



# Bangkok

Global Business Cities 2025 report

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August 2019

# Global Business Cities 2025

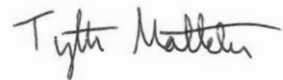
Dear Reader,

We hope that you will enjoy familiarizing yourself with this Statista Global Business Cities 2025 report. We have carefully collected and analyzed data that provides you with a comprehensive and up-to-date impression of the city of your choice.

These reports cover 200 most important business cities from 73 countries and territories around the globe. The distribution of cities across the geographical regions and countries was based on their relative share of the global and regional economy. The individual cities included in this product were chosen based on their economic importance and geographical distribution.

Tytti Mälkki studied International Business and Politics in Copenhagen, São Paulo, and Beijing and has specialized in subnational econometric analysis. Tytti has been part of Statista since summer 2017 with prior experience in consulting and communications.

We wish you a valuable and insightful reading experience.



**Tytti Mälkki**

# Global cities for business 2025

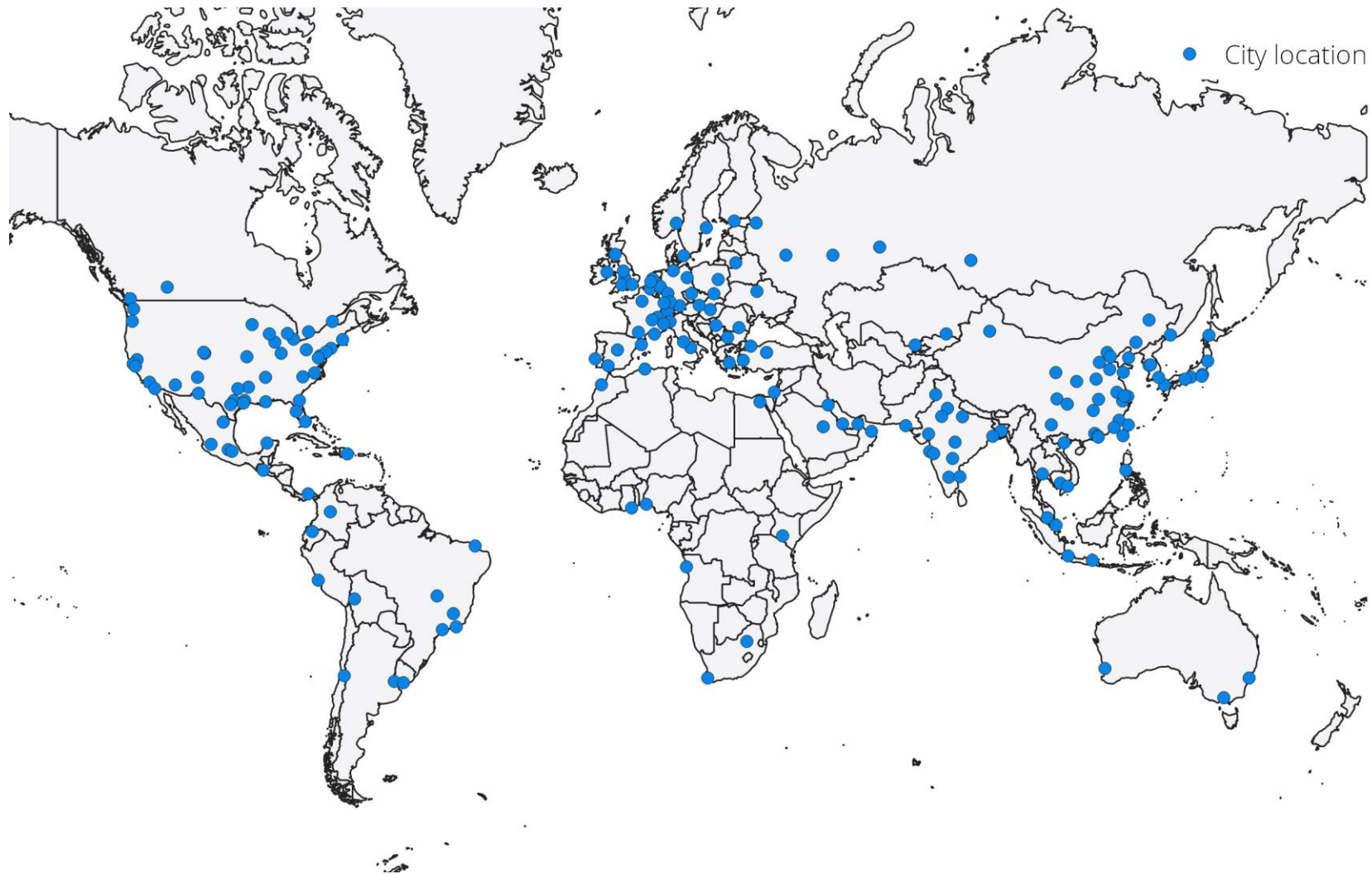
Urbanization has been identified as one of the megatrends shaping the economy and society globally. More than half of the world's population already lives in urban areas, and this proportion is expected to rise to over 65 percent by 2030. In addition, urban agglomerations are becoming larger in size. According to population projections there will be 49 cities with over 10 million inhabitants by 2025 and increasing number of these so-called megacities are in the South and East.

Not just people, but economic activities tend to concentrate in cities as more than 70 percent of world's Gross Domestic Product (GDP) is generated in cities. Cities are increasingly seen removed from their national context and considered more in relation to one another in a transnational network of central marketplaces and operational hubs. Both urbanization and the role of cities as economic powerhouses highlight the importance of taking a closer look at the aspects that are associated with cities that nurture businesses.

Environmental factors beyond just the population size and GDP measures determine how advantageous of a location a given city will be for business as companies cannot operate in a vacuum separated from the wider context of the economy and society. For this reason, these reports have identified, collected and analyzed a set of indicators connected to the attractiveness of a city from a global business perspective. This collection has been divided to conceptual chapters describing different sides of what makes a city into a good location choice from the perspective of business operations. The society chapter features information connected to institutional quality, the economy chapter emphasizes the economic strength and level of development, the operational environment focuses on infrastructure and logistics, while the charisma chapter highlights aspects reflecting cultural capital and social influence.

Based on the research conducted for the Global Business Cities 2025 ranking, these conceptual categories were mostly resonating with the results. Factors that were found most connected to the favorable business environment were quality of institutions supporting business activities, general quality of life in the city in terms of health and individual rights, soft power from connectedness and cultural capital, as well as importance of the market in terms of size of local economy and trade volume.

