

SINGAPORE

QUARTERLY CONSTRUCTION COST REVIEW





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SINGAPORE MARKET OVERVIEW

Singapore's gross domestic product (GDP) grew moderately in the second quarter of 2018 at a rate of 3.9% year-on-year (YoY), easing off slightly from the 4.5% growth rate seen in the previous three months. This tapering off growth can be attributed to a weakening in the construction sector, where demand contracted at a rate of 4.6% YoY in 2Q2018.

Slowed demand in both the private and public construction sectors contributed to the city-state's slump, resulting in the Singapore government taking steps to support the market and ensure stability, specifically through the introduction of grants and programmes:

1. The Government Land Sales (GLS) programme for the second half of 2018 provides a healthy supply of private projects yielding a total of 8,040 residential units, 124,200m² of commercial space and up to 930 hotel rooms.

2. To tackle speculative demand, aggressive land bids and residential property price inflation, the government introduced pre-emptive measures to target developers and sharply increase buyers' stamp duties for such entities.

3. From 1 July 2018, the S\$5 million enhanced Innovation Grant (iGrant) by Building and Construction Authority (BCA) with the funding support from Ministry of National Development (MND) expanded its brief to include Integrated Digital Delivery (IDD) proposals. This is to encourage the adoption of innovative digital solutions across the entire value chain of the industry.

MARKET MOVEMENT



ECONOMY

Indicator	Q2/16 - Q2/17	Q1/17 - Q1/18	Q2/17 - Q2/18
GDP Growth per annum	Q2/16 - Q2/17 (+) 2.8%	Q1/17 - Q1/18 (+) 4.5%	Q2/17 - Q2/18 (+) 3.9%
Inflation Rate (CPI) per annum	Jun 16 - 17 (+) 0.5%	Mar 17 - 18 (+) 0.2%	Jun 17 - 18 (+) 0.6%

Source: Ministry of Trade and Industry



SUPPLY & DEMAND

Indicator	Q2/17	Q1/18	Q2/18p
BCA Construction Demand	Q2/17 S\$4.88 Bn	Q1/18 S\$8.27 Bn	Q2/18p S\$5.60 Bn
BCA Construction Output	Q2/17 S\$6.78 Bn	Q1/18 S\$6.52 Bn	Q2/18p S\$6.40 Bn

Source: Building and Construction Authority
p- denotes preliminary data



BASIC COSTS

Indicator	Apr 18	May 18	Jun 18
BCA Concrete Price Index	Apr 18 105.9	May 18 106.1	Jun 18 106.8
BCA Steel Reinforcement Price Index	Apr 18 101.9	May 18 102.0	Jun 18 103.6

Source: Building and Construction Authority



CONSTRUCTION COST TREND

Indicator	Q2/17	Q1/18	Q2/18
BCA Tender Price Index	Q2/17 96.2	Q1/18 97.4	Q2/18 98.5
Arcadis Singapore Tender Price Index	Q2/17 98.7	Q1/18 98.7	Q2/18 99.7

Source: Building and Construction Authority



1 MARKET ANALYSIS

PUBLIC SECTOR PROJECTS REMAIN AS THE KEY CONTRIBUTOR TO SINGAPORE'S CONSTRUCTION MARKET

According to the BCA's preliminary data, total construction demand (based on actual contracts awarded) for 2Q2018 declined by approximately 32% to S\$5.6 billion as compared to 1Q2018. This was mainly attributed to a 50% decline in private construction demand due to a lack of commercial, industrial and institutional and other projects. Residential projects, on the other hand, increased by approximately 27% and contributed to 57% of the total private construction demand.

Public construction demand accounted for approximately 66% of the total demand albeit declining by 18% quarter-on-quarter when compared to 1Q2018. The decline was mainly due to institutional & others and civil engineering projects.

GOVERNMENT LAND SALES MAINTAIN YIELD FOR PRIVATE RESIDENTIAL UNITS AND RAMP UP COMMERCIAL REAL ESTATE SUPPLY

The GLS programme for the second half of 2018 was announced by the Urban Redevelopment Authority (URA) on 27 June 2018 and released six Confirmed List sites and nine Reserve List sites.

The six Confirmed List sites comprise of four private residential sites, one White site and one Hotel site. While the nine Reserve List sites comprise seven private residential sites and two White sites.

