The Role of Government Investment and Foreign Direct Investment on Business Development and Public Welfare of Papua Province

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Abstract

The objectives of this research are: 1) Examine and analyze the influence of government investment and foreign direct investment toward business development, 2) Examine and analyze the influence of government investment and foreign direct private investment toward the welfare; 3) Examine and analyze the influence of business developments toward the public welfare; 4) Examine and analyze the influence of government investment and foreign direct investment to the welfare through business development. In this study used the theory of investment and economic growth, business development is a proxy of economic growth. The type of this research is explanation which explains the relationship between the study variables. The data used in this study is secondary data based on time series and panel data between 2007 and 2010. Analysis tools used in this research are the Path Analysis. The results showed that foreign direct investment is less significantly influence on the development of business and foreign direct investment have a significantly effect on the welfare. Public investment does not significantly influence the development of business and government investment significantly negative effect on the welfare. The development of business significantly influences the overall welfare. The development of business is a perfect mediating the effects of foreign direct investment to the welfare. Public investment is not developed in a sustainable manner can reduce the welfare of society.

Keywords: Government investment, Foreign Direct Investment, Business Development, Public Welfare.

1. Introduction

Papua province is a province which faces several paradoxes; at one side, we can see Papua which has entered new era as signed by the emergence of modern bureaucracy, information technology utilization, foreign direct investment, and other economic activities as part of global economic. Papua province has fertile soil and possesses abundant natural and mines; yet, the society welfare of the Papua province is still deprived. In 2011, the Human Development Index of Papua province was 65.36 and ranked as 32nd position among 34 provinces in Indonesia (BPS Papua Province, 2012).

During 2000 – 2010, the economic growth rate of Papua province is fluctuating. In the years of 2000 to 2004, the economic growth rate of Papua province declined (-22.53 percent). The highest economic growth rate happened in 2005 which significantly increased up to 36.40 percent. In 2010, the economic growth rate of Papua province experienced a declining trend again which achieved only 2.65 percent. The fluctuation of the economic growth rate is due to the role of mining industry which fluctuating during the last eleven years; meanwhile, the other sectors’ role got increased. Mining sector provides more than a half of the total contribution on Papua’s economic sector, which achieves 68.72 percent (2007), 64.73 percent (2008), 65.79 percent (2009) and 64.35 percent (2010). The regency which contributes from mining sector is Mimika Regency as the exploration location of PT. Freeport Indonesia.

In the years of 2007 to 2010, the average investment value in Papua province gets increased for 8.18 percent annually. The greatest investment comes from mining sector in Mimika Regency in which 85% of the investment is FDI (Foreign Direct Investment) at mining sector. The role of Mimika regency is dominant in Papua province’s investment. Other than mining sector, Papua province also has potential on agriculture, plantation, forestry, and fishery. The development of those sectors demonstrates that Papua province has abundant natural resources which are potential to be developed. It needs good investment support from both government and private sectors to achieve a high value-added product.

Papua province is one of the regions in Indonesia which gets Special Autonomy from central government; Papua obtains quite enormous budget compared to other provinces in Indonesia. The local government leaders are authorized to utilize and manage the budget. According to Izlan (2008), 5.8 trillion
rupiah of the Local Government Income and Expenditure Budget (abbreviated as APBD/ Anggaran Pendatapan dan Belanja Daerah) of Papua province, 72 percent of the total APBD is allocated to fund the government bureaucracy. The 72 percent of the total APBD is spent on salary and allowance of the local government officers (and public servants) as well as office administration costs. The rest of 28 percent is utilized to support public service matters such as education, health, infrastructure, economic, and other development sectors.

Government has a great role to support business development in Papua province. The role and function of local government in local financial management is reflected on the way to manage its APBD (Local Government Income and Expenditure Budget); basically, it should run some functions such as: allocation, distribution, and stability functions. The implementation of those functions will be able to encourage local economic potentials, public welfare enhancement, and economics sectors development (Musgrave, 1959; Due, 1968; Suparmoko, 2002). In some developing countries, private sector tends to avoid investing its capital on high-risk and low-return business; thus, it needs government to provide facilities in attracting the private business to start-up its business (Jhingan, 2000).

