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Research Article

## Outlook Infrastructure Development in Indonesia

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**Abstract:** The purpose of article writing is to provide an overview of Indonesia's infrastructure development and its relation to investment plans and economy in general, as well as providing information for the preparation of roadmap infrastructure development in Indonesia. The availability of quality infrastructure is one of the determinants of the attractiveness of a region / region, in addition to environmental quality factors, image, and society (culture). Meanwhile, infrastructure performance is a key factor in determining global competitiveness, in addition to macroeconomic performance, government efficiency, and business efficiency. Availability of adequate infrastructure in terms of quality is a major factor to encourage and support sustainable economic growth. Infrastructure is seen as an important element of the global competitiveness of a nation. This article also presents an outlook for Indonesia's infrastructure development that can be used by stakeholders in various infrastructure sectors (Government or private) as. The growth target of the RPJMN 2010-2019 in 2015 fixes the figure of 5.80 percent. Up to T-III 2015, the national economic growth only reached 4.9 percent far below the RPJMN growth target.

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**Keywords:** outlook, development, infrastructure, sustainability.

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### BACKGROUND

The National Medium Term Development Plan (RPJMN) 2015-2019 has been drawn up through Presidential Regulation no. 2/2015 which contains the development plan for the next 5 years to achieve the target of infrastructure implementation include (1) Availability of infrastructure according to spatial planning; (2) The development of transportation network; (3) Fulfillment of reliable and efficient power supply; (4) Start of utilization of nuclear power for power plant; (5) Realization of conservation of water resources and the fulfillment of drinking water supply for basic needs Rural infrastructure development supports agriculture; (6) Fulfilling shelter needs supported by long-term financing system; And (7) The realization of a city without slums.

The targets for the construction of the infrastructure have been established and must be achieved by each K / L, both the output target and the target of the outcome (national target). To achieve these development targets, a media that can be used to predict the development of Indonesia's development will take place by preparing an outlook for Indonesia's infrastructure development.

Predictions for infrastructure development include forward-looking conditions, quality, quantity, and infrastructure financing of various aspects and typologies. The basis for making predictions is a macroeconomic projection in the global, regional, national and local scope. In addition to reviewing the social and political development of Indonesia based on the trend of the previous year. The projection also considers the national infrastructure program that has been outlined in the medium term development planning document. In addition to the prediction of future development, the

Government's efforts to overcome the obstacles and challenges of infrastructure implementation are among others: uncertainty of legislation, slow bureaucracy, and land acquisition issues.

While the availability of quality infrastructure is one of the determinants of the attractiveness of a region / region, in addition to environmental quality factors, image, and society (culture). Meanwhile, infrastructure performance is a key factor in determining global competitiveness, in addition to macroeconomic performance, government efficiency, and business efficiency. In terms of global competitiveness, several international agencies regularly issue a ranking of Indonesia's infrastructure performance. Thus, infrastructure is seen as an important element of a nation's global competitiveness.

### LITERATURE REVIEW

#### National Development Planning System

Some definitions of planning according to some experts, such as C. Brobowski (1964): Planning is a set of final decisions, preliminary decisions and consistent forward projections over a period of time, and the main purpose is to influence the entire economy of a country. While Waterston (1965) states that planning is a conscious effort, organized and continuous in order to choose the best alternative from a number of alternatives to achieve certain goals. Furthermore, Conyers and Hills (1984) assert, planning is a continuous process, consisting of decisions or choices of various ways to use existing resources, with the goal of achieving certain future goals. Todaro (2000) states that economic planning is a deliberate effort by the government to coordinate long-term economic decision-making as well as to influence, regulate

and in some cases control the rate and growth rates of key economic variables to achieve pre-determined development goals, and Jhingan 1983): Planning is a technique / means to achieve goals, to realize certain goals and targets that have been predetermined and well defined by the Central Planning Agency. The goal may be to achieve social, political or other objectives.

Planning consists of several elements, namely: First, Planning relates to the future, implications: planning is closely related to: projections / predictions, scheduling activities, monitoring and evaluation. Second, Planning means choosing: choosing alternative alternatives to achieve better conditions, and selecting ways / activities to achieve the goals / objectives of the activity. Third, Planning as a tool to allocate natural resources, human resources, capital: Resources are limited so that resource allocation needs to be done as well as possible, and Consequences: the collection and analysis of data and information on available resources becomes very important.

