

SINGAPORE

QUARTERLY CONSTRUCTION COST REVIEW





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SINGAPORE MARKET OVERVIEW



The Ministry of Trade and Industry (MTI) announced that the Singapore economy grew by 1.0% year-on-year for 4Q2019. For the whole year of 2019, the economy grew by 0.7%, slower than the 3.4% growth recorded in 2018.

Construction sector has continued to perform well with its fourth consecutive quarter of year-on-year expansion. It grew by 4.3% in 4Q2019, representing a 2.8% growth for the whole year of 2019, a turnaround from the 3.5% contraction in 2018. The expansion was supported by both public and private construction works.

Based on Arcadis Singapore's data, tender prices for 2019 have increased approximately 0.5% year-on-year (i.e. 4th Quarter 2019 versus 4th Quarter 2018). Looking ahead, the sluggish global economic growth coupled with

anticipated moderate increase in key construction materials prices, tender prices are anticipated to remain competitive as contractors are filling up their order books.

Nonetheless, the price movement (if any) for the whole year of 2020 is anticipated to be in the range of 0% to +2%, the actual level depending on the prevailing market sentiment and any adverse ramifications of the prevailing economic instability.

MARKET MOVEMENT



ECONOMY

Indicator

	GDP Growth per annum	Q4/17 - Q4/18 (+) 1.1%	Q3/18 - Q3/19 (+) 0.7%	Q4/18 - Q4/19 (+) 1.0%
	Inflation Rate (CPI) per annum	Dec 17 - 18 (+) 0.5%	Sep 18 - 19 (+) 0.5%	Dec 18 - 19 (+) 0.8%

Source: Ministry of Trade and Industry



SUPPLY & DEMAND

Indicator

	BCA Construction Demand	Q4/18 S\$9.35 Bn	Q3/19 S\$9.62 Bn	Q4/19 S\$8.01 Bn
	BCA Construction Output	Q4/18 S\$6.82 Bn	Q3/19 S\$6.95 Bn	Q4/19 S\$7.51 Bn

Source: Building and Construction Authority



BASIC COSTS

Indicator

	BCA Concrete Price Index	Oct 19 121.7	Nov 19 122.2	Dec 19 122.0
	BCA Steel Reinforcement Price Index	Oct 19 94.5	Nov 19 94.2	Dec 19 93.2

Source: Building and Construction Authority



CONSTRUCTION COST TREND

Indicator

	BCA Tender Price Index	Q4/18 99.7	Q3/19 99.8	Q4/19 100.2
	Arcadis Singapore Tender Price Index	Q4/18 99.7	Q3/19 101.2	Q4/19 100.2

Source: Building and Construction Authority



1 MARKET ANALYSIS

SINGAPORE'S CONSTRUCTION DEMAND

According to the Building and Construction Authority's (BCA) data, total construction demand (based on actual contracts awarded) in 2019 was \$33.5 billion, an increase of approximately 9.8% as compared to 2018.

Public sector construction demand increased from \$18.3 billion in 2018 to \$19 billion in 2019, contributing approximately 57% of the total construction demand. This was mainly driven by increased industrial and institutional building projects in addition to the continued strong demand for civil engineering projects.

Private sector construction demand increased from \$12.2 billion in 2018 to \$14.5 billion in 2019, contributing approximately 43% of the total construction demand. It has surpassed the upper bound forecast of \$13 billion. This was mainly attributed to a stronger than expected increase in industrial construction demand for petrochemical facilities.

Based on BCA's forecast, total construction demand for 2020 (excluding reclamation works and expansion of Integrated Resorts) is projected to reach between \$28 billion and \$33 billion. Public sector construction demand is projected to contribute approximately 62% of the total construction demand at between \$17.5 billion and \$20.5 billion. On the other hand, private sector construction demand is projected to contribute approximately 38% of the total construction demand at between \$10.5 billion and \$12.5 billion.

COMMENCEMENT OF THE BUILDING AND CONSTRUCTION INDUSTRY SECURITY OF PAYMENT (AMENDMENT) ACT 2018 AND (AMENDMENT) REGULATIONS 2019

Changes to the Building and Construction Industry Security of Payment Act (Cap 30B) ("SOP Act") governing the statutory adjudication regime for the building and construction industry has come into effect on 15 December 2019.

