

Quarterly Construction Cost Review

China and Hong Kong

2023 | Q1

Arcadis Hong Kong Limited



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China and Hong Kong Market Overview



In the first quarter of 2023, the level of construction activities in Hong Kong has been making a positive and encouraging start, after the persisted tough conditions facing by the construction sector throughout the year of 2022.

In February 2023, the 2023-24 Budget was unveiled by the Financial Secretary, strengthening the construction industry with sufficient land and housing supply. According to the Budget, 12 residential sites will be covered under the 2023-24 Land Sale Programme, which provides about 20,000 units of potential supply for the whole year, together with railway property development, private development, and Urban Renewal Authority (URA)'s project. Besides, 3 commercial sites and 3 industrial sites, providing 200,000m² and 170,000m² floor area respectively, will also be included under the above-mentioned programme. With the continuous development on the Northern Metropolis and Kau Yi Chau Artificial Islands, it is anticipated that the level of construction output in both public and private sectors will edge up moderately in the rest of 2023.

While expecting significant opportunities for the construction sector, the mismatch in supply and demand of construction workers will be 6-15% (demand less supply) in coming years, according to the Construction Manpower Forecast released recently by the Construction Industry Council (CIC). Looking ahead to the rest of the year, the insufficiency of construction workforce may be a challenge that the industry needs to overcome.

Market movement

Economy

	Q1/21 - Q1/22	Q4/21 - Q4/22	Q1/22 - Q1/23
 GDP Growth	(-) 3.9%	(-) 4.1%	(+) 2.7%
 Inflation Rate (CPI)	Mar 21 - 22	Dec 21 - 22	Mar 22 - 23
	(+) 1.7%	(+) 2.0%	(+) 1.7%

Construction Output

	Q4/21	Q3/22	Q4/22
 Activity Level (Gross output; new + A&A)	HK\$63.391 Bn	HK\$61.000 Bn	HK\$66.419 Bn*

Basic Costs

	Dec - Feb 22	Sep - Nov 22	Dec - Feb 23
 Highways Material Index	1165.5	1183.1	1162.2
 Labour Wages Index	156.2	154.5	154.5

Construction Cost Trend

	Q1/22	Q4/22	Q1/23
 Tender Price Index (Arcadis)	1810	1860	1882

*Provisional

Source: Highways Materials Index from Civil Engineering and Development Department (CEDD), other data from Census and Statistics Department (CSD).



Market Analysis

China

China's GDP grew by 4.5% YoY in the first quarter of 2023 despite the impact of the Covid-19 epidemic in late 2022 and early 2023. It is also noteworthy that production across industries was affected during the pandemic, but it appears that economy has been able to recover quickly.

The real estate market continues to cool down, with a downward trend in both real estate investment and new construction area. However, the decline has slowed compared to the previous year. The decrease of 9.0% YoY in real estate investment capital source by the end of the first quarter of this year suggests that there may be less investment in the real estate sector. Similarly, the decline of 19.2% YoY in commencement new construction area indicates that there may be a slowdown in the growth of new construction projects.

In Q1 2023, there were fluctuations in the prices of basic construction materials in China. Rebar and steel prices increased by 5%, while aluminium prices decreased by 2% and copper prices increased by 5%. The price of concrete decreased by 1%, while cement prices increased by 3%.

Construction wages remained stable during this period, indicating that there may not have been significant changes in the labor market for construction workers.

The construction output grew by 6.8% in Q1 2023, which is the highest record in the past six years. The growth in infrastructure is a major contributing factor to this growth, and it is encouraging to see that the industry is resilient despite the contraction in the real estate sector. The prices of some major building materials have stopped falling or even increased, which could potentially impact construction costs. However, the bidding prices of real estate projects remained stable in Q1 2023. It is anticipated that the construction price level may go down in the next quarter due to strong competition.

Hong Kong

Growth in economy of Hong Kong

The economy of Hong Kong has rebounded after four consecutive quarters of recession. The increase in Gross Domestic Product (GDP) by 2.7% in Q1 2023 is a positive sign for the economy and suggests that economic activity is picking up. Moreover, the stable Consumer Price Index (CPI) in the first four month in 2023, with year-on-year increases ranging from 1.7% to 2.4%, suggests that inflation is under control.

Floor area of commenced and completed works

The total gross floor area of the consented private construction works increased by 110.8% YoY, but reduced by 36.4% QoQ in Q1 2023, while commenced private construction works increased by 49.5% QoQ and 52.3% YoY in same period. It indicates that construction activity is picking up and that projects are moving from planning stages to actual construction recently. Meanwhile, the reduction in completed private construction works by 24.2% QoQ and 36.3% YoY in Q1 2023 could be a lagging effect of reduction in commencement in the earlier period. The drop in both consented and commenced private construction works over the last twelve months period, by 29% and 59% respectively, could also be a cause for concern as it suggests a longer-term slowdown in the construction industry. However, the total gross floor of completed private construction works increased by 42.4% after the resumption of construction following the pandemic, as compared to the previous 12 months.

Gross value of performed construction works

Gross value of performed new-built private works and public works increased by 16.0% and 10.2% QoQ respectively in Q4 2022, while gross value of performed A&A works rose by 2.8% QoQ. Gross value of new-built private works and public works in Q4 2022 increased by 10.4% and 9.0% respectively compared to the previous year. Though the gross value of performed A&A works reduced by 2.6% YOY, the overall performed construction works in Q4 2022 recorded an increase of 4.8% as compared to the previous year.

Cost of materials and labour

The Tender Price Index (TPI) increased by 3.98% YoY based on Q1 2023. Steel price in this quarter increased slightly by 1.5% QoQ but dropped by 18% from the peak in March 2022. Price of homogeneous floor tiles in this quarter keeps rising and recorded an increase of 16.6% YoY. Meanwhile, price of diesel fuel in this quarter dropped slightly by 2.2% QoQ, but significantly increased by 12.4% YoY. The construction labour wages index remained stable comparing with previous quarter and Q1 2022; based on Q1 2023 data. Wages of electrical fitter, mechanical fitter and general welder increased by 6.0%, 3.6% and 3.2% respectively YoY, while wages of plumber and painter decreased by 5.2% and 5.9% respectively YoY; all based on Q1 2023 data.

