriers identified include licensing relating to the business and investment climate, transportation, human resources, and a high rate of return, especially for the middle to the bottom.

ABSTRAK

Surabaya merupakan kota terbesar kedua di Indonesia setelah DKI Jakarta. Sebagai salah satu kota metropolitan yang terus tumbuh, Surabaya mempunyai potensi yang besar bagi investor untuk menanamkan investasinya dan juga berbisnis di kota ini. Investasi yang masuk akan menjadikan perekonomian bergerak menuju ke arah yang lebih modern, meningkatkan status ekonomi kota sebagai pusat pertumbuhan ekonomi nasional sekaligus membantu mengurangi penduduk miskin yang ada. Akan tetapi pada kenyataannya, pembangunan yang sudah dilaksanakan masih menemui banyak tantangan terutama untuk membangkitkan sektor industri yang melemah dan menggerakkan sektor perdagangan dan jasa sebagai stimulan bagi kegiatan perekonomian lainnya. Laporan yang akan menganalisis lebih jauh terkait kondisi makroekonomi terkini dan tantangan dan peluang yang ada menunjukkan bahwa Kota Surabaya berkembang cukup pesat dengan segala dinamika yang ada di dalamnya. Kota Surabaya berkembang menjadi kota jasa dan perdagangan diikuti perkembangan sektor properti yang mengesankan. Namun demikian, penelitian ini juga menemukan beberapa kendala yang apabila dijadikan prioritas dan diatasi secara efektif dapat membantu kota ini tumbuh lebih tinggi lagi. Hambatan-hambatan utama yang dapat diidentifikasi antara lain adalah perijinan yang berkaitan dengan dunia usaha dan iklim investasi, transportasi, sumberdaya manusia, dan tingkat pengembalian yang tinggi terutama bagi masyarakat menengah ke bawah.

## 1. INTRODUCTION

Surabaya city has grown rapidly even in the structure of East Java-zone. This city has been established as a major center of East Java. The development of Surabaya exceeds other cities that are under its sub-ordinances. This can be considered as an indicator of the level of the primacy of Surabaya City to other cities in East Java. As a metropolitan city, the majority of the population is engaged in services, industry, and trade or they are rarely

* Corresponding author, email address: ignatia_martha@yahoo.com

found in rice fields.

Some big companies are headquartered in Surabaya. Processing industry and trade sector which includes hotels and restaurants is a major contributor to economic activity Surabaya incorporated in the value of Gross Domestic Product (GDP). Surabaya is the dominant function as a center of commercial activity, financial, trade, information, administrative, social, and health. Apart from a densely population, a strong economy, and a good infrastructure, the city of Surabaya is still widely regarded as the axis of economic growth like some other areas such as Jakarta.

Although economic growth is quite good for 3 years (2011- 2013) with an average of 7.37 percent, this figure is still below pre-crisis levels which were on average of 10.90 per cent over the period 1993-1996. This is due to the fact that the investment in East Java is still low compared to other provinces, as well as in the city of Surabaya. On the use of GDP at constant prices, Household Consumption component occupies the top position with the largest contribution rate reached 66.57 percent in 2012. The next position is the GFCF components contributing 18.88 percent; government consumption component reaches 3.00 percent contribution. While the components of Net Exports in 2012 accounted for 2.70 percent and the smallest contribution is the consumption component of Private Non-Profit Organization that only 0.21 percent.

Although gradually reduced, the number of poor people is still quite high, both in the city center and suburbs. Therefore, poverty is still an important concern in the future development. Besides that, the diversity of socio-economic conditions led to the problem of poverty in the city of Surabaya to vary with the properties of the character or different family circumstances. The problem of poverty is multidimensional because it is not only referred to the size of income, but also the vulnerability and insecurity. All these are due to the society poverty. In addition, the poverty is also related to the failure in the fulfillment of basic rights and disparities of treatment for the groups of people for living with dignity.

In connection with above condition, this study aims to better understand the factors supporting and inhibiting economic growth in the city of Surabaya, which is one of the most dynamic region and has an important position in the economy. It also attempts to better understand the factors that hamper economic growth in the city of Surabaya. Through the support and advice, this research is expected to provide the government with the way of improving the economic performance of the region. It finally responds to the question of whether there are problems associated with the funding or investment returns of factors that inhibit Surabaya such as difficulty in achieving investment and higher growth relative to other major cities. The study also seeks to address the problem in economic growth in the broad framework of intersector and inclusive reach most of the labor and the poor in this region.

The purpose is to analyze the economic development of the city of Surabaya and also identify the existing barriers related to further economic growth. It better observes and detects any factor which is a challenge in realizing Macroeconomic stability and economic growth in the city of Surabaya, so it can provide valuable recommendations for efforts to achieve them. The findings are expected to provide inputs as well for the central government to interact in economic development at the local level. In addition, it leads to being part of a broader regional development planning in Indonesia. Therefore, it is useful not only for the city of Surabaya, but also for other areas in Indonesia are not maximizing their potential into regional growth poles.

## 2. THEORETICAL FRAMEWORK

It looks at the obstacles that hinder the poor and the majority of the workforce to contribute to and benefit from economic growth. Thus, the inclusivity should be attained by more concerning to equality of opportunity that they have in terms of access to markets, resources, and environmental regulations are not biased for businesses and individuals. Analysis of economic growth that focuses on ways to increase the rate of growth by leveraging or utilizing part of the labor force who are still trapped in low productivity activities or totally excluded from the process of economic growth.

The concept tries to create productive jobs that include both 'employment growth' to generate new jobs and income for these individuals and also 'productivity growth' that can increase the wages of the workers as well as the rate of return for entrepreneurs. Furthermore, it also looks into the feasibility of an individual to be employed (employability), as well as the opportunities available for them to be employed. Feasibility assessment of individual work as it requires an analysis of human capital (education and health), their ability to acquire skills and their ability to access the labor market in which they can earn money using their expertise.

The next assessment is the employment oppor-

**Figure 1**
**The Framework of Inclusive Economic Growth Analysis**


Source: Elena Ianchovichina and Susanna Lundstrom (2009).

funities that are carried through more classical studies on economic growth that relies on private sector growth that can offer employment opportunities. Thus, studying inclusive growth implies looking at the ability of individuals to be productively employed (labor supply perspective) and the opportunity they have to make full use of the resources available at the time the economy evolves over time from the perspective of the business environment (demand point of view for labor force). See Figure 1.

