

23nd AsiaConstruct Conference
Kuching, Sarawak
Malaysia (on Borneo Island)
8 – 10 October 2018

Country Report

MALAYSIA



Construction Industry Development Board Malaysia (CIDB)
Level 10, Menara Dato' Onn
Putra World Trade Centre (PWTC)
No. 45, Jalan Tun Ismail
50480 Kuala Lumpur
Malaysia

October 2018

CONTENT

EXECUTIVE SUMMARY

MACROECONOMIC REVIEW

Overview of the National Economy

Main Economic Indicator

OVERVIEW OF THE CONSTRUCTION INDUSTRY

Construction Project's Review

Contractor Registration

Construction Labour Market

Construction Productivity

Construction Cost

Import and Export of Construction Services

EXECUTIVE SUMMARY

In 2017, the Malaysian economy recorded a robust growth at 5.9% (2016: 4.2%). The growth was supported by expansion in both private and public sector spending. Private consumption growth improved to 7.0% (2016: 6.0%) while public consumption growth expanded by 5.4% (2016: 0.9%). On the supply side, all economic sectors continued to expand. The construction sector recorded moderate growth at 6.7% (2016: 7.4%). The value of construction projects awarded in 2017 recorded at 7,548 projects worth RM163.1 billion. The number of contractors registered an increased by 21.3% to 87,071 contractors, meanwhile number of construction labour force amounted to 1.3 million people. Construction sector productivity grew marginally at 2.4%. Compared to 2016, the average price for major building materials does not change much. Average daily wage rates for local skilled construction personnel recorded an increase up to 4.0%; an increase up to 8.0% for skilled machine operator; and an increase of 4.0% for Industrialised Building System (IBS) installer. It is estimated that the construction sector will continue to grow in 2018.

MACROECONOMIC REVIEW AND OUTLOOK

Main Economic Indicator 2017

The Malaysian economy grew by 5.9% (2016: 4.2%) in 2017 driven by domestic demand. Private consumption growth improved to 7.0% (2016: 6.0%), supported mainly by continued wage and employment growth. Public consumption growth expanded by 5.4% (2016: 0.9%) due to higher spending on supplies and services by the Federal Government amid sustained growth in the emoluments. Public investment recorded a marginal growth of 0.1% in 2017 (2016: -0.5%) supported by continued spending by the General Government and public corporations.

On the supply side, in 2017, most sectors registered higher growth. Growth in the service sector expanded at a faster pace of 6.2% (2016: 5.6%). The manufacturing sector expanded further at 6.0% (2016: 4.4%); agriculture production growth rebounded to 7.2% (2016: -5.1%); and mining sector growth moderate to 1.1% (2016: 2.2%). The construction sector registered a moderate growth of 6.7% (2016: 7.4%). The construction sector growth was supported mainly by the civil engineering sub-sector, due to the steady progress of large petrochemical, transportation, and utility project.

Malaysian labour force expanded by 303,000 people and net employment gains amounted to 295,000 jobs. Labour force participation rate edged higher at 67.8% (2016: 67.7%) and employment growth grew to 2.1% (2016: 0.7%). The unemployment rate stood unchanged at 3.4% (2016: 3.4%).

Inflation rate increased to 3.7% in 2017 (2016: 2.1%). Higher external and domestic costs from higher global commodity prices and disruptions in domestic food supplies contributed to inflation during the year.

Consistent with the unchanged level of Overnight Policy Rate (OPR) in 2017, money market was stable throughout the year. The Ringgit appreciated by 10.4% to end the year of 2017 by RM4.06 against the US Dollar.

