



Singapore

Country Insights and Commodity Report

Q1 2022



Singapore

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Robust growth in manufacturing, construction and services bolstered economic expansion of 6% in 2021, and the Ministry of Trade and Industry (MTI) has forecast growth of 3–5% in 2022. The easing of domestic and border restrictions is expected to support this economic output in 2022, although downside risks are present with the Russia-Ukraine conflict impacting the global economy and ongoing supply chain issues.

Following a very challenging 2020, with a 38.4% contraction, the Singaporean construction industry saw a recovery in 2021 with 20.1% growth, but real output is not expected to exceed pre-COVID levels until 2026. Labour availability (and the associated costs) and material cost escalation are expected to constrain growth, which is forecasted to stand at 15.4% in real terms this year.

As material costs will continue to represent a challenge for the construction industry for the foreseeable future, Linesight will publish quarterly updates to track commodities and provide insights about future projections on movements.



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Lumber

Construction output in Singapore is expected to continue its recovery from the sharp downturn in 2020. The improvement in residential construction combined with global supply pressures saw lumber prices increase by 4% in 2021 on an annual average basis. Prices are expected to remain relatively high in 2022, assuming construction continues to recover in the absence of any repeat of COVID-19 lockdowns.



Cement and concrete

The sharp rebound of construction activity following the shutdowns in 2020 has driven up demand for cement and concrete. However, given that Singapore is in a position to meet most of its demand for concrete and cement via domestic production, price inflation will be relatively muted when compared to metals prices.



Concrete blocks and bricks

Although supplies will likely be sufficient to meet the rising demand stemming from the ongoing recovery in the construction industry, higher production costs will keep prices relatively elevated in the coming quarters.



Steel (rebar and structural)

Steel prices soared in 2021, reflecting a combination of supply disruption, higher input costs, and improving demand from steel-consuming industries, and this contributed to a sharp rise in overall construction costs in Singapore. Given the renewed disruptions stemming from the Russia-Ukraine conflict, prices will remain elevated in the coming quarters. Russia and Ukraine are key suppliers of steel and iron ore to the EU, and the regional disruptions to trade will mean European buyers seek alternative source markets, thereby tightening global supplies.



Copper







After rising sharply in the first half of 2021, copper prices have fluctuated at levels close to the record highs. There had been an expectation that an improvement in supply would contribute to some cooling in the market in 2022, but it has again come under pressure stemming from global disruptions. However, an outlook for weaker growth in China will help to contain copper price inflation.

Singapore - Commodity Report



Materials	Q4 2021	Q3 Q4 2022 (f)		Q4 - Q1 (e) 2022
	S\$	S\$	2021-22 (f) % change	% change
Copper (S\$/MT)	12,759	14,283	11.9% ↑	6.4% ↑ ●
Steel rebar (S\$/MT)	1,109.2	1,242	11.9% ↑	6.6% ↑ ●
Steel flat (S\$/MT)	1,227.8	1,382	12.6% ↑	6.8% ↑ ●
Lumber (S\$/M3)	102.96	115.1	11.8% ↑	8.7% ↑ ●
Asphalt (S\$/MT)	357.4	427	19.6% ↑	11.5% ↑ ●
Limestone (S\$/MT)	34.5	39.5	14.6% ↑	12.1% ↑ ●
Cement (S\$/MT)	95.7	115	19.9% ↑	12.9% ↑ ●
Concrete (S\$/M3)	103.4	107	3.9% ↑	1.5% ↑ ●
Welded mesh (S\$/unit)	12	15	24.2% ↑	19.2% ↑ ●
Bricks (S\$/'000 unit)	3,467.5	3,593	3.6% ↑	3.6% ↑ ●
Plasterboard (S\$/unit)	9.5	9.5	-0.1% ↓	0.5% ↑ ●
Diesel (S\$/litre)	2.1	2.52	20.1% ↑	11.5% ↑ ●

Q3 Q4 2022 (f): Forecasted average
2021-22 % change: % change from Q4 2021 to Q3 Q4 2022 average
 ● **Q4 to Q1 2022 % change greater than estimation in our Q4 report**
 ■ **Q4 to Q1 2022 % change less than estimation in our Q4 report**