The key amendments that came into force are as follows:

- Scope of the SOP Act is expanded to include contracts relating to prefabrication components for:
 - Prefabrication works carried out outside Singapore for local projects;
 - Prefabrication work carried out locally for export overseas, where both contracting parties are locally registered
- For contracts that have been terminated, it is clarified that SOP Act is applicable for claims for work done before termination. However, contract provisions that allows suspension of payment have to be followed.
- Adjudicators are not required to consider complicated claims involving damages, losses and expenses unless such claims are supported by:
 - Document showing agreement of the quantum between the parties; or
 - Certificate or other document required to be issued under the contract
- Adjudicators are precluded from considering any respondent's objection to the payment claim that have not firstly been raised in the payment response unless circumstances of the respondent's objection only arose after the provision of the payment response.
- Interest rate payable on the unpaid amount of a progress payment will be based on the following, whichever is higher:
 - The contractual interest rate or
 - The prescribed interest rate for judgment debts under the Supreme Court of Judicature Act (presently 5.33% per annum).
- Reduction of the 6-year limitation period for serving payment claim to a 30-month limitation period from the latest of the following dates:
 - When the work was last carried out;
 - Issuance of the last contractual document certifying completion; or
 - Issuance date of the last Temporary Occupation Permit (or Certificate of Statutory Completion)
- Various procedural timelines and requirements on submission of claims and responses were amended and/or clarified to enhance the progress payment and adjudication regime.

FIRST HALF 2020 GOVERNMENT LAND SALES (1H2020 GLS) PROGRAMME

The Government announced on 3 December 2019 the 1H2020 GLS Programme which comprises three Confirmed List sites and eight Reserve List sites.

The three Confirmed List sites comprises two private residential sites and one commercial & residential site which can yield about 1,775 private residential units and 22,000m² Gross Floor Area (GFA) of commercial space.

The eight Reserve List sites are carried over from 2H2019 GLS Programme and comprises four private residential sites, three White sites and one hotel site which can yield about 4,715 private residential units, 92,000m² GFA of commercial space and 1,070 hotel rooms.

FIRST HALF 2020 INDUSTRIAL GOVERNMENT LAND SALES (1H2020 IGLS) PROGRAMME

MTI announced its 1H2020 IGLS Programme on 27 December 2019 which comprises three Confirmed List sites and five Reserve List sites, with a total site area of 7.11 ha.

CONFIRMED LIST				
Location	Site Area (ha)	Proposed Gross Plot Ratio (GPR)	Estimated Launch Date	Sales Agent
Residential Sites				
Yishun Avenue 9 (EC)	2.15	2.8	Apr-20	HDB
Tanah Merah Kechil Link	1.01	2.8	May-20	URA
Commercial & Residential Sites				
Jalan Anak Bukit	3.29	3.0	Jun-20	URA
Industrial Sites				
Plot 1, Jalan Papan	1.23	1.4	Feb-20	JTC
Plot 2, Tampines North Drive 3	0.48	2.5	May-20	JTC
Plot 3, Gambas Avenue/Sembawang Avenue	0.70	2.00	Jun-20	JTC

RESERVE LIST				
Location	Site Area (ha)	Proposed Gross Plot Ratio (GPR)	Estimated Launch Date	Sales Agent
Residential Sites				
Dairy Farm Walk	1.57	2.1	Available	URA
Dunman Road	2.52	3.5	Available	URA
Hillview Rise	1.04	2.8	Available	URA
Tampines Street 62 (EC)	2.38	2.5	Available	HDB
White Sites				
Marina View	0.78	13.0	Available	URA
Woodlands Avenue 2	2.75	4.2	Available	URA
Kampong Bugis	8.29	-	Available	URA
Hotel Sites				
River Valley Road	1.02	2.8	Available	URA
Industrial Sites				
Plot 4, Kaki Bukit Road 5	2.02	2.5	Available	JTC
Plot 20, Tuas South Link 3	0.44	1.4	Jan-20	JTC
160 Gul Circle	0.40	1.4	Feb-20	JTC
Gul Avenue	0.60	1.4	Mar-20	JTC
Plot 2, Jalan Papan	1.24	1.4	Apr-20	JTC

Source: URA press release dated 3 December 2019 & MTI press release dated 27 December 2019



