THE CONSTRUCTION SECTOR OF INDONESIA*

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1. EXECUTIVE SUMMARY

Indonesian economy was ranked 16^{th} in the world in 2013. In the third quarter of 2014, Jakarta composite index even exceeded 5,259, the highest in history. The national medium term development plan 2015-2019 states that infrastructure development is estimated more than 5,500T IDR. The economic growth of Indonesia is very steady from 2014 - 2016. Economic growth of Indonesia in 2014 was 5.08% higher than 2015 which was 4.79% and it estimated that in 2016 will be higher (5.18%) (Central Bank of Indonesia Report, 2016). CBS (Central Bureau of Statistic) reports that GDP (2015) is 2,770.3 IDR trillion (based on constant price 2000). The construction growth of 2015 is 6.65% lower than 2014 which was 7.4% and it is higher than the economic growth, however since 2012 the construction growth was decreasing but it improves in 2014 (CBS, 2015). Based on GDP (constant price 2000), economic growth from 2015 is lower than 2014. Highest GDP growth in 2015 was achieved by transportation and communication sector which growth 8.5%. In the next five years (2015 – 2019), the government estimates to push infrastructure investments of 4,886 IDR trillion by which 3,386 IDR trillion for strategic infrastructures and 1,500 IDR trillion for basic infrastructures.

2. MACRO ECONOMY REVIEW & OUTLOOK

2.1 Overview of National Economy

The economic growth of Indonesia is slow since the first quarter of 2013 due to the dynamic influenced of global economic. Economic growth of Indonesia in 2013 was 5.8% slower than 2012 which was 6.3% (Central Bank of Indonesia Report, 2013). The central bank estimates that the economic growth of 2014 is 5.1% - 5.5% and in 2015 the estimated economic growth will be 5.4% - 5.8% (Central Bank of Indonesia, 2013). CBS (Central Bureau of Statistic) reports that GDP (2015) is 2,353,207 IDR trillion (based on constant price 2000). Economic growth in fourth quarter of 2013 compared to the fourth quarter of 2012 (y-on-y) was increased 5.72% (CBS, 2014). The growth occurred in all sectors of economy. In the second quarter 2014, economic growth was 5.12%. Based on GDP (constant price 2000), economic growth from the first quarter 2014 to second quarter 2014 was 2.47% (q-to-q). Highest growth from second quarter 2013 to second quarter 2014 was achieved by transportation and communication sector which growth 9.53% (CBS, 2014).

In 2013, the transportation and communication sector had a highest growth of 10.32%, followed by financial, real estate and company services sectors (6.79%). The construction sector growth achieved 6.68%, followed by energy, gas and water supply (6.62%), manufacturing industry (5.29%), services sector (5.27%), trade, hotel and restauran (4.78%), mining sector (3.91%) and agriculture sector (3.83%).

^{*}*This paper is mostly based on construction statistic reported by CBS (2013) and CBS (2014)*

2.2 Main Economic Indicators

The Indonesian economy has been growing significantly since last 5 years. The gross domestic product in 2014 under constant price 2000 is forecasted about 3,017,268 IDR Million which represents a 0.45% slightly increasing when compared to the previous year (2013). From the second quarter 2013 up to the second quarter 2014, the gross domestic product grew 5.12% as reported by the Central Bureau of Statistics data (CBS, Economic Indicators, August 2014). In the last five years, GDB at current price has been increasing steadily from 6,446,851.9 IDR million in 2010 to 10,523,270.3 IDR million in 2014 (fc). However, in term of GDP growth, Table 2 shows that it decreases from 6.50% (2011) to 6.40% (2012) and then 5.80% (2013). It is expected that it will increase 6.30% in 2014. However, inflation rate in 2013 is much highest in last 5 years. In 2013, the inflation rate was 8.4% and it is double than 2012 which was only 4.3%. The foreign exchange (IDR/USD) also increased and it is expected that in 2014 will be decreasing. It is claimed that polical changing is blame to be the cause of such issues. In 2013 and 2014, there were two national general election both for members of parliements and the president. During the last five year, labour force growth rate increased from 1.9% (2010) to 4.3 % (2014).In 2010, the number of population reached 237,556,000 and increased dramatically in 2013 is 248,422,000. It is forecasted that in 2014 the number of population will reach 252,069,000. Indonesia also has what many people saya "demography bonus". The labour force in 2010 was 116,000,000 and then increased to 125,310,000 in 2014. Futhermore, Table 1 and Table 2 show the main econonic indicators reflecting the progress of Indonesia development within the last five years.