Functions / Benefits Planning is as a direction guide, minimization of uncertainty, minimization of inefficiency of resources, and stipulation of Standards in Quality Supervision. The requirements of planning must have, know, and take into account: (Jhingan, 1983) The desired end goal, Targets and priorities to make it happen (reflecting the selection of alternatives), Duration of achieving those goals, , The capital or resources to be used and their allocations, the policies to implement them, the Persons, the organizations, or their executing bodies, the Monitoring, Evaluation, and Supervision Mechanisms of their implementation. Nature of Planning, ie In terms of scope of objectives and targets, planning can be national, sector and spatial. From the form of planning can be aggregative or comprehensive and partial planning. Within its reach and hierarchy, there is central and regional level planning. From the time frame, planning can be long term, medium, or short term. Judging from the flow of information, planning can be top down, bottom up, or both. In terms of provision or projection flexibility in the future, planning can be indicative or prescriptive. Based on its political system, planning can be alocative, innovative and radical.

Scope of Planning under Law No. 25 of 2004 on National Development Planning System: National Long Term Development Plan (RPJP-National), National Medium-Term Development Plan (RPJM-National), Ministry / Institution Strategic Plan (KL Strategic Plan), Government Work Plan (RKP), Ministry/Institution Work PlanLeadership Regulations KL.

### **Infrastructure and Economic Linkages**

Infrastructure has a broad and diverse role to play in development, both in the physical-environmental, economic, social, cultural, political and other contexts. Infrastructure is a driving force in economic growth. His role in developing a region certainly no one doubts it anymore. So some empirical facts state that the development of infrastructure capacity in a region will go hand in hand with the development of economic output. A statement released by World Bank (1994) even dare

to state that an average 1 percent increase in infrastructure stock will be associated with a 1% increase in GDP.

The role of infrastructure is also vital because it is believed to increase productivity which will ultimately affect the increase in overall economic performance. Meanwhile, the role of infrastructure in the economy is not just availability (availability) into quantity and quality. An important role run by infrastructure can be a stumbling block when the amount of investment or spending disbursed by the Government for public infrastructure is decreasing. This is probably one of the causes of the decline in the role of the agricultural sector in supporting economic output both nationally and regionally.

Efforts to improve the condition of infrastructure are acknowledged the important role in reducing the income gap and its long-term impact on GDP per capita. Infrastructure improvements have contributed to improving productivity and are expected to support long-term economic growth. Referring to the World Development Report (World Bank, 1994), infrastructure plays an important role in promoting economic growth where higher economic growth is found in areas with sufficient infrastructure availability. The identification of infrastructure development programs in some countries concludes that in general programs are targeted in the medium term with a focus on increasing basic needs and human connectivity, from water, electricity, energy, to transportation (highways, railways, ports and airports). Weil (2009) also states that the disparities in the availability of physical capital and human capital play a role in explaining the differences in economic growth between countries.

In Indonesia, many studies explore the influence of infrastructure on the economy with varying results. Sibrani (2002) found that infrastructure, in terms of electricity and education, had a positive and significant impact on per capita income of Indonesians, while road and telephone variables were not significant. Centralized infrastructure development policies in Java and western Indonesia create disparities in per capita income of each region in Indonesia, especially in eastern Indonesia. Furthermore, Yanuar (2006) using panel data of 26 provinces shows that physical capital, road infrastructure, telephone, health, and education have a positive effect on economic output. In the meantime, Prasetyo (2008) concluded that electricity, road length, capital stock, and local authority have a positive effect on the economic development of West Indonesia Region, while the variable of clean water is not significant. Research by Prasetyo and Firdaus (2009) concluded that Indonesia's economic growth is influenced by the availability of infrastructure, including electrification, paved roads, and clean water.

Infrastructure will indirectly affect economic growth through households (through welfare improvements) and corporations (through decreasing costs and market expansion) which will then have an effect on collectively on economic growth. The linkage between infrastructure and economic growth is inseparable from the function of infrastructure as an enabler of economic activity. Infrastructure has the benefit of moving

various sectors of the economy because it is considered as social overhead capital.

There is a long debate about the link between infrastructure and economic growth in both developed and developing countries. Generally there are three transmission channels that get emphasis. First, the impact of increased productivity from infrastructure, for example, through decreasing transportation costs and improving communications. Second, improvements in human resources, such as better education and health outcomes, as more clinics and schools are built connected with the population. Third, infrastructure support to economies of scale and scope of production, for example, by supporting the centralization of activities within clusters or enabling firms to serve larger markets. Conversely, there are potential problems associated with a decrease in other investment in the short term (crowding-out effect), although there is a potential increase in long-term benefits from infrastructure investment. Also, if a new investment is made by reducing spending on maintenance of existing infrastructure, then there may be a problem in terms of cost effectiveness. From a political economy point of view, depending on the institutional situation, a sharp increase in infrastructure spending can extend profit-seeking behavior, again affecting cost effectiveness.