2 APPROXIMATE BUILDING COSTS

SINGAPORE

BUILDING TYPE	S\$/m ² CFA
RESIDENTIAL	
Terraced Houses	2,400 - 2,650
Semi-Detached Houses	2,600 - 3,000
Detached Houses	3,050 - 4,000
Average Standard Condominium	1,850 - 2,050
Above Average Standard Condominium	2,100 - 2,800
Luxury Condominium	2,850 - 4,200
OFFICE	
Average Standard Offices	2,400 - 2,650
Prestige Offices	2,700 - 2,900
COMMERCIAL	
Shopping Centres, Average Quality	2,700 - 2,800
Shopping Centres, High Quality	2,850 - 3,100
CAR PARKS	
Multi-Storey Car Parks	900 - 1,280
Basement Car Parks	1,300 - 1,730
INDUSTRIAL	
Flatted Light Industrial Buildings	1,250 - 1,380
Flatted Heavy Industrial Buildings	1,400 - 1,880
Single Storey Industrial Buildings	1,150 - 1,280
Flatted Warehouses	1,150 - 1,280
Single Storey Warehouses	1,050 - 1,280
HOTEL (INCLUDING FURNITURE AND FITTINGS)	
3-Star Hotels	3,000 - 3,250
4-Star Hotels	3,200 - 3,750
5-Star Hotels	3,850 - 4,300
HEALTH	
Private Hospitals	3,850 - 4,000
Polyclinics, Non Air-conditioned	1,650 - 1,800
Nursing Homes, Non Air-conditioned	1,650 - 1,900
Medical Centres	2,950 - 3,100

The above costs are at 4th Quarter 2019 levels.

Notes:

The construction costs above serve only as a guide for preliminary cost appraisals and budgeting. It must be understood that the actual cost of a building will depend upon the design, site conditions 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, plant rooms, water tanks and the like.

All buildings are assumed to have no basements (unless otherwise stated) and are built on flat ground with normal soil conditions. The costs exclude the following:

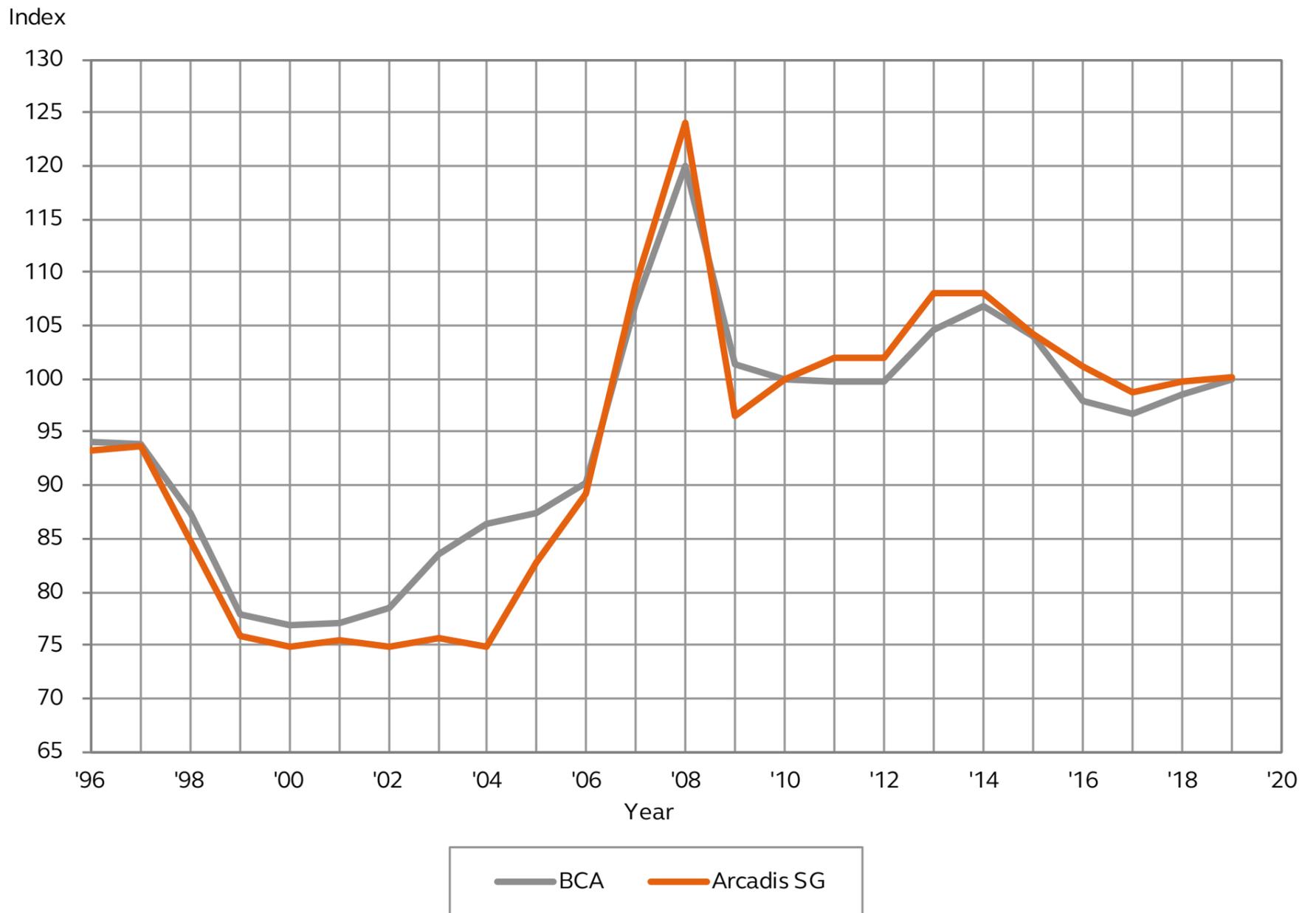
- Professional fees
- Authorities' plan processing charges
- Land cost
- Financing charges
- Site inspectorate
- Administrative expenses
- Legal cost & disbursements
- Demolition of existing building(s)
- Furniture and fittings (unless otherwise stated)
- Operating equipment
- External works
- Prefabricated Prefinished Volumetric Construction (PPVC) / Prefabricated Bathroom Units (PBUs) / Structural steel structure
- Cross Laminated Timber (CLT) / Glued Laminated Timber (Glulam)
- BCA Green Mark Gold and above
- Cost escalation
- Goods and Services Tax



