

THE CONSTRUCTION SECTOR OF INDONESIA

Biemo W. Soemardi and Krishna S. Pribadi
Construction Service Development Board – Indonesia
b.soemardi@gmail.com ; kspribadi@gmail.com

1. EXECUTIVE SUMMARY

Despite slowing world economic growth, according to the latest study by the World Bank (2018), the Indonesia economy outlook will continue to be positive with the growth of around 5,27% in 2017. The Gross Domestic Product (GDP) in Indonesia was worth USD 1015,54 billion US in 2017, which represents 1,64 percent of the world economy. As one of the main contributors to the economy, the construction industry has been for decades the engine of National economic growth, contributing around 6% to the GDP. In the last decade construction industry in Indonesia has enjoyed a relatively steady growth at roughly 5% per year, in particular, boosted by the government spending, in the last five years, significant increase in spending in infrastructure development has led to notable expansion on the size of construction works in Indonesia. In 2018, it is estimated that construction will hit a record high of IDR 471 trillion or USD 32 billion, with 65% for civil infrastructure and 35% for real estate and building constructions. From 2015 to 2019 the Government has allocated infrastructure spending up to USD 95 billion, a significant increase from USD 65,5 billion from 2009 to 2014. In 2018, the government has allocated IDR 410,7 trillion (USD 28,3 billion), part of USD 72 billion construction investment, for national infrastructure spending, for 832 km new roads, 33 km toll roads, 15,4 km of bridges, 8 airports, seaports and 639 km of railroads. The remaining budget are allocated for local infrastructure spending. For 2019, these figures are up to USD 29 billion and expected to continued growing for the next years.

2. MACRO ECONOMIC REVIEW & OUTLOOK

2.1 Overview of National Economy

Indonesia is the largest economy in Southeast Asia, and the fifth in Asia after China, Japan, India, and Korea. As the fourth largest population country in the world, Indonesia is expected to be one of the largest economic countries in the world. It is currently the seventh largest economy with a USD 3,24 trillion GDP in terms of purchasing power parity. while currently only placed 16th in the world, it is predicted that by 2030 Indonesian economy will expand to

USD 10,5 trillion and become the fourth largest economy in the world, trailing China, India and USA.

Table 1 The Top 20 World Economic Power

GDP (Nominal) Ranking 2018										
Rank	Country/ Economy	GDP (Nominal) (billions of \$)					Growth (%)	GDP per capita (Nominal) (\$)		Continent
		2018	% Share	diff	2023	Rank		2018	Rank	
1	United States	20,412.87	23.3	-	24,537	1	2.27	62,152	9	North America
2	China	14,092.51	16.1	6320	21,574	2	6.86	10,088	72	Asia
3	Japan	5,167.05	5.90	8925	5,962	3	1.71	40,849	25	Asia
4	Germany	4,211.64	4.81	955	5,272	4	2.51	50,842	17	Europe
5	UK	2,936.29	3.36	1275	3,477	7	1.79	44,177	23	Europe
6	France	2,925.10	3.34	11.2	3,586	6	1.85	44,934	21	Europe
7	India	2,848.23	3.25	76.9	4,663	5	6.74	2,135	142	Asia
8	Italy	2,181.97	2.49	666	2,554	9	1.47	35,914	27	Europe
9	Brazil	2,138.92	2.44	43.1	2,717	8	0.98	10,224	71	South America
10	Canada	1,798.51	2.06	340	2,434	10	3.00	48,466	20	North America
11	Russia	1,719.90	1.97	78.6	1,974	12	1.55	11,947	65	Europe
12	Korea	1,693.25	1.94	26.7	2,155	11	3.09	32,775	29	Asia
13	Spain	1,506.44	1.72	187	1,875	14	3.05	32,559	31	Europe
14	Australia	1,500.26	1.71	6.18	1,958	13	2.27	59,655	11	Oceania
15	Mexico	1,212.83	1.39	287	1,586	15	2.04	9,723	74	North America
16	Indonesia	1,074.97	1.23	138	1,549	16	5.07	4,052	116	Asia
17	Netherlands	945.33	1.08	130	1,168	18	3.11	55,185	13	Europe
18	Turkey	909.89	1.04	35.4	1,224	17	7.05	11,114	68	Asia
19	Saudi Arabia	748.00	0.855	162	866.0	21	-0.74	22,65	42	Asia
20	Switzerland	741.69	0.848	6.32	929.3	19	1.07	86,835	2	Europe

After fallen into a victim of Asian economic crisis in 1997, Indonesia economy is recovering. Due in part to various politic and regulation changes, since its national reform in 1998, over the last two decades Indonesian economy has shown great progress. The World Bank cites its enormous progress on poverty reduction “cutting the poverty rate to more than half since 1999, to 10.9% in 2016.” Its GDP per capita at USD 3,875 is way higher than USD 857 in 2000. Indonesia, the fourth most populous nation is the seventh largest economy with USD 3,24 trillion GDP in terms of purchasing power parity. Amongst all sectors, agriculture contributes about 14% to its GDP while industry and services add approximately 43% each to its output.