# Global Business Cities 2025



# Agenda

## 01 Introduction

- Total rankings
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- Executive summary

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- Education
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## 03 Economy

- Economic conditions
- Business environment
- Living standards

## 04 Operational environment

- Information exchange
- Transportation
- Social infrastructure

## 05 Charisma

- Tourism
- Culture
- Environment

## 06 Appendix

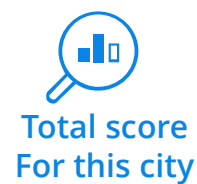
- Methodology
- Glossary
- Author

# INTRODUCTION



# Bangkok ranked 151st out of 200 Global Business Cities 2025

Global Business City 2025 results

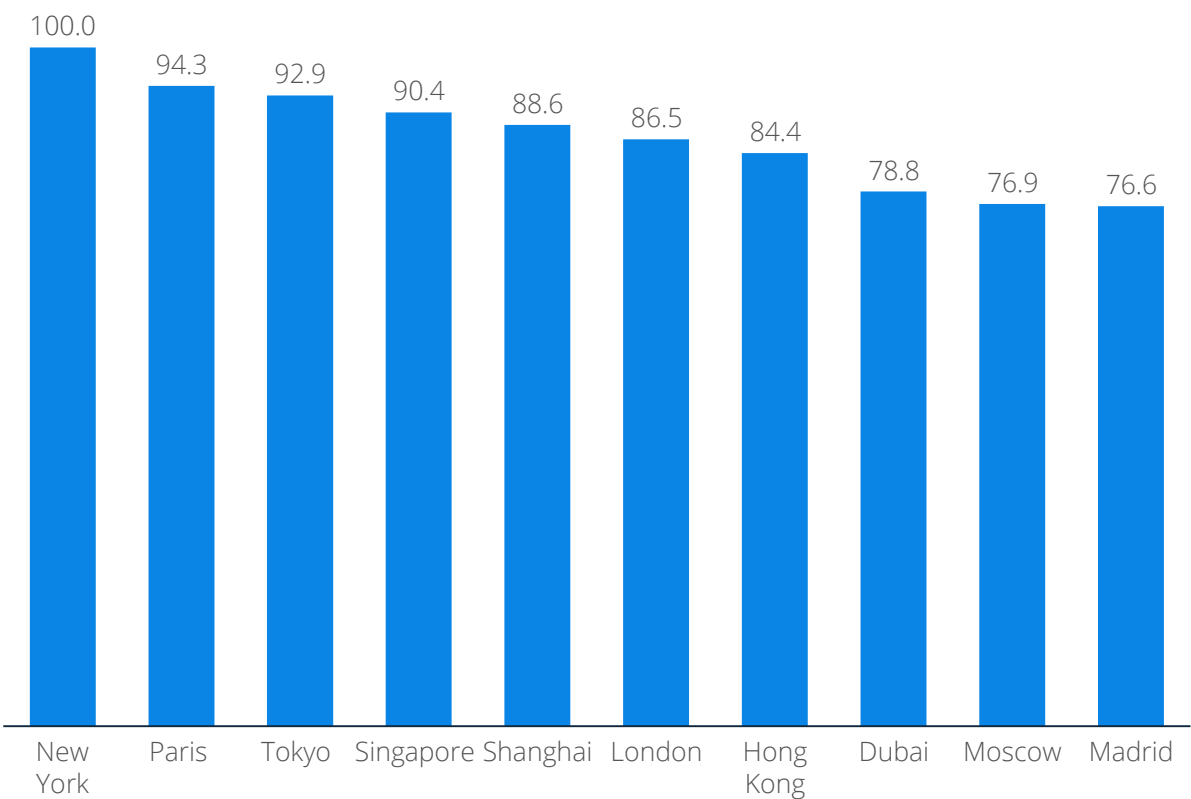


22.8



151st

Top 10 cities in Global Business Cities 2025 index



# Global business Cities 2025 rankings (1/2)

| #  | City      | Total score |
|----|-----------|-------------|
| 1  | New York  | 100.0       |
| 2  | Paris     | 94.3        |
| 3  | Tokyo     | 92.9        |
| 4  | Singapore | 90.4        |
| 5  | Shanghai  | 88.6        |
| 6  | London    | 86.5        |
| 7  | Hong Kong | 84.4        |
| 8  | Dubai     | 78.8        |
| 9  | Moscow    | 76.9        |
| 10 | Madrid    | 76.6        |
| 11 | Boston    | 76.4        |
| 12 | Vienna    | 76.3        |
| 13 | Oslo      | 75.9        |
| 14 | Amsterdam | 75.4        |
| 15 | Athens    | 74.8        |
| 16 | Shenzhen  | 74.2        |
| 17 | Frankfurt | 73.6        |
| 18 | Chicago   | 73.3        |
| 19 | Stockholm | 72.3        |
| 20 | Berlin    | 71.6        |
| 21 | Brussels  | 71.3        |
| 22 | Zürich    | 70.6        |
| 23 | Helsinki  | 70.1        |
| 24 | Munich    | 69.0        |
| 25 | Lisbon    | 68.6        |

| #  | City             | Total score |
|----|------------------|-------------|
| 26 | Sydney           | 68.4        |
| 27 | Copenhagen       | 65.0        |
| 28 | Hamburg          | 65.0        |
| 29 | Barcelona        | 64.7        |
| 30 | Toronto          | 63.9        |
| 31 | Miami            | 61.1        |
| 32 | Melbourne        | 60.4        |
| 33 | Düsseldorf       | 60.4        |
| 34 | Busan            | 60.4        |
| 35 | Dublin           | 60.0        |
| 36 | Istanbul         | 58.5        |
| 37 | Taipei           | 58.4        |
| 38 | Osaka            | 57.9        |
| 39 | Budapest         | 57.7        |
| 40 | Tel Aviv         | 57.1        |
| 41 | São Paulo        | 57.0        |
| 42 | Kuala Lumpur     | 56.1        |
| 43 | Milan            | 55.9        |
| 44 | Stuttgart        | 55.8        |
| 45 | Jakarta          | 54.2        |
| 46 | Sofia            | 54.0        |
| 47 | Vilnius          | 53.2        |
| 48 | Quito            | 53.2        |
| 49 | Saint Petersburg | 53.1        |
| 50 | Seoul            | 52.4        |

| #  | City          | Total score |
|----|---------------|-------------|
| 51 | Atlanta       | 52.3        |
| 52 | Montréal      | 51.9        |
| 53 | Perth         | 51.3        |
| 54 | Bucharest     | 51.3        |
| 55 | Buenos Aires  | 50.8        |
| 56 | Calgary       | 50.5        |
| 57 | Fukuoka       | 50.3        |
| 58 | Dalian        | 50.2        |
| 59 | Santiago      | 50.2        |
| 60 | Warsaw        | 48.9        |
| 61 | Prague        | 48.8        |
| 62 | Mexico City   | 48.7        |
| 63 | Guangzhou     | 48.2        |
| 64 | Doha          | 48.2        |
| 65 | Riyadh        | 47.8        |
| 66 | Los Angeles   | 47.8        |
| 67 | Muscat        | 47.5        |
| 68 | Nagoya        | 47.3        |
| 69 | Kuwait City   | 46.8        |
| 70 | Tashkent      | 46.3        |
| 71 | Belgrade      | 45.6        |
| 72 | Kiev          | 45.4        |
| 73 | Montevideo    | 45.1        |
| 74 | Almaty        | 44.2        |
| 75 | Santo Domingo | 44.0        |

