

“An approach on workforce number, investment, and project number on investment realization as indicators of development progress”

AUTHORS	Tengku Erry Nuradi P.L. Rika Fatimah
ARTICLE INFO	Tengku Erry Nuradi and P.L. Rika Fatimah (2015). An approach on workforce number, investment, and project number on investment realization as indicators of development progress. <i>Investment Management and Financial Innovations</i> , 12(1), 114-123
RELEASED ON	Thursday, 26 February 2015
JOURNAL	"Investment Management and Financial Innovations"
FOUNDER	LLC "Consulting Publishing Company "Business Perspectives"



NUMBER OF REFERENCES

0



NUMBER OF FIGURES

0



NUMBER OF TABLES

0

© The author(s) 2024. This publication is an open access article.

Tengku Erry Nuradi (Indonesia), P.L. Rika Fatimah (Indonesia)

An approach on workforce number, investment, and project number on investment realization as indicators of development progress

Abstract

Investment can be a driver of regional economy and improve welfare. Investor can gain sufficient profit to perform capital addition, increase productivity, improve employees' welfare, and expand their investment. Increasing the wage should be sufficient not only to meet the consumption needs but also improve the ability to save and/or invest. For the government, increasing the production activities and trade, wages and purchasing power means the increase in tax revenue which in turn allows the government to improve the quality of public services. The purpose of the study is to indicate that investment realization that can be referring as monitoring indicators of real sector performance. Three indicators considered are workforce number, investment value and project number. Quantitative analysis used to address the problems and prove the hypotheses proposed in this study. The result shows that apart of seven hypotheses purposed three only have positive relationships. Workforce plays significant role both to the foreign investment and the amount of domestic capital investment project in North Sumatera. In addition, it is found that the number of foreign investment has a significant affect on the number of domestic capital investment projects in North Sumatera. Discussion and policy recommendation are also presented in this paper with regard to the findings.

Keywords: Indonesian workers, investment, domestic capital, foreign capital, performance monitoring indicator.

JEL Classification: R58.

Introduction

Investment to develop real sector performance.

Regional development can be viewed from different aspects, one of which is the sectorial development aspect. The achievement of a national development goal is done through various sectorial development activities in regions. Sectorial development should be adjusted to the condition and potential of the region. Secondly, regional development can be seen from the aspect of territorial development that includes urban and rural areas as the center and location of the region's socio-economic activities. Thirdly, regional government can be seen from the government aspect. The goal of regional government can only be achieved if the regional government works well. Therefore, regional development is an effort to develop and strengthen regional government with an aim to build up a real, dynamic, harmonious, and responsible regional autonomy.

The understanding of regional development as a translation of national development, the performance of national development is thus an aggregate of the entire regions' development performances. The achievement of national development goals and targets constitutes an aggregate of the achievements of all provinces, and the achievement of goals at a provincial level is an aggregate of the achievement of goals at a district/municipal level. Consequently, the responsibility to reach the goals and targets in national development should be born together by the Central and Regional Government. The progress in macro-economic performance has yet to be followed with a

better real sector performance as reflected by the states of the business, industry, and investment spheres. As a result of the slow recovery of the real sector, the reduction of unemployment and poverty has not reached the expected level. This confirms that an improved macroeconomic condition is indeed necessary, but it is not enough to drive economic recovery.

Investment will create a multiplier effect to the economy. Increased investment will not only increase the aggregate demand, but also increase the aggregate supply through increased capital stocks and production capacity. Production activities will absorb labor force. Investment, particularly those coming from abroad or outside of the region, will also encourage the transfer of technology and innovation. Therefore, the success in creating a macroeconomic stability should be seen as a platform to improve performance in the real sector for economic recovery. The Central Government and Regional Government bear a common responsibility to provide stimulants for developing the real sector by pushing investment.

Investment as monitoring indicator to the real sector performance. The investment growth of both foreign and domestic in North Sumatra, Indonesia, shall be sufficient to be referred as one of the indicators to monitor the real sector performance. The prosperity performance indicator can be seen in the investment realization that tends to increase through the years. Below are the table and the figure of the development of PMDN (Domestic Capital Investment) and PMA (Foreign Capital Investment) realization in North Sumatra from 2009 to 2013:

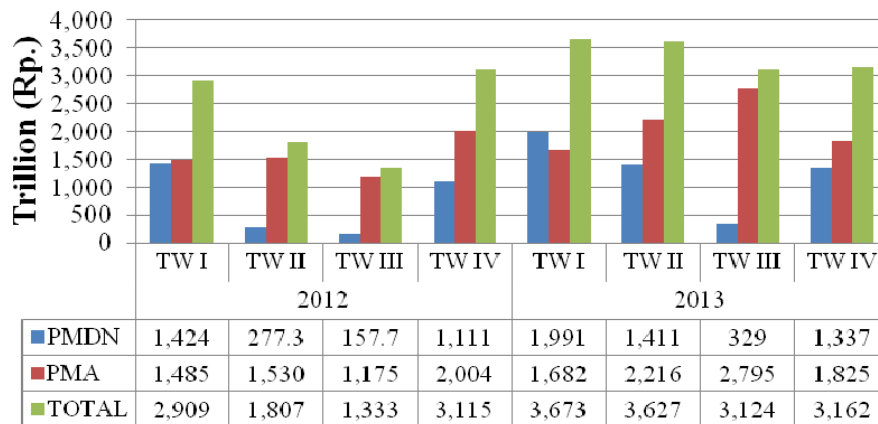
Table 1. Increasing pattern in the investment growth and Indonesian labor involvement of both foreign (PMA) and domestic (PMDN) in North Sumatera, Indonesia in 2009-2013

No.	Year	PMDN			PMA		
		Total project	Investment value (Rp/USD)	Total of Indonesian labor	Total project	Investment value (Rp/USD)	Total of Indonesian labor
1.	2009	14	2,644,965.26	5,142	20	940,296.46	6,526
2.	2010	43	1,708,056.37	5,928	84	321,829.19	8,067
3.	2011	58	2,004,055.78	4,289	65	658,466.72	8,537
4.	2012	55	2,970,186.19	8,575	101	645,300.00	18,517
5.	2013	116	5,068,881.40	4,492	247	887,452.00	29,186

Source: Investment and promotion board of North Sumatera province 2009-2013.

As refer to Table 1, the real sector performance is not only referring the investment number and value but also to the labor number who involved. The table also shows increasing pattern throughout the years with regard to the number and value investment as well as the labor involvement in PMA and PMDN. A prosper performance also can be refered to Figure 1 that represent the foreign and domestic investment target in North Sumatera in 2012 was set to be Rp. 8

trillion by BKPM RI, with actual realization beyond the target of Rp. 9.16 trillion. In 2013 the investment was targeted to be Rp. 9 trillion, with the realization Rp. 13.58 trillion (150.8%). North Sumatera province is ranked 7th and 8th nationally in the realization of domestic and foreign investment in 2013, respectively. Furthermore, central government has set the target of investment in North Sumatera province in 2014 to be Rp. 13.1 trillion.



Source: Investment and promotion board of North Sumatera province 2012-2013

Fig. 1. Beyond the target: actual realization in the investment growth of both foreign (PMA) and domestic (PMDN) in North Sumatera, Indonesia year 2012-2013

1. Literature review

This section shall include two discussions on literature review referred for this study. First is about investment value and project number. The second one is regarding workforce/labor and issues related to it. At the end of each approach, some hypotheses shall be presented then illustrated in Figure 1 as the analysis framework.

1.1. An approach to investment values and project numbers. Approach on both investment value and project number shall include a theory of investment, categorizing investment by region, and investment function in regional development. In addition, some factors affecting the climate of investing also take in consideration to be discussed.

1.1.1. Investment theory. According to Sukirno (2007), investment can be defined as any expense or

outlay of capital and production equipment to improve the ability to produce goods and services available in an economy. Todaro (2003) says any resource used to grow income and consumption in the upcoming time is called investment. Investment is a flow of expenses that enhances physical capital stocks. Investment reflects the adjustment of the existing capital stocks to the capital demand (Dornbusch, 2008).

Thus, the term investment can be defined as any expense or spending of capital investment or a company to purchase capital goods and equipment to improve the ability to produce goods and services available in an economy. The growth in the number of capital goods allows the economy to produce more goods and services in the future. In general, investment can be understood as the act of laying out capital in a company or project with the expectation of profit.

1.1.2. Investment categorization by region. Decisions to execute investment in a region can be categorized through several factors which as followed:

Realizing investment. The capital subsidies for companies to realize their businesses have had a positive impact on the increase of their productivity, efficiency, and profitability and growth. According to Yanrui (2005), a region's good environment will make it an investment destination and investment realization in the region will progress quickly. Such a good condition can be seen by looking at some factors, i.e. security, workforce productivity, human resources availability, the region's openness, infrastructure, and economic reform.

Delaying investment. The macroeconomic condition of a region and its unstable industrial economy could make investors decide to delay their investment. The implementation of foreign investment can be stimulated by encouraging domestic capital investment (Driffield, 2003).

Relocating investment. This means relocating an industry from a region to another that is considered more cost-effective. Relocations are related to the selection of an industry location to gain maximum profit from an investment (Nun, 2004). Investment risks for an industry in a region can be in the form of security conditions and the workers' behavior during work may be one of the factors for an industrial relocation (Haelay, 2008).

Not making investment. In the 1990s, there were industrial agglomerations in several areas in Great Britain that no investment was made in other areas. As a result, there was an imbalance between the areas. An approach the government adopted at the time was to drawing capital to areas that lacked investment by carrying out some interventions in attracting investors (Mason, 2002).