Approximate Building Costs Hong Kong

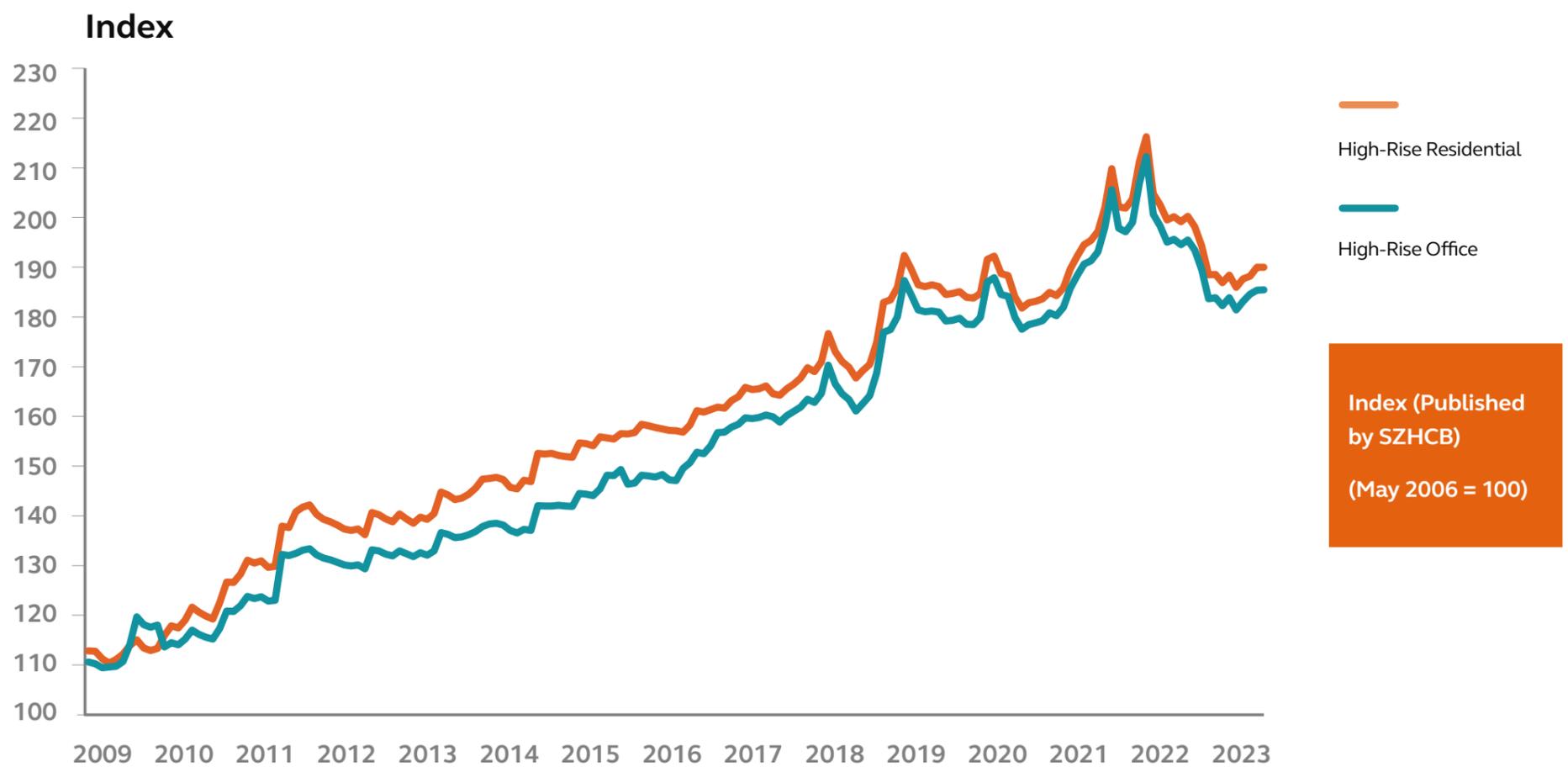
Notes:

1. The cost 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 cost per square metre are based on the 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\$/m2 CFA	Outline Specification
Domestic		
Apartments, high rise, public authority standard	11,500 - 13,800	Based on Hong Kong Housing Authority Non-standard Cruciform Block design (Rental Housing)
Apartments, high rise, average standard	24,800 - 28,600	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	32,100 - 37,100	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	34,300 - 39,400	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	49,800 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	24,700 - 28,000	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	29,500 - 33,800	RC structure, curtain wall, including public area fit-out, tenant area with raised floor, painted wall and false ceiling
Out-of-town shopping centre, average standard	24,300 - 28,600	Including public area fit-out and M&E, but excluding shop fit-out
Retail malls, high end	31,600 - 37,000	
Industrial		
Owner operated factories, low rise, light weight industry	18,700 - 23,400	RC structure, including small office with simple fit-out and M&E, but excluding a/c
Hotel		
Budget hotels - 3-star, mid market	31,300 - 33,300	1) Interior decoration
Business hotels - 4/5-star	32,300 - 37,400	2) Furniture (fixed and movable)
Luxury hotels - 5-star	37,600 - 42,600	3) Special light fittings (chandeliers, etc.) 4) Operating Supplies and Equipment (OS&E) excluded
Others		
Underground/basement car parks (<3 levels)	26,900 - 32,100	RC structure
Multi storey car parks, above ground (<4 levels)	16,100 - 19,000	RC structure, natural ventilation, no facade enclosure
Schools (primary and secondary)	20,800 - 22,400	Public authority standard including fit-out and a/c, but excluding loose furniture and educational equipment
Students' residences	23,700 - 26,600	Including fit-out, loose furniture and a/c
Sports clubs, multi purpose sports/ leisure centres (dry sports)	31,200 - 35,300	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	39,500 - 43,500	Excluding medical and operating equipment

The above costs are at 1st Quarter 2023 levels.

Building & Building Services Price Index Mainland China

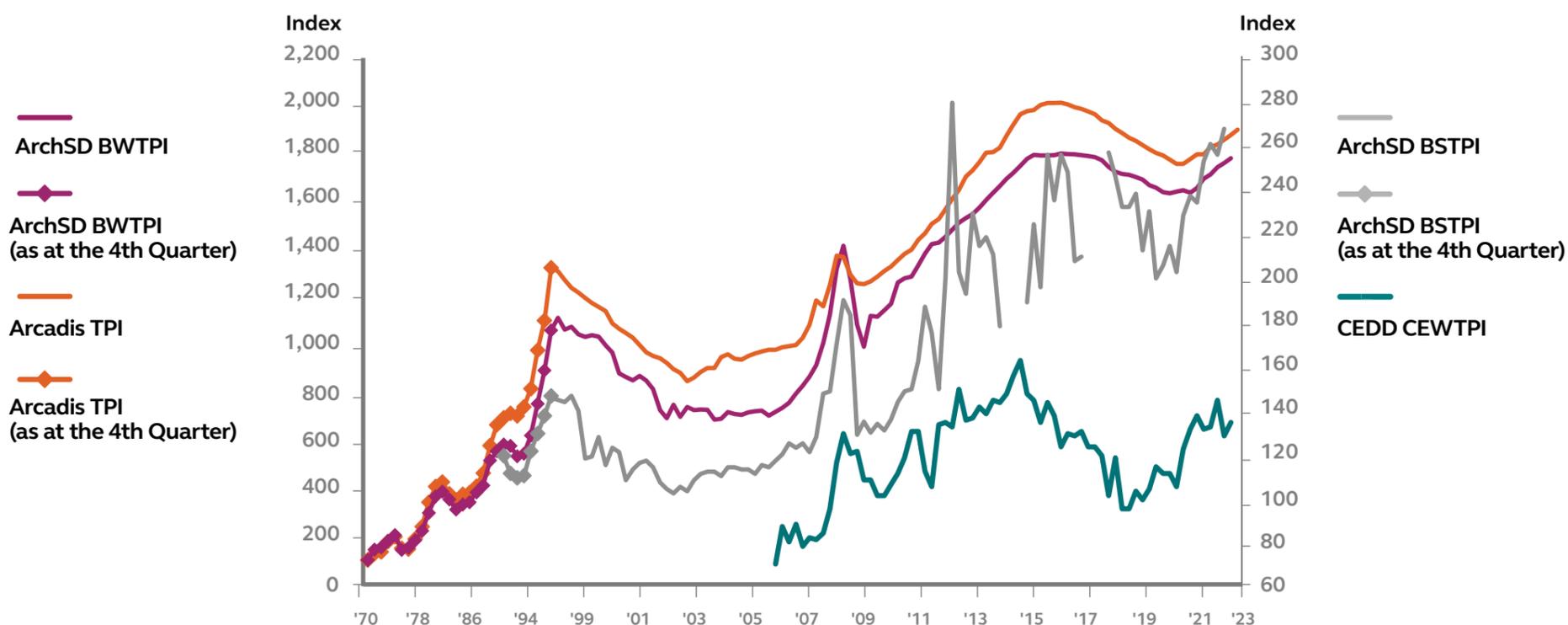


Building & Building Services Price Index								
Index	(Base Index: May 2006 = 100)							
	High-Rise Residential				High-Rise Office			
Month / Year	2020	2021	2022	2023	2020	2021	2022	2023
January	189.8	195.8	200.8	189.3	185.5	191.8	196.3	185.6
February	189.4	196.6	201.5	191.1	185.2	192.4	196.9	186.4
March	185.0	198.5	200.5	191.1	180.8	194.3	195.8	186.5
April	182.7	203.4	201.6		178.3	199.3	196.7	
May	183.8	211.4	199.4		179.3	207.0	194.7	
June	184.1	203.5	195.5		179.7	199.1	190.7	
July	184.6	203.3	189.6		180.1	198.4	184.6	
August	186.0	205.2	189.6		181.7	200.3	184.8	
September	185.3	212.9	187.9		181.2	208.4	183.2	
October	186.8	218.0	189.5		182.8	213.8	184.9	
November	190.8	206.2	187.0		186.8	202.0	182.3	
December	193.4	204.0	188.7		189.4	199.6	184.1	