| #   | City             | Total score |
|-----|------------------|-------------|
| 76  | Ahmedabad        | 43.9        |
| 77  | Algiers          | 41.9        |
| 78  | Bogotá           | 41.6        |
| 79  | San Francisco    | 41.0        |
| 80  | Mumbai           | 40.9        |
| 81  | Rome             | 40.9        |
| 82  | La Paz           | 40.3        |
| 83  | Luanda           | 40.2        |
| 84  | Panama City      | 38.8        |
| 85  | Minneapolis      | 38.6        |
| 86  | Lima             | 38.3        |
| 87  | Washington D.C.  | 37.2        |
| 88  | Beijing          | 37.1        |
| 89  | Denver           | 37.0        |
| 90  | Cairo            | 36.6        |
| 91  | Pittsburgh       | 36.0        |
| 92  | Johannesburg     | 35.4        |
| 93  | Seattle          | 35.3        |
| 94  | Dallas           | 35.2        |
| 95  | Karachi          | 34.4        |
| 96  | Manchester       | 34.2        |
| 97  | Ho Chi Minh City | 34.1        |
| 98  | Rotterdam        | 33.8        |
| 99  | Portland         | 33.4        |
| 100 | Accra            | 33.2        |

# Global business Cities 2025 rankings (2/2)

| #   | City        | Total score |
|-----|-------------|-------------|
| 101 | Geneva      | 33.1        |
| 102 | Manila      | 33.0        |
| 103 | Qingdao     | 33.0        |
| 104 | Hangzhou    | 32.8        |
| 105 | Kaohsiung   | 32.6        |
| 106 | Lagos       | 32.6        |
| 107 | Lahore      | 32.0        |
| 108 | Dhaka       | 31.1        |
| 109 | Cologne     | 30.4        |
| 110 | Tampa       | 30.2        |
| 111 | Baltimore   | 30.1        |
| 112 | Tianjin     | 29.9        |
| 113 | Hanoi       | 29.7        |
| 114 | Strasbourg  | 29.6        |
| 115 | Guadalajara | 29.5        |
| 116 | Phoenix     | 29.4        |
| 117 | Kolkata     | 29.2        |
| 118 | Phnom Penh  | 29.1        |
| 119 | Honolulu    | 28.3        |
| 120 | Auckland    | 28.3        |
| 121 | Vancouver   | 28.1        |
| 122 | Cleveland   | 27.1        |
| 123 | Casablanca  | 26.6        |
| 124 | Chengdu     | 26.5        |
| 125 | Nairobi     | 26.5        |

| #   | City           | Total score |
|-----|----------------|-------------|
| 126 | Xiamen         | 26.4        |
| 127 | Changsa        | 26.3        |
| 128 | Sevilla        | 26.1        |
| 129 | St. Louis      | 25.9        |
| 130 | Naples         | 25.8        |
| 131 | Charlotte      | 25.4        |
| 132 | Incheon        | 25.4        |
| 133 | Marseille      | 24.9        |
| 134 | Kunming        | 24.7        |
| 135 | Turin          | 24.3        |
| 136 | Sapporo        | 24.2        |
| 137 | Birmingham     | 24.2        |
| 138 | Lyon           | 24.1        |
| 139 | Xi'an          | 23.8        |
| 140 | Rio de Janeiro | 23.7        |
| 141 | Philadelphia   | 23.7        |
| 142 | Toulouse       | 23.5        |
| 143 | Surabaya       | 23.5        |
| 144 | Guatemala City | 23.5        |
| 145 | San Jose       | 23.4        |
| 146 | Houston        | 23.3        |
| 147 | Glasgow        | 23.2        |
| 148 | Suzhou         | 22.9        |
| 149 | Chongqing      | 22.9        |
| 150 | Detroit        | 22.9        |

| #   | City          | Total score |
|-----|---------------|-------------|
| 151 | Bangkok       | 22.8        |
| 152 | Novosibirsk   | 22.8        |
| 153 | Bristol       | 22.7        |
| 154 | San Diego     | 22.7        |
| 155 | Kazan         | 22.4        |
| 156 | Sacramento    | 22.2        |
| 157 | Albuquerque   | 22.1        |
| 158 | Nanjing       | 21.9        |
| 159 | Wuhan         | 21.8        |
| 160 | Yekaterinburg | 21.4        |
| 161 | Vladivostok   | 20.9        |
| 162 | Monterrey     | 20.3        |
| 163 | Columbus      | 20.3        |
| 164 | Brasília      | 20.3        |
| 165 | El Paso       | 20.3        |
| 166 | Indianapolis  | 20.2        |
| 167 | Delhi         | 19.9        |
| 168 | Kansas City   | 19.7        |
| 169 | Ankara        | 19.0        |
| 170 | New Orleans   | 19.0        |
| 171 | Zhengzhou     | 18.3        |
| 172 | Sendai        | 18.3        |
| 173 | Pune          | 18.2        |
| 174 | Jacksonville  | 18.2        |
| 175 | Yokohama      | 17.8        |

| #   | City           | Total score |
|-----|----------------|-------------|
| 176 | Austin         | 17.8        |
| 177 | Nashville      | 17.7        |
| 178 | Belo Horizonte | 17.6        |
| 179 | Krakow         | 17.3        |
| 180 | Urumqi         | 17.2        |
| 181 | Puebla         | 17.1        |
| 182 | Harbin         | 16.6        |
| 183 | Fuzhou         | 16.5        |
| 184 | Shenyang       | 16.0        |
| 185 | Mérida         | 15.7        |
| 186 | Louisville     | 15.3        |
| 187 | Jinan          | 15.1        |
| 188 | Izmir          | 14.8        |
| 189 | San Antonio    | 14.7        |
| 190 | Lanzhou        | 14.5        |
| 191 | Bangalore      | 14.2        |
| 192 | Shijiazhuang   | 13.4        |
| 193 | Lucknow        | 11.3        |
| 194 | Memphis        | 9.8         |
| 195 | Nagpur         | 9.2         |
| 196 | Jaipur         | 8.6         |
| 197 | Fortaleza      | 7.1         |
| 198 | Cape Town      | 6.8         |
| 199 | Hyderabad      | 2.9         |
| 200 | Chennai        | 0           |