Investment function in development by region. To accelerate a region's economic development needs a large amount of capital, but the region's capability to provide capital is always limited. This is why they need to make an effort to draw investment for development. Tambunan (2001) wrote that investment is one of the important components that determine the level of a region's economic development. This is because economic development that is only supported by consumption without sufficient contributions from investment will not be able to sustain its growth.

Investment brings a broad impact on economy by creating job opportunities and supporting business entities to develop (Arsyad, 2004). Therefore, a good investment climate is one of the main factors

as a driver for developing economy and reducing unemployment. Economic growth is an increasing process of various economic indicators affecting the level of a country's development.

1.1.3. Factors affecting investment climate. Four factors should consider with regard to factors affecting investment value and project number. The first factor is Infrastructure, second one is natural resources. Followed by taxation and trading procedures.

Infrastructures. One of the factors affecting a region's investment climate is its infrastructure condition. Infrastructures are a primary platform for promoting regions to attract investment (Kuncoro, 2004). Good infrastructures will facilitate development processes and potential investors will be interested in laying out their money into the region. On the contrary, if the infrastructures are not adequate, little investment will come there. For example, when the necessary roads are in poor condition, investment in the industry will not operate optimally because it is hampered by transport fees (Lambrinidis, 2005).

Technical or physical infrastructures that support the industrial network can be facilities such as roads, trains, clean water, airports, canals, dams, embankments, waste management facilities, electricity, telecommunication, and harbors. These infrastructures, functionally, do not only facilitate the industry but also support the people's economic activities. With good roads, the distribution in the production flow of goods and services will operate properly as they can facilitate the delivery of raw materials to plants and then the distribution of products to the market and finally to the people (Zhang, 2007). Arifin (2008) states that the limited quantity and quality of infrastructures, especially roads, can obstruct production in the region itself and the export activities, which in turn will increase the costs that businesses have to bear. Nunn (2004) says that the availability of facilities and infrastructures in a region will encourage investors to invest capital in the region.

Natural resources. Among a region's appeals in attracting investment is its natural resources; the availability of natural resources, especially lands, is a very important factor that determines the potential of a region to be developed and managed. Ali (2010) states that an important factor in determining an industry location for foreign investment is the availability of raw materials and fuel.

The availability of natural resources can drive development and increase people's income through investment. This investment should aim at managing the potential of the available natural resources to be used effectively (Back, 2001).

Taxation. Taxes are one of the major obstacles in creating a proper investment climate in a country. Tax rates depend on the size of a government and are charged on various resources. The amount of taxes payable to companies may be affected by consideration on efficiency, fairness, and pragmatism related to the method to collect revenues. The difference in the level of investment growth in a region is determined, among others, by the tax rates established by the government (Mai, 2002). Taxes are very important to a regional development (Deller, 2012).

Trading procedures. Related to licensing, the difficulty in obtaining business permits and licenses, the long and costly administrative process force companies to spend a lot of money and time. This will make investors sustain losses and even leave the region. The strategy to increase investment is to ease and accelerate the licensing procedure (Lining, 2009).

1.1.4. Having theories above as refer to discussion under sub topic 1.1. the three hypotheses with regard to amount of investment and number of projects are;

H3: Total investment in the country significantly effects on the amount of foreign investment projects.

H6: Total foreign investment projects significantly influence the number of domestics' investment projects.

H7: The number of domestics' investment projects significantly effect on foreign investment project.

1.2. An approach on workforce: policy, work environment and protection. Approach on workforce shall include a theory of regional development. In addition, some factors affecting the climate of investing also take in consideration to discussed.

1.2.1. Regional development theory. Regional development is a partnership process between the regional government and stakeholders, including the private sector, in managing natural, human, and institutional resources better through a partnership with a goal to boost the growth of the region's economic activities and to create new jobs.

Regional development is a strategy to use and combine the existing internal (strengths and weaknesses) and external (opportunities and challenges) factors as a potential and opportunity to increase the region's production of goods and services to supply the needs of both the region itself and others. The internal factors include natural resources, human resources, and technological resources, while the external factors can be present in the form of opportunities and threats occurring as the region interacts with other regions.

1.2.2. Factors affecting workforce in investment. Seven factors should consider with regard to factors

affecting workforce in investment. The first factor is local economy, second one is human resources and the third is wisdom. Next factors are institutional, security, and social. The sixth and seventh factors are politic and labor issues.

Local economy. The economic condition of a region reflects its development, workforce condition, economic sector, and regional income (Marelli, 2010). Economic growth is related to increases in the production of goods and services in the people's economic activities and it can be said that economic growth can be associated with a development that is one dimensional and may be measured by increases in production and income. The economic state of a region is a very important factor in attracting investment. Kuncoro (2004) states that one of the things that can attract investment to a region is the region's economy. According to Todaro (2000), one of the main factors or components of a region's economic growth is the capital accumulation that includes all forms or types of new investment laid out on lands.