Source : Housing and Construction Bureau of Shenzhen

Tender Price Index

Hong Kong



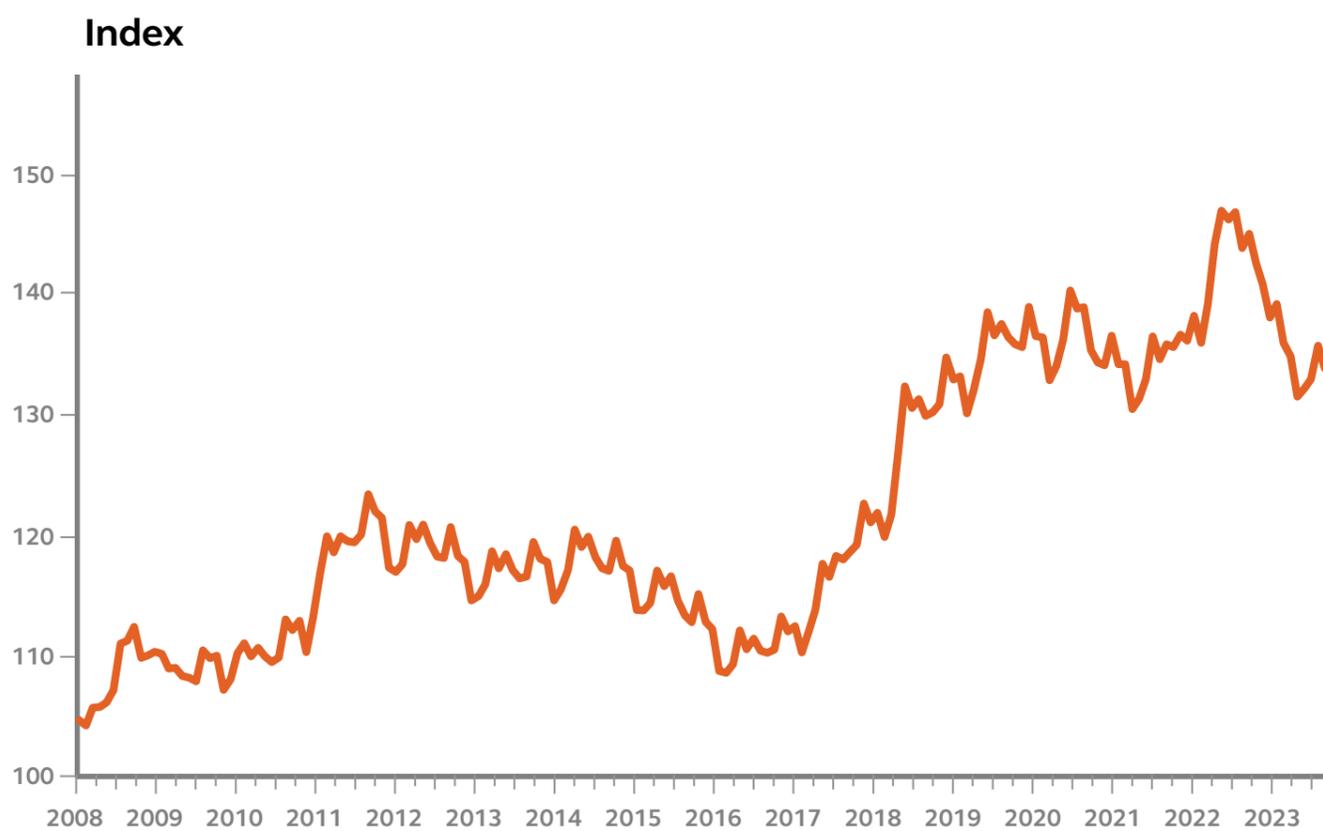
Quarter/Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
ArchSD BWTPI (Base = 100, at Q1 1970)										
Q1	1621	1732	1775	1779	1755	1695	1641	1631	1696	
Q2	1648	1761	1776	1776	1727	1686	1623	1620	1726	
Q3	1679	1777	1783	1773	1708	1675	1618	1640	1744	
Q4	1703	1775	1781	1768	1698	1652	1625	1679	1763	
ArchSD BSTPI (Base = 100, at Q4 1989)										
Q1	211	(N/A)	257	208	(N/A)	233	200	229	262	
Q2	178	189	236	210	258	239	206	238	257	
Q3	(N/A)	225	257	(N/A)	247	213	215	235	269	
Q4	(N/A)	196	249	287	233	231	203	254		
Arcadis TPI (Base = 100, at Q1 1970)										
Q1	1789	1946	1992	1975	1920	1848	1785	1740	1810	1882
Q2	1808	1958	1992	1968	1910	1835	1775	1760	1820	
Q3	1857	1963	1993	1957	1885	1818	1757	1780	1840	
Q4	1903	1984	1986	1946	1868	1800	1740	1780	1860	
CEDD CEWTPI (Base = 100, at Q1 2010)										
Q1	143	161	142	127	118	94	113	121	131	
Q2	142	146	136	129	100	102	110	130	143	
Q3	146	143	122	122	117	98	110	136	127	
Q4	154	133	128	122	94	103	104	130	133*	

Source : Competitive tenders received by Arcadis, Building Works Tender Price Index (BWTPI) and Building Services Tender Price Index (BSTPI) of Architectural Services Department (ArchSD) of HKSAR, and Civil Engineering Works Tender Price Index (CEWTPI) of Civil Engineering and Development Department (CEDD) of HKSAR

Notes:

- [*] denotes forecast figures
- Both BWTPI (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 2013 and onwards are given in detail, whereas indices between year 1970 to 1997 are shown with their 4th Quarter figures.

Materials Mainland China



Construction Material Price Index								
Month / Year	Published (by NBS of China) (Base : Corresponding month in preceding year = 100)				Projected (by Arcadis) (Base : 12/2006 = 100) (see explanatory notes below)			
	2020	2021	2022	2023	2020	2021	2022	2023
January	101.3	97.3	107.5	92.5	140.1	136.3	146.6	135.6
February	101.6	97.0	106.8	93.1	138.6	134.5	143.6	133.7
March	101.0	97.8	106.7	93.5	138.7	135.7	144.8	135.3
April	99.2	100.2	105.1		135.2	135.5	142.4	
May	98.9	101.7	103.0		134.2	136.5	140.6	
June	98.9	101.5	101.4		134.0	136.0	137.9	
July	98.3	101.2	100.7		136.4	138.0	139.0	
August	98.3	101.3	100.0		134.0	135.8	135.8	
September	98.4	103.7	96.9		134.0	139.0	134.7	
October	98.2	110.4	91.3		130.3	143.9	131.4	
November	98.0	111.8	90.0		131.2	146.7	132.0	
December	97.6	109.9	91.0		132.8	146.0	132.8	

Source : National Bureau of Statistics (NBS) of China

Notes:

1. Data are published on a monthly basis, measuring the year-on-year change in price level of each month, but the quarter-on-quarter change is not published, ie. the changes between consecutive quarters are not given.
2. To give an illustration of the price trend over time, Arcadis applies a hypothetical calculation to derive the data table and chart as above. For comparison purpose, December 2006 is referred to as base and the base index as 100.



