THE CONSTRUCTION SECTOR OF INDONESIA*

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1. EXECUTIVE SUMMARY

Economic growth of Indonesia has increased from 6.10% in 2010 to 6.5% in 2011. It is expected this year (2012) is about 6.3% - 6.7% and up to 7.4% (2016) (Central Bank of Indonesia, 2012). The construction growth sligtly decreases from 7.0% (2010) to 6.4% (2011), but it is expected to grow between 8.2% – 8.6% in this year. The contribution of construction sector to GDP is 756.5 Trilion IDR (2011) and 410.1 Trillion IDR (Sem-I 2012) based on current price and 160.1 Trillion IDR (2011) and 82.8 Trillion IDR (Sem-I 2012) under constant price (2000). CBS (2012) also published that the contribution of construction sector to GDP is 9.9% (2009), 10.3% (2010), 10.2% (2011) and 10.2& (Sem-I 2012). The growth of GDP of construction sector is 7.2% from Sem-I 201 2011 to Sem-I 2012. In the next following years until 2014, the volume of construction market will increase dramatically. Under the new masterplan of economic development (2011 – 2025), the Government estimates almost 2,000 Trillion IDR of infrastructure investment to boost economic growth under the new six economic corridors across archipelago (MP3EI, 2011). The market covers various infrastructures both under government funds and state owned companies as well public privarte partnership financing schemes. For the fiscal year 2012, the goverment spending for infrastructure provision accounts for almost 200 Trillion IDR and the next coming year accounts for 380 Trillion IDR (2013) in which public work projects covering road networks, water resources and human settlement will get the public funding almost 86 Trillion IDR (2012).

2. MACRO ECONOMY REVIEW & OUTLOOK

2.1 Overview of National Economy

The Indonesian economy is growing significantly since it was hit by Asia economic crisis in 1997 and global financial crisis in 2008. Now it is considered to be in stable state and to growth at 6.06% (2008) but it slightly decreases at 4.5% (2009) and then increases 6.10% (2010) then 6.5% (2011). During the last five years, economic of Indonesia were increased by 5.5% (2006), 6.3% (2007), 6.0% percent (2008), 4.5% (2009), 6.10% (2010) and 6.5% (2011). This year, t is expected to grow 6.3% – 6.7%. Furthermore, the value of GDP at current prices in 2011 Q-III was IDR 1,921.6 trillion and increased in the year 2012 Q-III to become IDR 2,050.1 trillion. In the third quarter of 2011, GDP at constant prices was IDR **632.4** trillion and in the fourth quarter of 2011 was IDR 624.0 trillion. The growth of GDP without oil and gas in the period of quarter I (2012) was IDR 632.8 trillion and in the quarter II was IDR 650.6 trillion (CBS, 2012). Other component of GDP which has significant contribution to GDP is Gross Fixed Capital Formation (GFCF) and export of goods and services. The growth of GFCF is expected 9.6% - 10.1% in 2012. The growth of GFCF in the period of quarter II (2012) over quarter II (2011) was 12.3%. The growth of export of goods and services is 10.9% of 2012 Q-II over 2011 Q-II (CBS, 2012) and decreased as compared to 17.4% in the period of quarter II (2011) over quarter II (2010) (CBS, 2011).

*This paper is updated from the country paper presented in the 17th Asia Construct, 2011

The business trend index of economic sectors shows a better condition. In second quarter of 2011 was 105.75 while in the fourth quarter was 106.92. Meanwhile in the first quarter 2012 was 103.89 and in the second semester was 104.22. It shows that business condition in general is sligtly stable. This business condition is growing better since increased revenue due to increasing production capacity and number of working time. Higher business revenue occurs in the finance sector, property and services. The higher increased workforce occurs in the construction sector. The highest business index is 111.51 occuring in the construction sector in 2011 but it decreases to 104.83 in 2012 Q-II. It shows that this sector is the among decreasing sectors in 2012 compared to 2011. However, the agriculture sector has increased its index from 98.14 in 2011 Q-IV to 111.31 in the first quarter 2012 but decreasing to 106.15 in the second quarter 2012. Overall, the business trend index during first quarter of 2012 was 103.89 and then grow up to 104.22 in the second quarter. In the first semester 2012, business condition in the construction sector increased from 98.53 (2012 Q-I) to 104.83 (2012 Q-II).