In addition, the workforce productivity, the level of job opportunity, and Gross Domestic Regional Product (GDRP) per capita are the main factors that build a city's competitiveness. This competitiveness is one of the indicators for the development of investment in a region (Santoso, 2009). A region's economic growth is also influenced by the surrounding areas and also the other regions with which it has commercial partnerships (Blaney, 2007). The development of an area can be affected by the regional economy (Heideman, 2011).

Human resources. Xiaolan (2008) states that quality human resources in a region is a very important factor in attracting investment. This is because businesses now adopt technology that is more and more complex. This modern technology requires more skills from workers to keep up with recent development. There are different investment flows in Great Britain and North America due to the different regional characteristics especially related to the characteristics of the workforce (Collis, 1994). Watanadumrong (2010) states that one of the determinants in choosing a region as a foreign investment location is the people's education and the population density.

Wisdom. Policies may raise risks for companies if they are often amended and not transparent and the implementation is inconsistent so that companies are faced with uncertainty and difficulties in making long-term decisions (Zhang, 2007).

A business person on average needs 150 days to complete all the licenses required to start their business in 2006 (in 2005, they also need 150 days),

while the cost spent on average amounts to 80% of per capita income (Arifin, 2008). Therefore, to obtain business permits takes a lot of time and money. If this process can be made more efficient, which means faster and cheaper, investment will grow quicker in a region as investors will be able to tackle the administrative tasks without much difficulty.

Business actors and investors need (regional) government that is capable to implement good governance principles both at the executive and legislative levels that will lead to the formation of a harmonious tripartite (government, private sector, and the people) cooperation that support a conducive investment climate at a microeconomic level (Tambunan, 2009). The easing of investment procedures and reduction of interest rates affect the improvement in foreign investment. The development of a region should be followed by the regulation that would have an impact on the coordination between the provision and implementation of infrastructure which in turn will affect the investment intentions in the region (Olsson, 2010).

Institutional. Cooperation between development institutions and policymakers and universities can improve the success of regional development by enhancing social capacity and social capital in investment (Bolden, 2009). Adjusting policies between each institution in a region as well as developing commitment to support foreign investment can increase the growth of investment and development (Xu Jing, 2010).

Arifin (2008) states that the indicators for a public institution include judicial independence, property rights, jurisdictional asset protection, wastefulness in government expenses, the effectiveness of bureaucracy, business costs, and production processes.

Security. One of the factors that significantly influence investment in a region is its security. Guaranteed security and security assurance for every capital laid out by investors can significantly increase investment in a region (Evans, 2007). The level of trust in state apparatus in guaranteeing a region's security is an important factor in determining an industry location for investment. A region with a high crime level will have a low level of investment (Haely, 2007).

Social. Social factors have certain impacts on economic development. These factors can push or drive the creation of good investment climate but can also hamper development. Among the cultural characteristics that can drive development are hard-working and smart-working attitude, honesty, and perseverance. As for those that can obstruct development, the examples are violence, selfishness, wasteful-

ness, and corruption-collusion-nepotism (Menkcen, 2005). According to Wattanadumrong (2010), the society's characteristics are one of the determinants in choosing an industry location. The social role of business owners and female workers significantly affects regional development (Blasio, 2009).

Political. Political condition, infrastructures, and knowledge level in a region are among the determining factors in choosing an industry location for investment (Demirbag, 2010). Local politics are one of the significant variables to investment climate (Hofman, in Kuncoro, 2004). Poor government services, lack of legal certainty, and regional regulations unsupportive to business are obstacles for investment growth. Furthermore, another political problem for investment in a region is illegal fees that must be paid to government officials, security apparatus, and others. The country's political stability is an important consideration for investors, especially foreign, in deciding whether or not to invest in a region. Because investors often need a long time to reach the break-even point and get profit on their investment, long-term political stability significantly influence investment decisions.

Labor issues. Labor-related problems will hamper investment growth in a region. Pay rise demands, workers' rally, conflict with workers' union, and workers' social security may make it difficult for investment to grow in a region. Investors will have to be faced with conflicts if the investment region and their operation do not work properly with these problems.

Labor's skills are an issue of the availability of skilled workforce in a region. An improvement in investment climate must be accompanied with an improvement in human resources quality. Skilled workforce is essential for a company to be able to use new and more productive technology (Mullen, 2007).

1.2.3. Having the theories above as refer to discussion under sub topic 1.2., the four hypotheses with regard to influence of Workforce in Investment are;

H1: Indonesian workers who work in domestic investment project significantly influence the number of foreign investment projects.