The study by Straub (2008) highlights the variation between studies of their country samples and time periods, econometric techniques, use of infrastructure investment amounts or physical measurements and sets of emphasis on growth, output or productivity and between temporary and long-term influence. Of the 80 specifications, about half found that infrastructure had a positive and significant effect, two-fifths found no influence and the rest found a negative and significant effect. Findings of a positive influence on output or growth will be more likely in studies that use physical indicators of infrastructure than investment data (which can not always map the actual level of physical investment well).

Calderon et al. (2011) is one of the researchers who found a positive relationship between the output and the level of physical infrastructure. In particular, an infrastructure index is structured as a weighted calculation of state support in the areas of transportation, electricity and telecommunications. The index was then used as an explanatory variable in the empirical analysis of 88 countries in the period 1960-2000. To illustrate the importance of economic analysis results, if the level of infrastructure services of a country will be increased from the sample median in 2000 to the 75th percentile, it will

obtain an increase in output per worker at least below 8 percent. Furthermore, by moving the median rate from a middle-income country to the median high-income country, the output per worker will increase by 5.2 percent. Interestingly, there is little inter-state variation in the elasticity between infrastructure and growth. However, they found that the added benefit to growth with improved infrastructure is greater for countries with lower levels of infrastructure and countries with larger populations may receive smaller benefits because of the impact of congestion.

According to research conducted by Guswandi (2015), states that factors affecting regional development and local economic development is infrastructure, this is evidenced from the results that states there is a positive and significant influence of infrastructure factors on the development of the region and local economic development Dharmasraya Regency.

## RESEARCH METHODOLOGY

Based on the research objectives to be achieved as described in the previous section is to prepare a document of the outlook for Indonesia's infrastructure development that can be used by stakeholders in various infrastructure sectors (Government or private) as a roadmap in carrying out infrastructure development in Indonesia, the research methodology Method) using mix metode (qualitative and quantitative). The qualitative method explains the existing conditions of infrastructure in Indonesia while the quantitative approach is intended to look at Indonesia's macroeconomic conditions and projections.

## DISCUSSION

### Macro Economic Condition Indonesia

National economic growth in 2014 reached only 5.06 percent, experiencing a slowdown in economic growth since last four years. In 2011 the national economic growth reached 6.49 percent, decreased to 6.26 percent in 2012. Until then in 2012 the economic growth of 5.73 percent. When viewed per sector, the transportation and communications sector from 2010-2014 always experienced the highest growth, reaching 10.64 percent per year. While the economic sector that experienced the smallest growth occurred in the mining and quarrying sector, which has an average growth of 1.64 percent per year. The development of world economic conditions in 2014 that are not in accordance with estimates from some circles such as the IMF, World Bank in akhirnya give effect to the Indonesian economy. This is indicated by the slow growth in GDP.

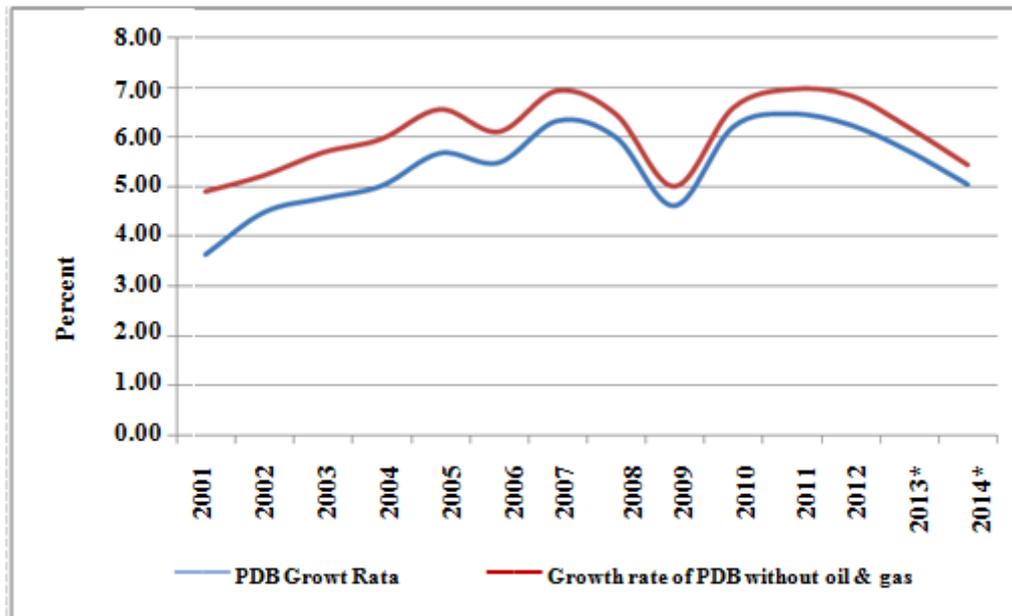
Table 1. *Growth Rate of Gross Domestic Product at 2000 Constant Market Prices by Industrial Origin*