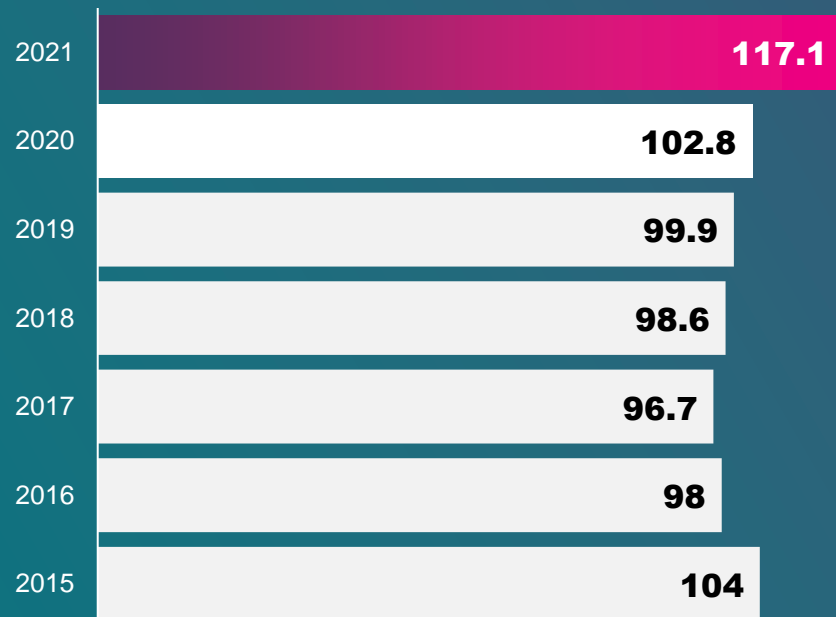
Material	% change Q1 – Q2 2022 (f)	Level of impact of pricing on construction procurement and supply chain *	
 Metal prices - Copper - Steel rebar - Flat steel	+2.1% ↑ +1.8% ↑ +1.7% ↑	 High	Having risen sharply during 2021 owing to a wide supply-demand gap, amid supply disruptions and low inventories, prices for copper were set to ease over 2022, based on an assumption of a recovery in production levels and a normalization of the supply chain. However, the Russia-Ukraine conflict has shocked the markets, and driven copper prices up. Steel prices soared in 2021, driven high by global pressures on both the supply side with disruptions and high input costs, and on the demand side, given the recovery in economic growth. Prices were expected to ease this year based on an assumption of an improvement in the global supply-demand balance, but supplies of raw materials and finished products have been disrupted by the ongoing conflict. According to NatSteel, by mid-March rebar prices in Singapore had already risen by 15% since the start of the conflict, and imports from Turkey and the Middle East were limited because of higher energy and transportation costs, as well as preferences to target European buyers.
 Cement Concrete	+5.5% ↑ +2% ↑	 Moderate	Cement prices rose by around 7% in the first two months of the year and faced continued upward pressure in March. Given the outlook for relatively high prices for raw materials and transportation costs, prices will remain elevated in the coming quarters. Demand will pick up in line with the recovery in the construction sector, but this demand is primarily met through domestic production.
 Asphalt	+2% ↑	 Moderate	Singapore is one of the largest producers and exporters of bitumen in the region, but local prices are mainly driven by global crude oil prices. Given the impact on crude oil prices from the Russia-Ukraine conflict, asphalt prices will remain high, but there will likely be sufficient supply to meet domestic demand.

Please note that commodity prices are based on representative materials available in the respective countries, and as these materials may not be standard across all markets, cross-country comparisons on prices can be ineffective. For example, asphalt types can vary between hot, cold or a bitumen price, and standard unit sizes for materials can vary across countries.