Table 1 Malaysia Main Economic Indicator

	2014	2015	2016	2017
GDP at Current Market Price (RM billion)	1,106	1,159	1,231	1,353
GDP Growth at Real 2010 Prices (RM billion)	1,013	1,063	1,108	1,174
GDP Growth at Real 2010 Prices (%)	6.0	5.0	4.2	5.9
Agriculture	2.0	1.3	-5.1	7.2
Mining and quarrying	3.3	5.3	2.2	1.1
Manufacturing	6.1	4.9	4.4	6.0
Construction	11.7	8.2	7.4	6.7
Services	6.6	5.1	5.6	6.2
Demographic Indicator				
Population (million persons)	30.7	31.2	31.6	32.1
Population growth rate (%)	2.7	1.6	1.3	1.6
Labour force (million persons)	13.9	14.1	14.2	14.5
Labour force growth rate (%)	2.3	1.6	0.7	2.1
Unemployment rate (%)	2.9	3.1	3.4	3.4
Inflation rate (%)	2.1	2.1	2.1	3.7
Financial Indicator				
Overnight interbank interest rate (%)	3.23	3.05	3.00	2.91
Commercial banks fixed deposit interest rate (%)				
3 months	3.13	3.13	2.92	2.94
12 months	3.31	3.31	3.06	3.10
Exchange rate at end of period (RM against USD)	RM3.50	RM4.29	RM4.49	RM4.06

Source: Central Bank of Malaysia

Malaysian Economy Outlook

In the first half of 2018, the Malaysian economy recorded an average growth of 5.0% (1Q2018: 5.4%; 2Q2018: 4.5%). Growth was slower in second quarter 2018 at 4.5% (1Q2018: 5.4%) affected by disruptions in the agriculture and mining sector. The agriculture sector growth contracted by 2.5% (1Q2018: 2.8%) and mining sector growth decline by 2.2% (1Q2018:

0.1%). Services and manufacturing continue to grow and remained supportive of the whole growth. Growth in the construction sector continued to moderate in the second quarter at 4.7% (1Q2018: 4.9%). The growth was supported by ongoing transportation, petrochemical and power plant projects.

The Malaysian economy growth is projected to remain stable between 5.5% and 6.0% for 2018. The growth is expected to be led by the construction and services.

Table 2 GDP Growth by Main Economic Activity (%)

Economic Sector	2018		
	Q1	Q2	Annual (f)
Agriculture	2.8	-2.5	3.6
Mining and Quarrying	0.1	-2.2	1.8
Manufacturing	5.3	4.9	5.9
Construction	4.9	4.7	7.3
Services	6.5	6.5	6.1
Real GDP Growth	5.4	4.5	5.5 – 6.0

Source: Central Bank of Malaysia

OVERVIEW OF THE CONSTRUCTION INDUSTRY

Construction Project Review

In 2017, value of construction projects awarded recorded at 7,548 projects worth RM163.1 billion. Construction project refers to projects awarded to the main contractor with the value of RM500,000 and above. In this report, the value and number of projects were taken as of March 2018.

Projects recorded by CIDB Malaysia are categorised into residential, non-residential, social amenities and infrastructure. Overall, in 2017, non-residential projects had the highest value of projects, representing 35.4%. Residential category ranking second with RM48.2 billion (30.0%), followed by infrastructure projects at RM46.8 billion (28.7%) and social amenities projects at RM10.4 billion (6.4%).

The major contribution to Malaysian construction projects came from the implementation of 18 major projects each costing more than RM1.0 billion each amounting to RM29.1 billion as follows:

1. 1440MW Power Plant Project in Pasir Gudang, Johor.
Award: October 2017; Expected completion: 2020
2. Baleh Hydroelectric Project in Sarawak.
Award: May 2017; Expected completion: 2026
3. Guideway; Stations; Iconic Bridge; Park and Rides; Ancillary Buildings; and Other Associated Works for Light Rail Transit Line 3 (LRT3) From Bandar Utama to Johan Setia in Klang Valley.
Award: September 2017; Expected completion: 2020
4. Petrochemical Integrated Development (RAPID) Project in Pengerang, Johor.
Award: Julai 2017; Expected completion: 2020
5. Mixed Development in Kuala Lumpur.
Award: June 2017; Expected completion: 2021