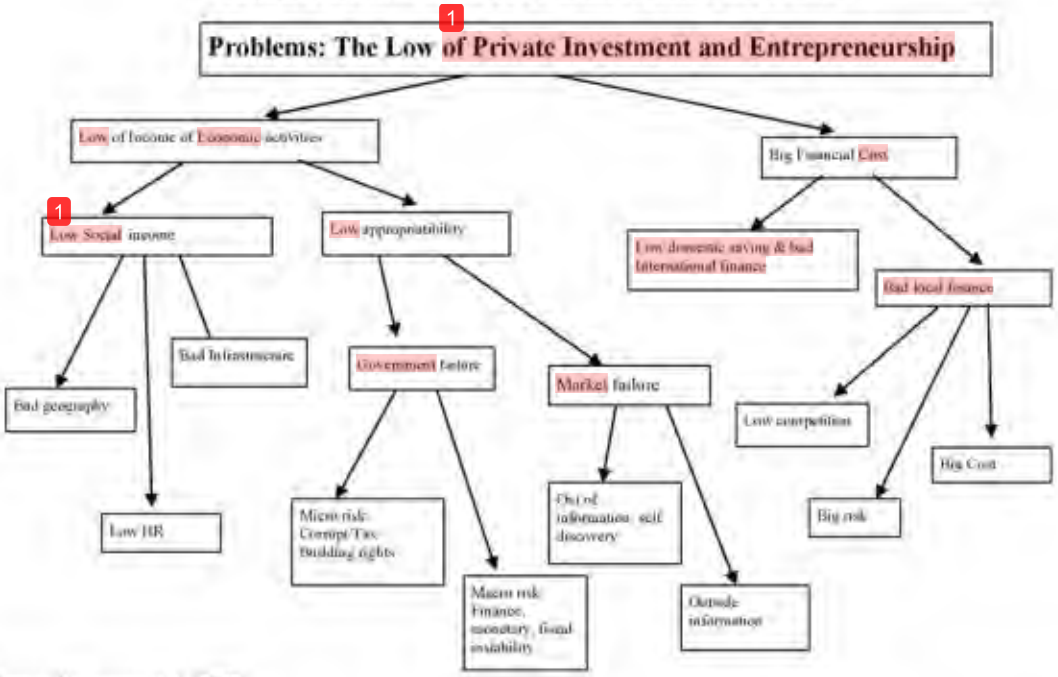
Analysis from the perspective of the business environment is carried out following the diagnostic growth framework developed by Hausmann et al. (2005). This approach is based on the idea that there are several reasons why the economy is not growing. Yet, each reason produces a collection of symptoms that are typical. These symptoms can be the basis for a wide range of diagnostics where then analysts try to distinguish between these explanations which are more potent against the economic growth rate was observed. This approach recognizes the important role of the private sector for economic growth. This strong private sector can improve productivity and invest in traditional industries and non-traditional, ultimately forming and strengthening the productive sector towards a modern economy (see Figure 2).

Some related studies on the macroeconomic diagnosis have been carried out by some previous researchers. For example, the World Bank in cooperation with REDI and East Java Provincial Government in 2011 conducted a study on East Java Growth Diagnostic. They identified the key constraints of inclusive growth in Indonesia as the second largest Province. They found that (1) despite having a stable growth rate and moderate, East Java is still not able to raise the growth rate of the economy back to the level before the crisis, while the poverty rate is above the national average; (2) in terms of the business environment it shows that access and cost of finance is not a constraint to economic growth in East Java; (3) in relation to the availability and cost of labor, macroeconomic outlook, and security issues, it does not seem to be an obstacle for the return on investment and growth.

Other than the above findings, (4) the main obstacle for economic growth that can be identified is in terms of the ability to obtain the return on investment, especially with regard to infrastructure and investment climate; (5) the employability analysis showed a high proportion of the labor force in East Java that do not have the skills in which it can be an obstacle for inclusive growth; (6) the majority of unskilled labor in East Java to work in the agricultural sector, which has the lowest labor productivity; (7) some of the main factors causing low production growth in the agricultural sector, among others, is the ratio of land per farmer is low, limited access to credit services, value-added agricultural products are low, and the high proportion of unskilled labor. Still others, it was found that (8) the manufacturing industries, the driving force of economic growth in East Java are not yet recovered to pre-crisis to create adequate employment opportunities in East Java; and finally (9) the spatially, the pattern of economic growth in East Java indicate regions leading and lagging.

The study recommends ten ideas to support inclusive growth in East Java, namely providing wider access to credit for SMEs; Increasing the supply and electrical connections to the company; Improving the quality of district roads; Strengthening the function of seaports in East Java; Improving the business climate for the private sector; Increasing the capacity of human resources; Revitalization of the agricultural sector; Recover the investment in manufacturing; Improving trade logistics perform-

**Figure 2**
**Business Environment Based on Hausmann, Rodric and Velasco**




Source: Hausmann et al. (2005).

ance; and supports integration between developed areas and lagging regions.

The subsequent research conducted by Ricardo Hausmann, Dani Rodrik, Andres Velasco (2005) with a study entitled Growth Diagnostic taking research location in El Salvador, Brazil, and the Dominican Republic. The study found that the three countries are showing signs of economic growth are different, with almost the same policy. El Salvador and Brazil they have slow economic growth response although given the current policy; otherwise the Dominican Republic has a very rapid economic growth as he took an active policy.

## 3. RESEARCH METHOD

The study on preparing Surabaya for macroeconomic assessment and analysis of economic growth uses two basic designs: exploratory and descriptive research carried out in stages. Exploratory research aims to be more familiar with the research environment to explore the theory based on the data available so as to construct a structured framework. Descriptive research seeks to understand and explain how the occurrence of an event based on that framework so that a conclusion can be drawn. This analysis also takes into account the main sector analysis based on the approach of LQ, a relative development based on the shift share, and Klassen analysis. The analysis techniques used include as the following.

a. Method of Descriptive Statistical Analysis

This method is used to describe the data that had been collected into information. The presentation is in tables, diagrams, and figures. It also includes the calculation of index numbers and forecasting (Suharyadi 2007).

b. Analysis of Economic Growth

Economic growth is measured by the following formula:

$$Eg = \left\{ \left( \sqrt[n]{\frac{Pn}{Po}} \right) - 1 \right\} \times 100\%, \quad (1)$$

In which:

*Eg* is the average rate of economic growth in Surabaya; *Pn* is the value of output (GDP Surabaya) year-to-n; and *Po* is the value of output (GDP Surabaya) base year, in this case the *Po* was in 2000 and *Pn* is the- *n*-th.