Singapore - Commodity Report





Tender price index 2015-2021



Knoema World Data Atlas

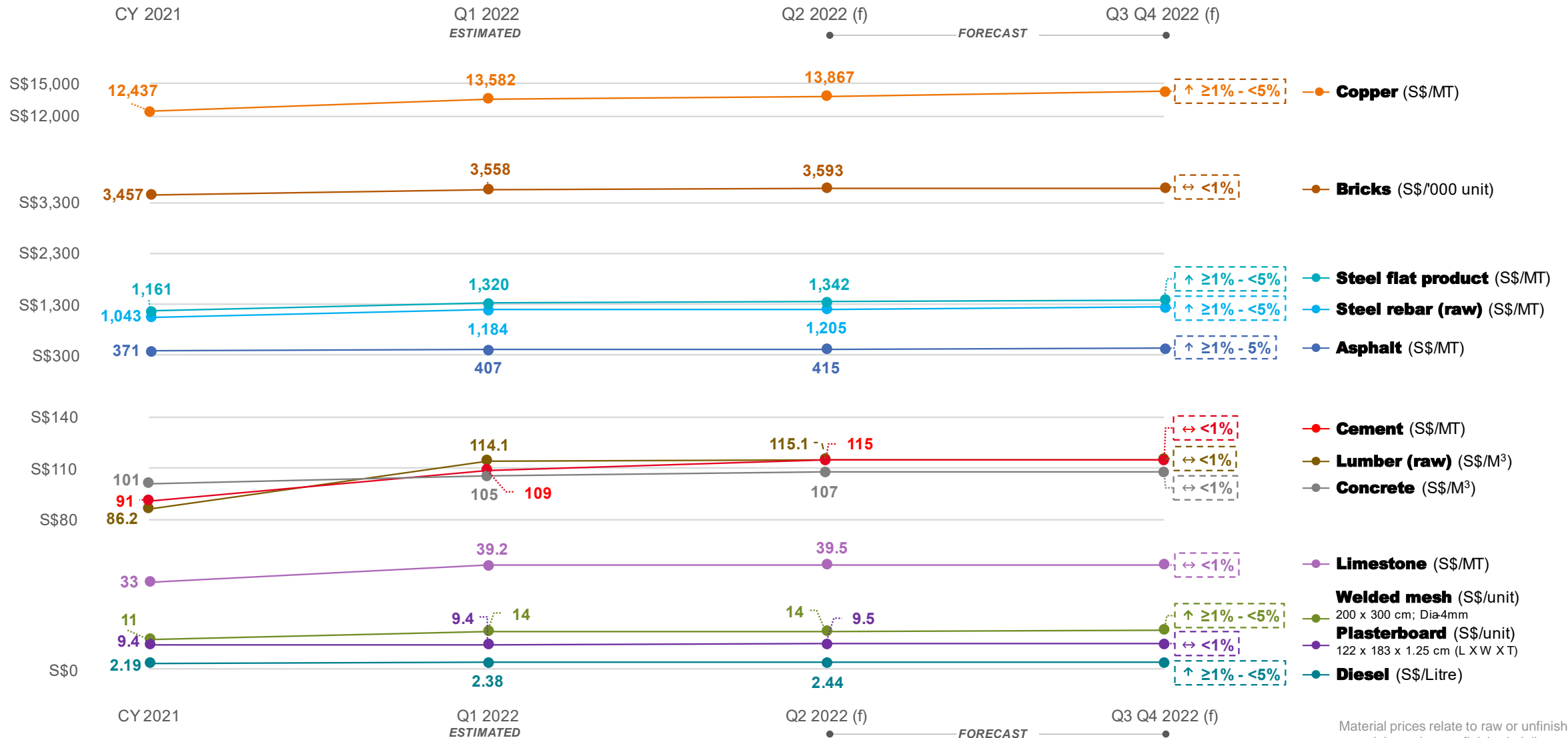
Index of economic freedom **89.70 out of 100**

Material	% change Q1 – Q2 2022 (f)	Level of impact of pricing on construction procurement and supply chain *
 Limestone	+0.8% ↑	 Low The local building and construction industry has proposed measures to the government to address skyrocketing building material costs, but prices for limestone and other building materials will ease in 2022.
 Lumber	+0.9% ↑	 Moderate Lumber prices in Singapore continued to rise in early 2022, having increased sharply over the previous year. The ongoing recovery in residential construction will keep prices relatively high in the coming quarters.
 Welded mesh	+1.2% ↑	 High Reflecting the expectation of a continued upward trend in the price of steel, the price of wired mesh is also set to edge higher.
 Bricks	+1% ↑	 High Reflecting the expected improvement in demand as construction output continues to recover, along with higher energy prices that will push up production costs, brick prices will trend upwards in the coming quarters.
 Plasterboard	+0.6% ↑	 Low Plasterboard will remain relatively high, bolstered by the recovery in domestic demand as construction picks up.
 Diesel	+2.5% ↑	 High Diesel prices surged in March, as suppliers reacted to the sharp rise in global crude prices following the outbreak of the Russia-Ukraine conflict. In view of the likely continuation of disruption in supplies from Russia, global prices will remain at high levels. There are also emerging shortages of diesel. In March, Singapore's diesel fuel inventories were four million barrels below the five-year average (prior to the COVID-19 outbreak).