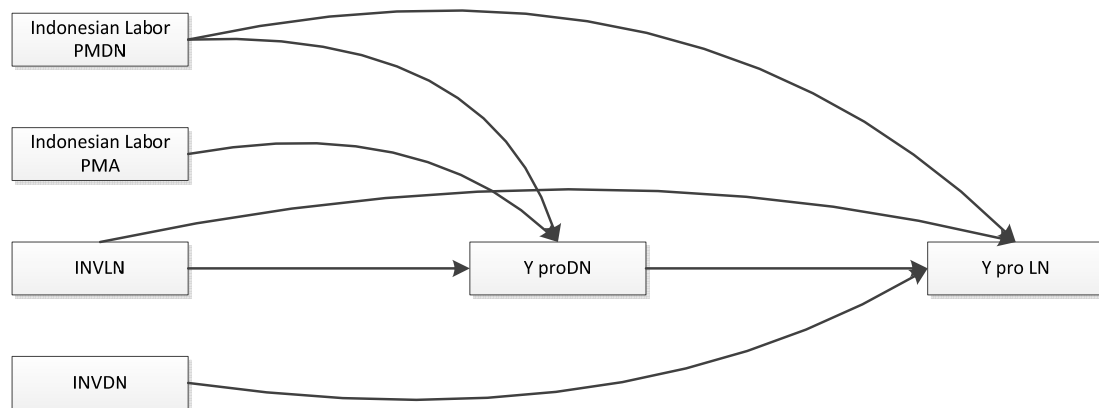
H2: Indonesian workers working in foreign investment projects significantly influence the number of foreign investment projects.

H4: Indonesian workers who work in domestic investment projects significantly influence the number of domestic investment projects.

H5: Workers who work in foreign investment significantly influence the number of domestic's investment projects.

1.3. The analysis framework. Having considered the literatures and the discussion on the referred theory, this study proposes an illustration of

relationships between the number of workforce, the amount of investment, and the number of projects as shown in the Figure 2.



Notes: Indonesian labor – PMDN: Indonesian labor in domestic investment, Indonesian labor – PMA: Indonesian labor in foreign investment; INV LN: foreign investment/aboard/PMA; INV DN: domestic investment; Y proDN: PMDN's projects; Y proLN: PMA's projects.

Fig. 2. The research model of investment growth with approach on workforce number, investment value, and project number

In conclusion, based on the research model above and discussion earlier, this study proposes seven hypotheses:

H1: Indonesian workers who work in domestic investment project significantly influence the number of foreign investment projects.

H2: Indonesian workers working in foreign investment projects significantly influence the number of foreign investment projects.

H3: Total investment in the country significantly effect on the amount of foreign investment projects.

H4: Indonesian workers who work in domestic investment projects significantly influence the number of domestic investment projects.

H5: Workers who work in foreign investment significantly influence the number of domestic investment projects.

H6: Total foreign investment projects significantly influence the number of domestic investment projects.

H7: The number of domestic investment projects significantly effect on foreign investment project.

2. Research methodology

A quantitative method is used to investigate and describe the empirical data systematically in this study. A sampling method is employed to collect the data through a questionnaire form, then to analyze the data by using Structural Equation Modeling (SEM) (Simamora, 2004). A convenient sampling is used to collect the data. Furthermore, the population of this study is domestic investment projects and foreign investment projects in North Sumatra. In addition, the sample for this study is domestic investment projects and foreign investment projects in North Sumatra from 2009 to 2013.

The sample is part of a population that has characteristics or particular circumstances that will be investigated accordingly to achieve the objective of this study (Riduwan, 2009). The 2009-2013 period is chosen because through these years we will be able to show the increasing trend related to the growth of investment realization. The domestic and foreign investment projects are sampled by using secondary data. Secondary data refers to data that is already available, which researchers get from sources that can be internal or external (Bryman & Bell, 2007).

Using the data as mentioned, this study then examines the model constructs to test for their goodness of fit. As a result, the constructs forming the research model meet the goodness of fit principle. Therefore, the model is sufficiently accepted (Table 2). Thus it can be said that the data used in this study has no multi-collinearity and singularity, so that the data fit for use.

Table 2. Test on the samples of determinant of covariance matrix

Goodness of fit index	Cut-off value	Model result	Note
Chi-square	Expected small	0.82	Good
Probability	= 0.05	0.36	Good
RMSEA	= 0.00	0.00	Good
GFI	= 0.90	0.98	Good
TLI	= 0.95	1.01	Good
CFI	= 0.95	1.00	Good

Looking at the table processing results, those with asterisks in the P column are significant, while the value 0.002 is also significant because the significance limit in this research is only 5%. If the result is above 5% or 0.05, then the influence between variables is not significant. The results indicate that all variables or indicators show good results (refer to Table 3).