3 TENDER PRICE INDEX

SINGAPORE

Arcadis Singapore TPI is a measure of the comparative tender price movements based on the projects handled by Arcadis Singapore Pte Ltd. The TPI reflects the tender price level of contracts let out over the years. Other than material and labour costs, it takes into account the elements of competition, risk and profits.



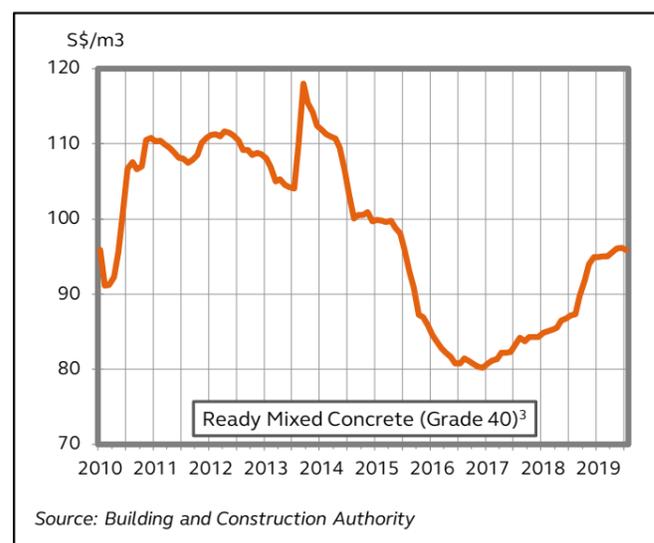
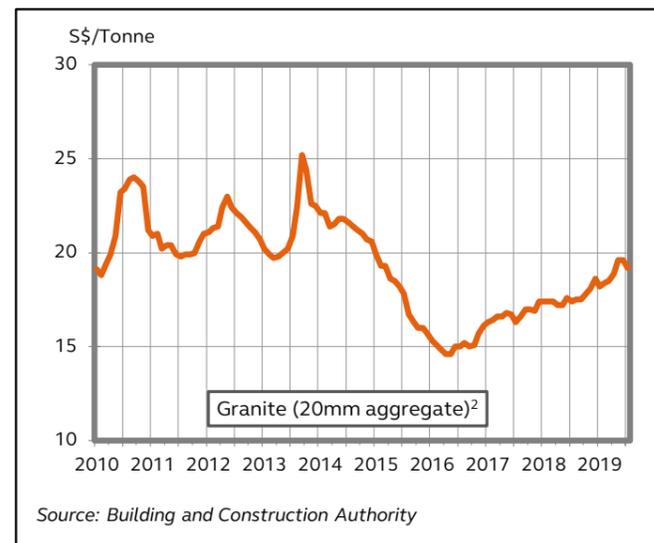
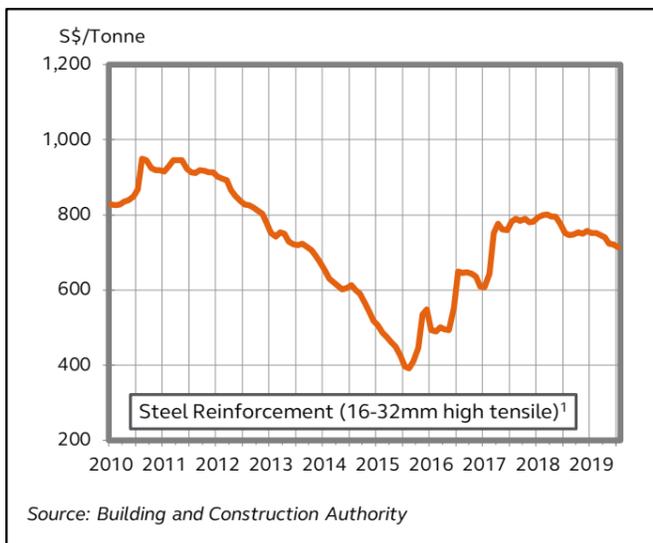
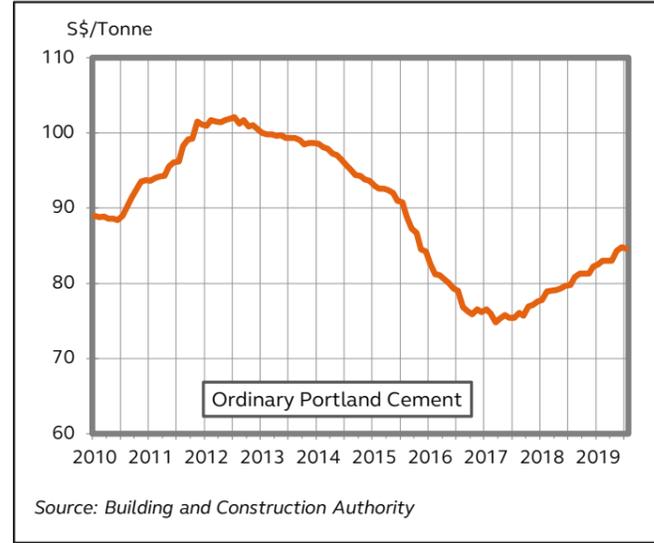
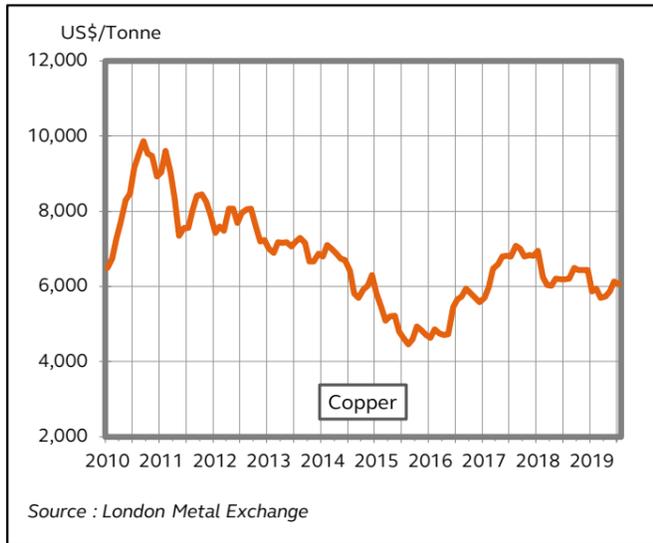
Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
BCA*	100.0	99.7	99.8	104.6	106.8	104.0	98.0	96.7	98.6	99.9
Arcadis SG^	100.0	102.0	102.0	108.1	108.1	104.3	101.2	98.7	99.7	100.2