The White site is a land parcel with flexible uses, although the government is likely to specify some requirement for the land use, to keep in line with the administration's planning objectives.

The total land sales for the second half of the year can yield up to 8,040 private residential units, 124,200m² gross floor area (GFA) of commercial space and up to 930 hotel rooms.

This rollout by the URA keeps the total pipeline of residential units at roughly the same level as the first half 2018, during which a total of 8,045 residential units were made available. The release of private residential land units has been fuelled by a strong property market, local developers' growing appetite for land and rising land transaction volumes in the city-state.

To meet the varying real estate needs in Singapore, the land sale programme included the first hotel site offered by the government in five years. In so doing, the government has anticipated and allowed for the supply of hotel rooms to meet the projected demand growth expected in the tourism industry over the next few years.

NEW LEGISLATION ANNOUNCED TO CURB RESIDENTIAL PROPERTY PRICES

Private residential prices have been rising substantially since 3Q2017 with no sign of declining. Over the last year, property prices have escalated as a result of speculative demand that was further exacerbated in recent months by en-bloc sales, where a group of owners would come together to sell a group of apartments.

To clampdown on a spiralling property market, the government made an unexpected announcement on 5 July 2018 on the new adjustments to the Additional Buyer Stamp Duty (ABSD) rates and Loan-to-Value (LTV) limits on residential property purchased on or after 6 July 2018. Accordingly, this new measure was made to cool the property market and keep price increases in line with economic fundamentals.

The increase in ABSD rates will require developers to pay an additional 5% in non-remissible ABSD and an additional 10% in remissible ABSD. Inevitably, this is expected to affect future land acquisition in the residential market.

Since the implementation of the above, some of the collective sale sites have extended their tender closing date to allow developers to observe and re-assess the market.

INNOVATION GRANT (IGRANT) EXPANDED TO INCLUDE INTEGRATED DIGITAL DELIVERY (IDD) PROPOSALS

To fully harness the capability of BIM and improve overall construction productivity, the government rolled out a 2-Stage iGrant in 2013 to encourage and support technology advancements in the building and construction industry.

From 1 July 2018, the existing grant focus areas of Construction Productivity, Safety, Quality and Maintainability will be expanded to include Integrated Digital Delivery (IDD), where innovative digital solutions can be deployed to provide a seamless integration of construction-related activities and processes, and the associated information flow.

iGrant would provide funding support for technology innovators and industry players that are keen to innovate, re-engineer their business and pilot emerging digital solutions in the sector. The S\$5 million grant will be available until 31 October 2020 and will operate on a co-funding basis with up to 70% for Stage 1: Proof-of-Concept study and up to 70% for Stage 2: Project Implementation.



2 APPROXIMATE BUILDING COSTS

SINGAPORE

BUILDING TYPE	S\$/m ² CFA
RESIDENTIAL	
Terraced Houses	2,350 - 2,650
Semi-Detached Houses	2,550 - 3,000
Detached Houses	3,000 - 4,000
Average Standard Condominium	1,800 - 2,050
Above Average Standard Condominium	2,050 - 2,800
Luxury Condominium	2,800 - 4,200
OFFICE	
Average Standard Offices	2,350 - 2,650
Prestige Offices	2,650 - 2,900
COMMERCIAL	
Shopping Centres, Average Quality	2,650 - 2,800
Shopping Centres, High Quality	2,800 - 3,100
CAR PARKS	
Multi-Storey Car Parks	880 - 1,280
Basement Car Parks	1,280 - 1,730
INDUSTRIAL	
Flatted Light Industrial Buildings	1,230 - 1,380
Flatted Heavy Industrial Buildings	1,380 - 1,880
Single Storey Industrial Buildings	1,130 - 1,280
Flatted Warehouses	1,130 - 1,280
Single Storey Warehouses	1,000 - 1,280
HOTEL (Including Furniture and Fittings)	
3-Star Hotels	2,950 - 3,250
4-Star Hotels	3,150 - 3,750
5-Star Hotels	3,800 - 4,300
HEALTH	
Private Hospitals	3,800 - 4,000
Polyclinics, non air-conditioned	1,600 - 1,800
Nursing Homes, non air-conditioned	1,600 - 1,900
Medical Centres	2,900 - 3,100

The above costs are at 2nd Quarter 2018 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:

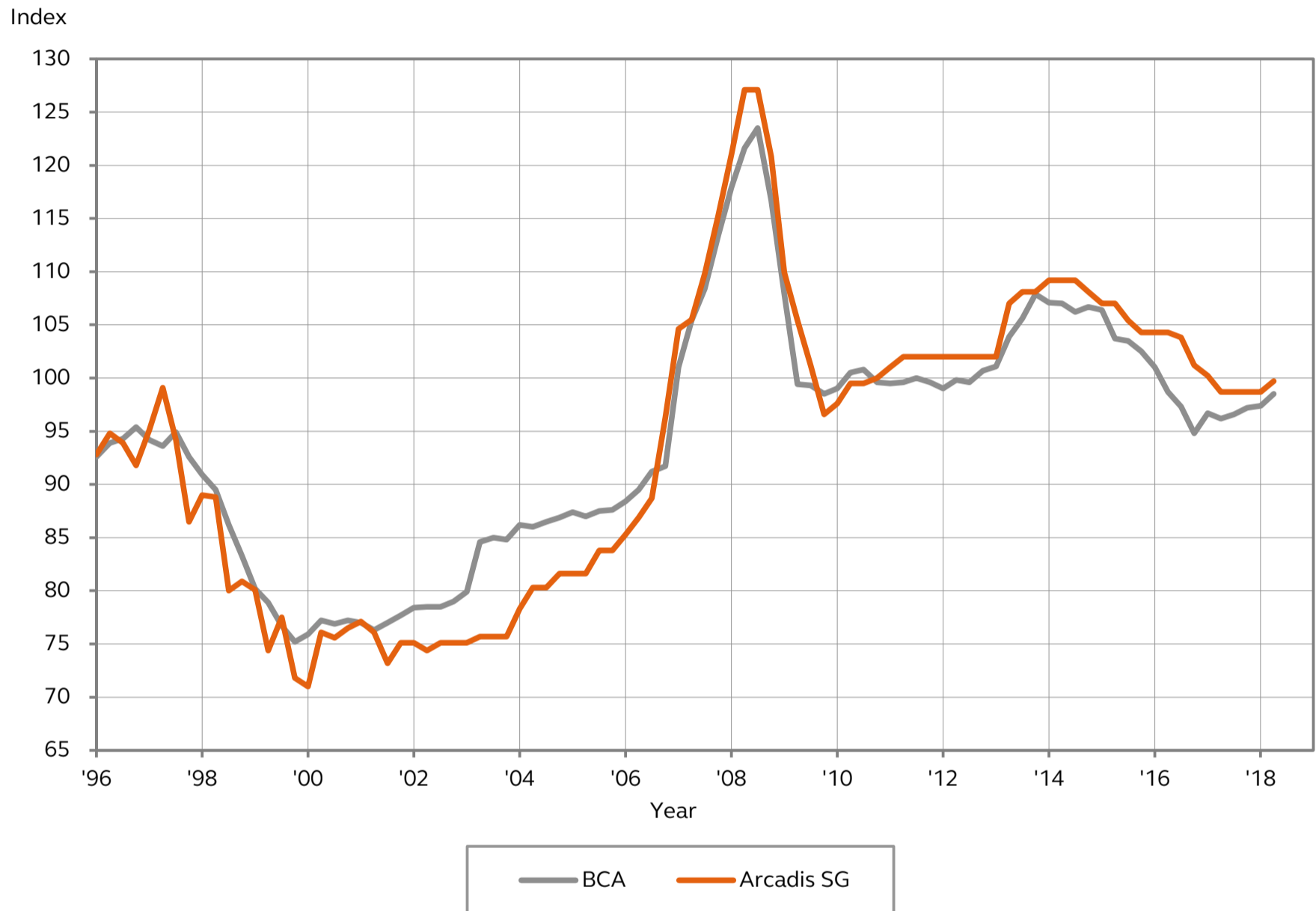
- Professional fees
- Authorities' plan processing charges
- Land cost
- Financing charges
- Site inspectorate
- Administrative expenses
- Legal cost & disbursements
- Demolition of existing building(s)
- Furniture and fittings (unless otherwise stated)
- Operating equipment
- External works
- Prefabricated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



