

CHINA AND HONG KONG

QUARTERLY CONSTRUCTION COST REVIEW





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CHINA AND HONG KONG MARKET OVERVIEW



The recent announcement of the Greater Bay Area (GBA) blueprint set out clear objectives to create an innovation and financial hub that will look to compete with the likes of Silicon Valley and Tokyo Bay Area. Importantly, Hong Kong, Macau, Guangzhou and Shenzhen have been named as the four key cities that will act as the foundation for regional development.

The blueprint offers a strong framework from which to build, but it's the announcement of specific policies that will ignite action and provide tangible projects for the region. The critical areas of focus include a need to strengthen cooperation in innovation and technology, accelerate infrastructure connectivity, improve internet infrastructure, strengthen security of water resources and pursue low-carbon development models.

The long-term area of focus for the construction industry is going to be the improvement of the region's transport hubs. Mobility will underpin the success for the GBA and will require major capital works projects to

secure the reliable movement of people, goods and services. However, with this comes specific challenges around governance and how to achieve collaboration between two Special Administrative Regions (SAR) and Mainland China.

The blueprint has outlined a strategy to focus on clusters to improve its international competitiveness. This will be realized through a ports program, a world-class airport cluster, a rapid transport network, passenger and cargo transport services and connection to existing transport infrastructure.

MARKET MOVEMENT



ECONOMY

Indicator	Q3/16 - Q3/17	Q2/17 - Q2/18	Q3/17 - Q3/18
GDP Growth per annum	(+) 3.6%	(+) 3.5%	(+) 2.9%
Inflation Rate (CPI) per annum	Dec 16 - 17 (+) 1.7%	Sep 17 - 18 (+) 2.7%	Dec 17 - 18 (+) 2.5%



SUPPLY & DEMAND

Indicator	Q3/17	Q2/18	Q3/18
Activity Level (Gross output; new + A&A)	HK\$60.939 Bn	HK\$62.001 Bn	HK\$60.297 Bn



BASIC COSTS

Indicator	Apr - Oct 17	May - Jul 18	Aug - Oct 18
Highways Material Index	781.8	845.7	863.1
Labour Wages Index	Sep - Nov 17 152.7	Jun - Aug 18 148.3	Sep - Nov 18 148.9



CONSTRUCTION COST TREND

Indicator	Q4/17	Q3/18	Q4/18
Tender Price Index (Arcadis)	1946	1885	1868



1 MARKET ANALYSIS

CHINA

The Chinese government has a clear economic outline for growth in 2018/19 with a focus on creating openness for foreign investment, improving the quality of GDP growth and to control its growing levels of pollution. In response, China's GDP increased by 6.6% Year-on-Year (YoY) and 9.0% Quarter-on Quarter (QoQ) based on Q4 2018. The rate of inflation was mild with the Composite Consumer Price Index (CPI) increasing gradually from a low in early 2017 by 1.9% YoY based on December 2018.

LOWERING THE RESERVE REQUIREMENT RATIO

In the fourth quarter of 2018, the Central Bank of China lowered the Reserve Requirement Ratio (RRR) by 1% for the fourth time in 2018. This action, together with the continuous growth of new development areas, has the potential to stabilize the rising cost of housing. Early activity in 2019 has seen a further 1% reduction in RRR.

COST OF MATERIALS AND LABOUR

In 2018, construction wages increased by 4.4% YoY at the highest rate of growth in the last three years. Basic construction product costs fluctuated with rebar (-) 12%, steel (-) 6%, concrete (+) 11% and cement (+) 5%, YoY. The price increase of cement and concrete was due to changes in environmental protection policies, while the decrease in rebar and steel were due to excess supply.

HONG KONG

The recent announcement of the Hong Kong Budget 2019 has built on some consistent market themes such as productivity, technology and public housing. Highlights include digitization of the works supervision system to enhance the standard and efficiency in public works monitoring and the implementation of Construction 2.0 – 'an expression of Industry changes required across three key pillars: Innovation, Professionalism and Revitalization'.

There is also an outlined spending to help enhance the city's liveability. This includes an earmarked HK\$6 billion for the enhancement of waterfronts and an allocated HK\$120 million to extend the public charging network of electric vehicles at government car parks. It also explores the feasibility of installing chargers in on-street parking spaces and provides HK\$1 billion for government departments to install renewable energy facilities.

QUARTERLY GDP GROWTH UNDER 3%

Hong Kong's economy showed continued GDP growth of 2.9% Year-on-Year (YoY) based on Q3 2018. However, this is the first time in seven consecutive quarters that GDP growth hasn't exceeded 3%. Inflation was mild with the Composite Consumer Price Index (CPI) increasing gradually from the low in early 2017 by (+) 2.5% (YoY) based on December 2018.

HIGH APPROVAL RATES FOR MAJOR CAPITAL WORKS

The gross value of construction works performed decreased by 1.05% YoY based on Q3 2018. Several major civil projects reached completion which included the Hong Kong-Zhuhai-Macau Bridge and the West Kowloon Railway Station. This created the potential to leave a shortfall in on-going capital works, but Hong Kong's Legislative Council has approved funding for major capital works in 2017/18, which showed a 50% increase from the previous year. Some of these projects, such as the 10-year Hospital Development Plan, will begin in 2019, sustaining commencement rates and keeping the market stable.

COST OF MATERIALS AND LABOUR

Steel price remained at peak levels since gradually increasing from the market low in early 2016. Other core materials also remained steady throughout the year. Notably, the price of sand increased by 134% since a market slump in September 2017. Construction workers' wages, including bar benders, electrical and mechanical workers remained stable in this quarter. However, the labour index has experienced a slight dip of 2.5% YoY, with bricklayers witnessing the largest quarterly movement of (-) 2.3%.



2 APPROXIMATE BUILDING COSTS

HONG KONG

Notes:

1. The costs for the respective categories given are averages based on fixed price competitive tenders. It must be understood that the actual cost of a building will depend upon the design and many other factors and may vary from the figures shown.

2. The costs per square metre are based on Construction Floor Areas (CFA) measured to the outside face of the external walls /external perimeter including lift shafts, stairwells, balconies, plant rooms, water tanks and the like.

3. All buildings are assumed to have no basements (except otherwise stated) and are built on flat ground, with normal soil and site conditions. The cost excludes site formation works, external works, land cost, professional fees, finance and legal expenses.