The construction growth shows higher than economic growth. Eventhough in 2013, it was lower than previous years, the construction growth is still higher as compared to the economic growth. In 2014, the construction growth is forecasted to achieve 6.58% - 7.7% slightly lower (0.02%) or even higher 1.2 % than the construction growth of 2013. The growth is expected to increase since the new government will launch the five years development plan (2015 – 2019) in which infrastructure development becoming a key strategic role of the national economic development (Bappenas, 2014). Under this new government development plan, there are many strategic infrastructure development programme will be implemented. In the next fiveyears (2015 – 2019), the government estimates to push infrastructure investments of 4,886 IDR trillion by which 3,386 IDR trillion for strategic infrastructures and 1,500 IDR trillion for basic infrastructures (Bappenas, 2014).

Indicators	2011	2012	2013	2014	2015	2016*
Economic Growth (%)	6.5	6.3	5.8	5.08	4.79	5.18
Construction Growth (%)	7.4	7.4	6.6	6.58	6.65	
Inflation (%)	3.8	4.3	8.4	8.36	3.35	4±1%
Foreign Exchange (Rp/US\$)	9.010	9.622	12.128	12.378	13.726	13.098

Table 1. Main Economic Indicators

Source: Central Bank of Indonesia, Finance Ministry of RI, <u>www.oilprice</u>.net (2009) Updated (2016), *Estimate

Table 2. Macro Economic Development Indicators (1,000,000 IDR)									
INDICATORS	2011	2015							
GDP at constant	2,464,566.1	2,618,938.4	2,770,345.1	3,017,268.7	2,353,207				
prices 2000 Rp. Billion									
GDP at current	7,831,726.0	8,615,704.5	9,546,134.0	10,565,817.3	11,540,789.8				
market price									
GDP growth (%)	6.50	6.03	5.56	5.02	4.79				
GDP growth (%) for agriculture, forestry	3.4	4.59	4.20	4.24	4.02				
and fishery sector									
GDP growth (%) for	5.0	6.3	5.6	5.7	4.2				
manufacturing sector									
GDP growth (%) for	7.0	7.7	5.5	4.2	6.5				
services sector GDP growth (%) for	1.6	1.6	1.3	1,1	(5.1)				
mining sector									
GDP growth (%) for	5.3	5.6	6.5	6.97	6.65				
construction sector GDP growth (%)	7.3	8.0	7.6	7.6	7.0				
Financial,									
Ownership and Business Services									
GDP growth	13.8	15.1	10.2	7.4	8.5				
(%)Transportation and Communication									
GDP growth	7.9	9.2	5.9	4.3	2.8				
(%)Trade, Hotel and									
Restaurant GDP growth	4.2	4.2	5.6	7.5	1.6				
(%)Electricity, Gas			210	7.0					
and Water Supply	241,417	244,775	248,422	252,069	255,467				
Population (number)	241,417	244,775	240,422	252,009	255,407				
Population growth	1.62	1.39	1.49	1.49	1.19				
rate (%) Labour force	109,67	112,50	112,7	114,6	114,8				
(number)									
Labour force growth rate (%)	(5,4)	2,8	5,63	6,35	7,15				
Unemployment rate	7,700,220	7,610,000	7,410,931	7,147,069	7,024,172				
Unemployment	(10.42)	(1.17)	(2.62)	(3.56)	(1.72)				
growth rate (%) Inflation rate	3.8	4.3	8.4	0.00	2.25				
				8.36	3.35				
Short term interest rate (%)	17.58	18.00	18,4*	18,9*	17,50				
Long term interest	15.27	16.00	16,8*	17,7*	18,75				
rate (%)	114.50	101.00	140.10	110.00	100.40				
Changes in Consumer Price	114.59	131.92	142,18	113,22	120,42				
Index (2012=100)									
Average change against USD\$	9.023	9.622	12.128	12.378	13.726				
against USDa		2012 2014 20							