And, the economic structure is determined from the sector contribution to PDRB (Gross Regional Income) total output, as measured by the following formula:

$$Ks = \frac{PDRBt}{PDRB} \times 100\%, \quad (2)$$

In which:
Ks is the sectors' contribution; PDRBi is the output of the $i^{th}$ sector; and GDP is the total output of Surabaya.

c. To measure the comparative advantage of the approach used LQ (Location Quotient), Shift-share analysis, and Typology Klassen. To calculate the value of LQ and Shift-share Surabaya, Surabaya compared to the GDP (counterpart) to GDP in East Java.

The formulation LQ (Location Quotient) is as follows:

$$Ks = \frac{PDRBi}{PDRB} \times 100\%, \quad (3)$$

In which:
PDRBIki the PDRB Surabaya city; PDRBki is the total of PDRB (GDP) Surabaya is the *i-th* sector; PDRBk is the total GDP of Surabaya; PDRBpi GDP in East Java is the *i-th* sector; PDRBp is the total GDP of East Java.

As for calculating the value of LQ and Shift-share of the sub-district, the GDP of sub-districts in the city of Surabaya is compared to the GDP of Surabaya.

The formulation LQ (Location Quotient) is as follows:

$$LQ = \frac{PDRBki/PDRBk}{PDRBpi/PDRBp}. \quad (4)$$

In which:
PDRBki is the sub-district sector of GDP to-*ith*; PDRBk is the District of total GDP; PDRBpi is the GDP of Surabaya is the *i-th* sector; PDRBp is the total GDP of Surabaya.

Furthermore, the formulation of the model Shift-share analysis uses two tools of analysis, namely,

***Proportional Shiftshare compone*** (P) to see the effect of sector ( i) of Surabaya on economic growth in sector (i) in the sub-districts of Surabaya. This component is positive in the sub-county (*kecamatan/distric* region) specializing in fast-growing sector in the city of Surabaya (average growth of sectors in counties or *kecamatan/distric* regions in Surabaya) and negative in areas that specialize in slow-growing sectors in the city of Surabaya. The formula of P is as follows:

$$Sp^i_i = [X'_{ni}/X'_{nn} - X_{ni}/X_{nn}]^* X'_{ni} \quad (5)$$

***Shift Differential Component*** (D) is to determine the deviation between economic growth in sector (i) at the county-districts in the city of Surabaya on economic growth sector (i) Surabaya. This component is positive if the sector has the advantage of being strategic and comparative sources such as having abundant power or being efficient, and has a negative value if the sector has not comparative advantages. The formula of D is as the following.

$$Sd^i_i = [X'_{ni} - (X'_{ni}/X'_{nn})X'_{ni}]. \quad (6)$$

In which:
$X_i$ = PDRB (GDP) of the county districts region in Surabaya
$X'_{ni}$ = Sector- ( i) in PDRB (GDP) of county/ districts region
$X_n$ = PDRB (GDP) of Surabaya
$X'_{ni}$ = Sector (i) in PDRB (GDP) of Surabaya

Now, the Klassen is based clustering method of the districts in the city of Surabaya to see economic growth and GDP per capita in each of these districts. By using the typology analysis of Klassen, a sub-district can be grouped into four categories, namely:

1. Developed Districts
2. Developed District but depressed (sub district Potential)
3. Developing Sub district, and
4. District of Retarded

To determine the category of sub-districts into four categories above, it should be based on an average economic growth rate and the average GI per capita in all districts in Surabaya, as shown in Table 1.

## 4. DATA ANALYSIS AND DISCUSSION

The macroeconomic stability is a fundamental factor for making a sustainable economic growth. The global economic turmoil, to some extent, can affect the performance of the domestic economy. For example, at the macro level, the economic development of Surabaya in 2013 was considered very encouraging in the midst of a global economy. This city was at that time experiencing the world financial crisis. As it is known that the world economy was also experiencing a slowdown triggered by the debt crisis in Europe and the United States economy that has not fully recovered. The impact of the debt crisis spread to other sectors. In that condition, the job market also experienced a slowdown with rising unemployment, especially in the Eurozone. The crisis in the Eurozone had finally also affected the performance of world trade and lower world economic growth.

The value of GDP of Surabaya value at current prices showed a trend which continues to increase every year. Surabaya city GDP in 2011 was reaching to Rp. 235,034.30 billion, up to Rp. 2[illegible]35.62 billion in 2012. Further, on the basis of the value of GDP at current prices in 2013 was Rp. 302,756.07 billion and for the year 2014 amounted to Rp. 336,266.12 yet, these results are still provisional, as

**Table 1**
**Matrix of Klassen Typology Category**

| | PDRB (GDP) per capita of Districts | |
|---|---|---|
| Average Economic Growth of Districts | Developing districts (Quadrant 3) Underdeveloped districts (Quadrant 4) | Developed districts (Quadrant 1) Potential Districts (Quadrant 2) |

**Table 2**
**GDP Products of Surabaya According to Business based on Basic Prices during 2009- Projection of 2014 (Billion Rupiah)**

| No. | Sector | 2009 | 2010 | 2011 | 2012 | 2013 | 2014** |
|---|---|---|---|---|---|---|---|
| 1 | Agriculture | 165.89 | 178.3 | 185.47 | 192.40 | 207.96 | 217,32 |
| 2 | Mining & the Like | 10.31 | 11.32 | 12.42 | 13.58 | 15.05 | 16,21 |
| 3 | Processing industries | 41,277.02 | 45,508.52 | 51,188.30 | 57,379.28 | 63,849.20 | 68.868,13 |
| 4 | Electricity, Gas & Water | 6,662.81 | 7,453.09 | 7,689.91 | 8,070.85 | 10,364.24 | 11.510,44 |
| 5 | Construction | 12,248.59 | 14,086.89 | 16,218.47 | 18,154.47 | 21,075.86 | 23.908,81 |
| 6 | Trades, Hotel & Restaurants | 76,354.51 | 88,851.24 | 103,172.40 | 117,525.13 | 135,688.79 | 153.889,99 |
| 7 | Transport & Communication | 17,099.70 | 20,230.54 | 23,724.73 | 26,887.74 | 30,990.98 | 32.819,97 |
| 8 | Finance, Rental & ServComp | 10,879.17 | 12,388.90 | 14,176.90 | 16,032.98 | 18,411.54 | 20.614,42 |
| 9 | Services | 13,860.96 | 16,452.65 | 18,665.70 | 20,079.18 | 22,152.43 | 24.430,83 |
| Total PDRB Surabaya | | 178.558,97 | 205,161.47 | 235,034.30 | 264,335.62 | 302,756.07 | 336,266.12 |