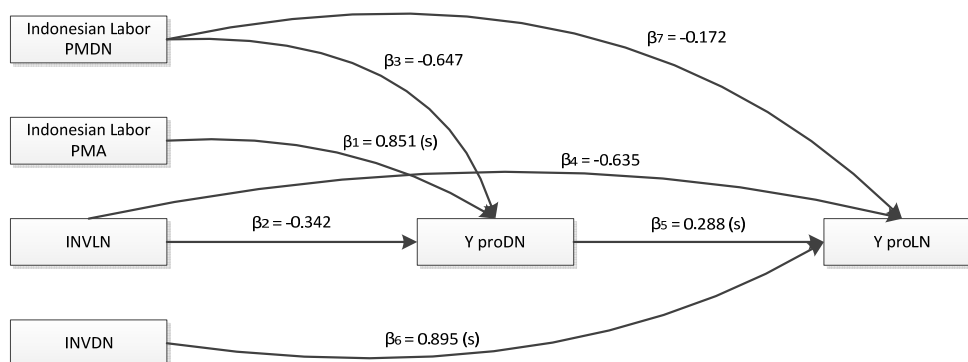
Table 3. Regression processing results

Regression weight			Estimate	S.E.	C.R.	P	Estimate standard
XNET	→	KURS	18.204	3.458	5.264	***	0.206
XNET	→	TK	14.898	2.924	5.096	***	0.340
XNET	→	SAVING	0.925	0.058	15.927	***	1.182
XNET	→	INV	-0.702	0.061	-11.470	***	-0.470
Y	→	SAVING	0.368	0.077	4.748	***	0.174
Y	→	INDMAF	0.765	0.063	12.135	***	0.244
Y	→	KURS	8.700	2.862	3.040	0.002	0.036
Y	→	INV	0.708	0.067	10.551	***	0.176
Y	→	TK	34.475	2.728	12.636	***	0.291
Y	→	XNET	0.526	0.062	8.428	***	0.195

3. Results and discussion

As stated earlier, this study proposes seven hypotheses with regard to investment growth with approach on workforce number, investment value,

and project number. The hypotheses result can be referring to Figure 2 and Table 4. The value of hypothesis and relationship of one variable with another variable is as shown also in the same figure.



Notes: Indonesian labor – PMDN: Indonesian labor in domestic investment; Indonesian labor – PMA: Indonesian labor in foreign investment; INV LN: foreign investment/abroad/PMA; INV DN: domestic investment; Y proDN: PMDN's projects; Y proLN: PMA's projects; S: significant.

Fig. 3. Research result for hypothesis and inter-variable of investment with approach on workforce number, investment value, and project number

Table 4. The hypothesis analysis result for investment with approach on workforce number, investment value and project number

Hypothesis		Inter-variable relationship	Inter-variable influence
H1:	Indonesian workers who work in domestic investment project significantly influence the number of foreign investment projects.	Positive (0.851)	Significant influence
H2:	Indonesian workers working in foreign investment projects significantly influence the number of foreign investment projects.	Negative	No significant influence
H3:	Total investment in the country significantly effect on the amount of foreign investment projects.	Negative	No significant influence
H4:	Indonesian workers who work in domestic investment projects significantly influence the number of domestic investment projects.	Negative	No significant influence
H5:	Workers who work in foreign investment significantly influence the number of domestic investment projects.	Positive (0.288)	Significant influence
H6:	Total foreign investment projects significantly influence the number of domestics' investment projects.	Positive (0.895)	Significant influence
H7:	The number of domestic investment projects significantly effect on foreign investment project.	Negative	No significant influence

As refer to Table 4, out of the seven hypotheses, four hypotheses show negative relationships, i.e. H2, H3, H4 and H7. Furthermore, the other three that have positive relationships are H1, H5 and H6. All hypotheses are accepted at a significance level of 0.005.

The positive relationships show that there are significant influences between variables. Hypotheses 1 and 5 have shown that workforce play a significant role for both the foreign investment and the number of domestic capital investment projects in North

Sumatra. Hypothesis 1 has shown that workforce working in domestic investment have a significant influence on the number of foreign investment projects with a coefficient of 0.851. The high rate of influence on the number of foreign investment projects is mostly contributed by workers in domestic investment. Foreign investors seem to observe labor's capability through their performance in domestic investment. Therefore, efforts to improve workforce capability in domestic investment need to be considered by the provincial government of North Sumatra in order to increase the number of foreign investment projects. This is in line with what is said by Yanrui (2005) who discusses that a region's good condition, including that of the workforce performance, will have a positive impact on the investment growth in the region.

In addition, Hypothesis 5 has shown that workforce working in foreign investment have a significant influence on the number of domestic capital investment projects with a coefficient of 0.288. On the contrary to Hypothesis 1 on workforce working in domestic investment, Hypothesis 5 maintains that workforce working in foreign investment seem to be less observed by domestic investors with regard to their influence on the amount of domestic capital investment projects. The fact that local people know their own people seems to be the reality that happens in the decision making process for the domestic investors in North Sumatra. Besides, in line with the four factors affecting the amount of capital investment, investors may have more concerns about infrastructures, natural resources, taxation, and trading procedures (Kuncoro, 2004; Back, 2001; Mai, 2002; Lining, 2009). However, the workforce factor still slightly affects the variation of the amount invested in domestic investment projects. Therefore, attention shall be paid to labor welfare and facilities supporting their good performance.