# Thailand



## General information:

|  |                        |
|--|------------------------|
| <b>Capital:</b>                            | Bangkok                |
| <b>Official language(s):</b>               | Thai                   |
| <b>Main religion:</b>                      | Buddhist               |
| <b>Main ethnic group:</b>                  | Thai                   |
| <b>Population:</b>                         | 69,183,173             |
| <b>Area:</b>                               | 513,120 sq km          |
| <b>- Population density:</b>               | 135.1 people per sq km |
| <b>Total real GDP<sup>1</sup> in 2018:</b> | US\$248.3bn            |
| <b>- GDP<sup>1</sup> per capita:</b>       | US\$3,589.40           |
| <b>Corporate tax:</b>                      | 22.6%                  |
| <b>Currency:</b>                           | Baht (THB)             |
| <b>- Exchange rate:</b>                    | USD/THB = 33.39        |
| <b>Time zone:</b>                          | UTC+7                  |
| <b>Calling code:</b>                       | +66                    |



1: Constant US\$, see glossary for definition of current and constant US\$

Sources: [CIA](#) 2018, [United Nations](#) 2017, [World Bank](#) 2018, [International Monetary Fund](#) 2018, [Columbia University](#), Statista 2018

# Bangkok

★ Capital city    □ Other city



## General information

- Population in 2019: 10.3 million
- Total population growth 2019-2025: 10.5%

## Economy

- City product: US\$ 501.5 billion PPP
- City product per capita: US\$ 53,336 PPP
- Number of tourists per year: 19.4 million
- Unemployment rate: 0.1%
- Poverty rate: 0.3%

## Logistics

- International airport: Yes
- Harbour: Yes
- Airfreight: n.a.
- Shipping freight: 1.5 million TEU
- Air passengers: 5.6 million

## Infrastructure

- Internet penetration: 22.2%
- Stock exchange: Yes

## Quality of life

- Mean years of schooling<sup>1</sup>: 8.9
- Life expectancy at birth: 74.4 years
- Air pollution: 41 PM10 µg/m3 (annual mean)

1: Average number of completed years of education of population aged 25 years and older, excluding years spent repeating individual grades  
Note: World Health Organization (WHO) has set air quality guideline at 20.0 PM10 µg/m3 measured as annual mean. See appendix for definitions

Sources: [United Nations](#) 2018, Statista

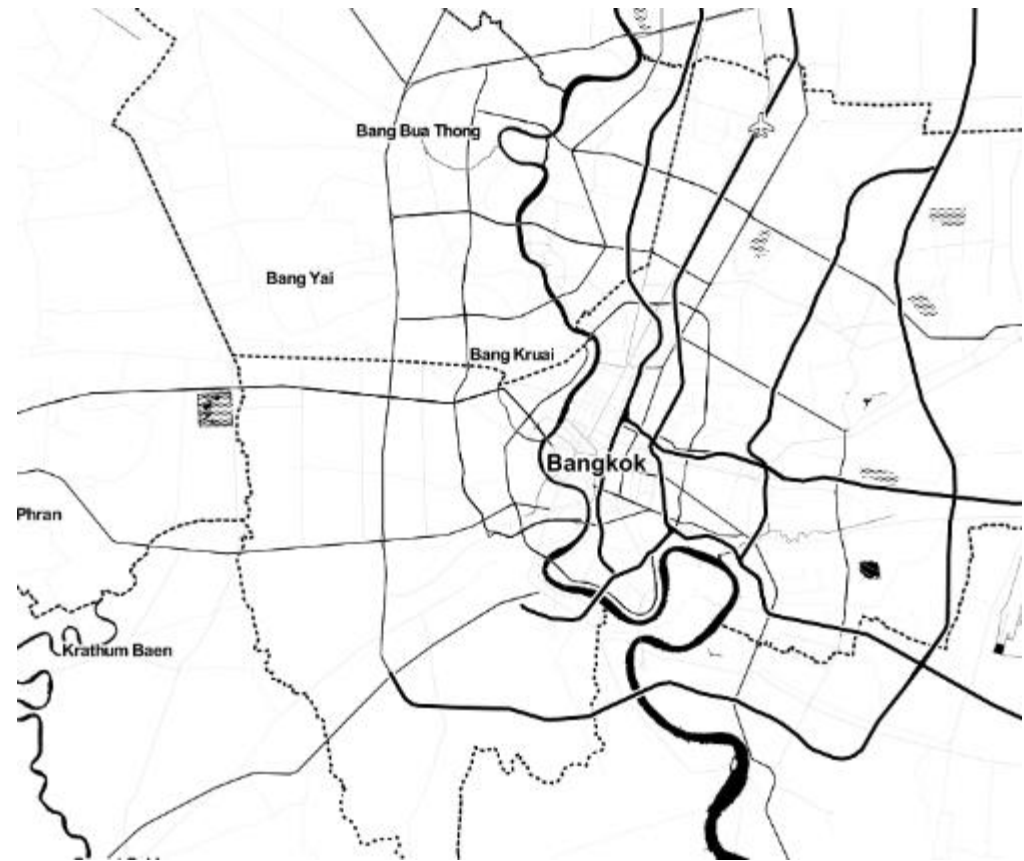
# City orientation

## Airport information

Suvarnabhumi Airport (BKK), Bangkok

- Distance to city center: 31 km
- Domestic connections: 14
- Total connections: 165

Other airports nearby<sup>1</sup>: Don Muang (DMK), Rayong (UTP), Hua Hin (HHQ)



# Thailand sports 4 major airports – flight time from the U.S. ca. 20 hours

## Major airports in Thailand<sup>1</sup>

Suvarnabhumi Airport, Bangkok

- Airport code: BKK
- Distance to city center: 31 km

Udon Thani Airport, Udon Thani

- Airport code: UTH
- Distance to city center: 9 km
- Phuket Airport, Phuket
- Airport code: HKT
- Distance to city center: 33 km

Chiang Mai Airport, Chiang Mai

- Airport code: CNX
- Distance to city center: 5 km

## Flight times from regional hubs in hours (no. of stops)<sup>2</sup>

| Region                     | Hub                              | BKK          | UTH          | HKT          | CNX          |
|----------------------------|----------------------------------|--------------|--------------|--------------|--------------|
| North America              | New York City, the U.S. (JFK)    | 19:50<br>(1) | NA           | 20:25<br>(1) | 20:20<br>(1) |
| Latin America & Caribbean  | São Paulo, Brazil (GRU)          | 23:45<br>(1) | NA           | 26:15<br>(1) | 26:55<br>(2) |
| Europe & Central Asia      | London, the UK (LHR)             | 11:15<br>(0) | 14:15<br>(1) | 14:30<br>(1) | 13:50<br>(1) |
| East Asia & Pacific        | Hong Kong, Hong Kong (HKG)       | 2:40<br>(0)  | 05:30<br>(1) | 3:20<br>(0)  | 2:50<br>(0)  |
| South Asia                 | Delhi, India (DEL)               | 4:10<br>(0)  | 16:45<br>(2) | 7:00<br>(1)  | 7:00<br>(1)  |
| Middle East & North Africa | Dubai, the UAE (DXB)             | 6:30<br>(0)  | 12:20<br>(1) | 6:20<br>(0)  | 9:10<br>(1)  |
| Sub-Saharan Africa         | Johannesburg, South Africa (JNB) | 12:40<br>(1) | NA           | 12:50<br>(1) | 16:30<br>(2) |