Source: Central Bureau Statistics Surabaya 2014. Note: ** Projection Data.

shown in Table 2. The increase of the household credit in Surabaya until 2014 in the midst of global economic conditions was still experiencing the economic crisis as a result of the world financial crisis. This was as an indicator that the purchasing power of home stairs in Surabaya also decreased. This condition also as an indicator that the domestic market in 2013 still held a very dominant role in improving the economy of the city of Surabaya in addition to increasing the market share of exports from Surabaya to export destination countries of the city of Surabaya.

The trend of GDP at constant prices also shows an increase every year. For example, in 2011, the value of GDP ADHK was Rp. 94471.05 billion, rose in 2012 to Rp. 101,671.63 billion. Furthermore, in 2013, the value of GDP ADHK was up to Rp. 109,075.46. For the 2014 projection of the value of GDP ADHK, it reached to 117,007.69 billion as shown in Table 3.

In general, the economic growth in Surabaya in 2009-2013 was relatively stable, as reflected in the economic growth rate by an average of 5-7% per year. This figure exceeds the growth rate of both the provincial and national levels. In 2010 the economic growth in Surabaya was at 7.09%. Furthermore, in 2011 to 2013, economic growths in Surabaya continued to fluctuate in which it either increased or decreased, although the degree of fluctuation was relatively very small. To see the development of economic growth in Surabaya in 2007-2013, it can be seen in Figure 3.

The economic transition in Surabaya is mostly in the manufacturing sectors, moving into to trade, hotels, and restaurants. The contribution of trade, hotels and restaurants to GDP Surabaya during 2009 to 2013 has continued to rise. In 2013, the value of the contribution was of 43.73%. This indicates that the purchasing power in this city is quite high and has a tendency to increase. However, the increase in purchasing power could also mean that the contribution of the consumer sector is also very dominating, far above the GFCF. The GDP at constant prices usage was on household consumption component in which it remains in the top position with the highest contribution rate reached to 66.57 percent in 2012. The next position was the GFCF component is contributing to 18.88 percent.

The small proportion of private investment in Surabaya is one of the factors inducing the stagnation of capital formation in this city. How to attracting private investment in order to get into the city of Surabaya is therefore the key to improving productivity and economic modernization of higher again in this city? Investment into the city of Surabaya has a role in improving the economy of the city of Surabaya that impact on employment and improving social welfare. Development of investment in Surabaya described from both the target and actual investment FDI (Foreign Direct Investment) and domestic (Domestic Investment), as well as the realization of other investments. The devel-

**Table 3**
**GDP Products of Surabaya, According to Business Fields 2009 – 2013 and Projection for 2014**
**(ADHK 2000 in Billion Rupiah)**

| No. | Sector | 2009 | 2010 | 2011 | 2012 | 2013 | 2014** |
|---|---|---|---|---|---|---|---|
| 1 | Agriculture | 78.24 | 79.17 | 77.66 | 78.01 | 78.12 | 77.91 |
| 2 | Mining & the Like | 6.20 | 6.35 | 6.51 | 6.74 | 7.09 | 7.31 |
| 3 | Processing industries | 18,542.20 | 19,225.16 | 20,223.28 | 21,421.55 | 22,451.87 | 23.811,06 |
| 4 | Electricity, Gas & Water | 1,962.34 | 2,080.13 | 2,089.36 | 2,118.12 | 2,412.99 | 2.725,43 |
| 5 | Construction | 3,529.74 | 5,890.30 | 6,316.85 | 6,782.24 | 7,347.22 | 8.541,56 |
| 6 | Trades, Hotel & Restaurants | 34,135.78 | 37,025.58 | 40,371.15 | 44,011.46 | 47,716.55 | 52.372,64 |
| 7 | Transport & Communication | 9,215.35 | 10,082.26 | 11,122.67 | 12,054.70 | 13,056.02 | 13.280,37 |
| 8 | Finance, Rental & ServComp | 5,368.47 | 5,745.70 | 6,153.54 | 6,613.39 | 7,068.12 | 7.257,33 |
| 9 | Services | 7,176.39 | 7,694.19 | 8,110.02 | 8,515.42 | 8,937.47 | 8.934,08 |
| Total PDRB Surabaya | | 82,014.71 | 87,828.84 | 94,471.05 | 101,671.63 | 109,075.46 | 117,007.69 |

Source: Central Bureau Statistics Surabaya 2014. Note: **) Projection Data

**Figure 3**
**Economic Growth of Surabaya, East Java, and National Scale**


Source: Central Bureau Statistics Surabaya 2014. Note: **) Projection Data

opment of the investment value of Surabaya since 2010 and 2013 are shown in Table 4.

Based on the analysis of LQ (Table 5), Surabaya has some sector bases which are secondary and primary sectors and it also has a relatively high labor productivity compared with the primary sector. The sector base in Surabaya includes Electricity, Gas, and Water, the construction sector, THR sector, transport, and communications sector, as well as the financial sector. On the other hand, the non-base sectors are agriculture, mining and the like, manufacturing, and services sector. This indicates that Surabaya has an absolute advantage in the sector when compared to city or other districts in East Java.

Based on the shift share calculation, the sector is a sector which has the advantage such as Trade, Hotels, and restaurant (THR), transport, and communications, and finance sectors. Based on calculations of the proportional shift, the third sector has a positive value. The shift analysis results support condition of Surabaya which is the hub of the MICE (meetings, incentives, conferences and exhibitions) both in scale, locally, regionally and internationally.