* Level of impact rating reflects a combination of factors: the price movement and also price level (compared to recent past beyond the last quarter), the importance of the material, and general state of the supply chain in terms of stability.

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Singapore - Construction Materials Pricing (2021-2022)



Material prices relate to raw or unfinished materials, and not to finished, delivered and erected on-site prices.

Singapore - Macroeconomic overview



Economic indicators



3.22%

GDP growth in 2022 (f) and 6.03% in 2021



1.46%

inflation rate in 2022 (f) and **1.56%** for 2021



3.78M

people employed in 2022 (f) and 3.72M in 2021



2.5%

unemployment rate in 2022 (f) and 2.7% in 2021



105.38

Consumer Price Index in 2022 (f) and 104.44 in 2021

Weather conditions



25°C to 32°C

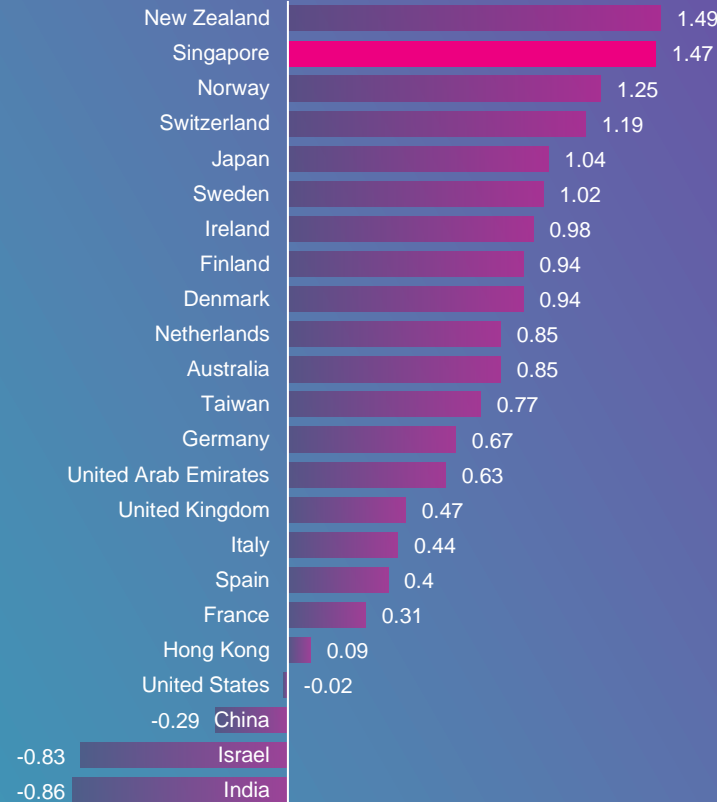
Typical temperature range throughout the year



2150mm

Average annual rainfall in Singapore.

Political stability



Political stability index (-2.5 weak; 2.5 strong)

The index of Political Stability and Absence of Violence/ Terrorism measures perceptions of the likelihood that the government will be destabilised or overthrown by unconstitutional or violent means, including politically-motivated violence and terrorism.