 Table 2. Macro Economic Development Indicators

Source: CBS (2009, 2010, 2011, 2012, 2013, 2014, 2015); Central Bank of Indonesia (2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016); statistics Indonesia

3. OVERVIEW OF THE CONSTRUCTION INDUSTRY

3.1 Construction Investment

The construction value completed can be seen in Tabel 3. In the last five years, civil works were dominant construction projects in Indonesia. Civil works usually are financed by both central and local government as well as the state owned companies whose infrastructure business. In the next five years (2015 – 2019), the new government estimates to push infrastructure investments of 4,886 IDR trillion by which 3,386 IDR trillion for strategic infrastructures and 1,500 IDR trillion for basic infrastructures. The strategic infrastructure development plan to response archipelago connectiviety include Sunda Brigde, Hub International Port (Kuala Tanjung, Maloy, Bitung), Trans Sumatra Highway, Trans Jawa Highway, National Road for Trans Kalimantan, National Road for Trans Sulawesi, National Road for Trans Maluku, Nasional Road for Trans Papua, Trans Sumatra Railway, Trans Kalimantan Railway, Trans Sulawesi Railway, Development of International dan Domestic Airports, National Capital Integrated Coastal Development (NCICD), Java Coastal Protection, Palapa Ring, Satelit Broadband, Consolidated Data Center.

Another strategic infrastructure development to be built for improving water resource management is river rehabilitation and dam restoration across the nation. Urban infrastructures are also targeted to improve urban area development such as MRT East-West, North-South Phase II and Monorail Jakarta, Elevated Loop Line Jabodetabek and BRT in 16 Cities, airport railways in Jakarta and other metropolitant cities, sewerage systems in Jakarta & other metropolitant areas. In addition, energy infrastructures are also the main concern of the government. The infrastructure energy investment covers development of coal powerplant Pembangunan near mining area of 5.000 MW including its cable distribution system under the sea of Jawa-Sumatera, Jawa-Kalimantan and Kalimantan-Sulawesi, development of geothermal power plant, development of LNG receiving terminal, oil refinery and gas networks across cities.

Funding of those construction investments are challenging since the government only provide small portion of investment required (30%) while the state owned company is aslo only 30%. Therefore, the government proposes PPP moderately for infrastructure investment about 20%. The rest is solely relied on off balance sheet (20%). The creative financing scheme is expected to overcome such off balance sheet.

Type of Construction	2010	2011	2012	2013	2014			
Building Works (Billion)	95 397	108 768	128 551	149 873	170 003			
Civil Works (Billion)	169 975	202 325	237 019	273 552	308 584			
Special Construction Works (Billion)	54 876	65 029	74 782	85 601	95 512			
TOTAL	320 248	376 122	440 352	509 026	574 099			
Notes: Benchmark Series Data								

Table 4. Type of Construction Completed (2010 – 2014).

* Preliminary Figures

Source: CBS (2015)

3.2 Construction Companies

According to Law No. 18/1999, construction company consists of consulting and contracting company. Consulting company can be as planner and designer and also supervison engineer. Most of construction companies are small medium enterprises. Under the new registration scheme and classification, Table 7 shows updated number of construction companies in 2014.

Table 7. The	Number of	f Construc	tion Co	mpanies	including	Consulting	Companies

NO	QUALIFICATION	CONTRACTING CO	MPANIES	CONSULTING COMPANIES		
NO	QUALITICATION	NUMBER	%	NUMBER	%	
1	LARGE	987	3	208	7	
2	MEDIUM	18,631	8	817	14	
3	SMALL	131,728	89	5,927	79	
	TOTAL	141.959	100	6.418	100	
		171.757	100	0.410	100	

Source: NCSDB (2016)

The number of foreign construction companies has been increasing after MP3EI launched in 2011. In 2013, the number of foreign contracting companies registered in Indonesia is 302 firms mostly coming from Japan dan China as well as Korea. The number of contractors from China working in Indonesia now increases 53 firms. The number of Indian contractors remains 4 since 1 contractor left.