Source: * Building and Construction Authority (BCA TPI based on average for the whole year)
 ^ From 2009 onwards, Arcadis Singapore TPI based on 4th Quarter Index



4 MATERIALS SINGAPORE

Basic Construction Materials



Notes:

¹ Prices of rebar other than 16-32mm dimensions may subject to surcharge

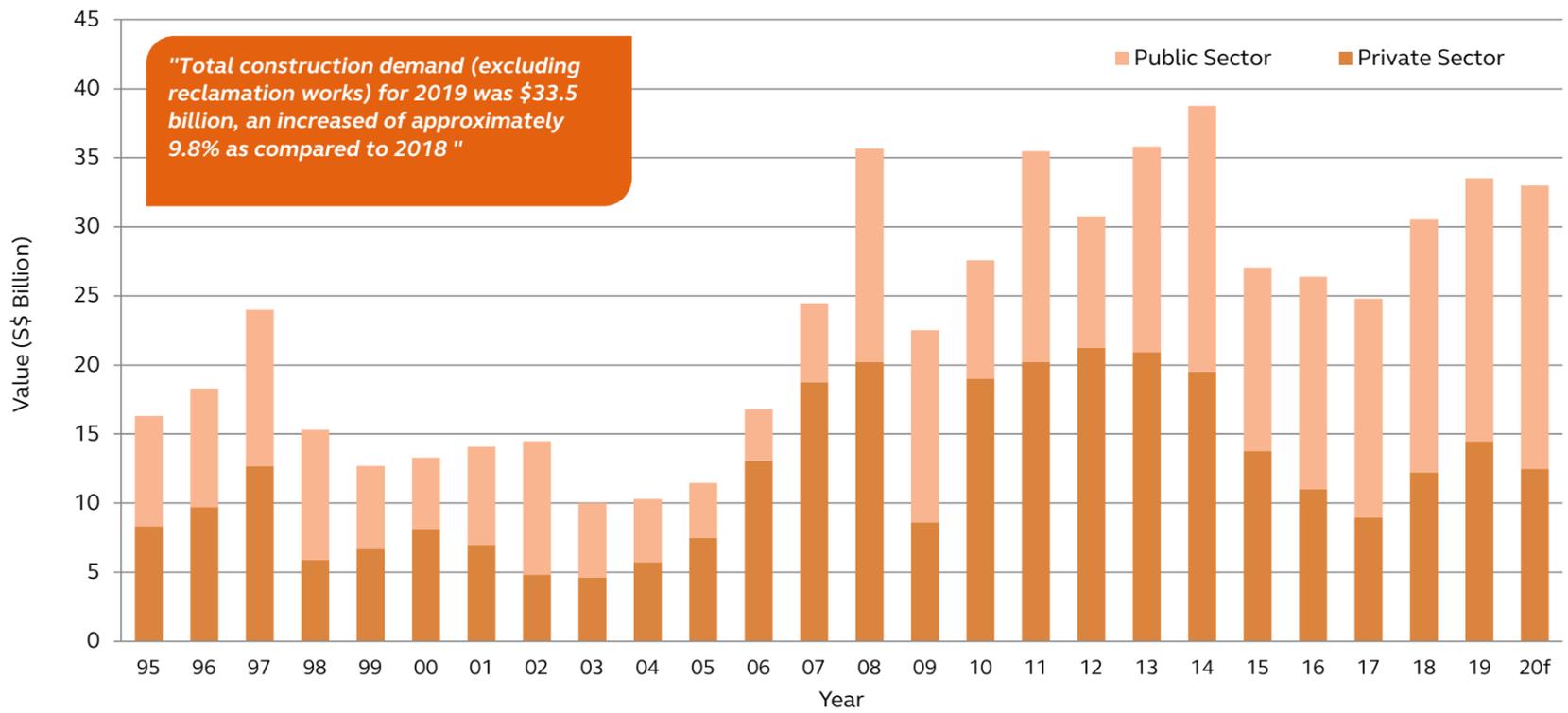
¹ With effect from Jan 2015, the market prices of rebar (without cut & bend) are based on fixed price supply contracts with contract period 1 year or less

² Prices of granite and concreting sand exclude local delivery charges to concrete batching plants

³ The market prices of ready mixed concrete are based on contracts with non-fixed price, fixed price and market retail price for Grade 40 pump



5 CONSTRUCTION DEMAND SINGAPORE



BCA Construction Demand (Exclude Reclamation) (S\$ Billion)												
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Private Sector	8.3	9.7	12.7	5.9	6.7	8.1	7.0	4.8	4.6	5.7	7.5	13.1
Public Sector	8.0	8.6	11.3	9.4	6.0	5.2	7.1	9.6	5.4	4.6	4.0	3.7
Total Value	16.3	18.3	24.0	15.3	12.7	13.3	14.1	14.5	10.0	10.3	11.5	16.8

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Private Sector	18.8	20.2	8.6	19.0	20.2	21.2	20.9	19.5	13.8	11.0	9.0	12.2
Public Sector	5.7	15.5	13.9	8.6	15.3	9.5	14.9	19.2	13.3	15.4	15.8	18.3
Total Value	24.5	35.7	22.5	27.6	35.5	30.8	35.8	38.8	27.0	26.4	24.8	30.5

	2019	2020f
Private Sector	14.5	10.5 - 12.5
Public Sector	19.0	17.5 - 20.5
Total Value	33.5	28.0 - 33.0

Source: Building and Construction Authority

Notes:

1. Construction demand refers to the total value of construction contracts awarded. It is a leading market indicator for the construction industry.
2. f - denotes forecast