The emergence of foreign direct investment results on several benefits for both the host-country and the investors from the home-country. Foreign direct investment is tightly related to domestic economics openness on global economics, interest rate discrepancy, and currency exchange rate (Tolentino, 2010). The empirical study conducted by Choi and Jeon (2007) demonstrates that currency exchange is positively related to foreign direct investment. It indicates that Foreign Direct Investment (FDI) has role on improving economic growth and contributes to foreign exchange; thus, FDI is able to supports good business atmosphere.

According to Jones (2014) and Sukirno (2000), investment can be from both government and private sectors. Investment correlates to economic growth (Arsyad, 1999; Tambunan, 2001); it indicates that investment has a role on encouraging economic growth. Government investment is the real allocated fund to develop infrastructures (Fahme, 2013). Investment conducted by government is through government expenditure affects economic growth (Dedy, 2008; Wu et al., 2010; and Glomm & Ravikumar, 1997).


Prior research mostly observes the relationship between investment and economic growth; yet, this research economic growth is proxied with business development. Therefore, we can see the relationship between investment and real sector directly, as the development of government investment and foreign direct investment have direct effect on business development and public welfare.

Based on the theoretical review, former research findings, and the phenomena occurring in Papua province, we can observe the role of government investment and foreign direct investment on the business development and public welfare.

2. Literature Review

2.1. The Role of Government Investment and Foreign Direct Investment on Business Development

Investment consists of direct investment and portfolio investment. Investments conducted by government and private sectors provide support on economic growth. The role of government in improving economic growth and development has started since long ago (Wade, 1990; Easterly & Levine, 1997). Private firm also has important role as the machine of economic growth (Levin & Renelt, 1992). Private investment has provided direct evidence on growth as stated by La Porta et al. (1997) and Beck et al. (2006). Dedy (2008) confirms that labor force, private investment (both foreign and domestic investments), as well as local government expenditure provide positive effect on economic growth.
Government expenditure can be perceived as investment to provide stimuli to support economic growth. For under-developed regions, the role of government expenditure is critically important to achieve local economic growth. Wu et al. (2010) says that government expenditure can help economic growth. Durevall and Henrekson (2011) mention that in critical condition government expenditure supports economics growth enhancement. Glomm and Ravikumar (1997) add that government expenditure in infrastructure, technology, and education has a role on improving growth; moreover, Butkiewicz and Halit (2011) state that government expenditure in infrastructure is able to improve economic growth. In addition, Montolio and Turati (2009) also express that government expenditure in health and education services brings positive effect on growth.

Bengoa and Sanchez (2003) say that foreign investment has positive correlation with economics growth; furthermore, Anwar and Sun (2011) mention that private investment in financial sector provides positive contribution on growth. Lin and Wong (2009) conclude that business investment correlates to growth. Adams (2009) also confirms that domestic investment positively influences economic growth; meanwhile, foreign direct investment initially has negative effect on growth and has positive effect in long term. Durham (2004) says that foreign direct investment has positive effect on growth; moreover, Li and Liu (2005) state that foreign direct investment has significant relationship with growth. Soil et al. (2008) mentions that private investment positively correlates to growth; further, Lu (2008) also says that investment on energy sector has positive effect on local economic growth.

Based on the prior research which correlates government investment and foreign direct investment toward economic growth, it comes to the following hypothesis:

Hypothesis 1a: An increase on government investment results in an increase on business development

Hypothesis 1b: An increase on foreign direct investment results in an increase on business development

2.2. The Role of Government Investment and Foreign Direct Investment on Public Welfare

Partowidagdo (1999) says that investment inevitably and directly correlates to new job opportunity. Greater job opportunity for the society will reduce unemployment rate. High unemployment rate is due to the dramatically decrease on investment rate during global economic crisis. Without investment, unemployment rises up and affects on the several aspects of life. It proves that investment has a role on improving public welfare.


Anwar (2009) states that investment has a role on welfare; whereas, Egger and Pfaffermayr (2007) conclude that trade liberalization decreases welfare, particularly for un-skilled labor. Reis (2006) says that foreign investment causes a decrease on welfare since the generated profit is taken over by the foreigners. Daniels (1996) adds that investment in technology correlates to welfare. O’Connor (1998) describes that and increase on global capital flow causes negative effect on public welfare system. Devereux and Roberts (1997) say that foreign investment in economic in Middle Asia reduces welfare.