2.2 Main Economic Indicators

The Indonesian economy is in a stable shape towards increased growth. The Indonesian gross domestic product for 2004 in constant 2000 real prices was RP. 1511 Trillion which represents a 1.03% increase on the previous year. To January 2005 the gross domestic product grew at an annual rate of 5.13% in Central Bureau of Statistics data (CBS, Economic Indicators, January 2005). During the same period the consumer price index standing at 118.53 in January 2005 grew by only 1.43 points against 0.57 the previous year (2002=100). The interest on 90-day bank deposit bills was 6.65% in October and the 10-year Treasury Bonds returned 8.31%. Rising cost of materials including that for crude oil leading to an increase in inflation from 5.06% in 2003 to 6.4% in 2004 and the cyclical Rupiah devaluation of 20% against the US$ has forced the government to instigate minimization of energy consumption, spending and subsidy provisions nationwide. The unemployment rate however, increased from 15% in 2003 to 16% in 2004. Despite current uncertainties about the international economy and the downturn in balance of payments from US$28.6 Billion in 2003 to 23.5 Billion in 2004, the rate of economic growth is forecasted to continue to the end of 2010 at 6 % while construction growth is expected to achieve 7 – 8% in 2011, with the domestic economy proving to be relatively resistant to adverse global economic conditions. The inflation rate was higher in 2008 (11.06%), then decreased 2.78% in 2009 and 6.96% in 2010. This year, the inflation rate is forecasted about 4.42%. Table 1 and Table 2 show that main economic indicators. As shown in Table 2, the construction sector growth is very better since the Asia economic crisis. The growth is expected to increase since the government launched of the new masterplan of economic development 2011 – 2025 in which infrastructure development becoming a key strategic role of the national economic development (MP3EI, 2011). Under this new masterplan, there are six economic corridors across the nation with its very specific target of development.

Table 1. Main Economic Indicators

Indicators	2007	2008	2009	2010	2011	2012 (fc)
Economic Growth (%)	6.28	6.06	4.5	6	6.5	6.3 – 6.7
Construction Growth (%)	10.40	10.50	7.95	7.3	7.4	8 – 9
Inflation (%)	6.59	11.06	2.78	6.96	3.8	4.5 – 5.5
Foreign Exchange (Rp/US$)	9.300	10.895	9.353	8.946	9.010	9.400

Source: Central Bank of Indonesia, Finance Ministry of RI, www.oilprice.net (2009) Updated (2012)

Table 2. Macro Economic Development Indicators

(1,000,000 IDR)