National holidays



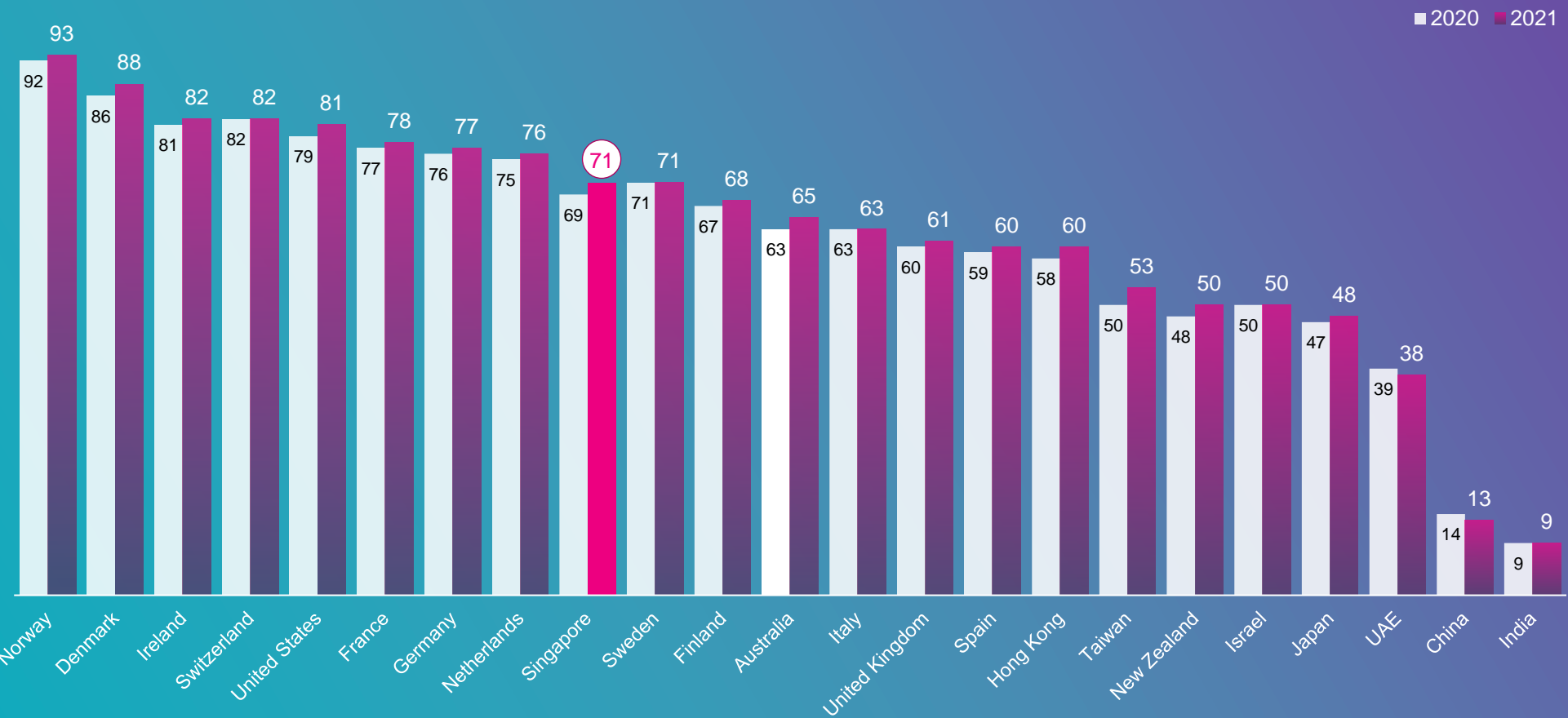
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national public holidays in Singapore each year. Most holidays are taken during Chinese New Year and Christmas in February and December.

Singapore - Macroeconomic overview




Labour productivity



Labour productivity per hour worked in 2020 international dollars, converted using Purchasing Power Parities

Labour costs



SGD22

is the average hourly earnings or

SGD45,713

average construction worker gross salary in Singapore.

An entry level construction worker (1-3 years of experience) earns an average salary of **SGD34,172**. A senior level construction worker (8+ years of experience) earns an average salary of **SGD55,646**.









\$71

is the labour productivity per hour worked in 2021 international dollars, and \$69 in 2020 (converted using Purchasing Power Parities)

Singapore - Construction overview



Output 2021 and 2022 (f) in millions

Sector	Total 2021	Total 2022 (f)	% change
Commercial 	S\$ 1,187.24	S\$ 1,360.68	14.6%
Energy and utilities 	S\$ 1,915.26	S\$ 2,165.42	13.1%
Industrial 	S\$ 5,213.67	S\$ 5,991.70	14.9%
Infrastructure 	S\$ 4,014.79	S\$ 4,648.00	15.8%
Institutional 	S\$ 3,219.36	S\$ 3,664.07	13.8%
Residential 	S\$ 5,106.95	S\$ 6,017.04	17.8%
Total output	S\$ 20,657.27	S\$ 23,846.77	15.4%

Long-lead equipment (LLE) – time risks

Long-lead equipment (LLE) lead times have changed drastically since the start of 2022. Suppliers have seen the implications of material shortages, delays and price hikes throughout the supply chain which is leading to extended lead times and reduced commitment from suppliers for new projects. The key areas in focus are:

- Demand:** The demand for long lead equipment in the data sector has increased exponentially with the IT boom. More and more data centre and crypto mining providers are joining the market and this new demand far outweighs the capacity of the supply chain. Entry onto the production line has become a significant challenge with suppliers reporting fully booked capacity until Q1 2023. Opportunities exist for the development of Tier 2 and Tier 3 suppliers to Tier 1 status however that will take time to develop an extended supply chain.
- Material shortage:** The end of Q1 2022 saw a significant drop in the availability of raw materials used for LLE production. Global factors such as the conflict in Ukraine and the resurgence of COVID19 has halted production which is at its lowest levels in recent years. The ethical approach, which is to manoeuvre away from the use of Russian gas and oil, has reduced production levels and added longer lead times within the supply chain – even for APAC, as the European impact is felt. The raw material shortages are expected to continue into Q2 2022, whilst there is uncertainty for the security of the supply chain.
- Freight durations and costs:** Heightened by the increase in fuel costs and compounded by the shortage of labour and low supply of shipping containers, freight durations have soared as suppliers look for ways to mitigate these challenges. The demand for freight services has grown across all markets in recent years and the competition amongst industries has had a negative effect on availability and durations. As clients consider alternative solutions, it almost becomes cost prohibitive to use quicker forms of transport such as air freight due to increasing fuel costs.

Construction health & safety practices and culture



Construction health and safety practices and culture regulated and maintained by MOM's Workplace Safety and Health Act.



1.1
fatalities per 100,000 workers in 2021.



>1
fatalities per 100,000 workers in construction is Singapore's goal.

Singapore – Average construction costs



Building type	Cost range		M&E (inc. @)	
Commercial offices				
Suburban, naturally ventilated				
Shell and core	\$2,170	\$2,800	per sq.m.	20 - 25%
Developer standard	\$2,400	\$3,120	per sq.m.	20 - 25%
Extra for air conditioning	\$230	\$320	per sq.m.	-
City centre, air conditioned				
Shell and core	\$2,600	\$3,600	per sq.m.	30 - 35%
Developer standard (CAT A)	\$2,600	\$3,600	per sq.m.	30 - 35%
Office fit-out				
95% open-plan, no catering	\$1,399	\$1,722	per sq.m.	25 - 30%
75% open-plan, limited catering	\$1,615	\$1,938	per sq.m.	25 - 30%
60% open-plan, full catering	\$1,830	\$2,153	per sq.m.	25 - 30%
Corporate HQ	\$3,200	\$3,800	per sq.m.	25 - 30%
High-tech industrial				
Shell and core	\$1,500	\$2,250	per sq.m.	25 - 30%
Fit-out	\$1,000	\$1,200	per sq.m.	25 - 30%

Building type	Cost range		M&E (inc. @)	
Residential				
Estate house (approx. 100sq.m.)	\$2,240	\$2,700	per sq.m.	10 - 15%
Purpose-built student accommodation (incl. FF&E)	\$1,700	\$2,300	per sq.m	15 - 20%
Apartments - suburban/city edge, air conditioned				
BTR - 4-8 storey (incl. FF&E)	\$2,450	\$3,700	per sq.m.	25 - 30%
BTS - 4-8 storey	\$2,030	\$2,650	per sq.m.	20 - 25%
Apartments - urban				
BTR - 12-15 storey (incl. FF&E)	\$4,000	\$5,900	per sq.m.	15 - 20%
BTS - 12 storey and above, luxury condominium	\$3,200	\$5,900	per sq.m.	15 - 20%
Co-living	\$2,450	\$3,700	per sq.m.	15 - 20%
Shopping centres				
Anchor unit	\$1,350	\$1,750	per sq.m.	15 - 20%
Unit shops	\$2,100	\$2,900	per sq.m.	20 - 25%
Mall	\$2,910	\$3,430	per sq.m.	30 - 35%
Retail fit-out	\$800	\$1,000	per sq.m.	15 - 20%

Notes:

- Costs are based on March 2022 prices, and based on gross floor area. Average costs as indicated should not be used for insurance valuation purposes. The costs are representative of typical valuations for each type of project. Unique designs or challenging sites may not be within the cost range shown. The rates shown are average construction build only and do not include GST, professional fees, any other soft costs, or allow for future inflation.
- The building costs noted above for the various building types are exclusive of site development costs and external works, which can vary significantly based on the specific site.
- The costs associated with brownfield sites can vary significantly and the building costs above exclude abnormal contamination.