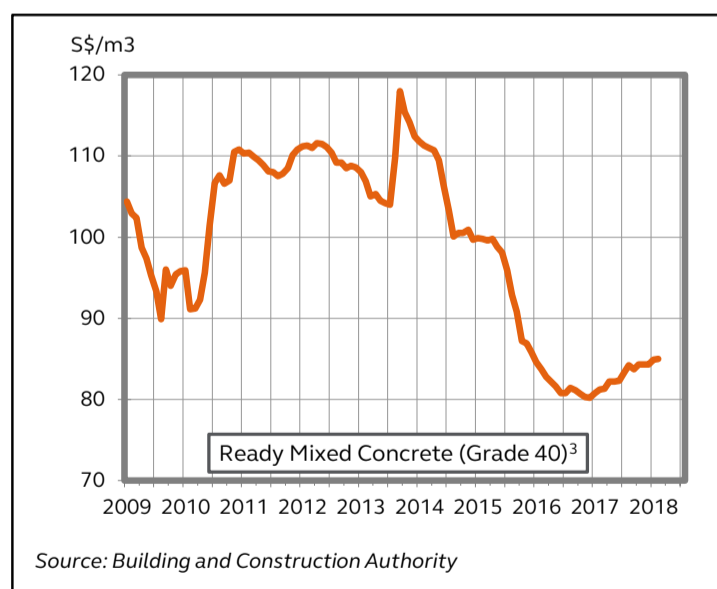
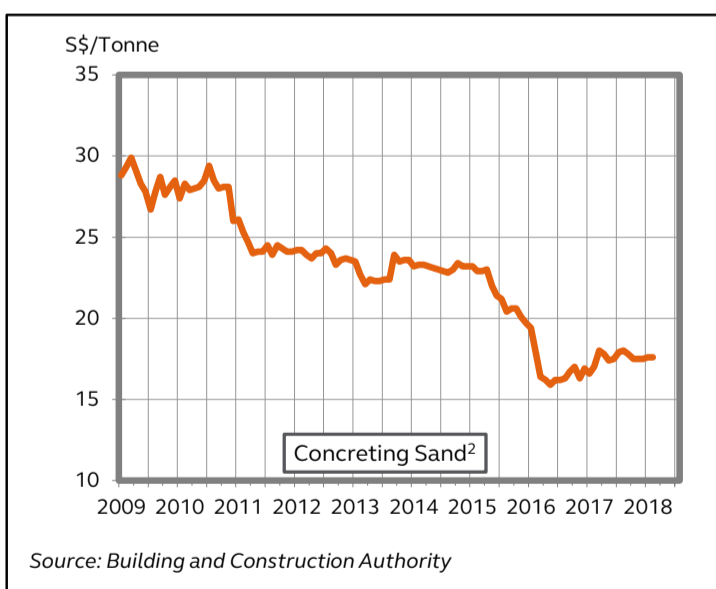
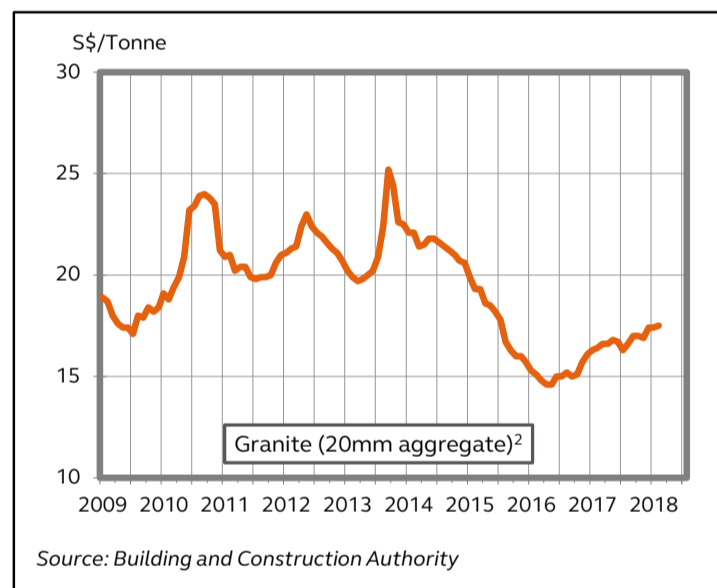
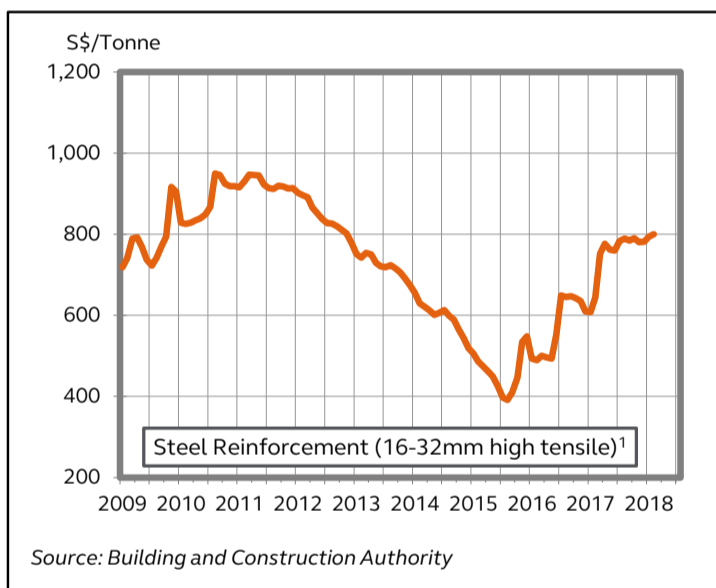
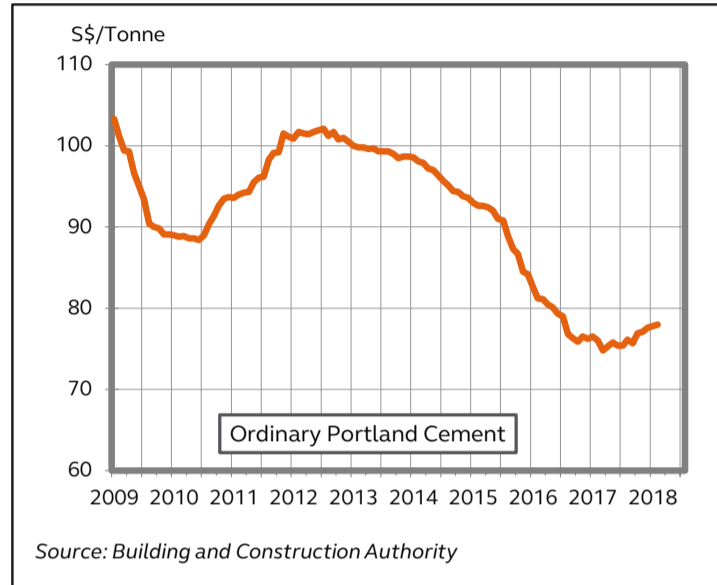