Basic Construction Materials

Copper, CIF European port

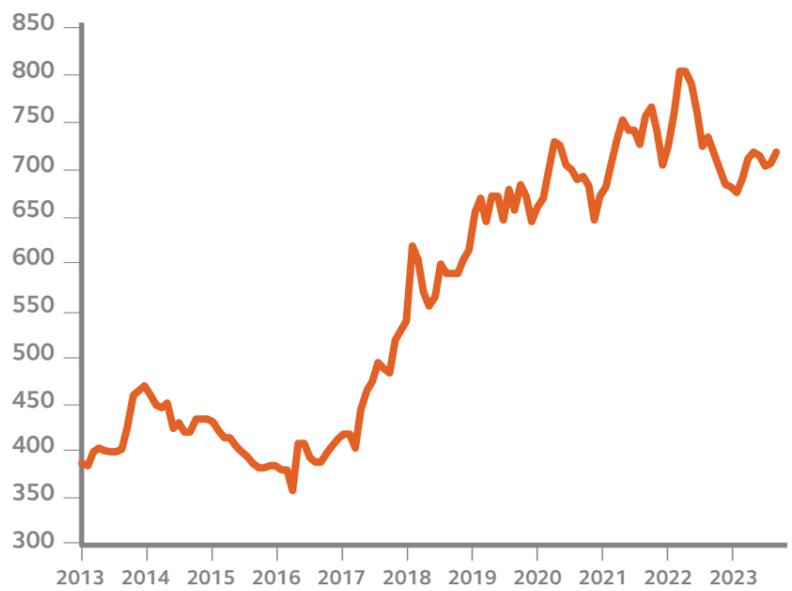
US\$/Tonne



Source : London Metal Exchange

Ready Mix Concrete, 40 MPa

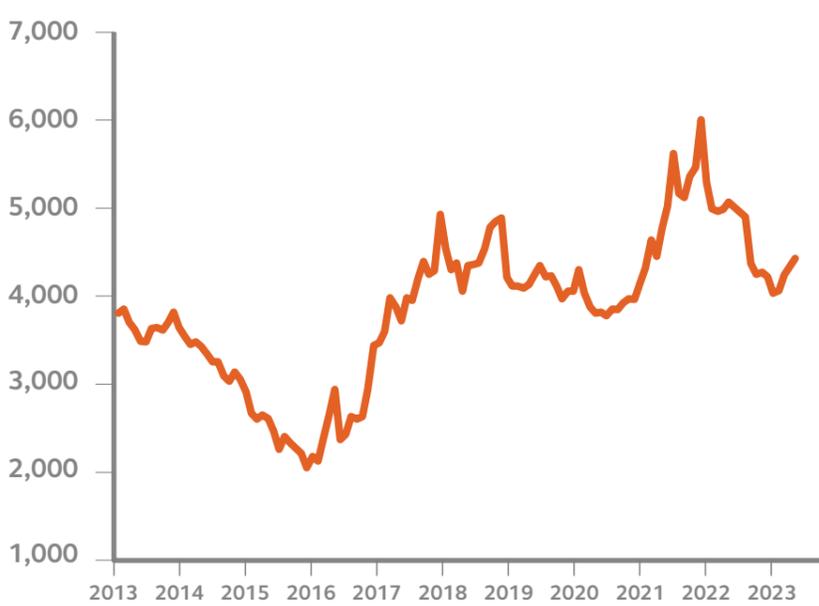
RMB/m3



Shanghai Municipal Management Commission of Housing and Urban-Rural Development

Steel Reinforcement, Grade III

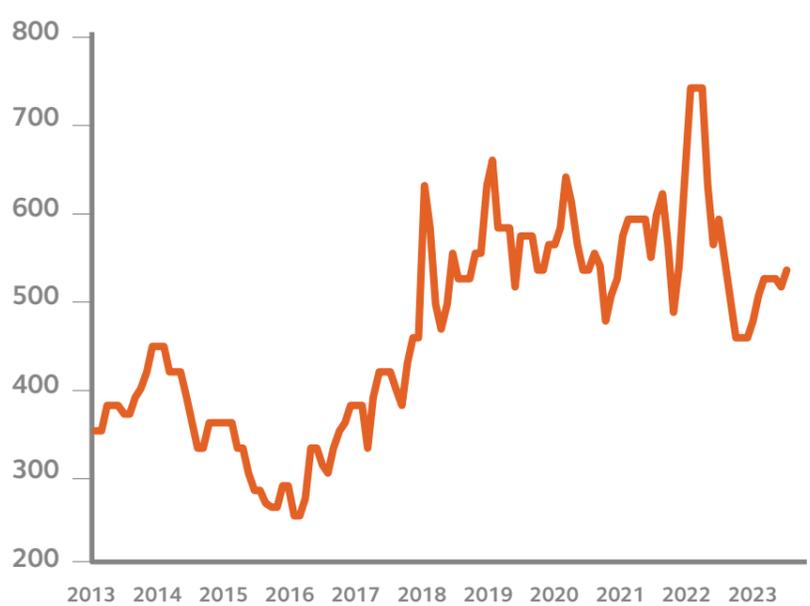
RMB/Tonne



Shanghai Municipal Management Commission of Housing and Urban-Rural Development

Portland Cement, 42.5 MPa

RMB/Tonne

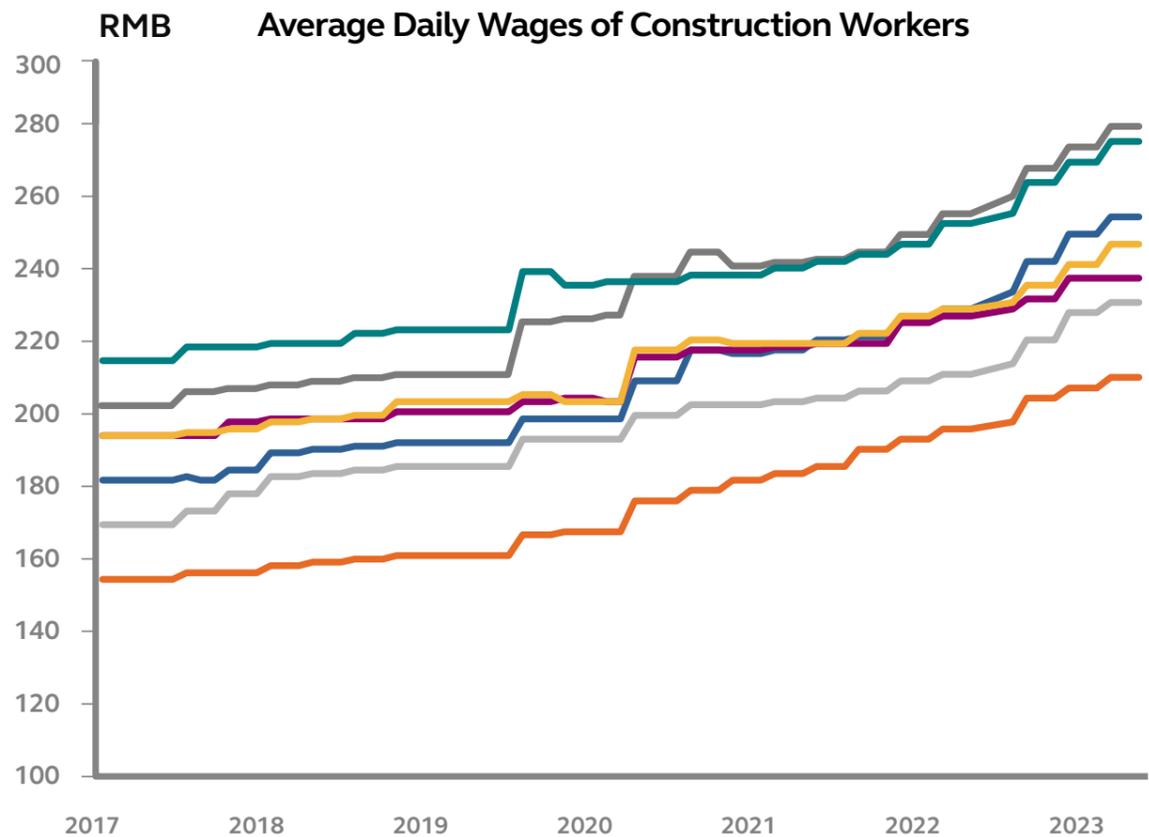