Table 3 Value of Construction Projects Awarded by Sector and Type of Project

Project Category	2015		2016		2017		2018	
	Number	Value (RM b)	Number	Value (RM b)	Number	Value (RM b)	Number	Value (RM b)
Residential	2,096	53.8	2,120	49.2	1,992	48.2	278	7.1
Non Residential	2,697	53.7	2,775	53.3	2,651	57.8	379	6.3
Social Amenities	727	5.5	876	8.6	821	10.4	158	2.2
Infrastructure	2,035	29.1	2,173	140.5	2,084	46.8	285	15.4
Total	7,555	142.1	7,944	251.5	7,548	163.1	1,100	31.0

Note : As at March 2018

Source : CIDB Malaysia

Contractor Registration

In 2017, the number of contractors registered increased by 21.3% to 87,071 (2016: 71,799 contractors). These contractors were categorised by grade, from Grade 1 (G1) to Grade 7 (G7). Grade G1 to G3 contractors forms the largest portion of contractors at 76.4% (66,492 contractors). Grade G4 and G5 contractors accounted for 11.6% (10,587 contractors), while grade G6 and G7 contractors comprise 11.5% (9,992 contractors) of the total registered contractors.

Table 4 Contractors Registered by Registration Grade

Grade	Bidding Limit	2014	2015	2016	2017
G1	Not exceeding RM200,000	34,485	33,991	34,068	34,766
G2	Not exceeding RM500,000	9,268	10,441	12,407	19,214
G3	Not exceeding RM1 million	8,825	8,875	9,375	12,512
G4	Not exceeding RM3 million	3,038	3,093	3,408	4,940
G5	Not exceeding RM5 million	4,130	4,287	4,746	5,647
G6	Not exceeding RM10 million	1,594	1,528	1,589	2,890
G7	Unlimited	5,332	5,618	6,206	7,102
Total		66,672	67,833	71,799	87,071

Source : CIDB Malaysia

Construction Labour Market

Total number of labour in the construction sector had a slight increase of 0.8% to 1.25 million people (2016: 1.25 person). Construction sector labour worker formed the second smallest share before the mining and quarrying sector at 8.7%.

Table 6 Labour Market in Construction Sector

	2016	2015	2016	2017
Number of employee ('000 persons)	1,278	1,310	1,252	1,262
% from total employee	9.2	9.3	8.8	8.7

Source: Central Bank of Malaysia

Construction Productivity

Labour productivity measures economic output per unit of labour. Malaysia's labour productivity grew 3.8% in 2017 (2017: RM81,268; 2016: RM78,294 billion). Compared to other economic sectors, the construction sector registered the lowest level of productivity. The construction sector recorded a moderate growth of 2.4% in productivity (2016: 13.2%) at RM40,242 billion in 2017. Nevertheless, construction sector plays a key role in the economy through its multiplier effect on other industries.

Table 7 Labour Productivity Performance

Main Economic Sector	RM			
	2014	2015	2016	2017
Agriculture	51,741	53,908	51,289	51,988
Mining and Quarrying	1,159,389	984,885	1,133,372	1,210,832
Manufacturing	97,342	102,633	106,307	110,858
Construction	34,714	34,723	39,298	40,242
Services	64,887	66,750	69,534	73,030
Labour Productivity	73,087	75,634	78,294	81,268

Source: Labour Productivity, Department of Statistics Malaysia

Construction Cost

Average Price of Major Construction Building Material

In general, the average price for major building materials does not differ much except for steel reinforcement. The prices of steel reinforcement recorded an increase of 8.9%. The prices of sand, paint and glass recorded an increase of between 1.5% and 4.0%. In contrast, prices for aggregate, cement and ready-mixed concrete decreased by average 1.5% in 2017.