As presented in Table 6, the rate of labor force participation rate in Surabaya in 2013 was of 68.37%, which shows that part of the working age population engaging in productive activities is relatively low. In fact, if calculated based on the level of opportunities or employment, it is relatively very high, whereas in the same year (2013), it was up to 94.72% Job opportunity. The labor force participation rate in 2013 was increased by 2.25% from 2012.

The job opportunity is an opportunity the working age population which includes the labor force to work. However, if measured by the difference in the number of residents who work with seeking employment (unemployment), it is seen that the rate of unemployment in the city of Surabaya is relatively low, i.e. 5.28% labor force (in 2013) increased compared to the year 2012 which amounted to 5.07% Work Force.

**Table 4**
**The Value of Foreign Investment (FI) & Domestic Investment (DI) in Surabaya 2009 – 2013**

| Description | Year | | | |
|---|---|---|---|---|
| | 2010 | 2011 | 2012 | 2013 |
| DI | Rp 301,508,197,222 | Rp 725,625,178,209 | Rp 4,396,363,620,332 | Rp 490,271,432,498 |
| FI | USD 42,571,713 and Rp 905,812,608,745 | USD 25,431,570 and Rp 22,500,000,000 | USD 12,176,402 and Rp 298,717,956,292 | USD 21,213,350 and Rp 91,883,698,021 |

Source: Board of Licensing and Investment, 2014.

**Table 5**
**Result of Calculation for Location Quotient (LQ) and Shift Share in Surabaya**

| | Sectors/Sub Sectors | LQ | Shift Share | |
|---|---|---|---|---|
| | | | SP | SD |
| 1 | Agriculture | 0.005332303 | (5,573.76) | 317.56 |
| 2 | Mining & the Like | 0.003117818 | (140.49) | (110.05) |
| 3 | Processing Industries | 0.844497401 | (529,167.00) | 244,407.98 |
| 4 | Electricity, Gas, and Water | 1.782231155 | (739.40) | (49,619.48) |
| 5 | Construction | 2.037248384 | 71,237.69 | (63,861.88) |
| 6 | Trade, Hotel, Restaurant | 1.320713793 | 533,078.36 | 236,781.48 |
| 7 | Transport and Communication | 1.527825544 | 123,733.99 | 56,761.96 |
| 8 | Finance, & ServComp | 1.176871933 | (26,727.56) | 43,423.20 |
| 9 | Services | 0.976132537 | (163,813.21) | (28,577.23) |

Source: Central Bureau Statistics Surabaya 2014, processed.

**Table 6**
**Number of Labors and Labor Trend Rate**

| Description | Year | | | | |
|---|---|---|---|---|---|
| | 2009 | 2010 | 2011 | 2012 | 2013 |
| Level of Job Participation | 62.92% | 63.02% | 68.52% | 66.12% | 68.37% |
| Level of Job Opportunity | 91.37% | 93.16% | 94.85% | 94.93% | 94.72% |
| Level of Unemployment | 8.63% | 6.84% | 5.15% | 5.07% | 5.28% |

Source: Central Bureau Statistics Surabaya 2014. Temporary Data

Even though gradually reduced, the number of poverty is still quite high, both in the city center and suburbs. The number of poor people in Surabaya in 2011 was up to 335 167 people or 82 837 poor households. The characteristics of poor people in Surabaya can be seen from the economic, social, physical, environmental conditions, specifically reflected in daily activities, such as informal business activities, illegal activities, or those who do not do anything (unemployment), mostly indeed residents of Surabaya (Surabaya ID cards) and partly non-residents of Surabaya (non ID of Surabaya).

When viewed from territoriality, most districts have a fairly high number of poor households with a number between 2000-5000 people. The districts that have high enough of household poor people are *Semolun, Kenjeran, Pabean Cantian, Wonokromo, Krembangan, Bulutan, Tegalsari, Sukolilo, Gubeng, Sukomanunggal, Rungkut*, and *Tandes*. Furthermore, the districts with very high amounts only are 3 districts, namely sub-districts *Semampir, Simokerto*, and *Tambaksari* as shown in Table 7. The higher the number of the house hold poor people is, the higher the potential problems that arise in the region.

Actually, the poverty can be reduced substantially with faster economic growth, especially if this growth is inclusive and beneficial to the majority of people in the city of Surabaya. It should be inclusive growth depending on how equitable access to economic opportunities maximized. Inclusivity can be achieved by expanding investment in human capital, physical capital, and technological change; promoting market access, improve productivity, and create economic opportunities for those who have been trapped in low-productivity sectors or excluded from economic activity

Unlike other city or districts in Indonesia, Surabaya has quality human resources which is quite good for attracting higher economic growth. It is indicated by the number of people with secondary education are quite high. The composition of the population by education level can be explained that the majority of residents of the city of Surabaya