Shanghai Municipal Management Commission of Housing and Urban-Rural Development

Labour

Mainland China

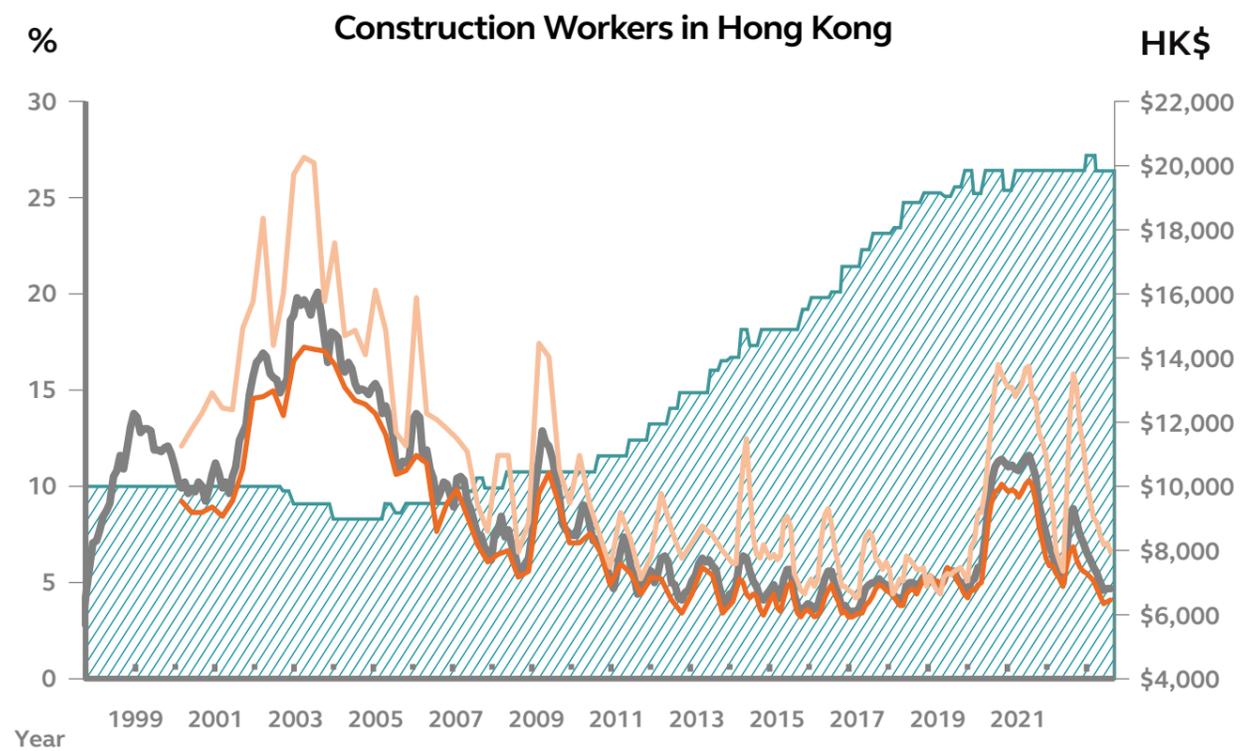
- General workers
- Concretor
- Bar bender and fixer
- Carpenter
- Joiner
- Metal worker
- Painter



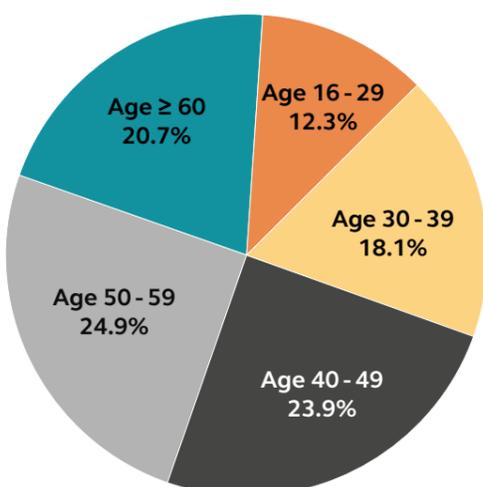
Source : Shanghai Municipal Management Commission of Housing and Urban-Rural Development

Hong Kong

- ▨ Median Monthly Earning (HK\$)
- Unemployment Rate (%) - All Construction Trades
- Unemployment Rate (%) - Foundation & Superstructure
- Unemployment Rate (%) - Decoration & Maintenance