BUILDING TYPE	HK\$/m ² CFA	OUTLINE SPECIFICATION
DOMESTIC		
Apartments, high rise, public authority standard	11,000 - 13,500	Apartment units with fit-out, based on Hong Kong Housing Authority Non-standard Cruciform Block design
Apartments, high rise, average standard	23,900 - 27,900	Apartment units with fit-out, including air-conditioning, kitchen cabinets and home appliances, but excluding decorative light fittings and loose furniture
Apartments, high rise, high end	31,400 - 36,700	Apartment units with good quality fit-out, including air-conditioning, kitchen cabinets and home appliances, but excluding decorative light fittings and loose furniture
Terraced houses, average standard	32,300 - 38,000	Houses with fit-out, including air-conditioning, kitchen cabinets and home appliances, but excluding decorative light fittings, loose furniture, garden and parking
Detached houses, high end	48,000 up	Houses with good quality fit-out, including air-conditioning, kitchen cabinets and home appliances, but excluding decorative light fittings, loose furniture, garden and parking
OFFICE / COMMERCIAL		
Medium/high rise offices, average standard	23,400 - 27,400	RC structure, curtain wall/window wall, including public area fit-out, tenant area with screeded floor, painted wall and ceiling
High rise offices, prestige quality	28,400 - 33,300	RC structure, curtain wall, including public area fit-out, tenant area with raised floor/carpet, painted wall and false ceiling
Out-of-town shopping centre, average standard	23,200 - 27,700	Including public area fit-out and M&E, but excluding shop fit-out
Retail malls, high end	30,900 - 36,900	
INDUSTRIAL		
Owner operated factories, low rise, light weight industry	18,200 - 23,100	RC structure, including small office with simple fit-out and M&E, but excluding a/c and heating
HOTEL		
Budget hotels - 3-star, mid market	30,000 - 32,500	1) Interior decoration 2) Furniture (fixed and movable) 3) Special light fittings (chandeliers, etc.) 4) Operating Supplies and Equipment (OS&E) excluded
Business hotels - 4/5-star	31,400 - 36,900	
Luxury hotels - 5-star	36,900 - 42,700	
OTHERS		
Underground/basement car parks (<3 levels)	25,000 - 30,000	RC structure
Multi storey car parks, above ground (<4 levels)	15,000 - 17,800	RC structure, natural ventilation, no facade enclosure
Schools (primary and secondary)	19,700 - 21,200	Public authority standard, including fit-out, no a/c, complete with basic external works but excluding educational equipment
Students' residences	22,900 - 25,900	Including fit-out, loose furniture and a/c
Sports clubs, multi purpose sports/leisure centres (dry sports)	29,900 - 34,800	Dry sports (no swimming pool) and are for 'leisure centre' type schemes including main sports hall, ancillary sports facilities, changing and showers, restaurant / cafe, bar, etc. Costs include a/c, Furniture, Fittings and Equipment (FF&E)
General hospitals - public sector	38,700 - 43,600	Excluding medical and operating equipment

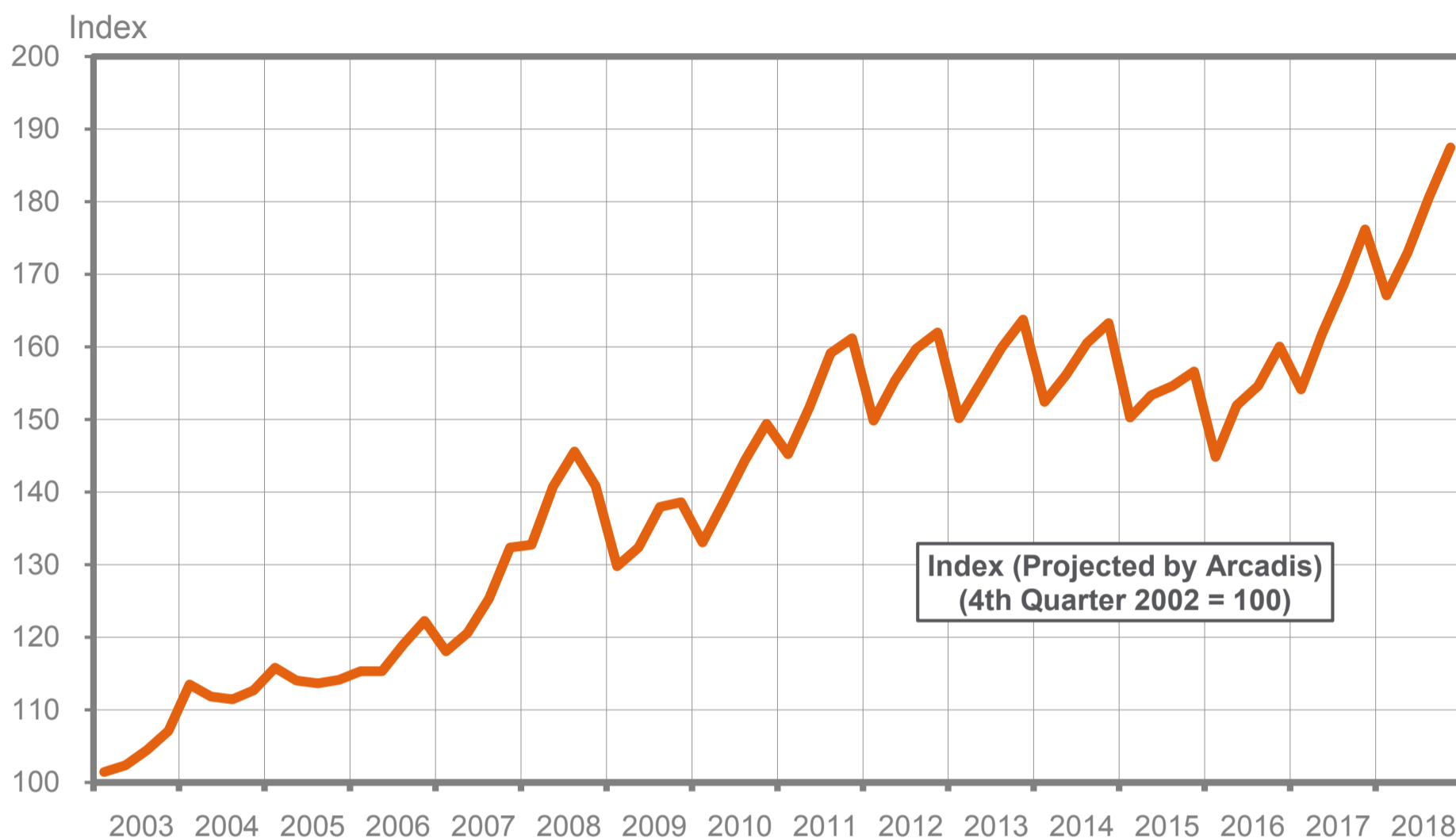
*The above cost are at 4th Quarter 2018 levels.



3

BUILDING & BUILDING SERVICES PRICE INDEX

MAINLAND CHINA



BUILDING & BUILDING SERVICES PRICE INDEX								
Index	Published (by NBS of China) (Base : Corresponding Quarter in Preceding Year = 100)				Projected (by Arcadis) (Base : Q4/2002 = 100) (see explanatory notes below)			
	2015	2016	2017	2018	2015	2016	2017	2018
Quarter / Year								
1st Quarter	98.6	96.4	106.4	108.4	150.3	144.9	154.1	167.1
2nd Quarter	98.2	99.1	106.5	106.9	153.3	152.0	161.8	173.0
3rd Quarter	96.3	100.0	109.0	107.2	154.6	154.6	168.5	180.7
4th Quarter	95.9	102.2	110.1	106.4	156.6	160.0	176.2	187.5

Source : National Bureau of Statistics (NBS) of China

Notes:

Data are published on a quarterly basis, measuring the year-on-year change in price level of each quarter, but the quarter-on-quarter change is not published, i.e. the changes between consecutive quarters are not given.

To give an illustration of the price trend over time, Arcadis applies a hypothetical calculation to derive the data table and chart as above, basing on the following understanding and assumptions:

1. Only indices from 1st Quarter 2003 and onwards are published.

2. For 2002 and before, indices were only published annually. This annual index indicates that the average fluctuation of 2002 was moderate. Arcadis' own in-house data further substantiates that the construction costs in 2002 were rather stable throughout the year.

3. Changes between quarters in 2002 are assumed to be evenly distributed throughout the year. This establishes a notional relationship between the four quarters in 2002 and can be compared with the published data for 2003 to find their notional quarter-on-quarter changes.