**Table 7**
**Number of the Poor PPLS 2011 every District According to Category**

| No | Districts | Household | | | | Individuals | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | The Poorest | Poor | Almost Poor | Number | The Poorest | Poor | Almost Poor | Number |
| 1 | Semampir | 5,999 | 4,357 | 3,460 | 13,816 | 26,815 | 16,297 | 12,534 | 55,646 |
| 2 | Simokerto | 3,913 | 1,734 | 1,551 | 7,198 | 16,878 | 6,674 | 5,451 | 28,903 |
| 3 | Tambaksari | 2,987 | 1,937 | 2,116 | 7,040 | 13,053 | 7,241 | 7,453 | 27,747 |
| 4 | Sawahan | 1,821 | 1,209 | 1,430 | 4,460 | 8,259 | 4,771 | 5,232 | 18,262 |
| 5 | Kenjeran | 1,937 | 1,202 | 1,093 | 4,232 | 9,970 | 5,160 | 4,283 | 19,413 |
| 6 | Pabean Cantian | 1,747 | 1,028 | 980 | 3,755 | 7,805 | 3,991 | 3,523 | 15,319 |
| 7 | Wonokromo | 1,409 | 1,076 | 1,250 | 3,735 | 6,068 | 3,949 | 4,323 | 14,340 |
| 8 | Krembangan | 1,709 | 972 | 909 | 3,590 | 8,080 | 3,856 | 3,240 | 15,176 |
| 9 | Bubutan | 1,359 | 944 | 1,021 | 3,324 | 6,825 | 3,671 | 3,667 | 14,163 |
| 10 | Tegalsari | 1,308 | 873 | 938 | 3,119 | 5,635 | 3,314 | 3,414 | 12,383 |
| 11 | Sukolilo | 1,177 | 807 | 803 | 2,787 | 5,024 | 2,997 | 2,752 | 10,773 |
| 12 | Gubeng | 826 | 683 | 793 | 2,302 | 3,712 | 2,660 | 2,984 | 9,356 |
| 13 | Sukomanunggal | 1,001 | 612 | 602 | 2,215 | 4,543 | 2,435 | 2,165 | 9,143 |
| 14 | Rungkut | 912 | 561 | 647 | 2,120 | 4,089 | 2,204 | 2,404 | 8,697 |
| 15 | Tandes | 796 | 566 | 647 | 2,009 | 3,831 | 2,299 | 2,481 | 8,611 |
| 16 | Lakarsantri | 651 | 487 | 519 | 1,657 | 2,855 | 1,872 | 1,809 | 6,536 |
| 17 | Jambangan | 644 | 461 | 387 | 1,492 | 2,541 | 1,660 | 1,379 | 5,580 |
| 18 | Genteng | 581 | 401 | 467 | 1,399 | 2,465 | 1,611 | 1,672 | 5,748 |
| 19 | Asemrowo | 685 | 280 | 275 | 1,240 | 3,377 | 1,122 | 982 | 5,481 |
| 20 | Mulyorejo | 489 | 340 | 370 | 1,199 | 2,162 | 1,291 | 1,300 | 4,753 |
| 21 | Wonocolo | 525 | 277 | 264 | 1,066 | 2,281 | 1,049 | 889 | 4,219 |
| 22 | Wiyung | 503 | 283 | 269 | 1,055 | 2,236 | 1,074 | 917 | 4,227 |
| 23 | Gunung Anyar | 440 | 291 | 302 | 1,033 | 1,862 | 1,150 | 1,174 | 4,186 |
| 24 | Sambikerep | 396 | 273 | 341 | 1,010 | 1,737 | 1,012 | 1,215 | 3,964 |
| 25 | Karang Pilang | 339 | 291 | 320 | 950 | 1,399 | 975 | 992 | 3,366 |
| 26 | Benowo | 444 | 237 | 256 | 937 | 1,866 | 935 | 951 | 3,752 |
| 27 | Pakal | 449 | 235 | 230 | 914 | 1,969 | 921 | 817 | 3,707 |
| 28 | Dukuh Pakis | 209 | 259 | 384 | 852 | 898 | 979 | 1,337 | 3,214 |
| 29 | Tenggilis Mejoyo | 296 | 237 | 257 | 790 | 1,243 | 853 | 924 | 3,020 |
| 30 | Bulak | 252 | 233 | 221 | 706 | 1,232 | 961 | 830 | 3,023 |
| 31 | Gayungan | 176 | 208 | 251 | 635 | 767 | 780 | 912 | 2,459 |
| | **Total** | **36,130** | **23,354** | **23,353** | **82,837** | **161,497** | **89,664** | **84,006** | **335,167** |

Source: Central Bureau Statistics Surabaya, 2014.

have education level of high school or equivalent of the total 864,083 people. Some have completed primary school or equivalent of 538,895 people. And, they also have undergraduate education diploma (Diploma 4) the graduates (S1) of 290.417 people.

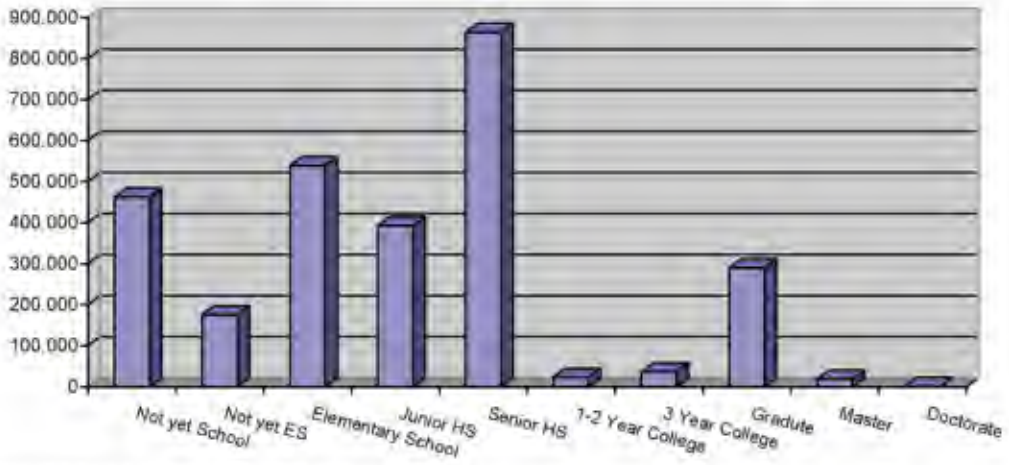
The level of at least Strata III (S3) is only equal to 1,048 people as the information regarding the level of education of Surabaya in 2013 can be seen in Figure 4.

However, the problem concerns the low level of technical skills, especially in specialized fields for entering the workforce. It is not as a part of the emergence of a paradigm in which the industry began to shift from labor-intensive industries into capital intensive. The capital-intensive industry profits for the company can reduce the manual labor that is considered the greatest contribution in terms of production costs. The replacement of manual labor changing into mechanical power, and thus it requires the skill people for the job fields. This will be more attractive to investors or companies.

Regardless of the national scale, the level of openness of services in Surabaya is also quite high, which causes the flow of foreign workers in the city drove significant. There are several policy recommendations that can be implemented by city officials to ease the flow of foreign workers which would be a non-tariff barrier. These policies are as the following:

1. It is obligatory to have a special professional certification issued by the competent institution in

**Figure 4**
**Number of Population Based on the Level of Education**




Source: Surabaya Population and Civil Bureau.

Surabaya. This professional certification policy also indirectly increases the competitiveness of local labor and foreign ones for it needs expertise recognized by the state, while for foreign workers this policy is quite difficult for them to be able to work here because of the absence of the required certification. Skill certification must be at least in this town is certified in the field of industry, tourism, and technology and language. It is recommended by the city officials to cooperate with relevant educational institutions in terms of institutional certification agency. In addition, the certification curriculum is expected to adjust to the international curriculum.