No.	Business field	2010	2011	2012	2013*	2014**
1.	Agriculture	3.01	3.37	4.20	3.44	3.29
2.	Mining & Quarrying	3.86	1.60	1.58	1.41	-0.22
3.	Processing industry	4.74	6.14	5.74	5.56	4.86
4.	Electricity, Gas and Water Supply	5.33	4.71	6.32	5.78	5.50
5.	Building	6.95	6.07	7.39	6.57	6.58
6.	Trade, Hotel and Restaurant	8.69	9.24	8.16	5.89	4.64

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No.	Business field	2010	2011	2012	2013*	2014**
7.	Trade, Hotel and Restaurant	13.41	10.70	9.98	9.80	9.31
8.	Finance, Rental & Corporate Services	5.67	6.84	7.14	7.57	5.96
9.	Services	6.04	6.80	5.22	5.47	5.92
	Growth Rate of GDP	<b>6.22</b>	<b>6.49</b>	<b>6.26</b>	<b>5.73</b>	<b>5.06</b>
	GDP Growth Rate Without Oil and Gas	<b>6.60</b>	<b>6.98</b>	<b>6.85</b>	<b>6.20</b>	<b>5.44</b>

Source: Central Bureau of Statistics (BPS), 2015



**Figure 1: Growth Rate of Gross Domestic Product at 2000 Constant 2000-2014 Constant Prices**

Indonesia's economic growth in 2014 is driven by two main driving motors: household consumption and investment. The growth of household consumption expenditure reached 5.55 percent higher than the growth of investment expenditure of 4.73 percent. Growth in government expenditures amounted to 2.31 percent, growth in exports of goods and services by -2.33 percent.

Table 2. Major Movers of Domestic Economic Growth Year 2007-2014

No.	TYPE OF EXPENDITURE	2010	2011	2012	2013	2014
1.	Household Consumption Expenditure	4.46	4.59	5.14	5.23	5.55
2.	Government Consumption Expenditures	-4.34	3.24	4.80	2.71	2.31
3.	Gross Domestic Fixed Capital Formation	8.21	7.65	10.24	5.06	4.73
4.	Export of Goods and Services	16.98	14.11	4.53	4.41	-0.72
5.	Less Imported Goods and Services	19.45	13.93	7.98	0.80	-2.33
<b>6.</b>	<b>GROSS DOMESTIC PRODUCT</b>	<b>6.10</b>	<b>6.48</b>	<b>6.30</b>	<b>5.83</b>	<b>5.10</b>

Source: Central Bureau of Statistics (BPS), 2015

### Macroeconomic Projection of Indonesia

Macroeconomic projection of Indonesia can be seen from economic indicators, such as the estimation of the principal amount, balance of payments, finance state, and the level of unemployment and poverty. Indonesia's macroeconomic projection is forecasted to grow 8 percent in 2019 from about 5.8 percent in 2015. In view of Indonesia's economic growth seen declining from 6.2 percent in 2010, it continues to decline to 5.1 percent in 2014. The decline in Indonesia's economic growth in 2010-2013 is affected by the global economic conditions that experienced financial crisis. However, by 2015 economic growth is expected to improve with the forecast of economic growth to be 5.8 percent and expected economic growth continues to rise. Furthermore, on the realization and projection of Indonesia's macro-economic medium term can be seen in the table below.