6 APPROXIMATE BUILDING COSTS FOR MAJOR CITIES

ASIA

BUILDING TYPE	Shanghai	Beijing	Guangzhou/ Shenzhen	Chongqing/ Chengdu
	RMB/ m ² CFA			
DOMESTIC				
Apartments, high rise, average standard				
- Shell and core	2,931 - 3,342	2,692 - 3,105	2,626 - 2,895	2,631 - 3,063
- Full fit	4,839 - 5,333	4,263 - 4,680	3,819 - 4,204	3,981 - 4,737
Apartments, high rise, high end				
- Shell and core	3,524 - 3,817	3,176 - 4,608	2,740 - 3,566	3,213 - 4,212
- Full fit	10,926 - 11,908	10,320 - 11,752	6,155 - 6,733	6,445 - 8,124
Terraced houses, average standard				
- Shell and core	3,313 - 3,526	3,108 - 3,630	2,783 - 3,065	3,238 - 3,905
- Full fit	N/A	6,097 - 6,610	N/A	N/A
Detached houses, high end				
- Shell and core	4,825 - 5,333	4,680 - 5,208	3,800 - 4,185	4,252 - 4,883
- Full fit	N/A	11,717 - 12,229	N/A	N/A
OFFICE/COMMERCIAL				
Medium/high rise offices, average standard	6,147 - 8,125	5,959 - 8,025	5,339 - 5,909	6,321 - 7,314
High rise offices, prestige quality	7,974 - 9,946	8,025 - 13,178	7,778 - 9,351	7,987 - 10,749
Out-of-town shopping centre, average standard	N/A	4,541 - 6,071	5,147 - 5,648	5,100 - 6,529
Retail malls, high end	8,455 - 10,908	8,213 - 11,307	7,476 - 10,451	7,605 - 10,645
INDUSTRIAL				
Industrial units, shell only (Conventional single storey framed units)	1,914 - 2,340	1,878 - 2,288	3,415 - 3,759	3,106 - 3,911
Owner operated factories, low rise, light weight industry	2,958 - 3,700	3,630 - 4,158	N/A	N/A
HOTELS				
Budget hotels - 3-star, mid market	6,790 - 8,281	6,717 - 8,282	6,768 - 7,448	6,849 - 8,452
Business hotels - 4/5-star	10,940 - 14,815	11,231 - 14,826	10,938 - 15,617	12,324 - 15,385
Luxury hotels - 5-star	14,794 - 17,687	14,304 - 18,400	14,875 - 16,394	15,183 - 18,188
OTHERS				
Underground/basement car parks (<3 levels)	5,073 - 7,072	5,188 - 5,702	3,525 - 5,634	3,016 - 4,238
Multi storey car parks, above ground (<4 levels)	2,600 - 3,630	3,122 - 3,157	2,522 - 2,776	2,399 - 2,961
Schools (primary and secondary)	3,877 - 4,894	3,616 - 4,666	2,797 - 3,079	3,190 - 3,530
Students' residences	2,839 - 3,870	2,559 - 3,616	1,814 - 2,041	N/A
Sports clubs, multi purpose sports/leisure centres (dry sports) with a/c and including FF&E	6,541 - 8,032	6,189 - 6,238	5,181 - 5,717	N/A
General hospitals - public sector	9,992 - 12,884	8,136 - 10,187	N/A	N/A