Source : Census & Statistics Department, Hong Kong SAR

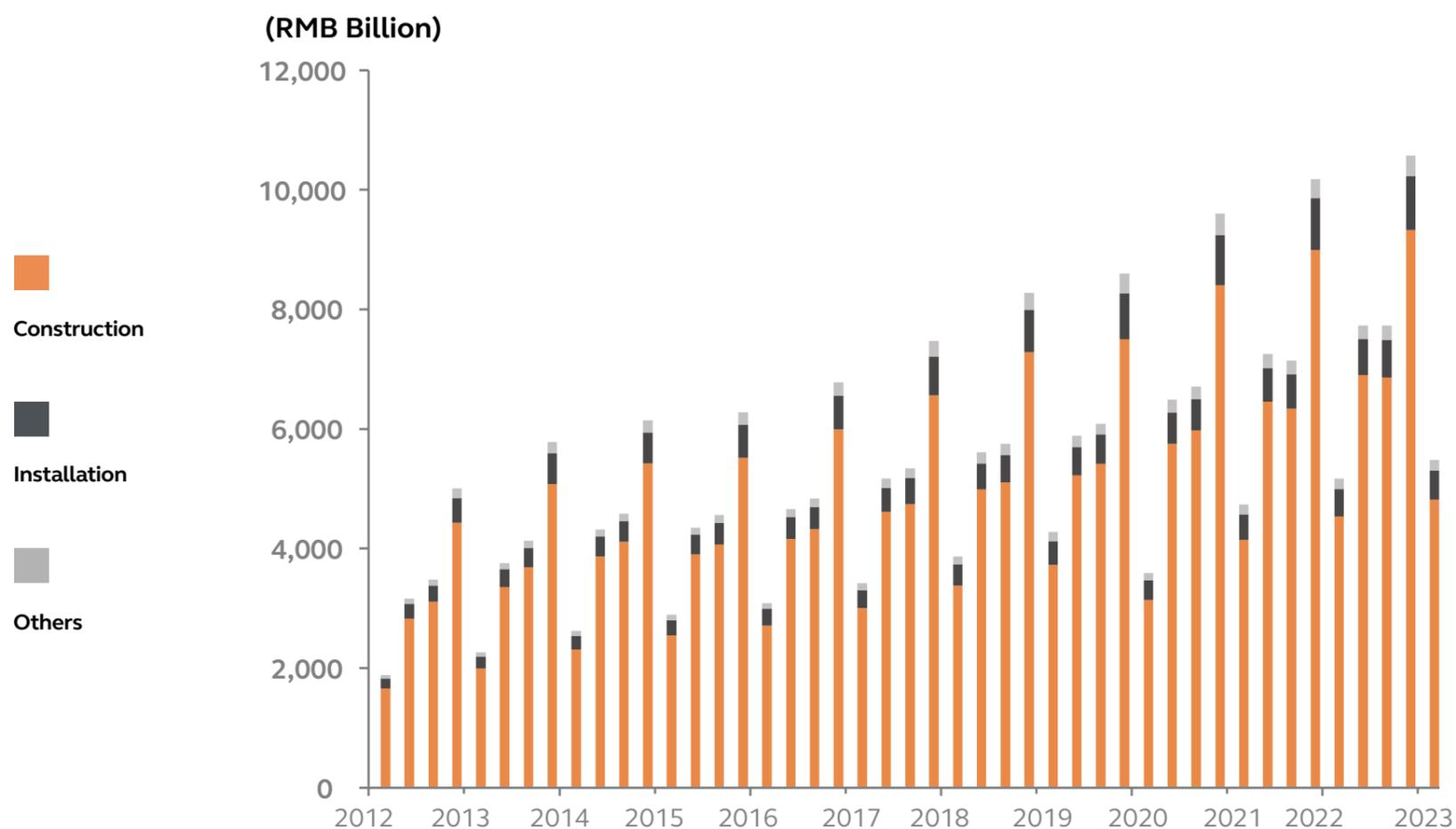


Age Distribution of Workers

Age Group	No. of Workers Employed by Construction Industry	
Age 16 - 29	75,682	12.3%
Age 30 - 39	111,567	18.1%
Age 40 - 49	147,272	23.9%
Age 50 - 59	153,429	24.9%
Age ≥ 60	127,547	20.7%
Total (as at Mar 2023) :	615,497	100.0%

Source : Construction Industry Council

Gross Value of Construction Work Performed – Mainland China



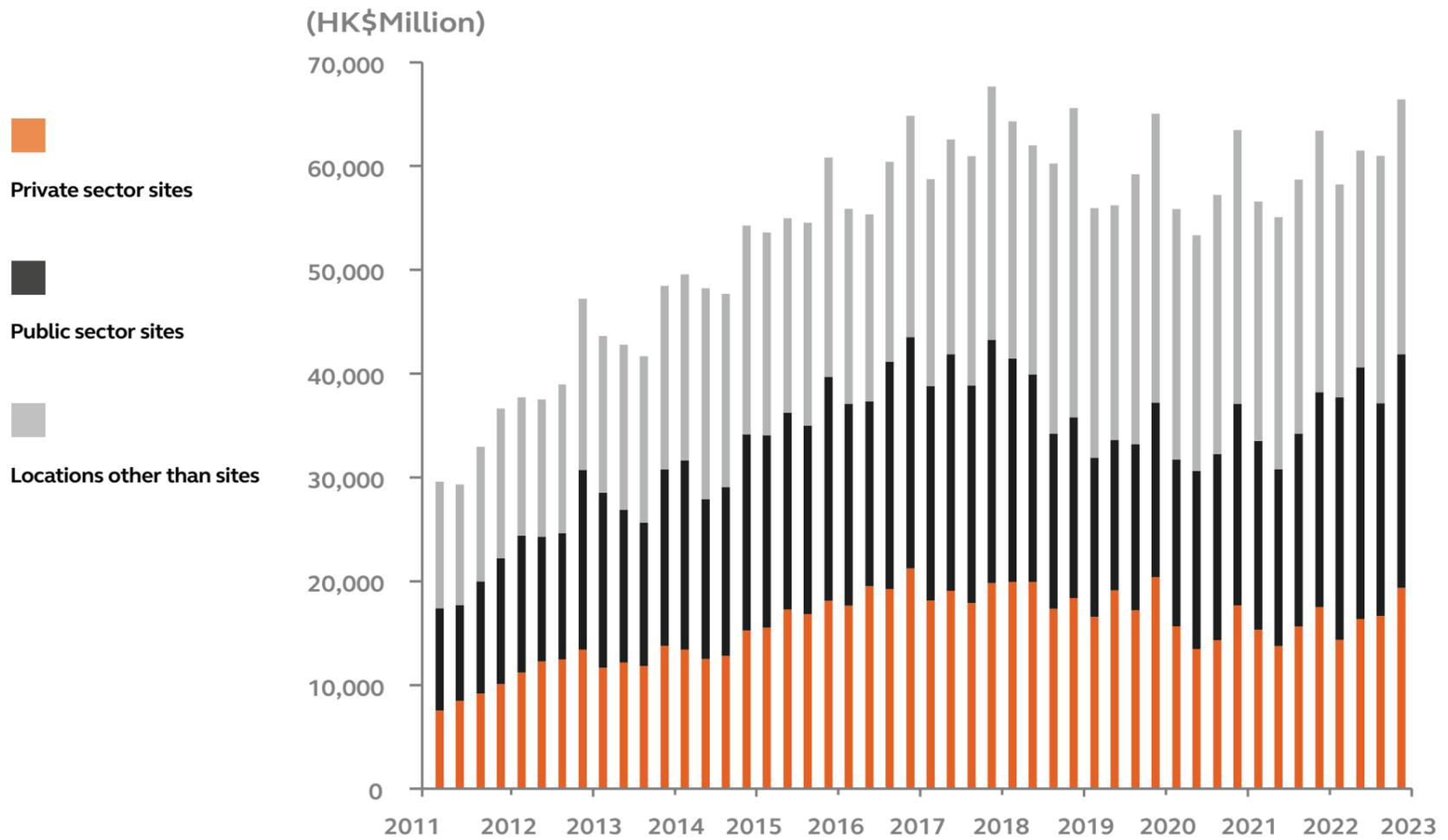
Value Performed (RMB Billion)										
Quarter	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
A. Construction										
1 st Quarter	2,311	2,544	2,712	3,003	3,382	3,727	3,138	4,141	4,533	4,820
2 nd Quarter	3,866	3,899	4,158	4,609	4,985	5,223	5,753	6,453	6,902	
3 rd Quarter	4,113	4,068	4,322	4,742	5,106	5,414	5,977	6,336	6,863	
4 th Quarter	5,425	5,517	5,994	6,562	7,286	7,502	8,405	8,991	9,328	
Year Total:	15,714	16,028	17,186	18,916	20,759	21,867	23,272	25,921	27,625	4,820
B. Installation										
1 st Quarter	230	255	277	303	358	393	326	428	463	485
2 nd Quarter	333	331	366	405	438	476	523	569	602	
3 rd Quarter	346	363	374	437	459	498	519	579	623	
4 th Quarter	517	548	561	646	708	768	840	871	906	
Year Total:	1,426	1,498	1,578	1,791	1,963	2,135	2,208	2,448	2,594	485
C. Others										
1 st Quarter	83	91	96	113	129	155	127	164	175	175
2 nd Quarter	118	117	138	154	187	186	217	229	223	
3 rd Quarter	126	126	137	160	189	173	213	228	240	
4 th Quarter	205	216	222	262	282	328	357	318	340	
Year Total:	531	550	593	689	787	843	915	940	978	175
Annual gross value performed (A + B + C)										
Total:	17,671	18,076	19,357	21,396	23,509	24,845	26,395	29,308	31,198	5,480

Source : National Bureau of Statistics of China

Notes:

1. Value of "Construction" refers to the value of projects included in the project budgets.
2. Value of "Installation" refers to the value of the installation of equipment, excluding the value of the equipment to be installed.
3. Value of "Others" refer to the output value excluding construction projects and installation projects. It includes: output value of repairing buildings and structures; output value of non-standard equipment manufacturing; overhead expenses received by contracted enterprises from the sub-contracted enterprises and the completed output value of construction activities undefined.