Table 3. Realization and Projection of Medium Term Macro Economy of Indonesia

Indicator	Realization				Estimates 2014	Medium Term Projection				
	2010	2011	2012	2013		2015	2016	2017	2018	2019
Estimation of Principle										
GDP growth (%)	6,2	6,5	6,3	5,8	5,1	5,8	6,6	7,1	7,5	8,0
GDP per Capita (Thousand Rp)	27.03	30.66	33.53	36.51	43.403	47.804	52.686	58.489	64.721	72.217
Inflation rate, Consumer Price Index (%)	5,1	5,4	4,3	3,4	3,4	5,0	4,0	4,0	3,5	3,5
Nominal Exchange Rates (RP / US \$)	1.991	1.968	1.967	12.19	11900	12200	12150	12100	12050	12000
Balance of Payments										
Current Account / GDP (%)	0,7	0,2	-2,8	-3,8						
Growth of Non-Oil and Gas Exports (%)	30,7	25,7	-6,0	-2,1	-1,0	8,0	9,9	11,9	13,7	14,3
Growth of Non-Oil and Gas Imports (%)	38,9	24,8	9,3	-3,6	-1,0	6,1	7,1	10,2	11,7	12,3
Foreign Exchange Reserves (US \$ Billion)	96,2	110,1	112,8	99,4	112,4	119,9	129,7	136,8	145,2	156,3
State finances										
Primary Balance of APBN / GDP (%)	0,6	0,1	-0,6	-1,1	-0,7	-0,6	-0,5	-0,4	-0,3	0,0
Surplus / Deficit APBN / PDB (%)	-0,7	-1,1	-1,9	-2,3	-2,0	-1,9	-1,8	-1,6	-1,4	-1,0
Tax Receipts / GDP (%)	11,3	11,8	11,9	11,9	11,5	13,2	14,2	14,6	15,2	16,0
Stock Government Debt / GDP (%)	26,2	24,4	24,0	26,1	23,9	26,7	23,3	22,3	21,1	19,3
Foreign debt	9,6	8,4	7,5	7,8	6,2	5,3	4,8	4,2	3,8	3,3
Domestic Debt	16,6	16,0	16,5	18,3	17,7	18,7	18,6	18,2	17,7	16,7
Unemployment and Poverty (%)										
Unemployment Rate	7,4	6,8	6,2	5,8	5,9	5,5-5,8	5,2-5,5	5,0-5,3	4,6-5,1	4,0-5,0
Poverty level	13,33	12,49	11,46	11,37	10,96	9,5-10,5	9,0-10,0	8,5-9,5	7,5-8,5	7,0-8,0

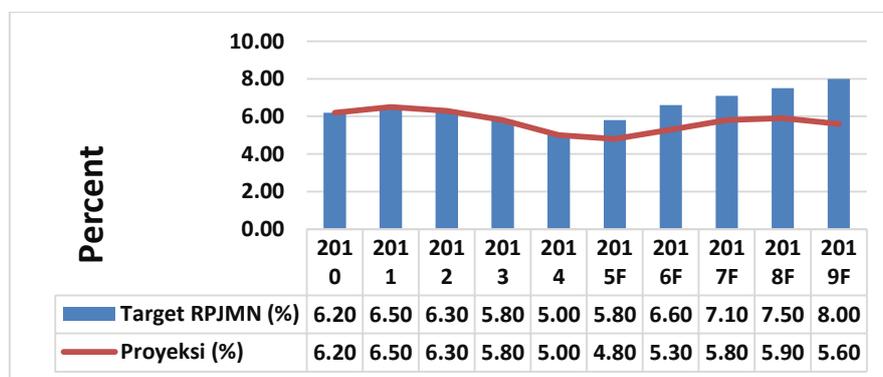
Information:  
 \*) Based on GDP in 2010  
 \*\*) Year 2015 uses the figures of RAPBN-P 2015, tax revenues in 2016-2019 including local taxes of 1 percent of GDP  
 \*\*\*) Poverty rate September 2014, prior to the policy of reducing fuel subsidy in November 2014.

### Target and Projection of National Economy

The target of national economic growth seems to be somewhat less achieved. The growth target of the RPJMN 2010-2019 in 2015 fixes the figure of 5.80 percent. Up to T-III 2015, the national economic growth only reached 4.9 percent far below the RPJMN growth target. The slowing of national economic growth which is far from target is influenced, both outside and inside the country. For example, China, which previously became the mainstay of Southeast Asian economies suddenly experienced economic downturn.

On the domestic side, low export is one of the factors of low national economic acceleration. On the other hand, fuel subsidy reform has liberated significant amounts of public funds for social and physical infrastructure, thereby providing long-term guarantee for economic acceleration, especially as a result of infrastructure development.

Data supporting the realization of gross domestic product in the third quarter has shown improvement, among others from the construction sector. Cement sales have again grown, reaching even 14 percent, and iron and steel imports have jumped 60 percent. Nevertheless, the national economic growth rate is unlikely to be too low as the Government is ready to deal with the economic slowdown by preparing policies to counter the economic slowdown.



Source: Bappenas and GEM Oxford Economics, 2015

Figure 2. National Economic Targets and Projection (In Percent) 2015 – 2019

If compared between 2015 T-III economic growth with projection year 2016, it seems will experience economic strengthening. Projection has been done that the growth in 2016 reached 5.30 percent is almost the same as the projection conducted by Bank Indonesia (BI) which predicts economic growth next year is in the range of 5.2 percent to 5.6 percent. The growth support is derived from domestic especially from investment side. The optimism of economic growth in the future is inseparable from the Government's commitment to accelerate and implement various development, especially the infrastructure sector. Growth in 2015-2016 will depend on government spending, especially government spending, capital expenditure and infrastructure being an important factor in boosting economic growth.