4. For comparison purposes, 4th Quarter 2002 is referred to as base and the base index as 100.

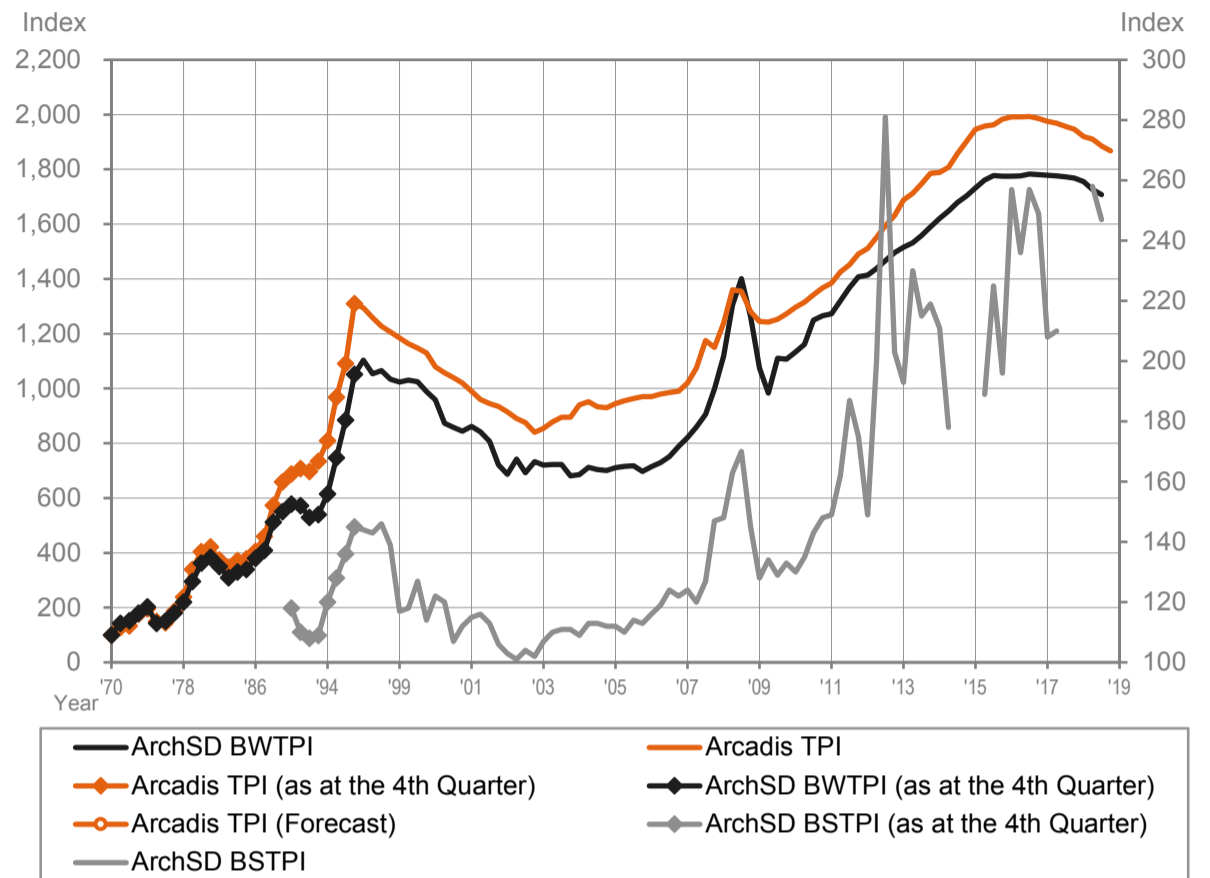


4 TENDER PRICE INDEX

HONG KONG

Notes:

- [*] denotes forecast figures.
- Both BWTP (ArchSD) and Arcadis TPI measure the trend of general builder's works only. Special works and Mechanical and Electrical Services would have to be considered separately.
- All indices were published quarterly. For reference purpose, only indices from 1st quarter of 1998 and onwards are given in detail, whereas indices between year 1970 to 1997 are shown with their 4th Quarter figures.



Quarter / Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
ArchSD BWTP (Base = 100, at Year 1970)										
Q1	1074	1134	1273	1414	1516	1621	1732	1775	1779	1755
Q2	983	1161	1320	1438	1532	1648	1761	1776	1776	1727
Q3	1111	1249	1369	1467	1559	1679	1777	1783	1773	1708
Q4	1107	1266	1408	1496	1590	1703	1775	1781	1768	
ArchSD BSTPI (Base = 100, at Year 1989)										
Q1	128	130	149	149	193	211	(N/A)	257	208	(N/A)
Q2	134	135	162	200	230	178	189	236	210	258
Q3	129	143	187	281	215	(N/A)	225	257	(N/A)	247
Q4	133	148	175	203	219	(N/A)	196	249	287	
Arcadis TPI (Base = 100, at Year 1970)										
Q1	1245	1297	1385	1511	1688	1789	1946	1992	1975	1920
Q2	1242	1315	1425	1552	1713	1808	1958	1992	1968	1910
Q3	1253	1342	1452	1595	1747	1857	1963	1993	1957	1885
Q4	1273	1367	1491	1632	1786	1903	1984	1986	1946	1868

Source : Competitive tenders received by Arcadis, Building Works Tender Price Index (BWTP) and Building Services Tender Price Index (BSTPI) of Architectural Services Department (ArchSD) of HKSAR

Note : 1. [*] denotes forecast figures

- Both BWTP (ArchSD) and Arcadis TPI measure the trend of general builder's works only. Special works and Mechanical and Electrical Services would have to be considered separately.
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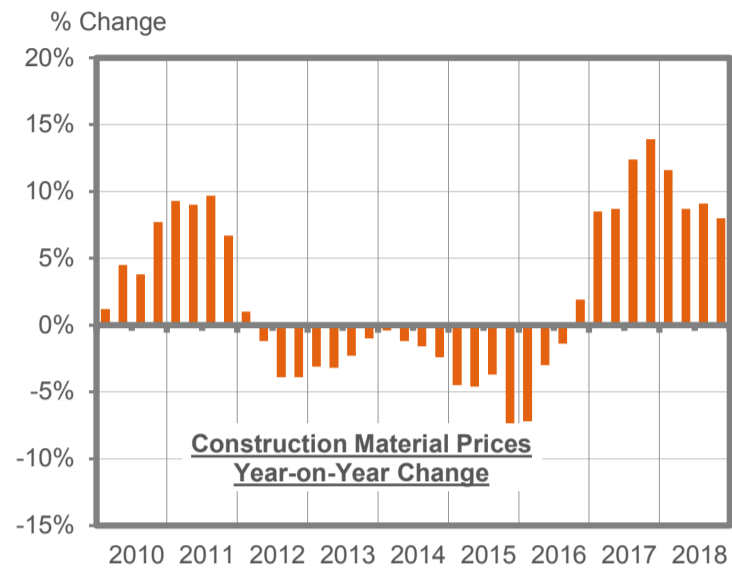