The other positive relationship also found in Hypothesis 6 with a 0.895 coefficient, which means the amount of foreign investment has a significant effect on the number of domestic capital investment projects in North Sumatra. Even though workforce working in foreign investment projects are not much influenced by domestic investors' decisions related to the number of investment projects, it seems the amount of foreign investment should also be taken into consideration by domestic investors. The finding is consistent with what Back (2001) also argues that investment manages the natural resources for the people welfare.

Conclusions and recommendations

Investment realization as a monitoring indicator of the real sector performance could be achieved with a macroeconomic stability as a foundation for improving the performance. In addition, investment can also be interpreted as expenditure or spending of stockholders or companies to purchase capital goods and equipment which increase the ability to produce goods and services available in the economy. The three monitoring indicators used here are the number of workforce, the amount of investment, and the number of projects. The positive relationships between the monitoring indicators show that there are significant influences between variables.

The result shows that workforce working in domestic investment have a significant influence on the amount of foreign investment and the number of domestic capital investment projects in North Sumatra. Meanwhile, the amount of domestic investments has a significant influence on the number of foreign investment projects in North Sumatra along with Domestic Investment. Workforce working in foreign investment do not have a significant influence on the number of foreign and domestic capital investment projects in North Sumatra, while the amount of foreign investment has a significant effect on the number of domestic capital investment projects in North Sumatra.

Therefore, the recommendations are proposed to discuss on the master plan for the Acceleration and Expansion of Indonesia's Economic Development with regard to the results of this study. First, the master plan shall consider the acceleration and expansion of the downstream sector of the palm oil industrial cluster at Simelungun District, North Sumatra. The area has been trying very hard (all-out) to become the first Special Economic Zone in Indonesia.

In the future, researchers are expected to add more research variables affecting investment realization in North Sumatra. So, they will produce additional results and contribute more to the society at large.

Acknowledgements

This paper is gone through review process in Workshop and Coaching on Writing Publication in International Journal (WCWPIJ) 2014, Malaysia. Therefore, the authors express their gratitude to ThinkSmart Scholar (TS Scholar) for the event and the support during the preparation of this article. In addition, our sincere thanks for the facilitation provided by Dashboard for Excellence Quality & Productivity Improvement (DEQPI), Faculty of Economics & Business, Universitas Gadjah Mada so that this article can be well finalized.