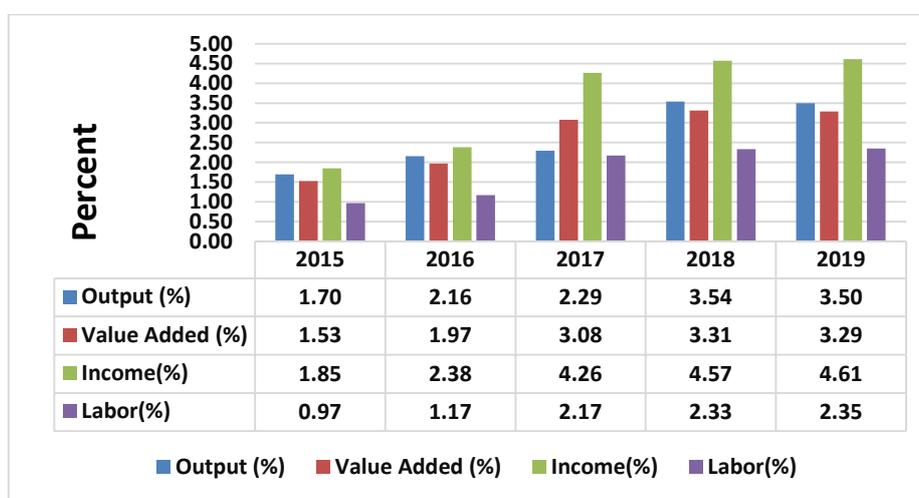
In addition to the global side in 2016, world economic growth is expected to strengthen to 3.8 percent, while economic growth in developing countries is expected to increase to 4.7 percent. This increase depends on improving economic conditions in a number of countries in crisis, including Russia, some Middle East and North Africa countries.

The performance of the world economy is expected to still affect the performance of economic growth in developing countries in 2016, including Indonesia. The basic macroeconomic assumptions used as the basis for the drafting of the Draft State Budget of 2016 consists of seven main indicators: (1) economic growth of 5.5 percent; (2) inflation of 4.7 percent; (3) the rupiah exchange rate against the US dollar amounting to Rp13,400 per US dollar; (4) a 3 month SPN rate of 5.5 percent; (5) Indonesia's crude price (ICP) of 60 per US dollar; (6) Indonesian oil lifting by 830 thousand barrels per day; And (7) gas lifting of 1,155 thousand barrels of oil equivalent per day.

### Impact of Infrastructure Development on National Development

The impact of infrastructure development on national development will have an impact on output value, added value, community income, and employment. Using the input-output approach, it is predicted in 2016 that the impact of infrastructure development will provide an output value (GDP) of 1.7 percent of GDP by 2015. This figure does not take into account the impacts derived from infrastructure development, such as the mobility and social impact of the community .

Another impact of infrastructure development on the national economy is the added value of the product, which is 1.53 percent against the added value of the previous year. Then the impact of community income resulting from infrastructure development amounted to 1.85 percent of revenue the previous year. While the impact of increased or absorption of labor due to infrastructure development gives an impact of 0.97 percent of the previous employment absorption.



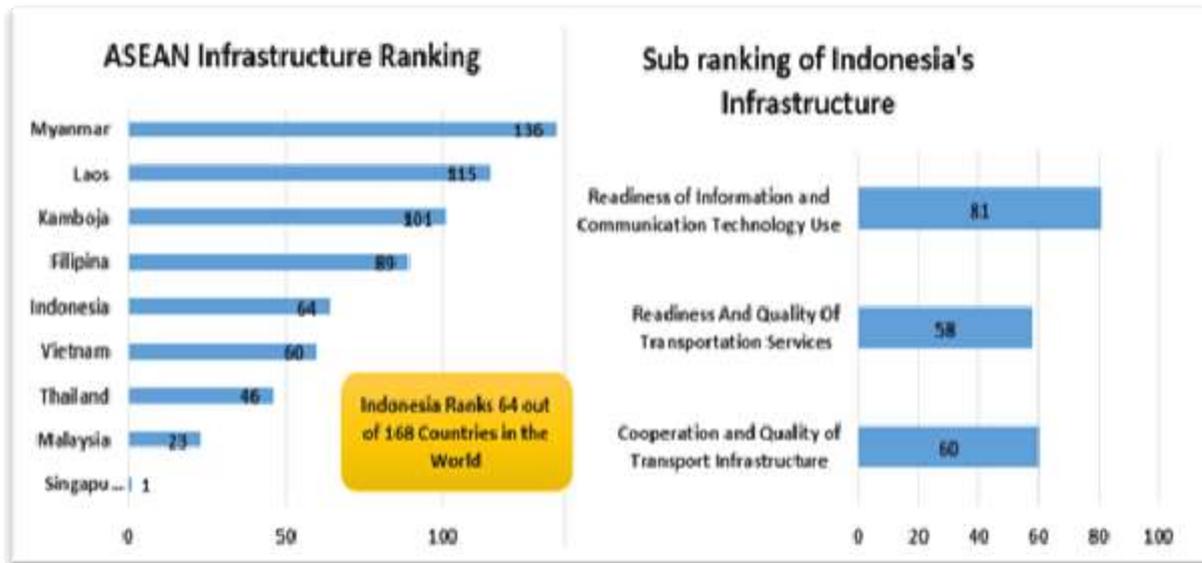
Source: Results IO Indonesia 2010 (Updating), BPS