2. To improve language skills and technology. The mastery of a foreign language is an important factor in employment nowadays. Therefore, the foreign language has been done by the city government to deserve appreciation. Further steps, it can be done by the provision of language training to the parties directly in contact with trade, tourism, hotels and restaurants such as taxi drivers, waiters of restaurants, and the like. Furthermore, technological mastery is also crucial because it is closely related to the level of specific skills that are needed by the company. It cannot be met by most people due to limited education levels. It is recommended that the city government is also open non-formal vocational training institutions or some sort of BLK (Training Center) integrated.

3. Determining the maximum ratio of foreign-local employees in a number of companies, including trade, hotels and restaurants. This policy ensures that the composition of the local labor force is not less than the foreign labor. Recommended government through the Department of Education should be in cooperation with employers in the tourism sector, hotel and restaurant related provision ready workforce that graduates of vocational students. This policy will be implemented starting in mid-2014 by Singapore.

4. Selection in admission requirements for foreign workers with intermediate skills, professionals, and managers. Currently, foreign workers come in Surabaya have intermediate skills, professionals and managers. With the increasing population composition with upper secondary education level, is expected to be a long-term solution when the government tightened the requirements for the admission of foreign workers.

In the field of licensing, permit management in Surabaya, UPTSA cannot speed up the process, but the more extended licensing process flow. For a permit that has been entered in UPTSA will be sent to SKPDs technician and then returned again to UPTSA. Such a procedure is increasingly extending the chain of bureaucracy although the system has been used Surabaya has been said to be Single Window. In some types of licensing, UPTSA in issuing licenses require quite a long time, because UPTSA must coordinate with SKPDs licensors. Furthermore, UPTSA has not possessed a clear form, just as receiving office files. In that way, it does not have the authority to issue permits. Yet, the agency in charge of issuing permits remains relevant SKPD.

IFC's annual report is entitled "Doing Busi-

**Table 8**
**Ease of Opening a Business**

| Indicators | Surabaya | Yogyakarta | Jakarta | Denpasar | East Asia& Pacific | Average OECD |
|---|---|---|---|---|---|---|
| Starting the New Business | | | | | | |
| Procedure (frequency) | 10 | 8 | 9 | 10 | 8.1 | 5.7 |
| Time ( number of days) | 50 | 43 | 60 | 58 | 41 | 13 |
| Cost (% form GDP/ capita) | 32 | 29 | 25.1 | 29.1 | 25.8 | 4.7 |
| To arrange the Licensing | | | | | | |
| Procedure (frequency) | 14 | 8 | 14 | 13 | 18.6 | 15.1 |
| Time ( number of days) | 230 | 67 | 160 | 112 | 168.6 | 157 |
| Cost (% form GDP/ capita) | 190.4 | 133.7 | 194.8 | 183.7 | 139.6 | 56.1 |
| To enlist the Property | | | | | | |
| Procedure (frequency) | 6 | 6 | 6 | 6 | 5 | 4.7 |
| Time ( number of days) | 39 | 36 | 22 | 39 | 97.5 | 25 |
| Cost (% form GDP/ capita) | 10.8 | 10.9 | 10.7 | 10.9 | 3.9 | 4.6 |

Sumber: Doing Business, IFC, 2010.

ness", to review the regulatory impact on the business sector. It was found that the regulation of investment in Indonesia has consistently considered less competitive than other countries. Their most recent survey in 2010 placed Indonesia ranks 122 out of 183 countries surveyed. The difficulty of doing business in Indonesia is due to the complex procedures in starting a business; rigid rules associated with hiring workers; and difficulty enforcing commercial contracts (see Table 8).

Surabaya also has a regulatory system that is more complex than other regions in Indonesia. The survey was conducted in 14 cities in Indonesia to look at three aspects related to the regulation of ease of starting a business, the ease associated with construction permits, and ease of registering property. Surabaya is ranked 11th for ease of starting a business, the last rank for ease of dealing with construction permits, and 6th for property registration.

Some aspects of business regulation, such as business license registration and construction permits need to be improved. Surabaya's business registration process still has to pass through a complicated procedure. It is more expensive compared to other cities in Indonesia. For example, the business registration process in Surabaya has 10 procedures, more than Jakarta (9 procedures) and 8 procedures for the average city in East Asia and Pacific. It takes lot of time to complete the 10 procedures (50 days) that is much longer than the best ranking cities, namely, Bandung and Yogyakarta (43 days), although Surabaya faster than Jakarta (60 days). The cost of registering a company in Surabaya is equivalent to 32 percent of income per capita and one of the highest in Indonesia.

The number of days required to obtain a construction permit in Surabaya is 230 days, higher than the average of Indonesia (160 days) and therefore, it is still longer than in Yogyakarta, which is considered as the best one. Yogyakarta only takes 43 days (lower than the average in East Asia and Pacific). The cost to obtain a construction permit in Surabaya at 190.4 percent of income per capita, and this is the worst compared to other regions in Indonesia.

The sea port infrastructure in Surabaya looks so weak, showing several drawbacks. Yet, the port is essential for the economy because of its function for transportation such as sending and receiving goods to and from outside of the provinces. The main port in Surabaya is the port of *Tanjung Perak*, which is one of the four most important commercial sea ports in Indonesia (in addition to *Belawan* in North Sumatra, *Tanjung Priok* in Jakarta, and *Sockarno Hatta* in Makassar).

*Tanjung Perak* Port serves as a gateway to Eastern Indonesia, and therefore it becomes a key to inter-island trade. This port is also the main gateway for transporting goods to other regions in Indonesia and even abroad for small, medium, and large industries in East Java, such as *Rambipuji* Industrial Estate (200 km away from *Tanjung Perak*), Surabaya Industrial Estate *Rungkut*, and *Pasuruan* Apex Industrial Estate (60 miles).

*Tanjung Perak* seems to have inefficiency problems in common with other sea ports in Indonesia. It can be reflected in the low performance of some indicators assessed an important port. The Dock occupancy ratio (BOR), which is the percentage of time for docking the ship in port is 53 percent, relatively high compared to, for example, to Westport in Port Klang, Malaysia, the BOR about 35 percent, while the maximum acceptable international standard is 40 percent (Patunru et al. 2009).