Based on the prior research related to the relationship between government and private investment toward welfare, the result demonstrates that government and private investment correlate to welfare. Those findings become the basic assumption to formulate the following hypotheses:

Hypothesis 2a: An increase on government investment is able to improve public welfare

Hypothesis 2b: An increase on foreign direct investment is able to improve public welfare
2.3. The Relationship between Business Development and Public Welfare


Prior research demonstrates that economic growth correlates to welfare. Based on the result of the former research, it leads to the following hypothesis:

**Hypothesis 3**: Business development increases public welfare

2.4. Business Development as the Mediation between Government Investment and Foreign Direct Investment toward Public Welfare

Business development influences poverty and welfare rate (Warr, 2000; Perrings and Ansuategi, 2000) related to the number of absorbed labors and business world development. Government investment stimulates economic growth (Wu et.al, 2010; Durevall and Henrekson, 2011). Private investment causes economic growth as well (Lin & Wang, 2013; Adams, 2009; Soli et.al., 2008). Even it is indirectly correlated to business development, government investment enhances infrastructures which then provide chances for business world. Private investment also has its role on improving business world as private investment results in more business and indirectly stimulates the growth of the business.

Government investment has a role on improving public welfare (Sanz & Velázquez, 2007; Alper et al., 2008; Chattopadhyay, 2009); government investment which comes from government expenditure can provide job opportunity for the society and then improve public welfare. In addition, public investment also has a role on improving public welfare as well (Egger & Pfaffermayr, 2007; Reis, 2006; and Daniels, 1996) as private investment widens job opportunity for the society of the surrounding firms; next, it will improve public welfare.

Based on the description above, we can develop the indirect relationship between government investment and private investment toward public welfare through business development. Next, we can formulate the following hypotheses:

**Hypothesis 4a**: An increase on government investment will increase public welfare through business development.

**Hypothesis 4b**: An increase on foreign direct investment will increase public welfare through business development.

Based on the review of literate related to the relationship between government investment and foreign direct investment toward business development and public welfare, we can draw the conceptual framework of this research below (Fig.1):

![Figure 1. Research Conceptual Framework](image-url)
3. Method

3.1. Research Design

This is an explanatory research which explains causal relationship among observed variables including the role of government investment and foreign direct investment on business development and public welfare.

3.2. Research Location

This research is conducted in regencies/cities at Papua province; thus, the unit analysis of this research is the regency/city government at Papua province. There are three considerations to choose Papua province as the research location. First, Papua province is a region which has unequal progress and development in several sectors compared to the other provinces in Indonesia. Second, Papua province has particular characteristic which is regulated by special law called as Special Autonomy. The last, Papua province is the main province which is not resulted from division of the region which has sufficient information that meet the research’s needs.

3.3. Population

The population of this research consists of 29 regencies/cities at Papua province; meanwhile the target population is the regency/city which has complete supporting data to measure the observed variables (consisting of government investment/ capital expenditure, foreign direct investment, number of firms, and human development index from 2007 until 2010). Based on the target population of this research, there are 9 regencies/cities which meet the complete supporting data requirement that are: 1) Merauke regency; 2) Jayawijaya regency; 3) Jayapura regency; 4) Biak Numfor regency; 5) Pania regency; 6) Mimika regency; 7) Sarmi regency; 8) Keerom regency; and 9) Jayapura city.

3.4. Data Type and Source

Based on how to obtain the data, the data gained in this research is secondary data which is gathered indirectly (Sekaran, 2006). Secondary data is pooled data which are cross section and time series data. The utilization of pooled data is aimed to obtain more data to improve the degree of freedom and reduce colinearity among its independent variables. The data used in this research are: 1) RGDP of Papua province (2007 – 2012), 2) Papua Statistics (2007 – 2012), 3) government expenditure and capital expenditure realization of Papua province (2007 – 2012), and 4) Human Development Index of Papua province (1996 – 2012).

3.5. Analysis Instrument

The analysis instrument used in this research to examine the research’s hypotheses is path analysis.

4. Result and Discussion

The analysis result on investment at Papua province, foreign capital investment, investment at Mimika, and non mining sector investment shows that government investment does not have significant effect on business development. The result indicates that government investment is not yet able to enhance business development. Government investment on infrastructures development is not sufficient compared to the needs of Papua province as this region is wide. Hence, government investment is lack of significant contribution to enhance business development.