INDICATORS	2007	2008	2009	2010	2011	2012 (fc)
GDP at constan prices 2000 Rp. Billion	1,963,092	2,082,104	2,165,388	2,286,650	2,412,076	2,050,100
GDP at current market price	3,949,321	4,954,029	5,152,190	5,440,713	6,165,836	7,020,000
GDP growth (%)	6.28	6.06	4.00	5.6	6.50	6.4
GDP growth (%) for agriculture, forestry and fishery sector	3.43	4.77	3.57	2.9	3.4	3.9
GDP growth (%) for manufacturing sector	4.67	3.66	4.38	3.6	5.0	6.3
GDP growth (%) for services sector	6.60	6.45	6.09	4.6	7.0	7.7
GDP growth (%) for mining sector	2.02	0.51	1.86	3.5	4.6	5.0
GDP growth (%) for construction sector	8.61	7.31	7.95	7.3	5.3	5.6
GDP growth (%) Financial, Ownership and Business Services	7.99	8.24	7.10	5,5	7.3	8.0
GDP growth (%)Transportation and Communication	14.04	16.69	14.43	11.9	13.8	15.1
GDP growth (%)Trade, Hotel and Restaurant	8.41	7.23	7.59	9.3	7.9	9.2
GDP growth (%)Electricity, Gas and Water Supply	10.33	10.92	8.33	7.2	4.2	4.2
Population (number)	225,642	227,779	230,633	237,556	241,417	244,775
Population growth rate (%)	1.30	0.95	1.25	2.9	1.62	1.39
Labour force (number)	109,940	111,879	113,852	116,000	109,67	112,80
Labour force growth rate (%)	3.34	1.76	1.76	1,9	(5,4)	2,8
Unemployment rate	10,547,917	9,427,590	9,258,964	8,595,600	7,700,220	7,610,000
Unemployment growth rate (%)	(5.01)	(10.62)	(1.79)	(7.16)	(10.42)	(1.17)
Inflation rate	6.40	10.31	6.02	5.67	5.38	4.23
Short term interest rate (%)	16.13	16.62	17.12	17.56	17.58	18.00
Long term interest rate (%)	13.00	13.90	14.87	15.18	15.27	16.00
Changes in Consumer Price Index (2007=100)	155.58	170.18	186.16	118.37	114.59	131.92
Average change against USD$	9,300	10,895	10,150	8,950	9,200	9,500

Source: CBS (2009, 2010, 2011, 2012) & Central Bank of Indonesia (2009, 2010, 2011, 2012)

3. OVERVIEW OF THE CONSTRUCTION INDUSTRY

3.1 Construction Investment

The construction value completed can be seen in Tabel 3. The Government of Indonesia has expressed her desire to speed up infrastructure development in order to accellerate economic growth to levels of 7.8% through increasing the ratio of Investment to GDP to 28.4% from 19.6%, opening new job opportunities to reduce unemployment and poverty alleviation to 5.1% and 8.2%. The above investment driven development plan can be seen in Table 4 which depicts infrstructure demand between 2005-2009 to be Rp.145 Trillion or US$15.825 Billion. A more accurate picture can be obtained in Table 5 which illustrates for construction investment and maintenance demand in the Department of Public Works to total Rp.73.59 Trillion; broken into Bina Marga (Roads and Bridges) Rp.21.27 Trillion, Sumber Day Air (Water Resources) Rp.34.53 Trillion, Cipta Karya (Human Settlements) Rp.14.60 Trillion, and Other Public Works Rp.3.18 Trillion.

Table 3. Value of Construction Completed by Type of Construction
2006 – 2011 Based on Contract Price (CBS, 2011)

(1,000,000 IDR)

TYPE OF CONSTRUCTION		2006	2007	2008	2009	2010	2011*
1	Residential	9,305,172	9,305,172	11,263,484	12,448,707	13,758,648	15,206,431
2	Non residential	22,069,558	23,528,407	29,613,637	34,421,939	40,010,954	46,507,445
3	Electrical installation	3,363,393	3.563,451	3,775,409	3,999,974	4,237,897	4,489,972
4	Gas and Water supply installation	371,544	319,911	275,453	237,173	204,214	175,834
5	Sanitary installation	194,926	184,447	296,659	477,137	767,413	1,234,285
6	Foundation	850,095	625,198	1,127,658	2,033,936	3,668,572	6,616,935
7	Sound system, AC, lift, etc	1,268,817	1,476,285	1,261,856	1,273,379	1,285,008	1,296,742
8	Water supply network	512,374	538,055	681,455	789,341.97	914,309.44	1,059,061.58
9	Oil and Gas pipe network	648,546	646,127	1,031,995	1,338,225	1,735,324	2,250,257
10	Electricity network	1,027,867	2,406,148	3,653,882	7,051,032	13,606,640	26,257,240
11	Road and bridge works	19,897,065	21,008,143	25,345,791	28,670,093	32,430,404	36,683,909
12	Irrigation/drainage	4,553,470	5,392,472	6,999,582	8,687,475	10,782,390	13,382,477
13	Electric power supply and Telecomunication Network	1,137,230	458,105	218,031	103,770	49,388	23,506
14	Construction or improvement of airport, harbor, bus station, etc	1,598,572	1,513,014	1,112,716	1,053,162	996,795	943,445
15	Other construction works	5,144,678	6,180,386	7,827,060	9,402,775	11,295,708	13,569,719
	TOTAL	71,943,309	79,391,287	94,484,668	111,988,121	135,743,665	169,697,259