1: : Busiest airports by number of Passengers-Airports of Thailand PLC 2: Most direct and fastest routes are considered. Flight times for 17th

July 2019-Google Flights

Note: Distances to city center are based on the shortest route calculated by Google Maps and rounded to full kilometers

Source: Google Flights , Google Maps

# Executive summary (1/2)

## Society

- This city is growing slower than the other cities in this region on average
- The level of English proficiency is low in this country
- Inhabitants in this city have 3.4 years less education than in the regional high performer
- In 'control on corruption' Thailand is 54.8 points behind regional high performer
- This city is considered safer than average for this region

## Economy

- The total population was larger and the city GDP higher in this city compared to general region
- The city GDP per capita in this city was US\$53,346.4, while it was US\$78,773.3 in regional high-performer
- It takes 4.5 days to start a business in Thailand compared to 5.6 days in the U.S.
- Cost of living was higher than in this region in general
- At US\$2,021, the average rent in this city was US\$1,847 lower than the highest for this region

# Executive summary (2/2)

## Operational Environment

- The internet penetration in this city is lower than in the general region
- This city has a stock exchange
- Shipping freight volumes at 1.49 mTEU were lower than the regional average
- There are 1.1 physicians per 1,000 inhabitants in this city
- The density of universities in this city was lower than regional average

## Charisma

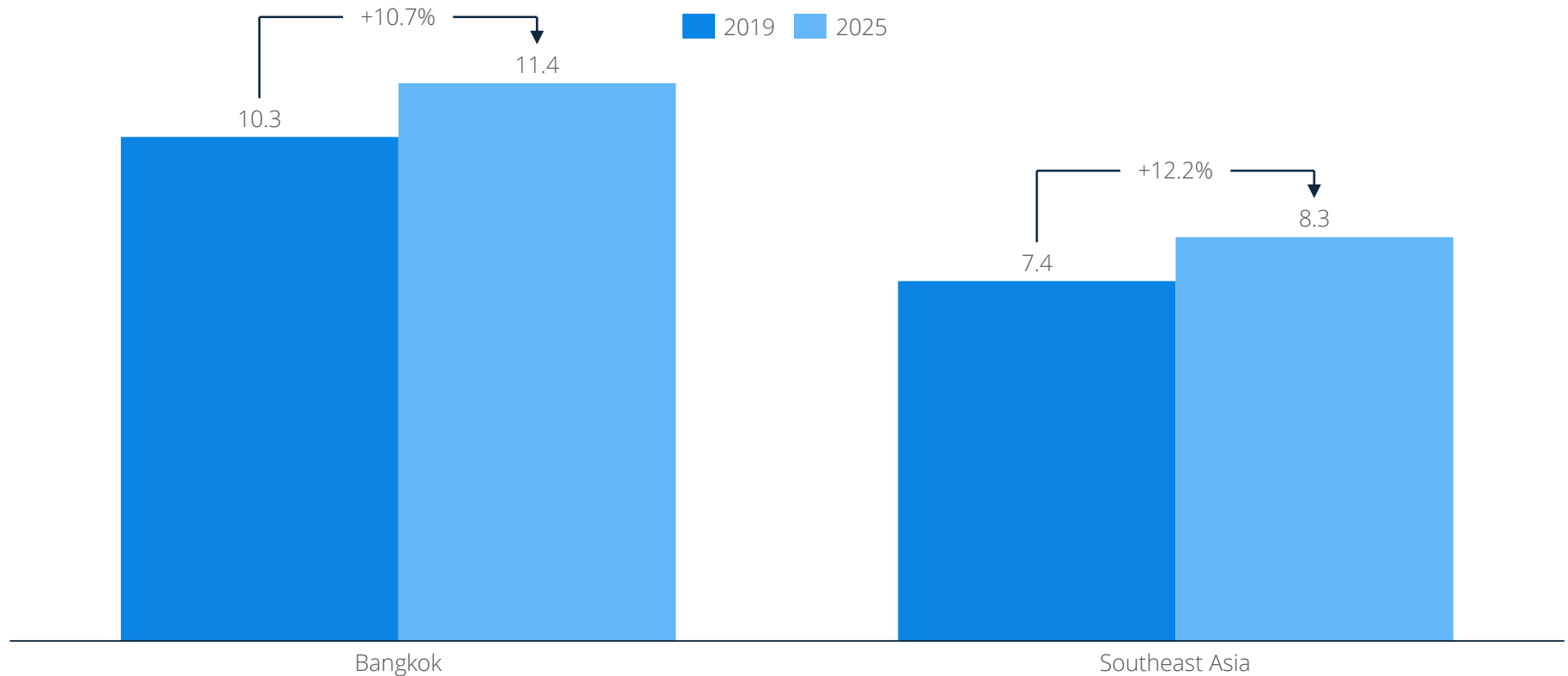
- Bangkok was more popular on Instagram than cities in this region
- This city had more museums than the regional average
- There are 55 embassies or consulates in this city
- In a year, there were 0 days under 0°C and 339 days above 30°C in this city
- At 41 µg/m<sup>3</sup>, the air pollution concentration was 105% higher than the WHO guideline