2.2 Main of Economic Indicator

The strength of the economy is reflected by the dynamic of its sizes and growth. GDP in Indonesia averaged USD 255,54 billion from 1967 until 2017, reaching an all-time high of USD 1015,54 billion in 2017. Despite increasing GDP volume, after reaching highest growth of

6,4% in 2010, the economy tends to be slowing down and reaching its slowest point in 2015. Boosted by government spending and private consumption, the economy seems to be recovering since 2015 onward. It is estimated that by the end of 2018, GDP will worth USD 1070 billion, at a growth rate of 5,2%.

According to a study by OECD Development Center (OECD, 2018), in 2017 the Gross Domestic Product (GDP) in Indonesia grew 5,1% from last year, worth 1015.54 billion USD, which account to 1,64 percent of the world economy. The inflation was 3,61%, slightly higher than previous year. In term of contribution to GDP, agriculture, forestry, and fishing sector added 13%, while industry (including construction), added 43% of the value of GDP. Construction sector continued to be the main contribution the GDP, only second after process industry. Employment growth in construction sector contributes to 0,72% of GDP for the first quarter of 2018.

Table 2 Main Economic Indicators

Indicators	2011	2012	2013	2014	2015	2016	2017
GDP (USD billion)	892,97	917,87	912,52	890,81	860,85	932,26	1015,54
Economic Growth (%)	6,5	6,3	5,56	5,01	4,88	5,03	5,07
Construction Growth (%)	7,4	7,4	6,11	6,97	6,36	5,96	6,79
Inflation (%)	3,79	4,3	7,72	8,36	3,35	3,02	3,61
Foreign Exchange (IDR/USD)	9.010	9.793	12.171	12.388	13.788	13.473	13.555

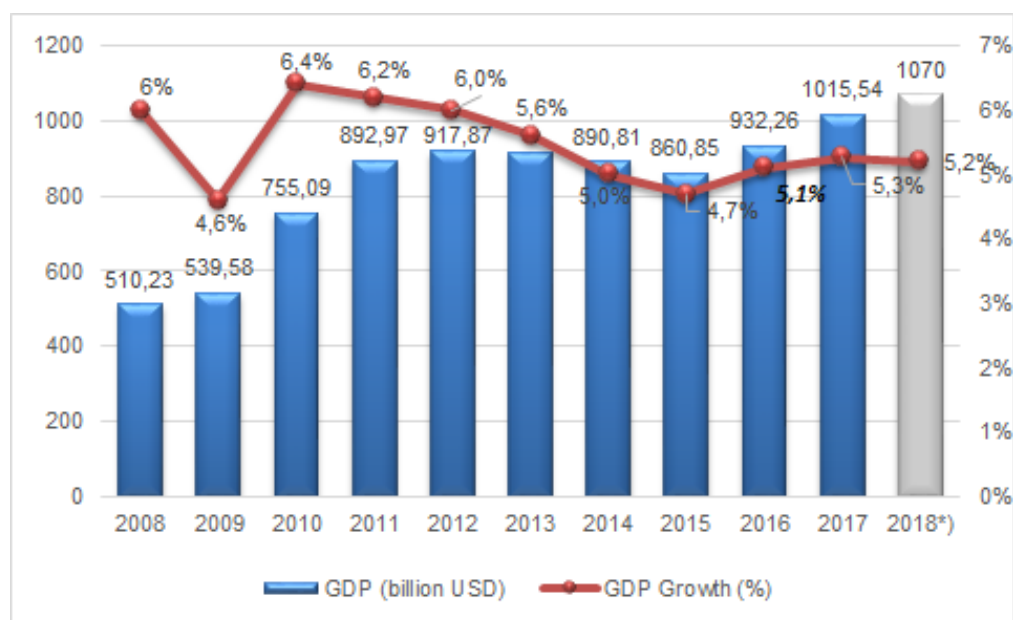


Figure 1 Indonesia GDP (USD billion)