Figure 3. Impact of Infrastructure Development on National Economy (In Percent)

### Description of Indonesia's Infrastructure Condition

Based on World Economic Forum 2013 data, Indonesia's infrastructure rank is ranked 64 out of 148 countries in the world. Meanwhile, Indonesia's ranking in Asean is ranked 5th after Vietnam. The low quality and condition of infrastructure is often used as a scapegoat on several issues of the nation, especially those related to the economy, business, and business climate. The high price of basic commodities in eastern Indonesia, often associated with the limited factor of infrastructure that inhibits the flow of goods. Infrastructure also became one of the main causes of low investment interest outside of Java. The lack of facilities and infrastructure becomes the consideration of investors to invest their capital. The decline of Indonesia's competitiveness among other countries, again due to inadequate infrastructure conditions and is well below other countries in one region.

To change these conditions, the government is actively implementing infrastructure development by implementing environmentally friendly infrastructure development.



Source: Forum Economic Forum, 2013

**Figure 4: Description of Indonesia's Infrastructure Condition**

The development target of 2019 according to *Bappenas* for food sovereignty starts from the construction and improvement of surface water, water, and swamp irrigation networks of 9.89 million hectares from the condition of 2014 covering 8.9 million hectares. Rehabilitation of surface irrigation, groundwater and swamps of 3.01 million hectares from the condition of 2014 of 2.71 hectares. Development and irrigation improvement of ponds covering an area of 304.75 hectares from 2014 condition of 189.75. It is still supported by the construction of 49 reservoirs from 21 reservoirs in 2014.

The target of basic infrastructure development and connectivity in 2019, the development of national roads 45,592 km from the condition of the year 2014 along 38,570 km. The new road construction is targeted 2,650 km from the 2014 condition along 1,202 km. The development of toll roads along 1000 km from the condition of 2014 along 807 km. The construction of a railway line of 8,692 km from the condition of 2014 along 5,434 km of tofu. The port development from the number 278 to 450, the number of airports from 237 to 252, the number of ferry docks from 210 to 275.

During Jokowi's administration, infrastructure development in 2015 up to 2019 includes: a) construction of new 2,650 km of new road; B) construction of toll roads along 1,000 km; C) construction of 15 new airports; D) construction of 24 new ports; E) construction of 3,258 km of railway track; F) construction of a seaport in 60 locations; G) BRT development in 29 cities.

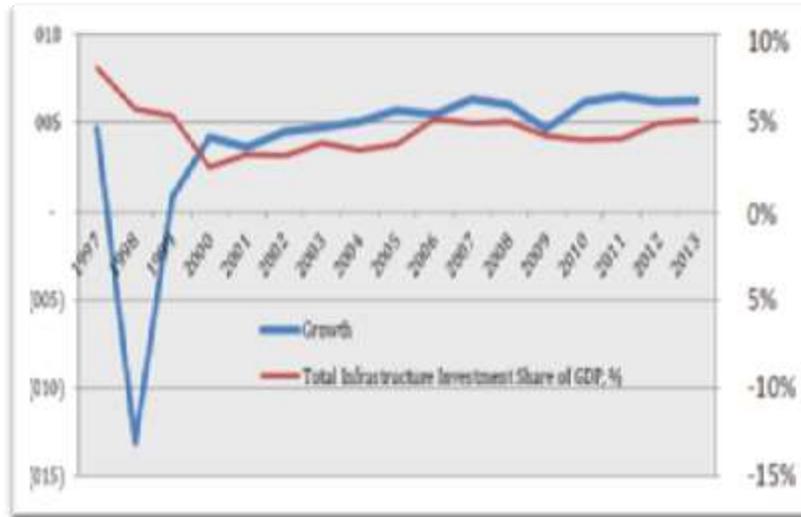


Source: *Bappenas*, 2015

Figure 5: Jokowi Government Infrastructure Development Plan 2015-2019

Acceleration of Infrastructure Development

As per the direction of RPJPN 2005-2025, Indonesia is targeted to reach the position as one of the middle income countries. To achieve these targets, required significant economic growth of 6-8 percent per year. Investment in infrastructure has a direct impact on the country's economic growth. As in figure VI.3, up to now investment in infrastructure measured from percentage to total GDP only reaches about 5 percent so it still has not been able to encourage economic growth that can generate the target.