The analysis on the role of government investment and foreign direct investment on business development and public welfare is as follow: (Table 1 and Table 2)

<table>
<thead>
<tr>
<th>Table 1. The Role of Government Investment and Foreign Direct Investment on Business Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Government Investment</td>
</tr>
<tr>
<td>Foreign Direct Investment</td>
</tr>
<tr>
<td>R Square</td>
</tr>
<tr>
<td>Sig F</td>
</tr>
</tbody>
</table>

Note: S = Significant
NS = Not Significant
The analysis result on the role of government investment and foreign direct investment on business development is shown in Table 1. The $R^2$ of investment at Papua province is 0.001 with 0.982 level of significance. The $R^2$ of Foreign Capital Investment is 0.139 with 0.209 level of significance; thus, it indicates weak and non significant role. The $R^2$ of non mining sector investment is 0.274 with 0.010 level of significance; therefore, it demonstrates weak but significant role. The $R^2$ of investment at Mimika is 0.861 with 0.139 level of significance which represents strong but not significant role.

Table 2. The Role of Government Investment, Foreign Direct Investment, and Business Development on Public Welfare

<table>
<thead>
<tr>
<th>Variable</th>
<th>Investment at Papua Province</th>
<th>Foreign Capital Investment</th>
<th>Investment at Mimika</th>
<th>Non Mining Sector Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Investment</td>
<td>-0.465 (S)</td>
<td>-0.653 (S)</td>
<td>-0.731 (NS)</td>
<td>-0.364 (S)</td>
</tr>
<tr>
<td>Foreign Direct Investment</td>
<td>0.343 (S)</td>
<td>0.488 (S)</td>
<td>0.171 (NS)</td>
<td>0.278 (NS)</td>
</tr>
<tr>
<td>Business Development</td>
<td>0.550 (S)</td>
<td>0.657 (S)</td>
<td>1.297 (NS)</td>
<td>0.441 (S)</td>
</tr>
<tr>
<td>R Square</td>
<td>0.448</td>
<td>0.617</td>
<td>0.989</td>
<td>0.554</td>
</tr>
<tr>
<td>Sid F</td>
<td>0.000</td>
<td>0.000</td>
<td>0.130</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Note:  S = Significant  
NS = Non Significant  

The analysis result on the role of government investment, foreign direct investment, and business development on public welfare is shown in Table 2. The obtained $R^2$ of investment at Papua province is 0.448 with 0.000 level of significance; the $R^2$ of non mining sector investment is 0.554 with 0.000 level of significance; thus, it shows weak and non significant role. The $R^2$ of foreign capital investment is 0.617 with 0.000 level of significance; hence, it proves strong and significant role. The $R^2$ of investment at Mimika is 0.989 with 0.130 level of significance which confirms that the role is strong but not significant.

5. Discussion

The analysis results on investment at Papua province, foreign capital investment, investment at Mimika, and non mining sector investment indicators show that government investment does not have significant effect on business development. This result confirms that government investment is not yet able to encourage business development. The investment conducted by the government in developing infrastructures is not yet sufficient compared to the needs on the infrastructures in the wide region of Papua province. Government investment does not much contribute to improve business development.

The result of this research confirms Ghate and Zak’s (2002) findings as they say that government expenditure can be detrimental to economic (as mentioned by Fölster and Henrekson (2006) that government expenditure is not yet able to contribute to economic growth). Government investment in Papua province is fluctuating annually; it indicates that the government investment is not yet well-planned. Government investment plan in infrastructures which is not quite well-prepared shows less-contribution on business development.

Foreign direct investment for Papua province, foreign capital investment, and investment at Mimika mostly are on mining sector. The analysis result shows that foreign direct investment does not significantly influence business development. Foreign direct investment often less-open and does not much involve the surrounding society (enclave) including the business world. The investors focus more on fulfilling their own needs by themselves which do not much involve the surrounding society. Therefore, the huge existing foreign direct investment activates are lack of contribution to business development.

The analysis on non mining sector investment indicates different result as the foreign direct investment has significant role on business development. Investment for non mining sector at Papua province is conducted on plantation, forestry, and fishery sectors. Investment on plantation, forestry, and fishery sectors involve the surrounding society in business firms’ operation. Society involvement stimulates complementary business to fulfill the firms’ needs; hence, the foreign direct investment for non mining sector significantly contributes to business environment at the investment site.

The result partially supports La porta et.al.’s (1997), Beck et.al. (2006), and Levin & Renelt (1992) findings as they confirm that private investment correlates to economic growth particularly for not mining sector; yet, the result is contradictory to those findings if the mining sector is included in the analysis result. Investment sector from foreign party causes different effect on business development.