Patunru et al. (2009) studies showed that the main weakness of *Tanjung Perak* port lies in its in-

frastructure. It can be seen from the limited space and the dock, shallowness lines, inadequate stacking area, the availability of the towing vessel and the vessel operator. The shallow sea around the port reduces the efficiency of a vessel to deliver cargo to the port, particularly for large vessels. This is due to the condition that the ships have to operate with an empty cargo space to keep ships safe when passing through the entrance. This weakness indicates more time needed in the port, thus resulting in higher shipping costs for shipping companies and end users.

## 5. CONCLUSION, IMPLICATION, SUGGESTION, AND LIMITATION

There are some inferences can be assorted in this study. First of all, it deals with the macroeconomic aspects which outlook favorable in overall in the country indicating that the macroeconomic risks should attract investment in Surabaya is not an obstacle to investment and higher growth. Secondly, challenges in coping with economic growth in Surabaya, among others, concerns the low level of technical skills, especially in specialized fields to enter the job fields; level of openness services in the city of Surabaya is also quite high, causing the flow of foreign workers in the city drove quite significant; Licensing bureaucracy that is still a long and weak infrastructure in the sea port city of Surabaya.

Thirdly, it is related to the issue of skilled labor, the policy recommendations for providing wider access to education technical skills. This can be achieved by such as expanding and optimizing the utilization of non-formal education institutions such as community learning center or informal training institutions to provide learning opportunities for those who already are beyond school age. The education institutions of the non-formal ones should offer special programs for those who do not have the opportunity to participate in formal education, for example, women's empowerment training, life skills training, job training, etc. It is also related to how to strengthen and expand vocational schools to produce skilled workforce more specific.

Fourthly, there must be an effort for simplifying business license registration procedure. It should reduce the burden of the private sector, but also reduces the possibility of illegal costs to be incurred by businesses. The fifth is strengthen the function of sea ports in East Java to (i) reduce barriers to marine traffic to the port of *Tanjung Perak*.

There must be initiatives to expand West Water Flow of Surabaya that need to be done as soon as possible with the support of the government. The government should also plan to remove and relocate the pipe disturbing sea traffic to be accelerated to avoid prolonged impact, implement a plan to develop a new port in the Gulf of *Lamong*, and optimize the utilization of a small port in East Java through the establishment of marine transport network of intra-provinces.

## REFERENCES


Badan Koordinasi Perijinan dan Penanaman Modal Kota Surabaya (berbagai tahun).

Badan Pusat Statistik Kota Surabaya (berbagai tahun).

Dinas Kependudukan dan Catatan Sipil Kota Surabaya (berbagai tahun).

Elena Ianchovichina and Susanna Lundstrom, 2009, *Inclusive Growth Analytics: Framework and Application*, Published: March 2009, Pages: 43.

Hausmann, Ricardo, Rodrik, Dani, Velasco, Andrés, 2005, 'Getting the diagnostics right', *Finance and Development*, 43 (1), (Summarizes the 2005 Growth Diagnostics working paper).

International Finance Corporation, 2010, 'Doing Business in Indonesia 2010. Comparing Regulations in 14 Cities and 183 economies', *IFC's Doing Business Survey Report*, IBRD and World Bank.

Patunru, A, Nurridzki, N and Rivayani, 2009, 'Port competitiveness: a case study of Semarang and Surabaya, Indonesia', in Douglas Brooks and David Hummel, *Infrastructure's Role in Lowering Asia's Trade Costs Building for Trade*, Edward Elgar and ADB Institute, Manila.

Suharyadi, 2007, *Statistika: Untuk Ekonomi dan Keuangan Modern*, Salemba Empat, Jakarta.

World Bank REDI, Pemerintah Provinsi Jawa Timur, 2011, *Diagnosa Pertumbuhan Ekonomi Jawa Timur: Mengidentifikasi Hambatan-Hambatan Utama Pertumbuhan yang Inklusif di Provinsi Terbesar Kedua di Indonesia*, Jakarta.

# 04. Analysis of macroeconomics and diagnostic of economic growth of Surabaya

ORIGINALITY REPORT

13%

SIMILARITY INDEX

PRIMARY SOURCES

| | | |
|---|---|---|
| 1 | openknowledge.worldbank.org<br>Internet | 566 words — 7% |
| 2 | portalgaruda.ilkom.unsri.ac.id<br>Internet | 212 words — 3% |
| 3 | docplayer.net<br>Internet | 119 words — 1% |
| 4 | en.wikipedia.org<br>Internet | 42 words — 1% |
| 5 | anzdoc.com<br>Internet | 22 words — < 1% |
| 6 | Dupasquier, C.. "Foreign direct investment in Africa: Performance, challenges, and responsibilities", Journal of Asian Economics, 200604<br>Crossref | 21 words — < 1% |
| 7 | media.neliti.com<br>Internet | 20 words — < 1% |
| 8 | siteresources.worldbank.org<br>Internet | 19 words — < 1% |
| 9 | 202.54.18.156<br>Internet | 18 words — < 1% |
| 10 | repository.usd.ac.id<br>Internet | 10 words — < 1% |

| | | |
|---|---|---|
| 11 | belajarseo-gratis.blogspot.com<br>Internet | 10 words — < 1% |
| 12 | www.cbaruba.org<br>Internet | 8 words — < 1% |
| 13 | www.bps.go.id<br>Internet | 8 words — < 1% |
| 14 | digilib.esaunggul.ac.id<br>Internet | 8 words — < 1% |
| 15 | Tejal Kanitkar, Rangan Banerjee, T. Jayaraman. "An integrated modeling framework for energy economy and emissions modeling: A case for India", Energy, 2018<br>Crossref | 8 words — < 1% |
| 16 | www.sciedu.ca<br>Internet | 8 words — < 1% |
| 17 | Martine Bakker, Hannah R Messerli. "Inclusive growth versus pro-poor growth: Implications for tourism development", Tourism and Hospitality Research, 2016<br>Crossref | 7 words — < 1% |

| | | | |
|---|---|---|---|
| EXCLUDE QUOTES | OFF | EXCLUDE MATCHES | OFF |
| EXCLUDE BIBLIOGRAPHY | OFF | | |