**SOCIETY**



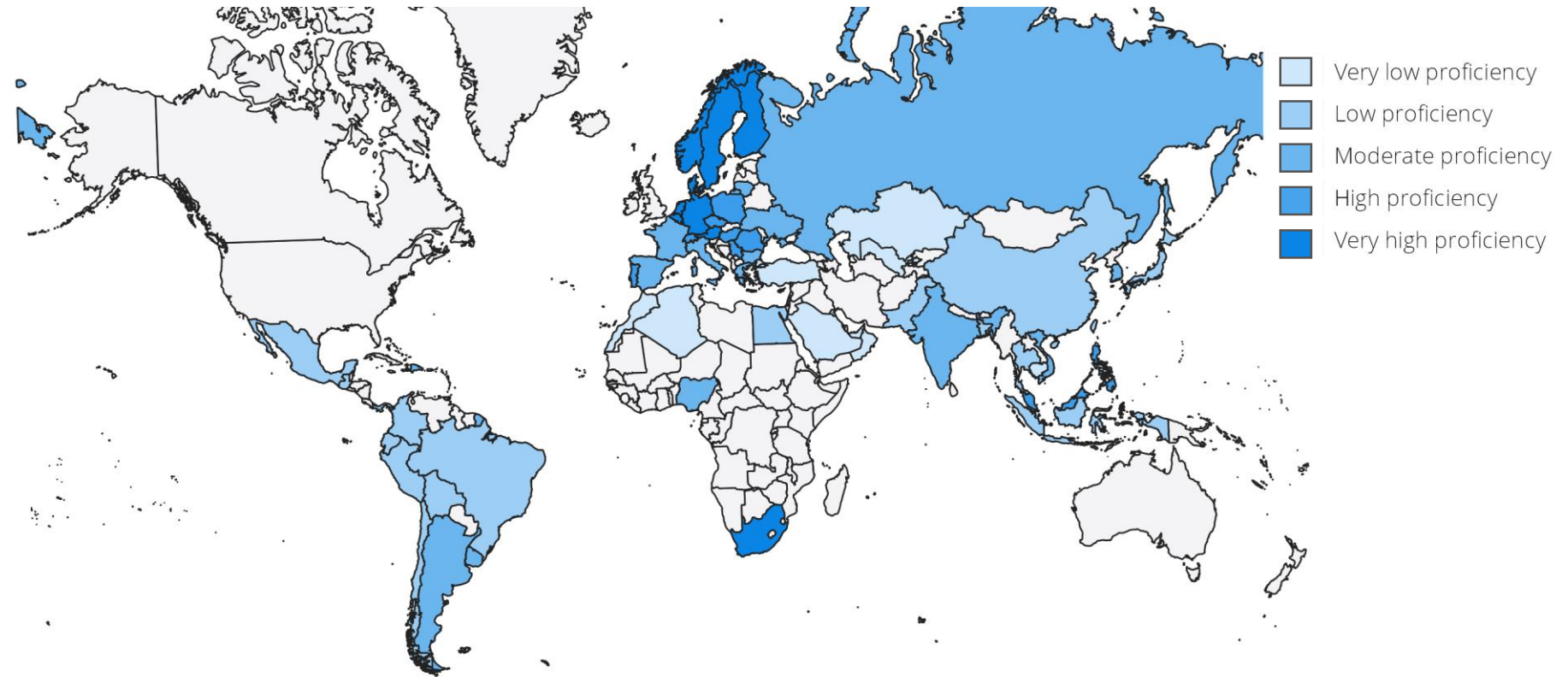
# This city is growing slower than the other cities in this region on average

Population in millions in this city and on average for this region



The level of English proficiency is low in this country

## Level of English language skills in 2018

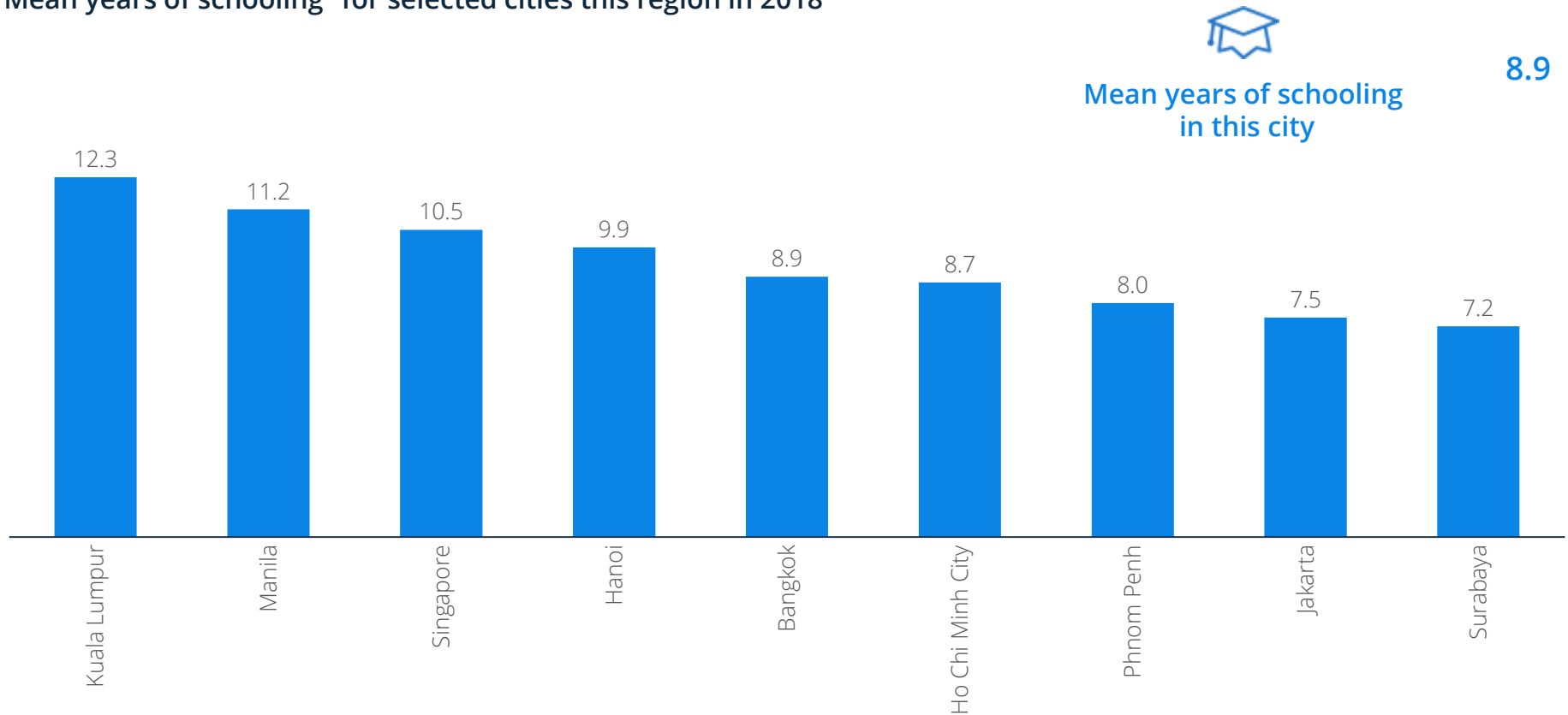


Note: The levels are based on index values divided between very low (39.6-48.4), low (48.5-52.4), moderate (52.5-57.4), high (57.5-62.9), and very high (63.0-71.0)