The analysis result on investment at Papua province, foreign capital investment, and non mining sector investment shows that government investment has negative and significant effect on public welfare. The analysis result indicates that government investment on infrastructures development does not have significant
contribution to public welfare. Government investment on infrastructures development in Papua province has not much involved the surrounding society so that it does not improve their income as the native Papua society. Lack of involvement of the surrounding society in infrastructures development is due to the inadequate human resource quality of the native Papua as they culturally an agriculture society.

The result of this research does not support the research findings of Gomanee et al., (2004), Sanz & Velázquez (2007), Van de Walle (1998), and Marattin et al. (2011); they state that government expenditure has an implication on public welfare. The finding of this research implies that the government investment for infrastructures development in short term does have significant contribution to public welfare.

Foreign direct investment for Papua Province, foreign capital investment, and non mining sector investment have significant effect on public welfare; meanwhile, for Mimika regency, foreign direct investment does not have significant effect on public welfare. The analysis result reveals that foreign direct investment provides significant contribution to public welfare. Foreign business firms have notable ways to provide assistance for the society at their surrounding environment through corporate social responsibility program. Foreign business firms with their CSR program have provided opportunities for society to achieve education, health, and empowerment. Therefore, the existence of foreign business firms in Papua province are able improve public welfare.

The result of this research supports González et al.’s (2009) finding as they say that investment from foreign capital inflow improves public welfare through the income received by labors. The result implies that foreign direct investment is able to provide significant contribution to improve public welfare.

Business development in overall has significant role on public welfare. Business development is interpreted as the growth of more firms on the regencies/cities in Papua province. Greater increase on business development results in greater job opportunity for the society to work at the existing firms. Society involvement to work at the firms offers greater chance to obtain more income which then improves public welfare. This result is relevant with research findings conducted by Warr (2000), Perrings & Ansuategi (2000), Tisdell (2001), and Simonis (2011) as they say that growth is formality related to public welfare index. This result implies that business development can directly improve public welfare.

The result of this research in investment at Papua province, foreign capital investment, Mimika regency, and investment on non mining sector shows that business development is not a mediation variable of the relationship between government investment and public welfare. This finding gives a feedback for government as the investment they conduct at Papua province has not yet able to encourage business development. Jhingan (2000) says that, for developing regions, private sectors are less-attracted to invest; hence, the government role is critically important to encourage the development for improving business world development. Government investment plan at Papua province is essential as the investment is more focused on supporting business world development; thus, the society and investors are encouraged to establish new business when sufficient infrastructures exist.

The result of this research on investment at Papua province, foreign capital investment, and investment at Mimika regency demonstrate that business development is not a mediation variable of the relationship between foreign direct investment and public welfare; whereas, non mining sector investment takes business development as its mediating variable between foreign direct investment and public welfare. This is due to foreign direct investment does not have significant effect on business development; meanwhile, business development significantly influences public welfare.

6. Conclusion

In sum, the research result reveals that business development is not the mediation variable among government investment and foreign direct investment toward public welfare. It shows that government investment and foreign direct investment directly influence public welfare.

Government investment which has been conducted to develop infrastructure is not yet able to support the existing business development in Papua province. Government investment is fluctuating in its amount which indicates that is not yet well-planned so that it provides less support on business development and public welfare.

Foreign direct investment also less contributes to business development; yet foreign direct investment is able to support public welfare enhancement.
Business development directly correlates to public welfare. Business development gives huge chances for Papua people to work in business firms so that they are able to generate income which then improve their welfare.

7. Limitation And Suggestion For Further Research

This research has its limitation on the research scope as the research was conducted only in 9 regencies/cities of Papua province. To define the choice on 9 regencies/cities is based the complete data availability that meets the needs of this research so that the result may not be able to represent the general condition of Papua province which in fact consist of 29 regencies/cities.

The research data has quite wide range among regions (regencies/cities); however, if the data which contain wide range were not utilized, it would not have reflected the real condition. The wide range of data affects on analysis result.

The amount of data to analyze Mimika regency is limited. The limited data are almost not sufficient to meet the requirement for using multiple regression analysis; thus, the analysis result for Mimika regency has less accurate degree.

This research can be further developed by using different government investment concept, such as government expenditure. Besides, further research can use different model of business development which is related to business volume as the indicator to measure business development. The utilization of different concept can enrich further research’s findings related to investment in Papua province.

References


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