Gross Value of Construction Work Performed – Hong Kong



Value Performed (HK\$ Million)										
Quarter	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
A. Private sector sites										
1 st Quarter	11,675	13,395	15,528	17,652	18,150	19,918	16,583	15,647	15,339	14,351
2 nd Quarter	12,176	12,507	17,284	19,530	19,070	19,925	19,112	13,489	13,758	16,360
3 rd Quarter	11,848	12,792	16,849	19,252	17,912	17,340	17,199	14,303	15,620	16,674
4 th Quarter	13,781	15,259	18,119	21,231	19,813	18,369	20,393	17,685	17,521	19,342*
Year Total:	49,480	53,953	67,780	77,665	74,945	75,552	73,287	61,124	62,238	66,727*
B. Public sector sites										
1 st Quarter	16,829	18,258	18,531	19,414	20,639	21,533	15,338	16,083	18,167	23,356
2 nd Quarter	14,690	15,397	18,964	17,780	22,827	20,002	14,512	17,155	17,054	24,247
3 rd Quarter	13,792	16,253	18,163	21,878	20,934	16,888	16,022	17,940	18,604	20,462
4 th Quarter	16,976	18,915	21,585	22,295	23,455	17,433	16,825	19,400	20,687	22,540*
Year Total:	62,287	68,823	77,243	81,367	87,855	75,856	62,697	70,578	74,512	90,605*
C. Location other than sites										
1 st Quarter	15,140	17,909	19,549	18,809	19,963	22,871	24,032	24,126	23,075	20,526
2 nd Quarter	15,914	20,327	18,744	18,041	20,657	22,073	22,592	22,674	24,249	20,867
3 rd Quarter	16,038	18,636	19,520	19,274	22,093	26,027	25,992	24,971	24,465	23,864
4 th Quarter	17,716	20,088	21,111	21,333	24,406	29,797	27,839	26,398	25,183	24,537*
Year Total:	64,808	76,960	78,924	77,457	87,119	100,768	100,455	98,169	96,972	89,794*
Annual gross value performed (A + B + C)										
Total:	176,575	199,736	223,947	236,489	249,919	252,176	236,439	229,871	233,722	247,126*

*Provisional

Source : Census and Statistics Department, Hong Kong SAR

Approximate Building Costs For Major Cities In Asia

Building Type	Shanghai	Beijing	Guangzhou/ Shenzhen	Chongqing/ Chengdu
	Q1/2023	Q1/2023	Q1/2023	Q1/2023
	RMB/ m ² CFA			
Domestic				
Apartments, high rise, average standard	3,108 - 3,543	2,827 - 3,261	2,725 - 3,130	2,710 - 3,081
- Shell and core	5,081 - 5,601	4,472 - 4,911	4,324 - 4,960	4,143 - 4,804
- Full fit				
Apartments, high rise, high end	3,737 - 4,047	3,369 - 4,887	2,844 - 3,856	3,349 - 4,262
- Shell and core	11,473 - 12,508	10,839 - 12,338	7,025 - 8,008	6,690 - 8,205
- Full fit				
Terraced houses, average standard	3,479 - 3,775	3,264 - 3,812	2,863 - 3,251	3,340 - 3,993
- Shell and core	7,019 - 7,647	6,404 - 6,937	6,550 - 7,831	5,651 - 6,634
- Full fit				
Detached houses, high end	5,116 - 5,655	4,915 - 5,470	3,985 - 4,526	4,377 - 4,995
- Shell and core	12,344 - 13,097	12,307 - 12,840	12,566 - 14,724	7,189 - 8,167
- Full fit				
Office / Commercial				
Medium/high rise offices, average standard	6,518 - 8,612	6,379 - 8,594	6,141 - 7,013	6,491 - 7,459
High rise offices, prestige quality	8,374 - 11,453	10,368 - 14,113	8,989 - 11,296	8,185 - 10,878
Out-of-town shopping centre, average standard	N/A	N/A	5,851 - 6,652	5,252 - 6,648
Retail malls, high end	8,850 - 11,931	8,625 - 11,874	8,657 - 12,544	7,802 - 10,769
Industrial				
Industrial units, shell only (Conventional single storey framed units)	2,007 - 2,459	1,970 - 2,402	2,280 - 2,801	3,203 - 3,983
Owner operated factories, low rise, light weight industry	3,105 - 3,889	3,808 - 4,365	N/A	N/A
Hotels				
Budget hotels - 3-star, mid market	7,132 - 8,693	7,057 - 8,693	7,878 - 8,933	7,083 - 8,658
Business hotels - 4/5-star	11,492 - 15,556	12,025 - 15,876	12,733 - 18,741	12,709 - 15,721
Luxury hotels - 5-star	15,538 - 18,573	15,305 - 19,702	17,137 - 19,473	15,650 - 18,608
Others				
Underground/basement car parks (<3 levels)	5,326 - 7,427	5,451 - 5,990	4,058 - 6,640	3,075 - 4,259
Multi storey car parks, above ground (<4 levels)	2,729 - 3,814	3,280 - 3,312	2,891 - 3,275	2,452 - 2,997
Schools (primary and secondary)	4,071 - 5,138	3,795 - 4,899	3,266 - 4,242	3,250 - 3,581
Students' residences	2,980 - 4,064	2,684 - 3,795	3,010 - 3,838	2,275 - 3,254
Sports clubs, multi purpose sports/ leisure centres (dry sports)	6,869 - 8,437	6,498 - 6,555	5,580 - 6,323	5,128 - 5,621
General hospitals - public sector	10,494 - 13,530	8,544 - 10,701	8,450 - 10,891	8,195 - 10,148

The above costs are at 1st Quarter 2023 levels.