Source: CBS (2009)

Table 4. Source of fund for construction projects 2012 (Natsir, 2012)

No	Source of Fund	Procured in 2012 (Million Rp)	Progress in 2012
1	NATIONAL BUDGET FOR PW	71,667,107	55,653,800
2	NATIONAL BUDGET FOR NON PW	57,266,604	31,605,713
3	LOCAL BUDGET	10,862,957**	11,917,551**
4	STATE OWNED CO	107,641,153	93,971,416
5	LOCAL GOV COMPANIES	104,391**	358,958**
6	DOMESTIC INVESTMENT	59,29,458	21,978,306
7	FOREIGN INVESTMENT	35,432,656	8,491,582
8	JOINT INVESTMENT	145,822,700	25,940,013
	TOTAL	488,092,026	249,917,339

Source: PusbinSDI (2012)
** Under Updating

Table 5. Construction Investment Plan under PPP Projects (PPP Books, 2011)

SUMMARY OF PUBLIC PRIVATE PARTNERSHIPS INFRASTRUCTURE PROJECTS PLAN IN INDONESIA

I. READY FOR OFFER PROJECTS

No	Sector/Sub-sector	Quantity	Project Cost (US$ Million)
1	Air Transportation	1	213.61
2	Land Transportation	0	-
3	Marine Transportation	2	1,198.50
4	Railways	0	-
5	Toll Road	2	25,670.40
6	Water Resources	0	-
7	Water Supply	6	311.47
8	Solid Waste and Sanitation	2	130.00
9	Telecommunication	0	-
10	Power	0	-
11	Oil and Gas	0	-
	Total	13	27,523.98

II. PRIORITY PROJECTS

No	Sector/Sub-sector	Quantity	Project Cost (US$ Million)
1	Air Transportation	0	-
2	Land Transportation	0	-
3	Marine Transportation	0	-
4	Railways	0	-
5	Toll Road	17	8,221.20
6	Water Resources	0	-
7	Water Supply	0	-
8	Solid Waste and Sanitation	2	120.00
9	Telecommunication	0	-
10	Power	2	2,040.20
11	Oil and Gas	0	-
	Total	21	10,381.40

III. POTENTIAL PROJECTS

No	Sector/Sub-sector	Quantity	Project Cost (US$ Million)
1	Air Transportation	7	1,972.80
2	Land Transportation	2	274.00
3	Marine Transportation	4	2,860.22
4	Railways	3	4,385.30
5	Toll Road	3	1,810.50
6	Water Resources	0	-
7	Water Supply	18	1,363.83
8	Solid Waste and Sanitation	4	50.27
9	Telecommunication	0	-
10	Power	4	2,785.80
11	Oil and Gas	0	-
	Total	45	15,502.72
	TOTAL INVESTMENT	**79**	**53,408.10**

Source: PPP Books (2011)

Public works investment is one of key government plan to deliver roads, water resources and human settlement infrastructures. Tabel 5 shows public works invesment plan for the period of 2010 – 2014. The road construction projects have higher priority funding, then water resources project such as irrigations, dams and river engineering projects. However, the human settlement projects covering sewerages, waste treatments and water supply are also among the prioritised public work projects.