Sources: [EF](#) 2018

# Inhabitants in this city have 3.4 years less education than in the regional high performer

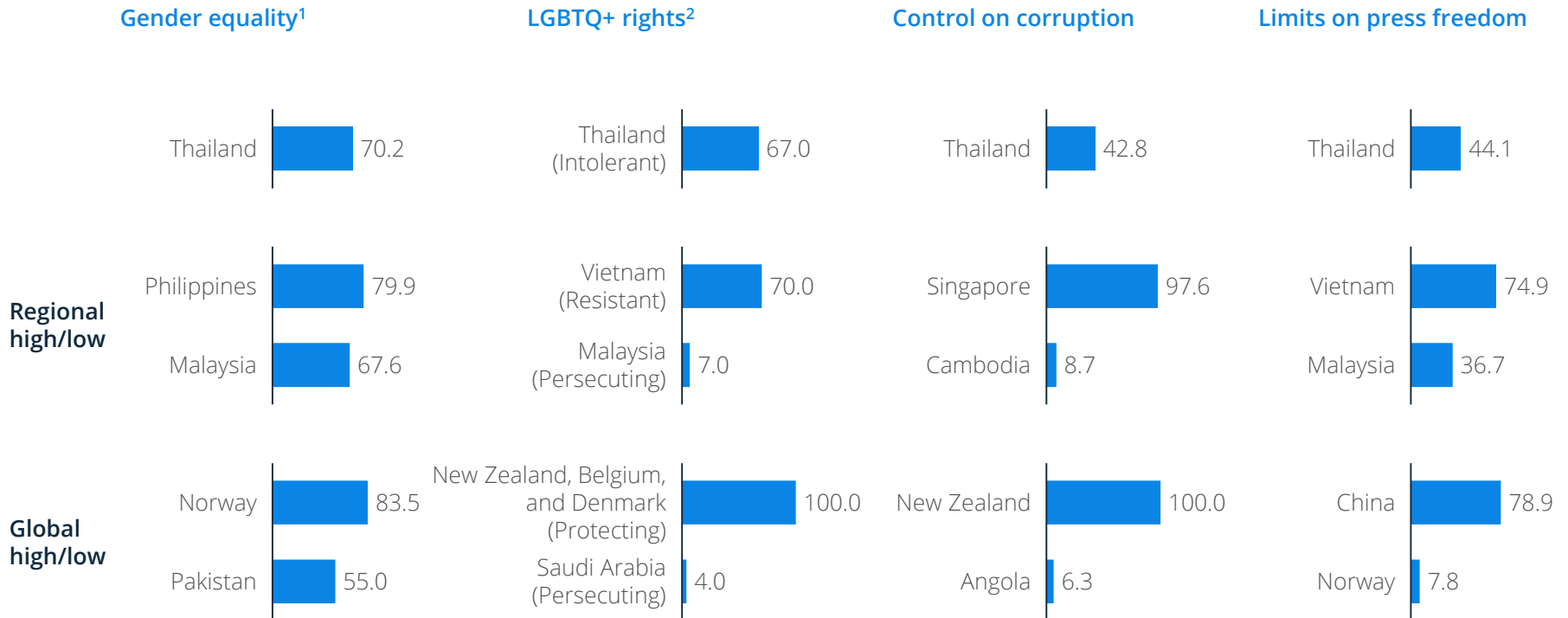
Mean years of schooling<sup>1</sup> for selected cities this region in 2018



1: Average number of completed years of education of population aged 25 years and older, excluding years spent repeating individual grades  
Sources: Statista 2019

# In 'control on corruption' Thailand is 54.8 points behind regional high performer

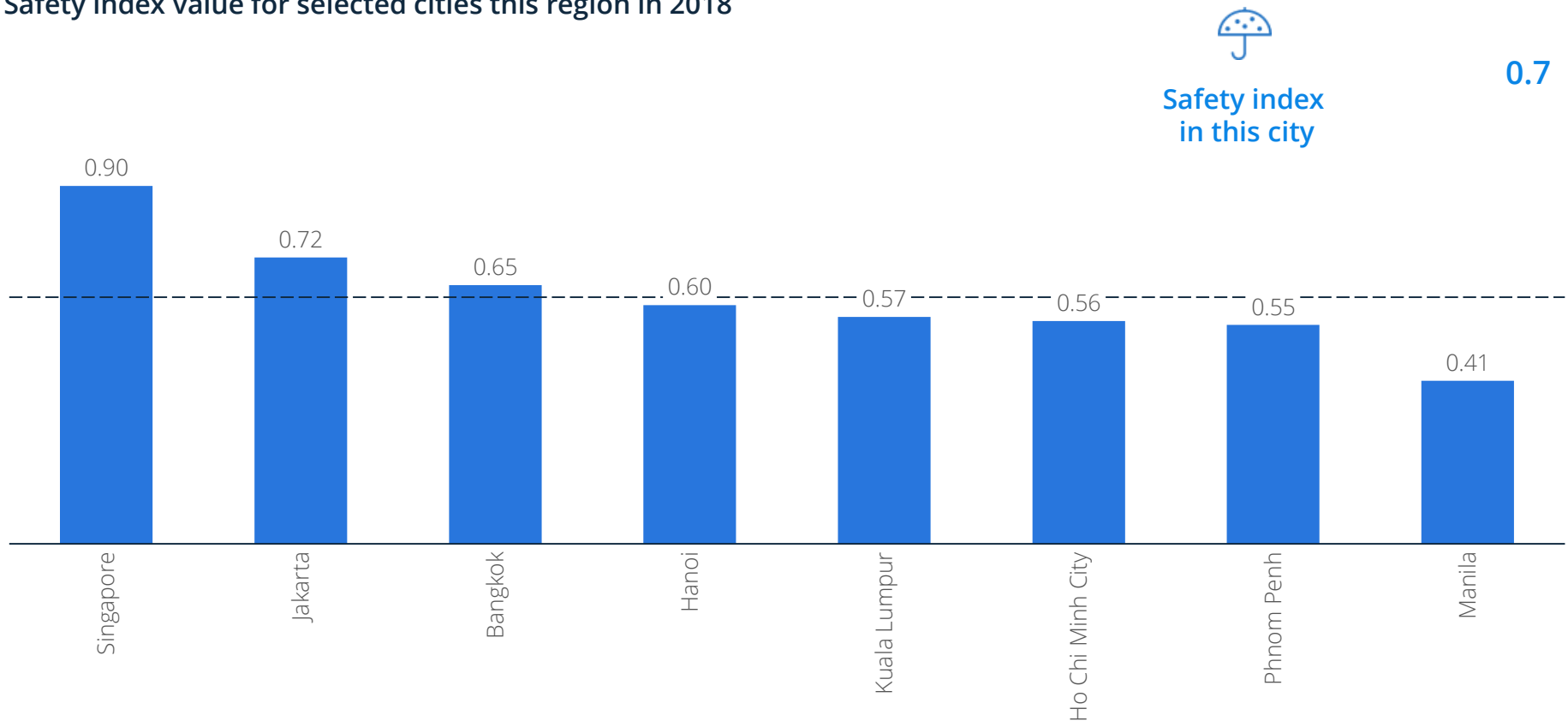
Comparison of country and territory scores to highest and lowest scores in the region and worldwide in 2019



1: Index values transformed from 0-1 scale to 0-100 2: Values in percentage. The categorization is grouped as follows: 0-59% for persecuting countries, 60-69% for intolerant countries, 70-79% resistant countries, 80-89% for tolerant countries, and 90-100% for protecting countries  
Sources: [World Economic Forum](#) 2018, [Franklin&Marshall College](#) 2019, [World Bank](#) 2019, [Reporters without Borders](#) 2019