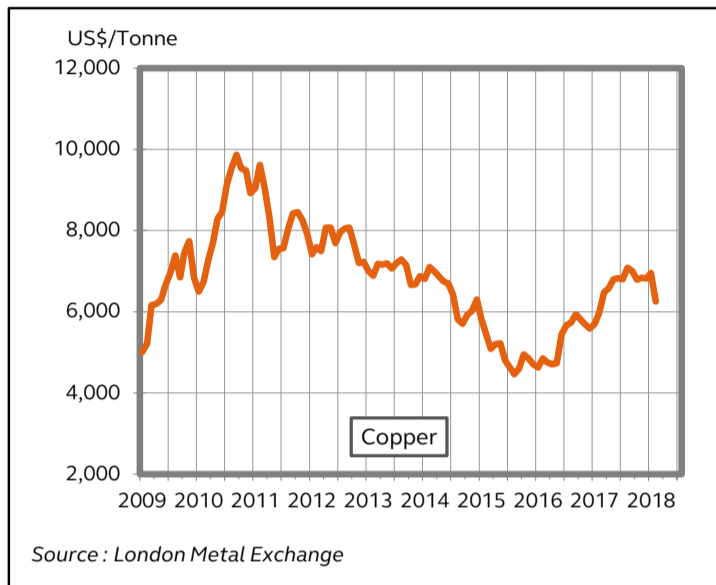
Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	1Q18	2Q18
BCA*	101.3	100.0	99.7	99.8	104.6	106.8	104.0	98.0	96.7	97.4	98.5
Arcadis SG^	96.6	100.0	102.0	102.0	108.1	108.1	104.3	101.2	98.7	98.7	99.7