Table 6. Public works investment plan (2010 – 2014) (IDR Trillion)

No	Public Works	YEAR					Total
		2010	2011	2012	2013	2014	
1.	Water Resource	11.468	14.908	19.320	25.125	32.679	103.500
2.	Roads	20.102	24.360	30.033	37.061	45.344	156.900
3.	Human Settlements	9.081	11.033	13.413	15.964	19.509	69.000

Source: Center for Strategic Studies, the Ministry of Public Works (2010)

3.2 Construction Companies

According to Law No. 18/1999, construction company consists of consulting and contracting company. Consulting company can be designer and also supervison engineer. Most of construction companies are small medium enterprises.

Table 7. The Number of Construction Companies including Consulting Companies

NO	QUALIFICATION	CONSULTING COMPANIES		CONTRACTING COMPANIES	
		NUMBER	%	NUMBER	%
1	LARGE	449	7	1,742	1
2	MEDIUM	264	4	21,032	12
3	SMALL	5,892	89	160,026	87
	TOTAL	6,605	100	182,800	100

Source: NCSDB (2012)

The number of foreign construction companies has been increasing since a couple of years ago. In the year (2011), the number of foreign contracting companies registered in Indonesia is 128 firms mostly coming from Japan and the number of consulting companies registered in Indonesia is 78 companies, and the number of EPC contractors is 23 companies. The consulting companies are mostly also coming from Japan dan China as well as Korea. The number of contractors from China now increases up to 39 firms. While 5 contractors of India also already expanded their business in Indonesia. In this year, the number of foreign construction companies increased.

Table 8. The Number of Foreign Construction Companies

Year	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
ASEAN	10	14	14	14	16	16
NON-ASEAN	108	181	184	193	237	239
Total	**118**	**195**	**198**	**207**	**253**	**255**

Source: PusbinUK (2012)

Table 9. The Origin of Construction Companies in Indonesia

Tahun	2005	2006	2007	2008	2009	2010	2011	2012
Japan	32	80	55	77	75	74	80	80
China	0	9	25	30	32	32	39	39
Korea	5	11	11	19	26	33	57	60
India	2	2	1	0	0	1	5	5

Source: PusbinUK (2012)

3.3 Construction Employees and Workforce

Total number of registered engineers is about 106,283 professional engineers (2008). The following table 6 shows the distribution of certificate held by professional engineers according to their expertise.

Table 10. The Number of Professional Engineer

ENGINEER	QUALIFICATION				TOTAL
	APPRENTICE	JUNIOR	SENIOR	MASTER	
Electrical Engineer	165	5,225	3,869	433	9,692
Landscaping Designer	327	4,423	1,099	213	6,062
Civil Engineer	4,841	58,368	18,182	1,917	83,308
Mechanical Engineer	62	2,282	710	74	3,128
Other	37	253	438	71	799
Architecture	265	1,268	1,497	264	3,294
Total	5,697	71,819	25,795	2,972	106,283

Source: NCSDB (2008).

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.

Table 11. The number of construction workforce

Year	2007	2008	2009	2010	2011	2012
Construction Labour	5,252,581	5,547,324	5,858,606	5,590,000	6,340,000	6,100,000

Source: CBS (2012)

3.4 Construction Cost

Indonesia is a large country with high diversity. It is very difficult to get a standard figure of construction cost across archipelago. In Jakarta, skill worker may have 100,000 rupiahs daily wage while in other regions such as Yogyakarta only 40,000 rupiahs. It is similar to natural material price such as sand and stone. In Central Java where sand and cobble stone are easier to get, the cost of sand is roughly 70,000 up to 90,000 rupiahs for 1 m^3. It is quite common to buy a truct of sand which is about 2.5 – 3.5 m^3 will cost about 300,000 up to 350,000 rupiahs.

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