Table 3 Indonesia Economic Indicators

INDICATORS	2011	2012	2013	2014	2015	2016	2017
GDP at constant prices 2000 (IDR. billion)	2.464.566	2.618.938	2.770.345	3.017.269	2.353.207		
GDP at current market price (USD billion)	892,97	917,87	912,52	890,81	860,85	932,26	1.015,54
GDP growth (%)	6,50	6,03	5,56	5,01	4,88	5,03	5,07
GDP growth (%) for agriculture, forestry and fishery sector	3,40	4,59	3,77	4,24	3,75	3,36	3,81
GDP growth (%) for manufacturing sector	5,00	5,62	4,37	4,64	4,33	4,26	4,27
GDP growth (%) for services sector	7,00	7,70	5,50	4,20	6,50		
Wholesale & Retail Trade; Repair of Motor Vehicles & Motorcycles		5,40	4,81	5,18	2,54	4,03	4,44
Real Estate Activities		7,41	6,54	5,00	4,11	4,69	3,68
Public Administration and Defence; Compulsory Social Security		2,13	2,56	2,38	4,63	3,19	2,06
Education		8,22	7,44	5,47	7,33	3,8	3,66
Human Health and Social Work Activities		7,97	7,96	7,96	6,69	5,15	6,79
Other Services Activities		5,76	6,40	8,93	8,08	8,02	8,66
GDP growth (%) for mining sector	1,60	3,02	2,53	0,43	-3,42	0,95	0,69
GDP growth (%) for construction sector	5,30	6,56	6,11	6,97	6,36	5,22	6,79
GDP growth (%) Financial, Ownership and Business Services	7,30	8,00	7,60	7,60	7,00		
Financial and Insurance Activities		9,54	8,76	4,68	8,58	8,9	5,48
Business Activities		7,44	7,91	9,81	7,69	7,36	8,44
GDP growth (%) Transportation and Communication	13,80	15,10	10,20	7,40	8,50		
Transportation and Storage		7,11	6,97	7,36	0,71	7,45	8,49
Information and Communication		1,28	10,39	10,12	9,70	8,88	9,81
GDP growth (%) Trade, Hotel and Restaurant	7,90	6,64	6,80	5,77	4,31	5,17	5,55
GDP growth (%) Electricity, Gas and Water Supply	4,20	4,20	5,60	7,50	1,60		
Electricity and Gas		10,06	5,23	5,90	0,90	5,39	1,54
Water supply, Sewerage, Waste Management and Remediation Activities		3,34	3,32	5,24	7,07	3,6	4,61
Population (million)	241,5	244,8	248,4	252,0	255,4	258,1	261,0
Population growth rate (%)	1,62	1,37	1,47	1,45	1,35	1,06	1,12
Labour force (million)	109,67	112,50	112,70	114,60	114,80	127,8	128,1
Labour force growth rate (%)	-5,40	2,58	0,18	1,69	0,17	11,32	0,23
Unemployment (million)	7,77	7,76	7,41	7,15	7,45	7,02	7,04
Unemployment growth rate (%)	-10,42	-0,13	-4,51	-3,51	4,20	-5,77	0,28
Inflation rate	3,80	4,30	8,40	8,40	3,40	3,02	3,61
Short term interest rate (%)	17,58	18,00	18,4*	18,9*	17,50		
Long term interest rate (%)	15,27	16,00	16,8*	17,7*	18,75		
Changes in Consumer Price Index (2012=100)	114,59	131,92	142,18	113,22	120,42	126,71	131,28
Average change against USD	9.023,00	9.793,00	12.171,00	12.388,00	13.788,00	13.473,00	13.555,00

As shown in table 3, in the last five years GDP growth for construction sector is steadily increasing, far higher than agriculture, forestry and fishery or mining sector which are traditionally the main contributor to the DGP. On the second quarter of 2018, construction sector has contributed 1,85% to GDP, only second after manufacturing sector (3,98%) and

ahead of mining sector (1,45%). Not only from the government spending in infrastructure development, the growth will also benefit from private consumption and better economic indicators. With the growing number population of over 260 million and increasing sizes of urbanisation, demands for infrastructure and building constructions will further contribute to the GDP.

3. OVERVIEW OF THE COSNTRUCTION INDUSTRY

3.1 Construction Investment

Construction investment in Indonesia continued to be the largest in Asia, and significantly leading amongst South East Asian countries. Rapid development in all industry sectors as well as increases in domestic demands for public services, has driven the construction investment.