Source: * Building and Construction Authority
 ^ 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

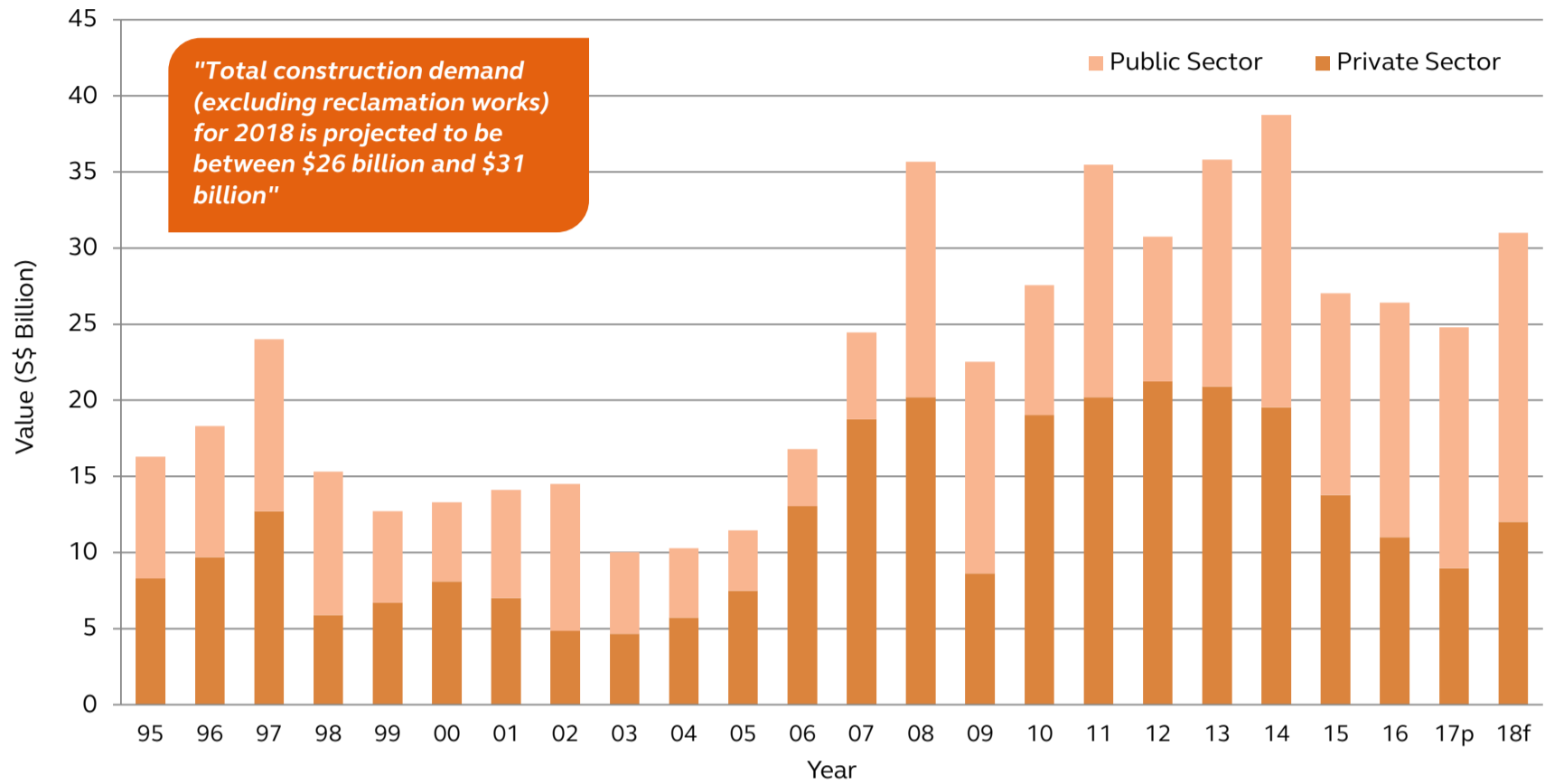
² Prices of granite and concreting sand exclude local delivery charges to concrete batching plants

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	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	2017p	2018f
Private Sector	18.8	20.2	8.6	19.0	20.2	21.2	20.9	19.5	13.8	11.0	9.0	10 - 12
Public Sector	5.7	15.5	13.9	8.6	15.3	9.5	14.9	19.2	13.3	15.4	15.8	16 - 19
Total Value	24.5	35.7	22.5	27.6	35.5	30.8	35.8	38.8	27.0	26.4	24.8	26 - 31