The above costs are at 4th Quarter 2019 levels.



6 APPROXIMATE BUILDING COSTS FOR MAJOR CITIES

ASIA

BUILDING TYPE	Hong Kong	Macau	Singapore	Kuala Lumpur
	USD/ m2 CFA (See also exchange rates per U.S. dollar below)			
	HK\$ 7.82	MOP 8.060	S\$ 1.38	RM 4.15
DOMESTIC				
Apartments, high rise, average standard				
- Shell and core	N/A	1,734 - 2,570	N/A	N/A
- Full fit	3,020 - 3,490	2,233 - 2,731	1,340 - 1,485	300 - 585 \$
Apartments, high rise, high end				
- Shell and core	N/A	2,570 - 3,854	N/A	N/A
- Full fit	3,910 - 4,550	3,118 - 4,765	2,065 - 3,045	700 - 1,375
Terraced houses, average standard				
- Shell and core	N/A	3,044 - 3,780	N/A	N/A
- Full fit	4,120 - 4,770	3,805 - 4,541	1,740 - 1,920	215 - 345 \$\$
Detached houses, high end				
- Shell and core	N/A	3,680 - 5,301	N/A	N/A
- Full fit	6,040 up	4,641 - 6,038	2,210 - 2,900	730 - 990
OFFICE/COMMERCIAL				
Medium/high rise offices, average standard	2,950 - 3,410*	2,570 - 3,318	1,740 - 1,920@	570 - 750 \$\$\$
High rise offices, prestige quality	3,550 - 4,120	3,318 - 3,630	1,955 - 2,100@	855 - 1,265 \$\$\$
Out-of-town shopping centre, average standard	2,940 - 3,450	2,420 - 3,630	1,955 - 2,030	540 - 720
Retail malls, high end	3,840 - 4,580	3,805 - 4,591	2,065 - 2,245	670 - 1,005
INDUSTRIAL				
Industrial units, shell only (Conventional single storey framed units)	N/A	N/A	760 - 930	315 - 435
Owner operated factories, low rise, light weight industry	2,290 - 2,880	N/A	N/A	425 - 525
HOTELS				
Budget hotels - 3-star, mid market	3,800 - 4,040	3,381 - 3,830	2,175 - 2,355	1,005 - 1,405
Business hotels - 4/5-star	3,940 - 4,580	4,591 - 5,488	2,790 - 3,115	1,325 - 2,190
Luxury hotels - 5-star	4,580 - 5,270	5,488 - 6,487	2,790 - 3,115	1,910 - 2,455
OTHERS				
Underground/basement car parks (<3 levels)	3,200 - 3,840	2,008 - 2,944	940 - 1,255	310 - 535
Multi storey car parks, above ground (<4 levels)	1,920 - 2,280	1,110 - 1,460	650 - 930@@	215 - 345
Schools (primary and secondary)	2,490 - 2,690**	2,220 - 2,570	N/A	245 - 310 \$\$\$\$
Students' residences	2,860 - 3,250	1,759 - 2,046	1,595 - 1,705	295 - 365 \$\$\$\$\$
Sports clubs, multi purpose sports/leisure centres (dry sports) with a/c and including FF&E	3,750 - 4,320	N/A	1,995 - 2,100	585 - 735
General hospitals - public sector	4,800 - 5,350	N/A	2,790 - 2,900	840 - 1,160