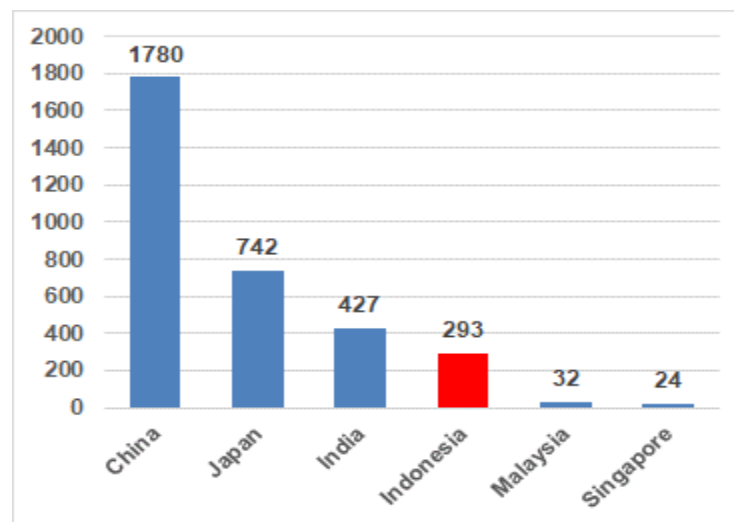


Figure 3 Asia Construction Market Size (USD billion)

Construction investment in all sectors in have been growing steadily at roughly 5% per year. The size of construction market has grown from USD 35,5 billion in 2010 to USD 64,2 billion in 2017. In public infrastructure alone, the construction market is estimated to worth USD 72 billion in 2018, whereby approximately USD 32 billion will be government spending for public infrastructure. In the last four years, under the current administration, the government has extensively invested in various infrastructure projects, ranging from local and regional airports, seaports, dams and irrigation, highways, bridges and toll roads, as well as railways. Government, some with foreign loans, has also invested in building

construction for education and health. Public infrastructure investment are part of the government's 5 years strategic development (2015-2019, which aims at spending up to IDR 3.386 trillion (USD 251 billion) for strategic infrastructure development and IDR 1.500 trillion (USD 110 billion) for basic infrastructure programs.

Table 4 Types of Construction Investment in Indonesia (all sectors)

Construction	2010	2011	2012	2013	2014	2015	2016	2017
Building Works (USD billion)	10,573	12,055	13,127	12,314	13,635	13,764	17,195	18,890
Civil Works (USD billion)	18,838	22,423	24,203	22,476	24,762	24,896	31,757	35,279
Special Construction (USD billion)	6,082	7,207	7,636	7,033	7,689	7,667	9,286	10,063
TOTAL (USD billion)	35,492	41,685	44,966	41,823	46,085	46,328	58,239	64,232

In private sector, construction investments are mainly for infrastructures for energy, oil refinery, transportation, toll roads, real estate and commercial buildings. Amid limited public funding, to satisfy the growing needs for infrastructure, the government are encouraging private sector to engage in public private partnership (PPP). Some notable private sector investment includes Jakarta-Bandung Highspeed Rails, in the form of B-to-B between China construction and railways companies and some state-owned companies of Indonesia.

3.2 Construction Companies

Compared to other countries, the number of contractors in Indonesia is extra-ordinarily high. In 2016, the total registered construction companies were 141.959, whereby only 3% or 987 companies and 8% or 18.631 companies were categorized as large and medium, respectively. The sheer number of small construction companies is indeed a particular problem for the industry. Most of the small size construction companies are in critical condition, unable to sustain in business, where the competition is extremely fierce. They only accounted to less than 10% of the construction market. One of the reasons is because infrastructure projects tend to be capital and technological intensive that are not favourable for small contractors.

Table 5 Number of National Construction Companies - Contractors

Company	2015	2016	2017	2018
Large	600	781	1.621	1.712
Medium	14.755	18.636	19.296	20.007
Small	101.603	122.834	113.371	109.883
Total	116.958	142.251	134.288	131.602

In the meantime, the number of national consultant companies remains the same in the last four years, 7850, 8633, 9044 and 8093 companies for 2015, 2016, 2017 and 2018, respectively.

Just as experienced by national construction companies, over the past three years, the number of foreign companies registered and working in Indonesia has declined. However, the diversity of countries that invest in Indonesia actually increases.

Table 6 Foreign Construction Companies.