	1Q18	2Q18
Private Sector	3.8	1.9
Public Sector	4.5	3.7
Total Value	8.3	5.6

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. p - denotes preliminary data
3. 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	2,648 - 3,053	2,660 - 3,068	2,398 - 2,658	2,362 - 2,773
- Full fit	4,561 - 5,056	4,211 - 4,627	3,561 - 3,938	3,642 - 4,362
Apartments, high rise, high end				
- Shell and core	3,232 - 3,522	3,139 - 4,553	2,513 - 3,314	2,916 - 3,867
- Full fit	10,692 - 11,675	10,197 - 11,616	5,965 - 6,537	5,985 - 7,580
Terraced houses, average standard				
- Shell and core	3,069 - 3,280	3,069 - 3,584	2,706 - 2,976	2,996 - 3,642
- Full fit	N/A	6,025 - 6,532	N/A	N/A
Detached houses, high end				
- Shell and core	4,580 - 5,089	4,627 - 5,148	3,703 - 4,073	3,979 - 4,591
- Full fit	N/A	11,578 - 12,084	N/A	N/A
OFFICE / COMMERCIAL				
Medium/high rise offices, average standard	5,927 - 7,887	5,887 - 7,927	5,204 - 5,756	5,709 - 6,633
High rise offices, prestige quality	7,887 - 9,847	7,927 - 13,022	7,149 - 7,876	7,187 - 9,742
Out-of-town shopping centre, average standard	N/A	4,488 - 5,999	4,955 - 5,439	4,567 - 5,900
Retail malls, high end	8,382 - 10,824	8,118 - 11,174	7,284 - 10,180	7,187 - 10,138
INDUSTRIAL				
Industrial units, shell only. (Conventional single storey framed unit)	1,894 - 2,310	1,855 - 2,264	3,400 - 3,743	2,957 - 3,769
Owner operated factories, low rise, light weight industry	2,944 - 3,676	3,584 - 4,112	N/A	N/A
HOTEL				
Budget hotels - 3-star, mid market	6,501 - 7,979	6,640 - 8,184	6,698 - 7,372	6,449 - 8,004
Business hotels - 4/5-star	10,685 - 14,553	11,095 - 14,652	10,805 - 15,422	12,137 - 15,200
Luxury hotels - 5-star	14,553 - 17,450	14,137 - 18,183	14,716 - 16,217	13,100 - 16,100
OTHERS				
Underground/basement car parks (<3 levels)	5,029 - 7,009	5,128 - 5,636	3,420 - 5,466	2,810 - 3,830
Multi storey car parks, above ground (<4 levels)	2,587 - 3,604	3,082 - 3,122	2,450 - 2,693	2,039 - 2,548
Schools (primary and secondary)	3,590 - 4,600	3,571 - 4,613	2,713 - 2,989	2,752 - 3,062
Students' residences	2,561 - 3,584	2,528 - 3,571	1,764 - 1,979	N/A
Sports clubs, multi purpose sports/leisure centres (dry sports)	6,521 - 8,006	6,118 - 6,164	5,029 - 5,547	N/A
General hospitals - public sector	9,728 - 12,619	8,039 - 10,065	N/A	N/A

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 necessary 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. dollar

* The above costs are at 2nd Quarter 2018 levels.