The above costs are at 4th Quarter 2019 levels.



6 APPROXIMATE BUILDING COSTS FOR MAJOR CITIES

ASIA

BUILDING TYPE	Bangkok	Bangalore	Manila	Ho Chi Minh
	USD/ m2 CFA (See also exchange rates per U.S. dollar below)			
	BAHT 29.96	INR 70.34	PHP 51.05	VND 23,300
DOMESTIC				
Apartments, high rise, average standard				
- Shell and core	584 - 751	495 - 550	N/A	N/A
- Full fit	801 - 951	565 - 645	968 - 1,197	650 - 806
Apartments, high rise, high end				
- Shell and core	684 - 885	725 - 865	N/A	N/A
- Full fit	1,068 - 1,319	850 - 1,025	1,287 - 2,276	827 - 948
Terraced houses, average standard				
- Shell and core	334 - 434	320 - 345	N/A	N/A
- Full fit	501 - 618	390 - 410	942 - 1,153	438 - 514
Detached houses, high end				
- Shell and core	584 - 835	425 - 450	N/A	N/A
- Full fit	868 - 1,052	515 - 540	1,830 - 3,103	500 - 610
OFFICE/COMMERCIAL				
Medium/high rise offices, average standard	801 - 951 #	425 - 460	958 - 1,152	760 - 880
High rise offices, prestige quality	1,002 - 1,285 ##	530 - 565	1,287 - 1,616	877 - 1,195
Out-of-town shopping centre, average standard	684 - 885	415 - 450	814 - 1,014	N/A
Retail malls, high end	918 - 968	580 - 625	1,112 - 1,558	710 - 930
INDUSTRIAL				
Industrial units, shell only (Conventional single storey framed units)	534 - 668	335 - 390	519 - 584	312 - 393
Owner operated factories, low rise, light weight industry	N/A	355 - 415	697 - 872	353 - 465
HOTELS				
Budget hotels - 3-star, mid market	1,252 - 1,385	800 - 885	1,216 - 1,356	1,410 - 1,725
Business hotels - 4/5-star	1,602 - 1,836	1,245 - 1,475	1,371 - 2,290	N/A
Luxury hotels - 5-star	1,869 - 2,170	1,570 - 1,720	1,884 - 3,158	1,780 - 2,137
OTHERS				
Underground/basement car parks (<3 levels)	601 - 801	280 - 300	502 - 750	645 - 770
Multi storey car parks, above ground (<4 levels)	200 - 327	225 - 245	483 - 683	415 - 455
Schools (primary and secondary)	N/A	280 - 315	713 - 984	545 - 595
Students' residences	N/A	300 - 335	755 - 968	545 - 700
Sports clubs, multi purpose sports/leisure centres (dry sports) with a/c and including FF&E	N/A	590 - 615	1,207 - 1,756	806 - 862
General hospitals - public sector	N/A	645 - 705	1,450 - 1,665	N/A

The above costs are at 4th Quarter 2019 levels.



6 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	Excluding 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: * (i) Tenant areas include screeded floor, painted wall and ceiling (ii) Facade in curtain wall/window wall ** 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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