5 MATERIALS

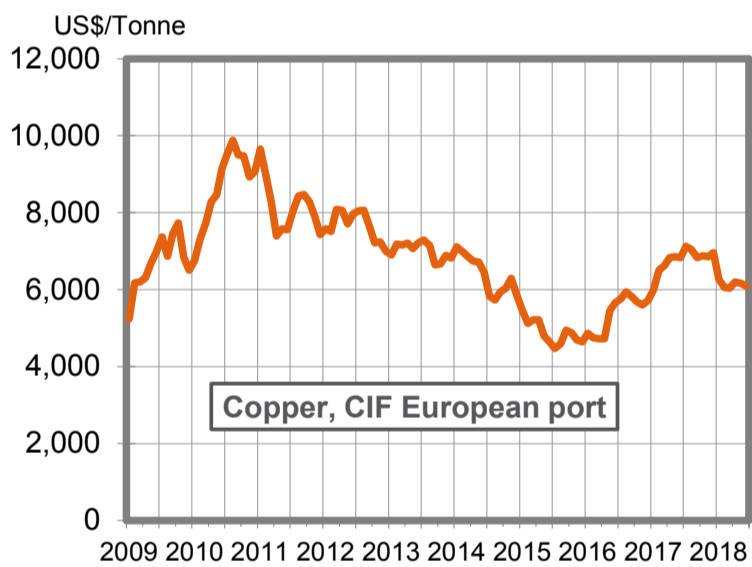
MAINLAND CHINA

CONSTRUCTION MATERIAL PRICES YEAR-ON-YEAR CHANGE			
Quarter / Year	2016	2017	2018
1st Quarter	(-) 7.2%	(+) 8.5%	(+) 11.6%
2nd Quarter	(-) 3.0%	(+) 8.7%	(+) 8.7%
3rd Quarter	(-) 1.4%	(+) 12.4%	(+) 9.1%
4th Quarter	(+) 1.9%	(+) 13.9%	(+) 8.0%

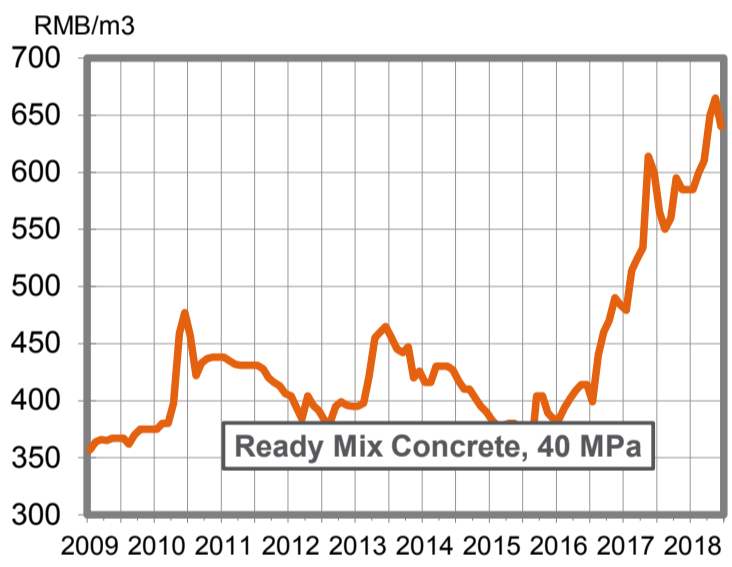
Source : National Bureau of Statistics of China



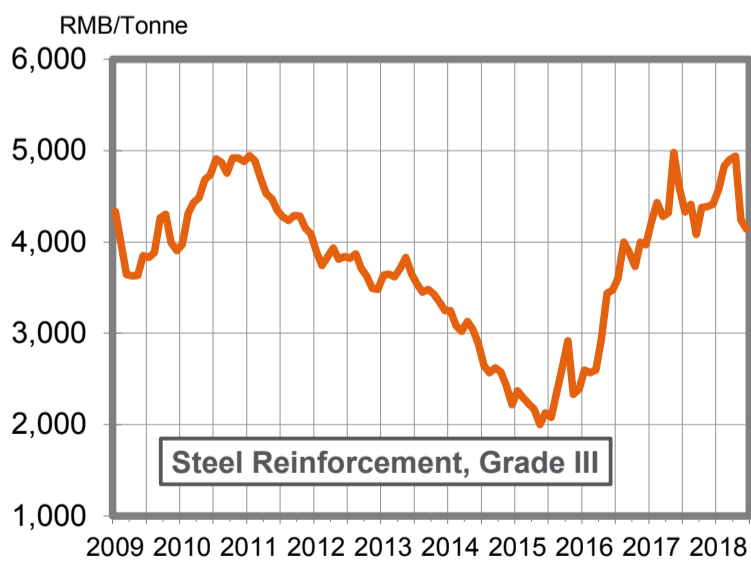
Basic Construction Materials



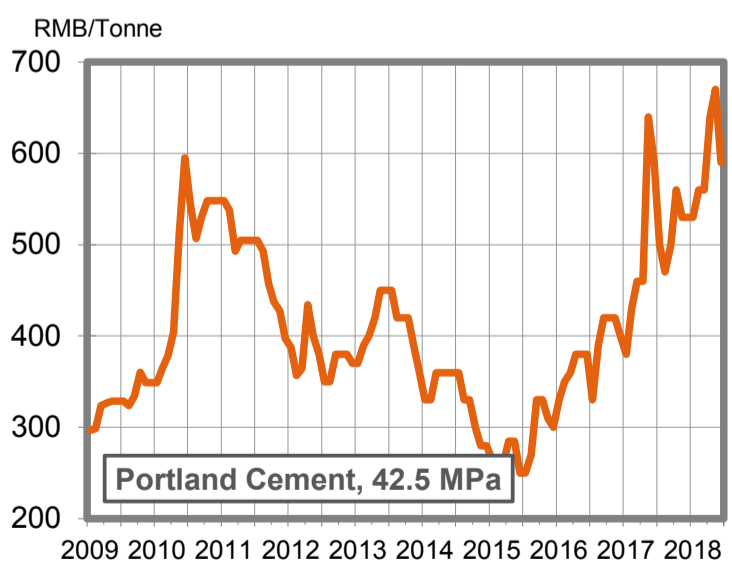
Source : London Metal Exchange



Shanghai Construction & Construction Material Industry Administration Department



Shanghai Construction & Construction Material Industry Administration Department



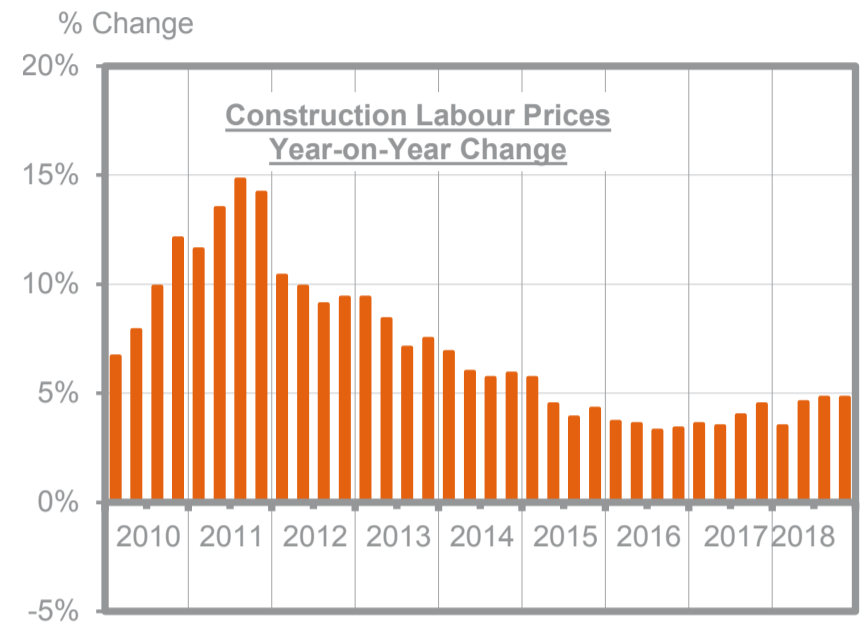
Shanghai Construction & Construction Material Industry Administration Department