NO	COUNTRY	2015	2016	2017	NO	COUNTRY	2015	2016	2017
1	CHINA	60	46	133	16	DENMARK	1	0	2
2	SOUTH KOREA	54	43	131	17	FRANCE	6	1	14
3	JAPAN	90	73	108	18	BELGIA	1	1	4
4	MALAYSIA	6	5	24	19	NORWEGIA	2	2	2
5	SINGAPORE	12	8	17	20	ITALY	5	6	12
6	THAILAND			2	21	CANADA	0	1	3
7	VIETNAM	1	1	3	22	UK	2	0	8
8	INDIA	7	5	11	23	USA	7	4	14
9	OMAN			1	24	BERMUDA			2
10	TURKEY	0	1	2	25	SPAN	3	4	7
11	PAKISTAN			1	26	SWITZERLAND	2	3	4
12	UNI ARAB EMIRATE			1	27	GERMANY	5	2	11
13	NEW ZEALAND	2	2	3	28	HUNGARY	2	2	3
14	AUSTRALIA	3	2	13	29	SWEDEN			1
15	HOLLAND	8	4	10	30	LUXEMBURG			0
TOTAL							279	216	547

China remains the country that have the most construction companies in Indonesia, followed by South Korea and Japan. As required by the regulations, foreign companies must establish and registered as local business entity. In 2017 there were 547 foreign construction companies registered at the National Construction Service Development Board. However, only 189 companies are actively in operation, whereas 358 companies have yet to re-register.

3.3 Construction Personnel and Labors

With the increment construction size, in the last 5 years, the total number of people working in construction sector has increased. On average construction employs around 7% of the national workforces. In 2017 over 1 million people employed permanently in construction, whereas 7,6 million free labors contributed to almost 2 billion man-days of construction works.

Table 7 Construction Workforces.

Year	2012	2013	2014	2015	2016	2017
Labor	893.996	928.729	951.426	975.831	979.772	1.001.251
Labor-day	1.092.943.923	1.237.586.253	1.384.972.056	1.515.206.712	1.771.682.233	1.954.696.290
Day/labor	1.223	1.333	1.456	1.553	1.808	1.952

Qualification	2015	2016	2017	2018 (est)
Expert/Engineer	122.501	171.607	167.761	165.864
Skilled labors	177.525	396.050	352.097	342.499

Despite the positive trend in the number of construction employment, the actual absorption of labors in construction sector continued to decline. Statistic Indonesia recorded a lower labor absorption in the first quarter of 2018 (7,06 million or 5,55%) from 8,14 million people or 6,72 % in August 2017.

As required by Law no 2 on Construction Services, anyone wishing to work in the construction must be certified and registered, and these include engineers and labors. The number of registered construction personnel and workers are show in the following table.

Table 8 Registered Construction Personnel and Labors

Qualification	2015	2016	2017	2018
Expert/Engineer	122.501	171.607	167.761	165.864
Skilled labors	177.525	396.050	352.097	342.499

In the last three years, the number of registered personnel and labors has increased significantly from around 300.000 in 2015 to 567.000 in 2016 and decrease subsequently in 2017 and 2018. In addition, 53 foreign licenced engineer are registered in National Construction Service Development Board.

3.4 Construction Cost

Changes in construction cost is shown in table 8, indicated by changes in construction cost index. After a sharp increase in 2015, cost index is higher in the average of 2,5 point per year

Table 8 Construction Cost Index (based: 2010, index 100)

Type of Construction	2014	2015	2016	2017
Residential and Non-residential building	123	130	133	135
Public works for Agriculture	121	127	129	132
Public Works for Roads, Bridges and Ports	120	125	125	128
Construction and Installations of Electrical, Gas, Water Supply and Communication	122	128	131	133
Other constructions	121	127	128	129
Indonesia Construction	122	128	130	132

3.5 Construction Outlook

Though many are concerned over the effect of rate of exchange, low inflation and good credit rating will continue draw investment to Indonesia Amid dynamic of global economy and political situation in Indonesia, the construction industry is expected to continue to grow in year to come. Owing to the solid economic foundation, prudent economic policy and strong infrastructure investment, the construction will continue grow and contribute to the national economy.

REFERENCES

- International Labour Organization (2018), Indonesia Labour Report 2017.
- OECD Development Center (2018), Economic Outlook for Southeast Asia, China and India 2018: Fostering Growth Through Digitalization
- Statistics Indonesia (2015), Economic Indicators, Jakarta
- Statistics Indonesia (2016), Economic Indicators, Jakarta
- Statistics Indonesia (2017), Economic Indicators, Jakarta
- Statistics Indonesia (2016), Construction in Numbers 2017, Jakarta
- The World Bank (2018), Indonesia Economic Quarterly: Learning More, Growing Faster, June 2018.