References

1. Back, W.B. (2001). Estimating contributions of natural resource investment to objectives in regional economic development, *Journal of Agricultural Economic*, ISSUE, pp. 1422-1426.
2. Blasio, Guido de. (2009). Historical Traditions of Civicness and Local Economic Development, *Journal of Regional Science*, 50 (4), pp. 833-857.
3. Bleaney, M. and Castilleja-Vargas (2007). Regional growth patterns and growth contagion, *Journal of Economic Studies*, 34 (1), pp. 4-12.
4. Boland, P. (2007). Unpacking the Theory–Policy Interface of Local Economic Development: An Analysis of Cardiff and Liverpool, *Urban Studies*, 44 (5/6), pp. 1019-1039.
5. Bolden, R. and Bagnall, J. (2009). Building regional capacity: lessons from Leadership South West, *Education + Training*, 51 (8/9), pp. 635-647.
6. Bryman, A. and Bell, E. (2007). *Business Research Methods the 2nd Edition*, New York: Oxford University Press.
7. Collis, C. (1994). Direct Investment from the EC Recent Trends in the West Midlands Region and their Implications for Regional Development and Policy, *European Business Review*, 94 (2), pp. 14-19.
8. Deller, S. et al. (2012). The Impact of State and Local Tax and Expenditure Limitations on State Economic Growth, *Growth and Change*, 43 (1), pp. 56-84.
9. Dornbusch, R. dkk. (2008). *Makroekonomi Edisi kesembilan*. PT. Media Global Edukasi.
10. Driffield, N. and Hughes, D. (2003). Foreign and Domestic Investment: Regional Development Or Crowding Out? *Regional Studies*, 37 (3), pp. 277-288.
11. Evan, D.J. and Thompson, P. (2007). The Spatial Dispersion of Informal Investment at a regional level: Evidence from the UK, *European Planning Studies*, 17 (15), pp. 659-675.
12. Fu, X. (2008). Foreign Direct Investment, Absorptive Capacity and Regional Innovation Capabilities: Evidence from China, *Oxford Development Studies*, 36 (1), pp. 89-110.
13. Healey, R.G. (2008). Risk and Behavioral Regional Investment: A Case Study of Speculation in the Nineteenth Century Oil Industry of Pennsylvania, *Historical Geography*, 35, pp. 214-240.
14. Heideman, L. (2011). Municipal Local Economic Development and the Multiplier effect: Piloting a Community Enterprise Identification Method in South Africa and Namibia, *Commonwealth Journal of Local Governance*, May-November (8/9).
15. Kim, J.Y. and Zhang, Le-Yin. (2008). Formation of Foreign Direct Investment Clustering – A New Path to Local Economic Development? The Case of Qingdao, *Regional Studies*, 42 (2), pp. 265-280.
16. Kuncoro, M. (2004). *Otonomi Dan Pembangunan Daerah: Reformasi, Perencanaan, Strategi, Dan Peluang*, Jakarta: Erlangga.
17. Lambrinidis, M. (2005). Regional Allocation of public Infrastructure investment: The Case of Greece, *Regional Studies*, 39 (9), pp. 1231-1244.
18. Lining & Duchin, F. (2009). Regional Development In China: Interregional Transportation Infrastructure and Regional Comparative Advantage, *Economic Systems Research*, 21 (1), pp. 3-22.
19. Mai, P.H. (2002). Development and FDI Flows in Vietnam, *Journal of the Asia Pacific Economy*, 7 (2), pp. 182-202.
20. Mason, C.M. and Harrison, R.T. (2002). The Geography of Venture Capital Investments in The UK, *Transactions of the Institute of British Geographers*, 27 (4), pp. 427-451.
21. Marelli, E. (2010). Employment, productivity and models of growth in the EU, *International Journal of Manpower*, 31 (7), pp. 732-754.
22. Mencken, F. (2005). Carson and Charles M. Tolbert (2005). Federal Public Investment Spending and Economic Development in Appalachia, *Rural Sociology*, 70 (4), pp. 514-539.
23. Mullen, J.K. (2007). Foreign Direct Investment and Regional Productivity Spillovers in US Manufacturing, *Review of Urban & Regional Development Studies*, 19 (3), pp. 185-196.
24. Olsson, J. (2010). Road Investment As Enabling Local Economic Development? Evidence from a Rural Philippine Fishing Village, *Singapore Journal of Tropical Geography*, 31 (3), pp. 343-356.
25. Riduwan. (2008). *Metode dan Teknik Menyusun Tesis*. Bandung: ALfabeta.
26. Sabri, L. and Hastono, S.P. (2006). *Statistik Kesehatan*, Jakarta: Raja Grafindo Persada.
27. Samuelson and Nordhaus. (2004). *Ilmu makroekonomi* (17th ed.), Jakarta: PT. Media Global Edukasi.
28. Santoso, S. (2007). *Structural Equation Modelling Konsep dan Aplikasi dengan AMOS*, Jakarta: Gramedia.
29. Santoso, E.B. (2009). *Daya Saing Kota-kota Besar di Indonesia*. Paper presented in “Seminar Nasional Perencanaan Wilayah dan Kota”, Surabaya.
30. Simamora, B. (2004). *Panduan Riset Perilaku Konsumen*, Jakarta: Gramedia Pustaka Utama.
31. Sukirno, S. (2007). *Ekonomi Pembangunan: Proses, Masalah, Dan Dasar Kebijakan*, Jakarta: Prenada Media Group.
32. Sun, H. and Chai, J. (1998). Direct Foreign Investment and Inter-Regional Economic Disparity in China, *International Journal of Social Economics*, 25 (2/3/4), pp. 424-447.
33. Tambunan, M. (2009). *Menggagas Perubahan Pendekatan Pembangunan*, Jakarta: Graha Ilmu.
34. Tambunan, T. (2001). *Perekonomian Indonesia beberapa masalah penting*, Jakarta: Penerbit Ghalia Indonesia.
35. Todaro and Smith. (2004). *Pembangunan Ekonomi di Dunia ke Tiga* (8th ed), Jakarta: PT.Gelora Aksara Pratama.
36. Wattanadumrong, B. et al. (2010). Still Big in Bangkok? An Empirical Analysis of the Regional Distribution of Foreign Direct Investment in Thailand, *International Journal of the Economics of Business*, 17 (3), pp. 329-348.

37. Xu, J. (2010). China's Policies on Foreign-Invested Travel Agencies Upon Its Entry To the WTO What Can Foreign Investors Do? *International Journal of Contemporary Hospitality Management*, 22 (3), pp. 360-381.
38. Yanrui, (2005). Understanding Growth in China's Regional Economies, *Journal of Contemporary China*, 14 (42), pp. 135-151.
39. Zhang, Y. and Zhao, K. (2007). Impact of Beijing Olympic-related Investments. Regional Economic Growth of China: Interregional Input-Output Approach, *Asian Economic Journal* 2007, 21 (3), pp. 261-282.