6 LABOUR

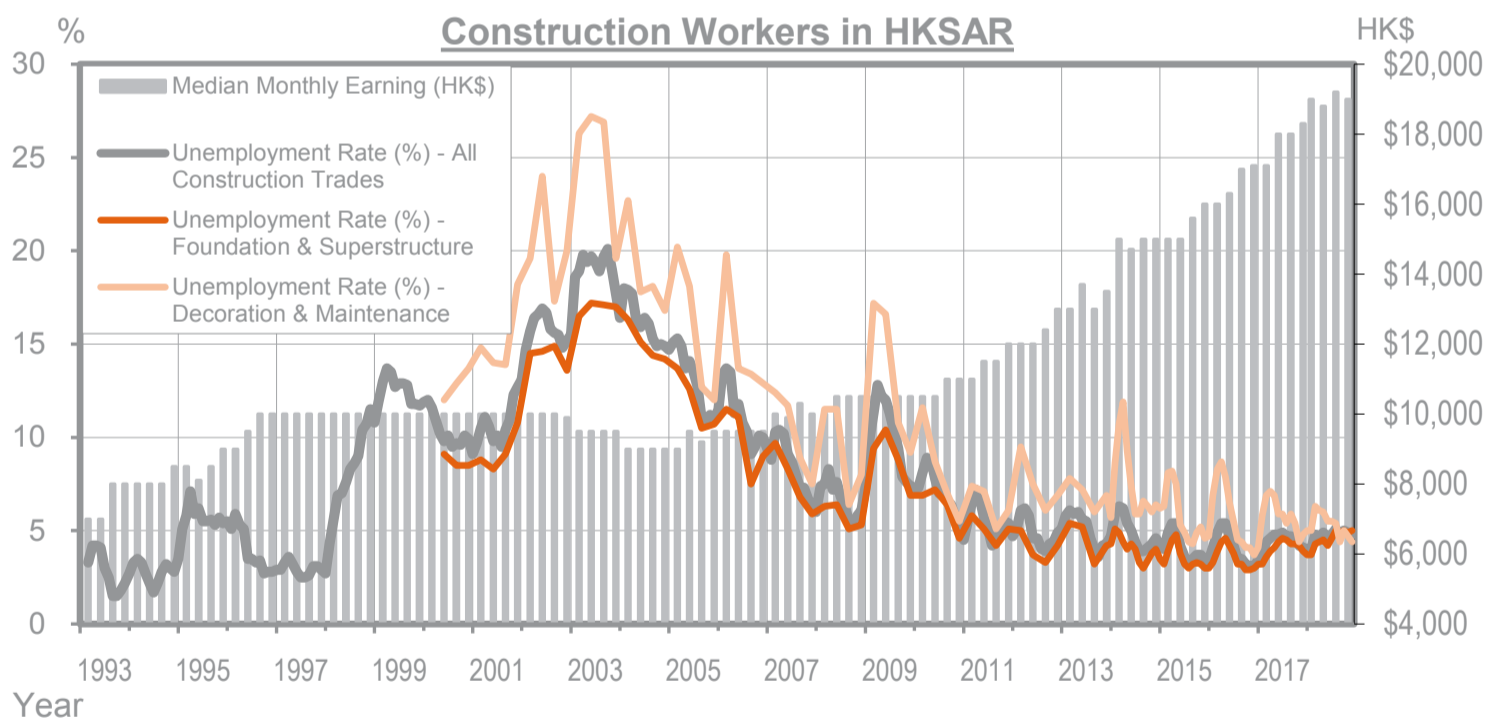
Mainland China

CONSTRUCTION LABOUR PRICES YEAR-ON-YEAR CHANGE			
Quarter / Year	2016	2017	2018
1st Quarter	(+) 3.7%	(+) 3.6%	(+) 3.5%
2nd Quarter	(+) 3.6%	(+) 3.5%	(+) 4.6%
3rd Quarter	(+) 3.3%	(+) 4.0%	(+) 4.8%
4th Quarter	(+) 3.4%	(+) 4.5%	(+) 4.8%

Source : National Bureau of Statistics of China

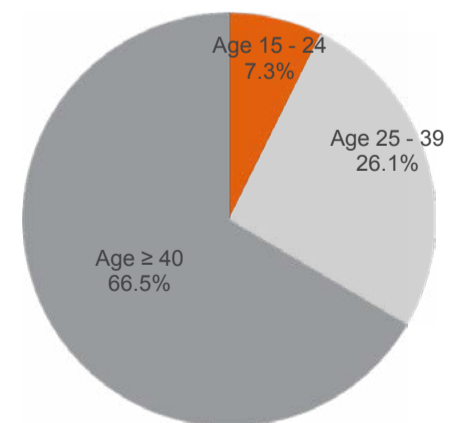


Hong Kong



Age Group	No. of Workers Employed by Construction Industry	
Age 15 - 24	34,506	7.3%
Age 25 - 39	123,095	26.1%
Age ≥ 40	313,379	66.5%
Total (as at June 2018)	470,980	100.0%

Source : Construction Industry Council



Age Distribution of Workers

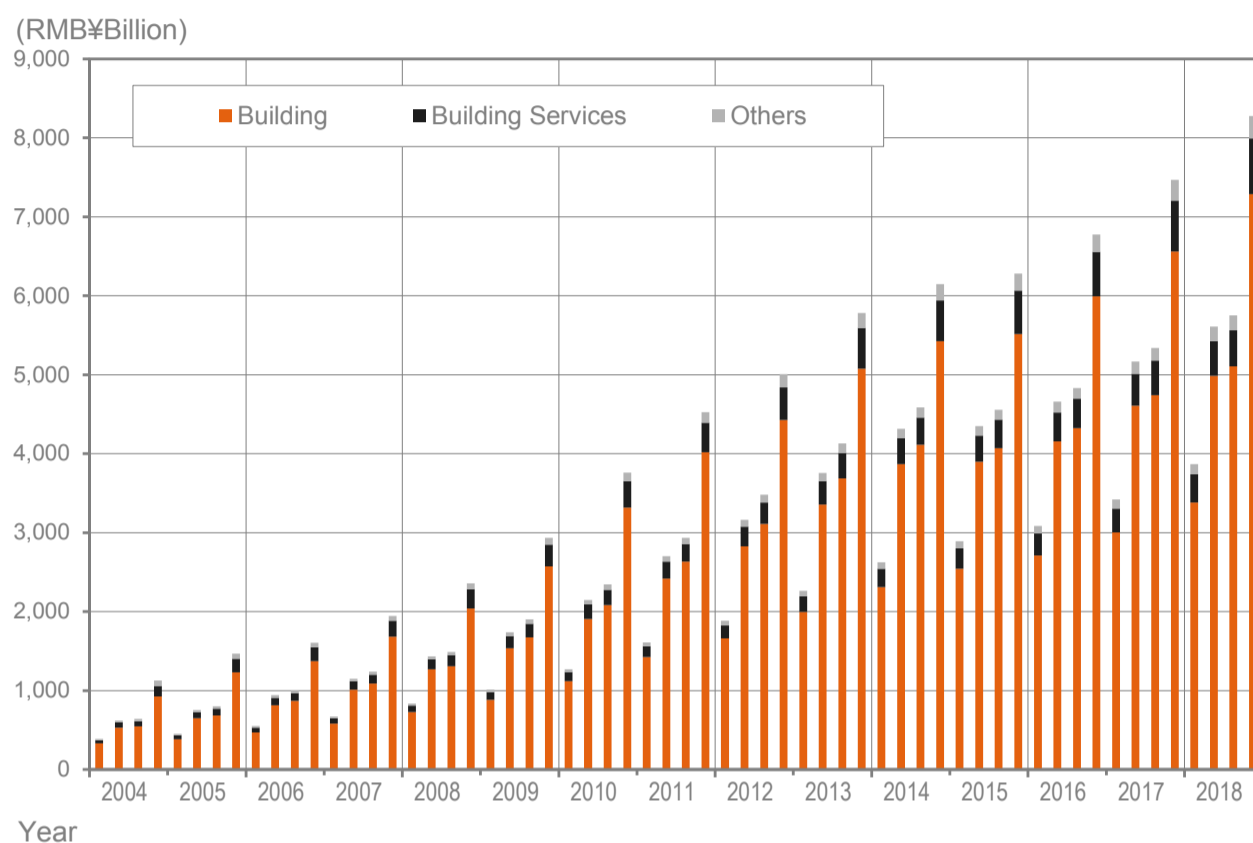


7 GROSS VALUE OF CONSTRUCTION WORK PERFORMED

MAINLAND CHINA

Notes:

1. Value of "Construction" includes builder's works and building services systems.
2. Value of "Installation" is for assembling and installation of equipment for industrial production, power, load-lifting, transportation, medical and laboratory uses, but excludes supply costs of such equipment.
3. Value of "Others" is generally maintenance and other miscellaneous construction activities.