Table 8 Average Prices of Major Construction Building Materials

Material	Unit	RM			
		2014	2015	2016	2017
Steel Reinforcement	tonne	3,363.44	2,089.64	2,478.00	2,698.39
Bricks	piece	0.40	0.42	0.43	0.43
Aggregate	tonne	44.85	45.97	42.99	42.04
Sand	tonne	37.98	40.91	41.90	42.68
Cement	50kg bag	18.71	18.89	19.24	19.11
Ready-mixed Concrete	m ³	250.13	264.15	257.38	253.04
Paint	litre	122.26	129.49	130.92	132.96
Glass	m ²	46.55	51.10	52.55	54.67

Source : CIDB Malaysia

Construction Industry Wage Rates

Construction Personnel Wage Rates

Average daily wage rates for local skilled construction personnel were varied and registered an increase of 2.0% to 4.0% in 2017. Plumber - reticulation (RM120.52) and steel structure fabricator (RM118.67per day) were the highest earners in the skilled worker category.

While the average daily wage rates of local semi-skilled construction personnel recorded a growth between a high of 4.0% and a low of 2.0% in 2017. The highest earners in the semi-skilled category were the building wiring installer (RM113.79 per day) and plumber - reticulation (RM104.75 per day).

Table 9 Average Daily Wage Rate for Local Construction Personnel

Worker Category	RM per day			
	Skilled		Semi-Skilled	
	2016	2017	2016	2017
General Construction Worker - Building	68.83	71.83	-	-
Concretor	98.66	102.05	84.30	87.65
Barbender	102.82	106.99	83.71	87.56
Carpenter-Formwork	105.89	108.43	902.20	92.80
Bricklayer	100.62	103.46	79.16	81.45
Roofer	110.19	113.80	92.59	95.57
Carpenter - Joinery	114.06	117.48	95.95	98.74
Steel Structure Fabricator	114.91	118.67	98.81	101.59
General Welder	109.94	113.38	95.50	97.85
Plumber - Building & Sanitary	107.74	110.94	87.12	89.79
Plumber - Reticulation	117.09	120.52	102.05	104.75
Building Wiring Installer	-	-	110.96	113.79
Electrical Wireman PW2 (RM Monthly)	2,454.59	2,508.26	-	-
Electrical Wireman PW4 (RM Monthly)	3,174.45	3241.57	-	-
Scaffolder - Prefabricated	102.68	105.74	86.13	89.25
Scaffolder - Tubular	104.82	108.57	85.93	89.34
Plasterer	104.89	107.43	89.12	92.12
Tiller	112.40	116.47	91.90	95.56
Painter - Building	97.95	101.34	82.24	85.31
General Construction Worker - Civil	83.04	86.30	-	-

Source : CIDB Malaysia

Construction Machine Operator Wage Rates

In 2017, the average daily wages of skilled machine operator grew between 2.0% to 8.0%. The highest wage earners were tower crane operators (RM127.12 per day) and mobile crane operators (RM121.59 per day).

For semi-skilled machine operator, the average wages increase between 1.0% and 5.0%. The highest wage earners were tower crane operators (RM96.72 per day) and mobile crane operators (RM94.83 per day).

Table 10 Average Daily Wage Rates for Local Construction Machinery Operator

Category of Operator	RM per day			
	Skilled		Semi-Skilled	
	2016	2017	2016	2017
Excavator	103.53	106.08		
Pile Riggers	98.22	101.86	78.19	80.80
Off Road Truck Operators	95.08	97.06	77.21	78.22
Backhoe Loader Operators	98.03	100.02		
Roller Operators	94.58	97.53	75.34	76.96
Roller/Compactor	96.64	98.86	77.53	79.19
Scraper Operators	98.46	101.26	81.21	83.21
Motor Grader Operators	97.83	101.08		
Wheel Loader Operators	96.87	100.00	79.09	81.20
Paver Operators	100.19	108.40	81.35	84.20
Mobile Crane Operators	119.33	121.59	93.53	94.83
Crawler Crane Operators	117.97	119.92	92.48	92.80
Tower Crane Operators	123.46	127.12	93.98	96.72
Forklift Truck Operators	94.57	98.34	75.48	79.28
Slinger/Dogger Operators	91.82	95.41	75.48	77.24

Source : CIDB Malaysia

Industrialised Building Installer (IBS) Installer Wage Rates

IBS installers comprises of local Malaysian workers. Average daily wage rates for IBS installer registered an increase between 3.0% and 4.0%. The highest wages were earned by skilled IBS precast concrete installer (RM156.81 per day) and IBS lightweight panel installers (RM147.87 per day).