Source: Bappenas, 2015

Figure 6: Economic Growth and Infrastructure Investment (1997-2013)

To overcome the condition of infrastructure as well as to support the achievement of Middle Income Country's infrastructure targets, the acceleration of infrastructure development emphasizes four main priorities: (1) Strengthening National Connectivity to achieve Development Balance, 2) Development of Urban Mass Transportation, (3) Infrastructure / Basic Infrastructure Development, and (4) Effectiveness Improvement, and Financing Efficiency in Infrastructure Provision.

Strengthening National Connectivity is a strategic issue of infrastructure to realize inclusive development in order to accelerate and expand Indonesia's economic development. The provision of connectivity infrastructure for both transportation and information and communication technology (ICT) networks will have an impact in lowering logistics costs, thus increasing the competitiveness of domestic products and industries. It also needs to be encouraged by the improvement of regulations and related rules. Therefore, the target of strengthening national connectivity in the future is to reduce logistics costs gradually.



Source: Blueprint Sislognas, 2011

Figure 7.: Sea Transport Network as National Logistics Backbone

The price of broadband connection is also still high. 512 kbps connection price reached up to 23 percent of revenue per month, much higher than the target set by Broadband Commission of 5 percent. Future broadband development is not only intended for.

### Target

Goals and indicators of achievement of national connectivity strengthening to achieve the balance of development as follows:

Increased capacity of transportation facilities and infrastructure to reduce the backlog and bottleneck of integrated transport and inter-island transport infrastructure capacity in accordance with the National Transportation System and the Blueprint of Multi *moda* Transportation through:

- 1) Increased road stability to 100 percent for National roads, 75 percent of provincial roads, and 60 percent of district roads through the construction of new roads along 5,200 km of road capacity and 42,000 km of maintenance.
- 2) The decrease of the average travel time per corridor (hour) for the main corridor in Sumatra to 35 hours, and in Java to 15 hours by constructing the Trans Java Road and Trans Sumatera Road.
- 3) Increasing the number of goods that can be transported by train to 1.5 million TEUs / year, the share of railway freight is at least 5 percent for goods and 7.5 percent for passengers through the construction of 3,792 km railway line on the cross of Sumatra, South Cross Java, trans Kalimantan and trans Sulawesi (Makassar-Parepare).
- 4) Connecting 100 percent of the main crossing belts.
- 5) The fulfillment of 100 percent of the frequency of cross-border main services through the development of ferry ports in 100 locations and the procurement of 50 units of ships.
- 6) The number of passengers transported by national airlines to 210 million passengers / year by developing major airports and pioneers in 43 locations.

### Conclusions and recommendations

Infrastructure development is prioritized on ensuring the availability of basic infrastructure to support the improvement of welfare, and ensuring the smooth distribution of goods, services and information to enhance the competitiveness of national products. The objective of infrastructure development is the development of national infrastructure that has the capacity and the power of movement towards economic growth and social justice by encouraging community participation. During the three years of implementation of the RPJMN 2010-2014 budget allocations for infrastructure to GDP continued to increase from 3.4 percent in 2010, to 4.1 percent in 2012, thus expected to lead to the fulfillment of at least 5 percent of GDP. The increase is a strong effort from the government to continue to encourage businesses in Indonesia to remain enthusiastic with the economic growth rate between 6.3-6.8 percent, as targeted RPJMN 2010-2014, in the midst of

a world economy that tends to no change.

The target of national economic growth seems to be somewhat less achievable. The growth target of the RPJMN 2010-2019 in 2015 fixes the figure of 5.80 percent. Up to T-III 2015, the national economic growth only reached 4.9 percent far below the RPJMN growth target. The slowing of national economic growth which is far from target is influenced, both outside and inside the country. Projection has been done that the growth in 2016 reached 5.30 percent is almost the same as the projection conducted by Bank Indonesia (BI) which predicts economic growth next year is in the range of 5.2 percent to 5.6 percent.

The growth support of economic growth rate comes from domestic especially from investment side. The optimism of economic growth in the future is inseparable from the Government's commitment to accelerate and implement various development, especially the infrastructure sector. Growth in 2015-2016 will depend on government spending, especially government spending, capital expenditure and infrastructure being an important factor in boosting economic growth.

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