Quarter	Value Performed (RMB¥ Billion)									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
A. Building										
1st Quarter	882	1,118	1,422	1,661	1,994	2,311	2,544	2,712	3,003	3,382
2nd Quarter	1,537	1,906	2,419	2,826	3,355	3,866	3,899	4,158	4,609	4,985
3rd Quarter	1,673	2,082	2,634	3,111	3,687	4,113	4,068	4,322	4,742	5,106
4th Quarter	2,572	3,318	4,016	4,427	5,078	5,425	5,517	5,994	6,562	7,286
Year Total :	6,664	8,424	10,490	12,025	14,115	15,714	16,028	17,186	18,916	20,759
B. Building Services										
1st Quarter	100	115	141	165	200	230	255	277	303	358
2nd Quarter	153	183	214	251	300	333	331	366	405	438
3rd Quarter	173	196	224	271	322	346	363	374	437	459
4th Quarter	277	333	378	413	514	517	548	561	646	708
Year Total :	702	827	957	1,100	1,336	1,426	1,498	1,578	1,791	1,963
C. Others										
1st Quarter	30	38	47	57	69	83	91	96	113	129
2nd Quarter	48	60	69	86	100	118	117	138	154	187
3rd Quarter	56	66	77	97	123	126	126	137	160	189
4th Quarter	86	107	133	166	189	205	216	222	262	282
Year Total :	220	270	326	406	481	531	550	593	689	787
Annual gross value performed (A + B + C)										
Total :	7,586	9,521	11,773	13,530	15,931	17,671	18,076	19,357	21,396	23,509

Source : National Bureau of Statistics of China

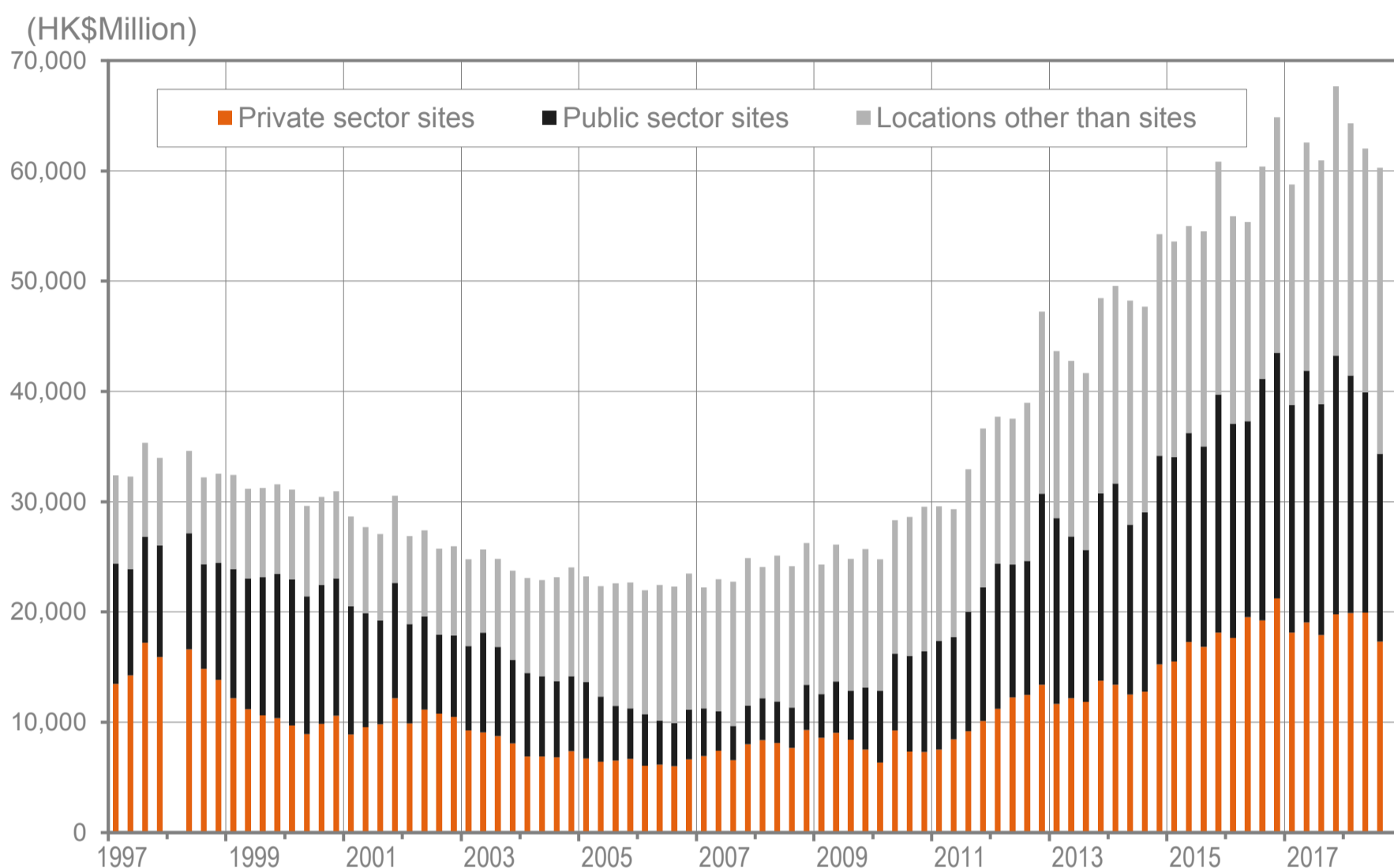
- Note : 1. Value of "Construction" includes builder's works and building services systems.
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 3. Value of "Others" is generally maintenance and other miscellaneous construction activities.