Year	2009	2010	2011	2012	2013
ASEAN	14	14	16	16	16
NON-ASEAN	184	193	237	239	286
Total	198	207	253	255	302

Table 8. The Number of Foreign Construction Companies

Source: PusbinUK (2012)

 Table 9. The Origin of Foreign Construction Companies in Indonesia (2009-2013)

Year	2009	2010	2011	2012	2013
Japan	75	74	80	80	81
China	32	32	39	39	53
Korea	26	33	57	60	81
India	0	1	5	5	4

Source: PusbinUK (2013)

A more detailed information on the status of active foreign contractors in Indonesia in the periode of 2015-2016 is preented in Table 10.

	Table 10. Active Foreign Construction Companies in Indonesi (2015-2016)								
NO		IN ACTIVITY							
	Companies	Contra	actor	Consulting		Integrated Services			
	Countries	2015	2016	2015	2016	2015	2016		
1	CHINA	36	30	4	0	20	15.5		
2	SOUTH KOREA	33	28	10	7	11	8		
3	JAPAN	42	39	23	17	25	17		
4	MALAYSIA	4	3	1	1	1	1		
5	SINGAPORE	6	4	1	1	5	3		
6	VIET NAM	1	1	0	0	0	0		
7	INDIA	3	1	1	1	3	3		
8	TURKEY	0	1	0	0	0	0		
9	NEW ZEALAND	1	1	1	1	0	0		
10	AUSTRALIA	0	0	3	2	0	0		
13	HOLLAND	1	1	6	3	1	0		
14	DENMARK	0	0	1	0	0	0		
15	FRANCE	3	0	2	0	1	1		
16	BELGIA	1	1	0	0	0	0		
17	NORWEGIA	0	0	0	0	2	2		
18	ITALIA	0	1	2	2	3	2.5		
19	CANADA	0	1	0	0	0	0		
20	INGGRIS	1	0	0	0	1	0		
21	USA	2	0	3	2	2	2		
22	SPANYOL	1	2	0	0	2	2		
23	SWITZERLAND	0	0	2	3	0	0		
24	JERMAN	1	0	3	2	1	0		
25	HUNGARIA	0	0	0	0	2	2		
	TOTAL	136	114	63	42	80	59		

Table 10. Active Foreign Construction Companies in Indonesi (2015-2016)

3.3 Construction Employees and Workforce

The number of workforce working in the construction sector is more than 5 million people in average. The following table 7 shows annual number of construction workers. The number of skilled workers registered by NCSDB (2014) is 43,381 persons consisting of 3^{rd} class of skilled workers (4,563), 2^{nd} class of skilled workers (9,765) and 1^{st} class of skilled workers (30,921) respectively. The number of professionals working in the construction sector is 59,378 persons consisting of junior engineers (31,867), senior engineers (26,687) and principal engineers (2,975) respectively.

Table 11.	The number	of construction	workforce

Year	2010	2011	2012	2013	2014	2015		
Construction Labour	5,590,000	6,340,000	6,851,291	6,349,387	7,280,086	8,208,086		
Source: CBS	Source: CBS (2015)							

Source: CBS (2015)

3.4 Construction Costs

Table 12 shows the changes in the construction cost index in the last three years, which shows the increase of about 10 % in three years, but compared to year 2010, the increase was about 30%.

Table 12. Type of Construction (2010 - 2014).

Type of Construction	Indonesian Index for and Const (Yea	Average		
	Sept. 2016	Sept. 2015	Sept. 2014	
Residential and Non Residential Buildings (26)	132.62	130.17	123.00	128.597
Public Works for Agriculture (15)	129.19	127.29	120.82	125.767
Public Works for Roads, Bridges and Ports (23)	125.17	124.75	119.61	123.177
Construction and Installations of Electrical, Gas, Water Supply and Communication Utilities (21)	130.64	128.22	121.96	126.940
Other constructions (18)	128.24	126.52	120.67	125.143
Indonesia Construction (27)	130.13	128.21	121.77	126.703

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