6 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\$ 7.85	MOP 8.085	S\$ 1.33	RM 4.04
Apartments, high rise, average standard				
- Shell and core	N/A	1,758 - 2,606	N/A	N/A
- Full fit	3,045 - 3,580	2,264 - 2,770	1,355 - 1,540	425 - 595 ^{\$}
Apartments, high rise, high end				
- Shell and core	N/A	2,606 - 3,909	N/A	N/A
- Full fit	4,076 - 4,752	3,162 - 4,832	2,105 - 3,160	890 - 1,140
Terraced houses, average standard				
- Shell and core	N/A	3,087 - 3,833	N/A	N/A
- Full fit	4,166 - 4,866	3,858 - 4,604	1,765 - 1,990	240 - 350 ^{\$\$}
Detached houses, high end				
- Shell and core	N/A	3,732 - 5,376	N/A	N/A
- Full fit	5,401 - 6,153	4,706 - 6,122	2,255 - 3,010	805 - 995
OFFICE / COMMERCIAL				
Medium/high rise offices, average standard	2,981 - 3,541*	2,606 - 3,365	1,765 - 1,990 [@]	650 - 755 ^{\$\$\$}
High rise offices, prestige quality	3,669 - 4,306	3,365 - 3,681	1,990 - 2,180 [@]	935 - 1,270 ^{\$\$\$}
Out-of-town shopping centre, average standard	2,981 - 3,554	2,454 - 3,681	1,990 - 2,105	595 - 730
Retail malls, high end	4,000 - 4,764	3,858 - 4,655	2,105 - 2,330	735 - 1,015
INDUSTRIAL				
Industrial units, shell only. (Conventional single storey framed unit)	N/A	N/A	750 - 960	345 - 435
Owner operated factories, low rise, light weight industry	2,331 - 2,968	N/A	N/A	465 - 530
HOTEL				
Budget hotels - 3-star, mid market	3,860 - 4,178	3,428 - 3,883	2,220 - 2,445	1,080 - 1,510
Business hotels - 4/5-star	4,051 - 4,752	4,655 - 5,566	2,855 - 3,235	1,870 - 2,190
Luxury hotels - 5-star	4,752 - 5,516	5,566 - 6,578	2,855 - 3,235	2,085 - 2,430
OTHERS				
Underground/basement car parks (<3 levels)	3,185 - 3,822	2,037 - 2,985	960 - 1,300	385 - 540
Multi storey car parks, above ground (<4 levels)	1,911 - 2,293	1,126 - 1,480	660 - 960 ^{@@}	245 - 355
Schools (primary and secondary)	2,510 - 2,701**	2,252 - 2,606	N/A	270 - 310 ^{\$\$\$\$}
Students' residences	2,917 - 3,299	1,784 - 2,075	1,615 - 1,765	320 - 375 ^{\$\$\$\$}
Sports clubs, multi purpose sports/leisure centres (dry sports)	3,822 - 4,459	N/A	2,030 - 2,180	640 - 750
General hospitals - public sector	4,943 - 5,580	N/A	2,855 - 3,010	930 - 1,175

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 necessary 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. dollar

* The above costs are at 2nd Quarter 2018 levels.



6 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 31.24	IDR 13596.00	PHP 51.95
Apartments, high rise, average standard			
- Shell and core	544 - 704	N/A	N/A
- Full fit	720 - 896	729 - 825	921 - 1,070
Apartments, high rise, high end			
- Shell and core	656 - 848	N/A	N/A
- Full fit	1,024 - 1,248	1,004 - 1,133	1,243 - 2,102
Terraced houses, average standard			
- Shell and core	320 - 416	N/A	N/A
- Full fit	480 - 576	386 - 503	748 - 915
Detached houses, high end			
- Shell and core	560 - 800	N/A	N/A
- Full fit	832 - 1,008	1,050 - 1,174	1,602 - 2,717
OFFICE / COMMERCIAL			
Medium/high rise offices, average standard	672 - 832 [#]	719 - 796	916 - 1,073
High rise offices, prestige quality	912 - 1,216 ^{##}	1,058 - 1,183	1,242 - 1,387
Out-of-town shopping centre, average standard	656 - 848	618 - 684	749 - 933
Retail malls, high end	880 - 912	682 - 737	1,074 - 1,505
INDUSTRIAL			
Industrial units, shell only. (Conventional single storey framed unit)	512 - 640	332 - 362	477 - 537
Owner operated factories, low rise, light weight industry	N/A	360 - 398	673 - 787
HOTEL			
Budget hotels - 3-star, mid market	1,200 - 1,329	1,249 - 1,476	1,174 - 1,309
Business hotels - 4/5-star	1,537 - 1,761	1,704 - 1,841	1,323 - 1,604
Luxury hotels - 5-star	1,793 - 2,081	1,811 - 2,041	1,819 - 2,518
OTHERS			
Underground/basement car parks (<3 levels)	576 - 768	513 - 629	485 - 609
Multi storey car parks, above ground (<4 levels)	192 - 307	332 - 362	466 - 659
Schools (primary and secondary)	N/A	N/A	689 - 950
Students' residences	N/A	N/A	729 - 935
Sports clubs, multi purpose sports/leisure centres (dry sports)	N/A	1,101 - 1,649	1,165 - 1,695
General hospitals - public sector	N/A	N/A	1,265 - 1,520

Notes :

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- The standard for each category of building varies from region to region and do not necessary 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. dollar

* The above costs are at 2nd Quarter 2018 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 hospitals - 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: * (i) Tenant area with 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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