8

GROSS VALUE OF CONSTRUCTION WORK PERFORMED

HONG KONG



Quarter	Value Performed (HK\$ Million)									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
A. Private sector sites										
1st Quarter	8,600	6,349	7,529	11,209	11,675	13,395	15,528	17,652	18,150	19,918
2nd Quarter	9,055	9,276	8,458	12,260	12,176	12,507	17,284	19,530	19,070	19,925
3rd Quarter	8,408	7,360	9,192	12,481	11,848	12,792	16,849	19,252	17,912	17,321*
4th Quarter	7,543	7,322	10,102	13,411	13,781	15,259	18,119	21,231	19,813	
Year Total :	33,606	30,307	35,281	49,361	49,480	53,953	67,781	77,666	74,945	57,164*
B. Public sector sites										
1st Quarter	3,967	6,511	9,880	13,168	16,829	18,258	18,531	19,414	20,639	21,533
2nd Quarter	4,652	6,937	9,263	12,023	14,690	15,397	18,964	17,780	22,827	20,002
3rd Quarter	4,428	8,651	10,814	12,137	13,792	16,253	18,163	21,878	20,934	17,010*
4th Quarter	5,605	9,117	12,113	17,332	16,976	18,915	21,585	22,295	23,455	
Year Total :	18,652	31,216	42,070	54,660	62,287	68,823	77,242	81,367	87,855	58,545*
C. Location other than sites										
1st Quarter	11,750	11,926	12,172	13,347	15,140	17,909	19,549	18,809	19,963	22,871
2nd Quarter	12,415	12,109	11,620	13,245	15,914	20,327	18,744	18,041	20,657	22,073
3rd Quarter	11,969	12,620	12,953	14,358	16,038	18,636	19,520	19,274	22,093	25,965*
4th Quarter	12,552	13,097	14,439	16,479	17,716	20,088	21,111	21,333	24,406	
Year Total :	48,686	49,752	51,184	57,429	64,808	76,961	78,924	77,458	87,119	70,909*
Annual gross value performed (A + B + C)										
Total :	100,944	111,275	128,535	161,450	176,575	199,737	223,946	236,491	249,919	186,618*

*Provisional

Source : Census and Statistics Department, Hong Kong SAR



9 APPROXIMATE BUILDING COSTS FOR MAJOR CITIES

ASIA

BUILDING TYPE	Shanghai	Beijing	Guangzhou/Shenzhen	Chongqing/Chengdu
	RMB / m2 CFA			
DOMESTIC				
Apartments, high rise, average standard				
- Shell and core	2,709 - 3,124	2,687 - 3,099	2,501 - 2,772	2,481 - 2,913
- Full fit	4,636 - 5,136	4,254 - 4,671	3,706 - 4,095	3,831 - 4,587
Apartments, high rise, high end				
- Shell and core	3,308 - 3,604	3,170 - 4,599	2,616 - 3,450	3,063 - 4,062
- Full fit	10,785 - 11,777	10,299 - 11,729	6,066 - 6,649	6,295 - 7,974
Terraced houses, average standard				
- Shell and core	3,095 - 3,310	3,102 - 3,623	2,811 - 3,095	3,088 - 3,755
- Full fit	N/A	6,085 - 6,597	N/A	N/A
Detached houses, high end				
- Shell and core	4,622 - 5,136	4,671 - 5,198	3,838 - 4,226	4,102 - 4,733
- Full fit	N/A	11,694 - 12,205	N/A	N/A
OFFICE / COMMERCIAL				
Medium/high rise offices, average standard	6,024 - 8,023	5,948 - 8,009	5,392 - 5,968	6,121 - 7,114
High rise offices, prestige quality	8,037 - 10,028	8,009 - 13,151	7,856 - 9,445	7,787 - 10,549
Out-of-town shopping centre, average standard	N/A	4,532 - 6,059	5,198 - 5,705	4,900 - 6,329
Retail malls, high end	8,522 - 11,000	8,196 - 11,284	7,551 - 10,556	7,405 - 10,445
INDUSTRIAL				
Industrial units, shell only. (Conventional single storey framed unit)	1,943 - 2,373	1,874 - 2,283	3,449 - 3,796	2,956 - 3,761
Owner operated factories, low rise, light weight industry	2,998 - 3,748	3,623 - 4,150	N/A	N/A
HOTEL				
Budget hotels - 3-star, mid market	6,607 - 8,113	6,704 - 8,266	6,836 - 7,523	6,649 - 8,252
Business hotels - 4/5-star	10,799 - 14,713	11,208 - 14,796	11,048 - 15,775	12,124 - 15,185
Luxury hotels - 5-star	14,692 - 17,614	14,276 - 18,363	15,025 - 16,559	14,983 - 17,988
OTHERS				
Underground/basement car parks (<3 levels)	5,149 - 7,169	5,177 - 5,691	3,560 - 5,691	2,866 - 4,088
Multi storey car parks, above ground (<4 levels)	2,651 - 3,692	3,116 - 3,151	2,547 - 2,804	2,249 - 2,811
Schools (primary and secondary)	3,664 - 4,691	3,609 - 4,657	2,825 - 3,109	3,040 - 3,380
Students' residences	2,616 - 3,657	2,554 - 3,609	1,832 - 2,061	N/A
Sports clubs, multi purpose sports/leisure centres (dry sports)	6,628 - 8,134	6,177 - 6,225	5,233 - 5,774	N/A
General hospitals - public sector	9,841 - 12,763	8,120 - 10,167	N/A	N/A

* The above costs are at 4th Quarter 2018 levels.



9 APPROXIMATE BUILDING COSTS FOR MAJOR CITIES

ASIA

BUILDING TYPE	Hong Kong	Macau	Singapore	Kuala Lumpur
	USD / m ² CFA (See also exchange rates per U.S. dollar below)			
DOMESTIC	HK\$ 7.82	MOP 8.07	S\$1.38	RM 4.18
Apartments, high rise, average standard				
- Shell and core	N/A	1,770 - 2,623	N/A	N/A
- Full fit	3,060 - 3,570	2,279 - 2,788	1,305 - 1,485	345 - 580 ^{\$}
Apartments, high rise, high end				
- Shell and core	N/A	2,623 - 3,934	N/A	N/A
- Full fit	4,020 - 4,690	3,183 - 4,864	2,030 - 3,045	710 - 1,120
Terraced houses, average standard				
- Shell and core	N/A	3,107 - 3,858	N/A	N/A
- Full fit	4,130 - 4,860	3,884 - 4,635	1,705 - 1,920	220 - 345 ^{\$\$}
Detached houses, high end				
- Shell and core	N/A	3,756 - 5,411	N/A	N/A
- Full fit	6,140 up	4,737 - 6,163	2,175 - 2,900	740 - 980
OFFICE / COMMERCIAL				
Medium/high rise offices, average standard	2,990 - 3,500	2,623 - 3,387	1,705 - 1,920 [@]	575 - 745 ^{\$\$\$}
High rise offices, prestige quality	3,630 - 4,260	3,387 - 3,705	1,920 - 2,100 [@]	865 - 1,255 ^{\$\$\$}
Out-of-town shopping centre, average standard	2,970 - 3,540	2,470 - 3,705	1,920 - 2,030	550 - 715
Retail malls, high end	3,950 - 4,720	3,884 - 4,686	2,030 - 2,245	680 - 1,000
INDUSTRIAL				
Industrial units, shell only. (Conventional single storey framed unit)	N/A	N/A	725 - 930	320 - 430
Owner operated factories, low rise, light weight industry	2,330 - 2,950	N/A	N/A	430 - 520
HOTEL				
Budget hotels - 3-star, mid market	3,840 - 4,160	3,451 - 3,909	2,140 - 2,355	1,020 - 1,395
Business hotels - 4/5-star	4,020 - 4,720	4,686 - 5,602	2,755 - 3,115	1,720 - 2,175
Luxury hotels - 5-star	4,720 - 5,460	5,602 - 6,621	2,775 - 3,115	1,940 - 2,435
OTHERS				
Underground/basement car parks (<3 levels)	3,200 - 3,840	2,050 - 3,005	930 - 1,255	310 - 530
Multi storey car parks, above ground (<4 levels)	1,920 - 2,280	1,133 - 1,490	640 - 930 ^{@@}	220 - 345
Schools (primary and secondary)	2,520 - 2,710 ^{**}	2,266 - 2,623	N/A	250 - 305 ^{\$\$\$\$}
Students' residences	2,930 - 3,310	1,795 - 2,088	1,560 - 1,705	295 - 360 ^{\$\$\$\$}
Sports clubs, multi purpose sports/leisure centres (dry sports)	3,820 - 4,450	N/A	1,955 - 2,100	595 - 730
General hospitals - public sector	4,950 - 5,580	N/A	2,775 - 2,900	855 - 1,155

* The above costs are at 4th Quarter 2018 levels.