- The basic building costs above exclude basement construction costs. Should a basement be required, this should be costed separately.
- Costs per car parking space assume a large, efficient car park layout providing a gross 28-34sq.m. per car parking space. Note that this relates to pure car parking areas, and additional basement spaces such as bicycle parking, plant rooms, shower and changing facilities are not accounted for, and should be costed separately.
- All cost shown are in Singapore Dollars (S\$).

* Current basic building cost (BBC) limit includes VAT, but excludes external works, fitted furniture and abnormal cost provisions.

Singapore - Average construction costs



Building type	Cost range		M&E (inc. @)	
Car park				
Surface	\$2,880	\$4,032	per space/ carpark lot	-
Multistorey	\$14,500	\$16,500	per space/ carpark lot	-
Undercroft	\$4,608	\$5,760	per space/ carpark lot	-
Single-level basement	\$22,835	\$25,575	per space/ carpark lot	-
Double-level basement	\$25,781	\$28,875	per space/ carpark lot	-
Basement (no car parking)				
Bicycle storage general	\$250	\$300	per sq.m.	-
Shower and changing facilities	\$300	\$400	per sq.m.	-
Plant space (excl. plant)	\$350	\$450	per sq.m.	-
Leisure				
Hotel building 3-4* (incl. FF&E)	\$3,320	\$4,500	per sq.m.	25 - 30%
Hotel building 5* (incl. FF&E)	\$4,600	\$6,000	per sq.m.	25 - 30%
Aparthotels	\$2,900	\$3,700	per sq.m.	25 - 30%
Restaurant	\$1,000	\$1,200	per sq.m.	15 - 20%
Cinema	\$2,700	\$3,300	per sq.m.	35 - 45%
Sports hall	\$14,00,000	\$16,00,000	per basketball hall size	20 - 25%
Swimming pool	\$8,35,000	\$11,45,000	per olympic size	15 - 20%
Retail fit-out	\$800	\$1,000	per	15 - 20%

Building type	Cost range			M&E (inc. @)
Site development business parks				
Roads and primary services	\$1,30,00,000	\$1,82,00,000	per hectare	-
Warehouses				
Without offices	\$800	\$1,000	per sq.m.	15 - 20%
With 10% offices	\$850	\$1,050	per sq.m.	15 - 20%
Healthcare				
Tertiary care	\$5,500	\$6,500	per sq.m.	35 - 40%
Acute teaching hospital	\$5,200	\$6,100	per sq.m.	35 - 40%
General hospital	\$3,850	\$4,600	per sq.m.	30 - 35%
Nursing home	\$2,100	\$2,600	per sq.m.	20 - 25%
Education				
Primary-level	\$1,150	\$1,550	per sq.m.	20 - 25%
Second-level	\$1,300	\$2,000	per sq.m.	20 - 25%
Third-level	\$2,500	\$3,500	per sq.m.	20 - 25%

Singapore - Report methodology



Linesight has commissioned independent global research to track construction materials and commodity prices. The approach and methodology for the collection of construction material pricing and other indicators is based on primary and secondary research.

Primary and secondary research

Primary research is conducted on a quarterly basis with stakeholders in the value chain, including manufacturers and suppliers/distributors of the target materials, to ascertain market information on prices in recent quarters, and also on projections for changes in the coming quarter and remainder of the year. The market analysis also involves a thorough assessment of secondary sources of data on materials and labour prices, in addition to underlying demand and supply trends that will impact market prices.

Sources include GlobalData's Construction Intelligence Center (CIC), the World Bank, IMF, OECD, as well as country specific national statistics offices, such as the U.S. Bureau of Economic Analysis, Bureau of Labor Statistics, and also industry specific associations and publications. A more comprehensive list of sources is included below.

Definitions

- Commodity prices are net of taxes for all the countries
- Prices are not customer delivered
- All commodities are raw materials
- Nominal and real data

Nominal data series do not exclude changes in prices and are also referred to as current prices series.

Annual changes in nominal data for construction output will include changes in construction activity, as well as changes in costs for materials and equipment.

Real data series are calculated by keeping prices constant (so, are also referred to as constant price series), and therefore, they reflect changes in activity only. Growth rates in nominal terms can overstate the pace of growth in construction activity if there is high inflation stemming from rising prices for key inputs.

Sample sources – Singapore

For Singapore, sources for this report include, but are not limited to:

- IMF
- Economy.com
- The Global Economy
- Weather Spark
- BCA
- GlobalData's Construction Intelligence Center (CIC)
- Conference-board.org

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