For semi-skilled IBS installer, the average daily wage rates also registered an increase of between 1.0% and 2.0%. The highest wages were earned by semi-skilled IBS precast concrete installers (RM125.60 per day) and IBS lightweight panel installers (RM122.39 per day).

Table 11 Average Daily Wage Rate for Local IBS Installer

Category of IBS Installer	RM per day			
	Skilled		Semi-Skilled	
	2016	2017	2016	2017
IBS Precast Concrete Installers	152.84	156.81	123.68	125.60
IBS Lightweight Panel Installers	142.83	147.87	120.34	122.39
Lightweight Block Wall Installers	127.57	132.47	108.39	110.10
System Formwork Installers	126.94	130.71	111.11	112.71
Roof Truss Installers (wood)	125.30	128.59	105.58	106.90
Roof Truss Installers (light steel gauge)	129.15	132.62	107.00	108.31

Source : CIDB Malaysia

Export and Import of Construction Services

Based on Malaysia's balance of payment statement, the value of projects awarded to the foreign contractor (imports) increased by 37.9% to RM16.9 billion in 2017 (2016: RM12.2 billion). The involvement of Malaysian construction companies in foreign countries (exports) decreased by 1.8% to RM4.1 billion (2016: RM4.1 billion). This shows a deficit in construction services, which widened to RM12.8 billion in 2017 (2016: RM8.1 billion).

Among the biggest projects undertaken by Malaysian companies were the energy power plant in the United Kingdom; Solapur-Bijapur National Highway in India; and road and infrastructure work in Qatar.

Comparatively, in 2017 a large number of construction projects in the Malaysia domestic market were secured by contractors from China, Japan and Singapore. They were mainly geared towards factory, residential and commercial projects. Other foreign contractors were from Hong Kong and Denmark.

Table 12 Export and Import of Construction Services

	2014	2015	2016	2017
Export of Construction (RM million)	2,796	4,038	4,137	4,072
<i>% Export Change</i>	-13.7%	44.4%	2.5%	-1.8%
Import of Construction (RM million)	8,675	10,549	12,221	16,851
<i>% Import Change</i>	7.1%	21.6%	15.8%	37.9%
Net Trade: Export-Import(RM million)	-5,879	-6,511	-8,084	-12,779

Source: Balance of Payment, Department of Statistics Malaysia

The exports and imports of architectural, engineering and other technical services have shown a decrease in 2017. In 2017, the exports declined by 15.2% to RM6.1 billion against a vast decrease in the imports by 37.4% to RM8.9 billion.

Table 13 Export and Import of Other Business Services

	2014	2015	2016	2017
Export of Architectural, engineering and other technical (RM million)	6,297	7,173	7,227	6,127
<i>% Export Change</i>	-2.2%	13.9%	0.8%	15.2%
Import of Architectural, engineering and other technical (RM million)	8,104	10,550	14,183	8,875
<i>% Import Change</i>	12.9%	30.2%	34.4%	-37.4%
<i>Net trade: Export-Import (RM million)</i>	-1,806	-3,377	-6,956	-2,748

Source: Balance of Payment, Department of Statistics Malaysia

CONSTRUCTION INDUSTRY OUTLOOK FOR 2018

The Malaysian economy is projected to register a sustained growth in 2018. Domestic demand will be the principal driver of growth, led by private sector activity. All economic sectors are projected to register positive growth in 2018. The construction sector will continue to expand with new and existing civil engineering project and expected to have a sustainable demand.