9 APPROXIMATE BUILDING COSTS FOR MAJOR CITIES

ASIA

BUILDING TYPE	Bangkok	Jakarta	Manila
	USD / m ² CFA (See also exchange rates per U.S. dollar below)		
DOMESTIC	BAHT 32.73	IDR 15180.00	PHP 52.88
Apartments, high rise, average standard			
- Shell and core	534 - 687	N/A	N/A
- Full fit	703 - 871	722 - 817	937 - 1,135
Apartments, high rise, high end			
- Shell and core	626 - 809	N/A	N/A
- Full fit	978 - 1,207	996 - 1,124	1,265 - 2,107
Terraced houses, average standard			
- Shell and core	305 - 397	N/A	N/A
- Full fit	458 - 565	383 - 498	762 - 917
Detached houses, high end			
- Shell and core	534 - 763	N/A	N/A
- Full fit	794 - 962	1,042 - 1,165	1,631 - 2,724
OFFICE / COMMERCIAL			
Medium/high rise offices, average standard	642 - 794 [#]	712 - 789	933 - 1,076
High rise offices, prestige quality	871 - 1,176 ^{##}	1,050 - 1,174	1,264 - 1,390
Out-of-town shopping centre, average standard	626 - 810	611 - 675	762 - 935
Retail malls, high end	840 - 886	675 - 730	1,093 - 1,508
INDUSTRIAL			
Industrial units, shell only. (Conventional single storey framed unit)	489 - 611	327 - 356	485 - 538
Owner operated factories, low rise, light weight industry	N/A	355 - 392	685 - 789
HOTEL			
Budget hotels - 3-star, mid market	1,146 - 1,268	1,237 - 1,461	1,195 - 1,312
Business hotels - 4/5-star	1,466 - 1,680	1,691 - 1,827	1,347 - 1,607
Luxury hotels - 5-star	1,711 - 1,986	1,801 - 2,030	1,851 - 2,524
OTHERS			
Underground/basement car parks (<3 levels)	550 - 733	505 - 619	494 - 610
Multi storey car parks, above ground (<4 levels)	183 - 299	327 - 356	475 - 661
Schools (primary and secondary)	N/A	N/A	701 - 952
Students' residences	N/A	N/A	742 - 937
Sports clubs, multi purpose sports/leisure centres (dry sports)	N/A	1,095 - 1,640	1,186 - 1,699
General hospitals - public sector	N/A	N/A	1,287 - 1,523

* The above costs are at 4th Quarter 2018 levels.



9 APPROXIMATE BUILDING COSTS FOR MAJOR CITIES

ASIA

BUILDING TYPE	OUTLINE SPECIFICATION
DOMESTIC	
Apartments, high rise, average standard	<u>Shell and core</u> , including finishes to public area, but <u>excluding</u> finishes to apartment units <u>Full fit</u> , with air-conditioning, kitchen cabinets and home appliances, but <u>excluding</u> decorative light fittings and loose furniture
Apartments, high rise, high end	<u>Shell and core</u> , including finishes to public area, but <u>excluding</u> finishes to apartment units <u>Full fit</u> , good quality provisions, with air-conditioning, kitchen cabinets and home appliances, but <u>excluding</u> decorative light fittings and loose furniture
Terraced houses, average standard	<u>Shell and core</u> , joined houses in row(s), <u>excluding</u> garden, parking, finishes and fittings to house interior <u>Full fit</u> , joined houses in row(s), with air-conditioning, kitchen cabinets and home appliances, but <u>excluding</u> decorative light fittings, loose furniture, garden and parking
Detached houses, high end	<u>Shell and core</u> , good quality facade, <u>excluding</u> garden, parking, finishes and fittings to house interior <u>Full fit</u> , good quality provisions, with air-conditioning, kitchen cabinets and home appliances, but <u>excluding</u> decorative light fittings, loose furniture, garden and parking
OFFICE / COMMERCIAL	
Medium/high rise offices, average standard	RC structure, curtain wall, including public area fit-out, tenant area with raised floor/ carpet, painted wall and false ceiling
High rise offices, prestige quality	
Out-of-town shopping centre, average standard	Including public area fit-out and M&E, but <u>excluding</u> shop fit-out
Retail malls, high end	
INDUSTRIAL	
Industrial units, shell only (Conventional single storey framed unit)	RC structure with steel roof and M&E to main distribution, but <u>excluding</u> a/c, heating and lighting
Owner operated factories, low rise, light weight industry	RC structure, including small office with simple fit-out and M&E, but <u>excluding</u> a/c and heating
HOTEL	
Budget hotels - 3-star, mid market	1) Interior decoration 2) Furniture (fixed and movable) 3) Special light fittings (chandeliers, etc.) 4) Operating Supplies and Equipment (OS&E) excluded
Business hotels - 4/5-star	
Luxury hotels - 5-star	
OTHERS	
Underground/basement car parks (<3 levels)	RC structure
Multi storey car parks, above ground (<4 levels)	RC structure, natural ventilation, no facade enclosure
Schools (primary and secondary)	Including fit-out and a/c, but <u>excluding</u> educational equipment
Students' residences	Including fit-out, loose furniture and a/c
Sports clubs, multi purpose sports/leisure centres (dry sports)	Dry sports (no swimming pool) and are for 'leisure centre' type schemes including main sports hall, ancillary sports facilities, changing and showers, restaurant / cafe, bar, etc. Costs include a/c, Furniture, Fittings and Equipment (FF&E)
General hospital - public sector	<u>Excluding</u> medical and operating equipment

Notes:

- The costs for the respective categories given above are averages based on fixed price competitive tenders. It must be understood that the actual cost of a building will depend upon the design and many other factors and may vary from the figures shown.
- The costs per square metre are based on Construction Floor Areas (CFA) measured to the outside face of the external walls / external perimeter including lift shafts, stairwells, balconies, plant rooms, water tanks and the like.
- All buildings are assumed to have no basements (except otherwise stated) and are built on flat ground, with normal soil and site conditions. The cost excludes site formation works, external works, land cost, professional fees, finance and legal expenses.
- The standard for each category of building varies from region to region and do not necessarily follow that of each other.
- "Shell and core" generally covers ONLY base building elements. "Shell" refers to overall structure and foundations, exterior walls, floors and roof, completing with common areas, staircases, lift shafts, service ducts and fire services systems to local statutory requirements. "Core" refers to fully-fitted public areas (like lobbies, corridors and lavatories) and M&E main plant and upfeed, with tenant or occupant areas unfurnished.
- "Full fit" buildings should complete with all elements that allow the buildings to be ready for operation, including public and tenants' (or occupants') areas (i.e. with ALL finishes, fittings and M&E distributions).
- Fluctuation in exchange rates may lead to changes in construction costs expressed in U.S. dollars.
- Hong Kong: ** Public authority standard, no a/c and complete with basic external works Singapore: @ Excluding carpet @@ Open on all sides with parapet
Kuala Lumpur \$ 6-12 units per floor, 46m² - 83m² per unit; excluding air-conditioning \$\$ Excluding air-conditioning, Kitchen cabinets and home appliances \$\$\$ Exclude Tenant fit-out \$\$\$\$ Standard government provisions \$\$\$\$ University standard Bangkok # (i) Excluding raised floor/carpet and inter-tenancy partition (ii) Facade in windows and brick wall/pre-cast concrete panel ## Excluding raised floor/carpet and inter-tenancy partition



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