Approximate Building Costs For Major Cities In Asia

Building Type	Hong Kong	Macau	Singapore	Kuala Lumpur
	Q1/2023	Q1/2023	Q1/2023	Q1/2023
	USD/ m2 CFA (See also exchange rates per U.S. dollar below)			
	HK\$ 7.85	MOP 8.010	S\$ 1.33	RM 4.42
Domestic				
Apartments, high rise, average standard				
- Shell and core	N/A	1,889 - 2,801	N/A	N/A
- Full fit	3,160 - 3,640	2,434 - 2,976	1,915 - 2,220	320 - 635
Apartments, high rise, high end				
- Shell and core	N/A	2,801 - 4,200	N/A	N/A
- Full fit	4,090 - 4,730	3,398 - 5,193	2,970 - 4,400	730 - 1,515
Terraced houses, average standard				
- Shell and core	N/A	3,318 - 4,118	N/A	N/A
- Full fit	4,370 - 5,020	4,146 - 4,948	2,480 - 2,780	230 - 370
Detached houses, high end				
- Shell and core	N/A	4,010 - 5,776	N/A	N/A
- Full fit	6,340 up	5,057 - 6,580	3,160 - 4,210	775 - 1,055
Office / Commercial				
Medium/high rise offices, average standard	3,150 - 3,570	2,801 - 3,616	2,480 - 2,820 [®]	610 - 805
High rise offices, prestige quality	3,760 - 4,310	3,616 - 3,957	2,820 - 3,045 [®]	955 - 1,370
Out-of-town shopping centre, average standard	3,100 - 3,640	2,637 - 3,957	2,670 - 2,970	450 - 675
Retail malls, high end	4,030 - 4,710	4,146 - 5,003	2,970 - 3,235	705 - 1,075
Industrial				
Industrial units, shell only (Conventional single storey framed units)	N/A	N/A	1,165 - 1,355 ^{®@}	330 - 465
Owner operated factories, low rise, light weight industry	2,380 - 2,980	N/A	N/A	435 - 555
Hotels				
Budget hotels - 3-star, mid market	3,990 - 4,090	3,685 - 4,174	3,160 - 3,460	1,030 - 1,515
Business hotels - 4/5-star	4,110 - 4,760	5,003 - 5,980	4,060 - 4,510	1,345 - 2,360
Luxury hotels - 5-star	4,790 - 5,430	5,980 - 7,069	4,060 - 4,510	1,970 - 2,645
Others				
Underground/basement car parks (<3 levels)	3,430 - 4,090	2,188 - 3,208	1,390 - 1,805	320 - 565
Multi storey car parks, above ground (<4 levels)	2,050 - 2,420	1,210 - 1,591	865 - 1,280	210 - 365
Schools (primary and secondary)	2,650 - 2,850	2,420 - 2,801	N/A	255 - 330
Students' residences	3,020 - 3,390	1,916 - 2,230	2,330 - 2,445	305 - 385
Sports clubs, multi purpose sports/leisure centres (dry sports)	3,970 - 4,500	N/A	2,855 - 3,045	610 - 780
General hospitals - public sector	5,030 - 5,540	N/A	4,025 - 4,210	855 - 1,245

The above costs are at 1st Quarter 2023 levels.

Approximate Building Costs For Major Cities In Asia

Building Type	Bangkok	Bangalore	Manila	Ho Chi Minh
	Q1/2023	Q1/2023	Q1/2023	Q1/2023
	USD/ m2 CFA (See also exchange rates per U.S. dollar below)			
	BAHT 33.71	INR 82.10	PHP 54.43	VND 23,600
Domestic				
Apartments, high rise, average standard				
- Shell and core	540 - 712	634 - 725	N/A	N/A
- Full fit	724 - 884	701 - 854	986 - 1,322	670 - 830
Apartments, high rise, high end				
- Shell and core	629 - 798	987 - 1,199	N/A	N/A
- Full fit	973 - 1,192	1,120 - 1,426	1,333 - 2,393	851 - 965
Terraced houses, average standard				
- Shell and core	300 - 389	484 - 544	N/A	N/A
- Full fit	457 - 564	494 - 558	884 - 1,082	452 - 525
Detached houses, high end				
- Shell and core	525 - 750	526 - 619	N/A	N/A
- Full fit	795 - 958	625 - 709	1,718 - 2,924	515 - 621
Office / Commercial				
Medium/high rise offices, average standard	804 - 958	519 - 572 [#]	903 - 1,178	783 - 896
High rise offices, prestige quality	1,003 - 1,287	603 - 761 [#]	1,307 - 1,686	903 - 1,216
Out-of-town shopping centre, average standard	685 - 887	521 - 569	768 - 957	N/A
Retail malls, high end	919 - 973	701 - 803	1,048 - 1,469	731 - 946
Industrial				
Industrial units, shell only (Conventional single storey framed units)	534 - 673	449 - 553	512 - 660	322 - 401
Owner operated factories, low rise, light weight industry	N/A	475 - 592	688 - 865	364 - 475
Hotels				
Budget hotels - 3-star, mid market	1,252 - 1,394	1,018 - 1,103	1,146 - 1,417	1,451 - 1,756
Business hotels - 4/5-star	1,602 - 1,842	1,440 - 1,859	1,308 - 2,169	N/A
Luxury hotels - 5-star	1,872 - 2,171	1,984 - 2,329	1,810 - 3,435	1,832 - 2,174
Others				
Underground/basement car parks (<3 levels)	614 - 810	344 - 396	597 - 777	665 - 784
Multi storey car parks, above ground (<4 levels)	202 - 329	286 - 335	472 - 709	428 - 464
Schools (primary and secondary)	N/A	357 - 419	673 - 929	562 - 606
Students' residences	N/A	373 - 458	722 - 916	562 - 713
Sports clubs, multi purpose sports/ leisure centres (dry sports)	N/A	688 - 771	1,134 - 1,652	830 - 878
General hospitals - public sector	N/A	773 - 898	1,366 - 1,596	N/A

The above costs are at 1st Quarter 2023 levels.

Approximate Building Costs For Major Cities In Asia

Building Type	Outline Specification
Domestic	
Apartments, high rise, average standard	Shell and core , including finishes and fittings to public area, but excluding finishes and fittings to apartment units Full fit , with air-conditioning, kitchen cabinets and home appliances, but excluding decorative light fittings and loose furniture
Apartments, high rise, high end	Shell and core , including finishes and fittings to public area, but excluding finishes and fittings to apartment units Full fit , good quality provisions, with air-conditioning, kitchen cabinets and home appliances, but excluding decorative light fittings and loose furniture
Terraced houses, average standard	Shell and core , joined houses in row(s), excluding garden, parking, finishes and fittings to house interior Full fit , including finishes and fittings to house interior, with air-conditioning, kitchen cabinets and home appliances, but excluding decorative light fittings, loose furniture, garden and parking
Detached houses, high end	Shell and core , good quality facade, excluding garden, parking, finishes and fittings to house interior Full fit , good quality provisions, with 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	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	RC structure, curtain wall, including public area fit-out, tenant area with raised floor, painted wall and false ceiling
Out-of-town shopping centre, average standard	Including public area fit-out and M&E, but excluding shop fit-out
Retail malls, high end	
Industrial	
Industrial units, shell only (Conventional single storey framed units)	RC structure with steel roof and M&E to main distribution, but excluding a/c and tenant fit-out
Owner operated factories, low rise, light weight industry	RC structure, including ancillary office with simple fit-out and M&E, but excluding a/c
Hotels	
Budget hotels - 3-star, mid market	<ol style="list-style-type: none"> Interior decoration Furniture (fixed and movable) Special light fittings (chandeliers, etc.) 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)	Government standard and provisions; excluding educational equipment
Students' residences	University standard
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 / café, bar, etc. Costs include a/c, Furniture, Fittings and Equipment (FF&E)
General hospitals - 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 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 and corridors) and M&E main plant and upfeed, with occupant areas unfurnished.
- "Full fit" buildings should complete with all elements that allow the buildings to be ready for operation, including public and occupant 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.
- Kuala Lumpur:** \$ 6-12 units per floor, 46m² - 83m² per unit; excluding air-conditioning, kitchen cabinets and home appliances \$\$. **Bangkok:** #Tenant area with screeded floor, painted wall and ceiling, excluding raised floor.
- The data for Bangkok is provided by Mentabuild Limited.
- The data for Bangalore is provided by Arkind LS Private Limited.
- The data for Singapore is provided by Asia Infrastructure Solutions Singapore Pte. Ltd.
- The data for Kuala Lumpur is provided by JUBM Group.
- The data for Ho Chi Minh is provided by DLS Consultant Company Limited.
- Singapore, Kuala Lumpur and Bangalore:** Rates are nett of GST. **Bangkok and Ho Chi Minh:** Rates are nett of VAT. **Manila:** Rates include 12% VAT.



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