# This city is considered safer than average for this region

Safety index value for selected cities this region in 2018



# Life expectancy at birth (1/2)

| #  | City                   | Years |
|----|------------------------|-------|
| 1  | Hong Kong <sup>1</sup> | 84.7  |
| 2  | Seoul                  | 84.1  |
| 3  | Fukuoka <sup>1</sup>   | 84.1  |
| 4  | Nagoya <sup>1</sup>    | 84.1  |
| 5  | Sapporo <sup>1</sup>   | 84.1  |
| 6  | Sendai <sup>1</sup>    | 84.1  |
| 7  | Yokohama <sup>1</sup>  | 84.1  |
| 8  | Madrid                 | 84.0  |
| 9  | Geneva <sup>1</sup>    | 83.6  |
| 10 | Paris                  | 83.6  |
| 11 | Toulouse               | 83.6  |
| 12 | Sevilla <sup>1</sup>   | 83.3  |
| 13 | Naples <sup>1</sup>    | 83.2  |
| 14 | Rome <sup>1</sup>      | 83.2  |
| 15 | Turin <sup>1</sup>     | 83.2  |
| 16 | Lyon                   | 83.1  |
| 17 | Tokyo                  | 83.0  |
| 18 | Milan                  | 82.9  |
| 19 | Zürich                 | 82.9  |
| 20 | Barcelona              | 82.7  |
| 21 | Osaka                  | 82.7  |
| 22 | Tel Aviv <sup>1</sup>  | 82.6  |
| 23 | Perth <sup>1</sup>     | 82.5  |
| 24 | Calgary <sup>1</sup>   | 82.5  |
| 25 | Vancouver <sup>1</sup> | 82.5  |

| #  | City                   | Years |
|----|------------------------|-------|
| 26 | Incheon                | 82.4  |
| 27 | Melbourne              | 82.4  |
| 28 | Marseille              | 82.3  |
| 29 | Stockholm              | 82.2  |
| 30 | Singapore              | 82.1  |
| 31 | Strasbourg             | 82.1  |
| 32 | Sydney                 | 82.0  |
| 33 | Busan                  | 81.9  |
| 34 | Stuttgart              | 81.8  |
| 35 | Toronto                | 81.8  |
| 36 | Oslo                   | 81.7  |
| 37 | Auckland <sup>1</sup>  | 81.7  |
| 38 | San Jose               | 81.6  |
| 39 | Rotterdam <sup>1</sup> | 81.6  |
| 40 | Montreal               | 81.5  |
| 41 | London                 | 81.4  |
| 42 | Munich                 | 81.4  |
| 43 | Frankfurt              | 81.2  |
| 44 | Miami                  | 81.2  |
| 45 | Los Angeles            | 81.1  |
| 46 | San Diego              | 81.1  |
| 47 | Dublin                 | 81.0  |
| 48 | Helsinki               | 80.9  |
| 49 | San Francisco          | 80.9  |
| 50 | Amsterdam              | 80.8  |

| #  | City                   | Years |
|----|------------------------|-------|
| 51 | Berlin                 | 80.8  |
| 52 | Bristol                | 80.7  |
| 53 | Lisbon                 | 80.7  |
| 54 | Hamburg                | 80.6  |
| 55 | Athens                 | 80.5  |
| 56 | Boston                 | 80.5  |
| 57 | New York               | 80.5  |
| 58 | Washington D.C.        | 80.5  |
| 59 | Brussels               | 80.4  |
| 60 | Düsseldorf             | 80.4  |
| 61 | Cologne                | 80.4  |
| 62 | Kaohsiung <sup>1</sup> | 80.4  |
| 63 | Taipei <sup>1</sup>    | 80.4  |
| 64 | Portland               | 80.1  |
| 65 | Atlanta                | 80.0  |
| 66 | Vienna                 | 80.0  |
| 67 | Austin                 | 80.0  |
| 68 | Birmingham             | 79.8  |
| 69 | Santiago <sup>1</sup>  | 79.7  |
| 70 | Dallas                 | 79.7  |
| 71 | Denver                 | 79.7  |
| 72 | Seattle                | 79.7  |
| 73 | Copenhagen             | 79.6  |
| 74 | Minneapolis            | 79.6  |
| 75 | Phoenix                | 79.6  |

| #   | City                | Years |
|-----|---------------------|-------|
| 76  | Lima                | 79.5  |
| 77  | Sacramento          | 79.5  |
| 78  | Prague <sup>1</sup> | 79.5  |
| 79  | Manchester          | 79.4  |
| 80  | New Orleans         | 79.4  |
| 81  | Charlotte           | 79.3  |
| 82  | Houston             | 79.2  |
| 83  | El Paso             | 79.1  |
| 84  | Chicago             | 79.0  |
| 85  | Cleveland           | 78.9  |
| 86  | Pittsburgh          | 78.9  |
| 87  | Tianjin             | 78.9  |
| 88  | Tampa               | 78.8  |
| 89  | Jacksonville        | 78.7  |
| 90  | Philadelphia        | 78.7  |
| 91  | Memphis             | 78.6  |
| 92  | Panama City         | 78.6  |
| 93  | Kansas City         | 78.4  |
| 94  | Nashville           | 78.4  |
| 95  | St. Louis           | 78.4  |
| 96  | Doha <sup>1</sup>   | 78.3  |
| 97  | Albuquerque         | 78.3  |
| 98  | Columbus            | 78.2  |
| 99  | Honolulu            | 78.2  |
| 100 | Bogotá              | 78.0  |

# Life expectancy at birth (2/2)

| #   | City                     | Years |
|-----|--------------------------|-------|
| 101 | San Antonio              | 78.0  |
| 102 | Louisville               | 77.9  |
| 103 | Krakow <sup>1</sup>      | 77.9  |
| 104 | Detroit                  | 77.7  |
| 105 | Hangzhou                 | 77.7  |
| 106 | Montevideo <sup>1</sup>  | 77.6  |
| 107 | Indianapolis             | 77.6  |
| 108 | Dubai <sup>1</sup>       | 77.4  |
| 109 | Mexico City <sup>1</sup> | 77.3  |
| 110 | Quito                    | 77.3  |
| 111 | Muscat <sup>1</sup>      | 77.3  |
| 112 | Buenos Aires             | 77.2  |
| 113 | Warsaw                   | 77.2  |
| 114 | Shijiazhuang             | 77.0  |
| 115 | Moscow                   | 76.8  |
| 116 | Baltimore                | 76.6  |
| 117 | Nanjing                  | 76.6  |
| 118 | Suzhou                   | 76.6  |
| 119 | Budapest                 | 76.5  |
| 120 | Guangzhou                | 76.5  |
| 121 | Jinan                    | 76.5  |
| 122 | Qingdao                  | 76.5  |
| 123 | Shenzhen                 | 76.5  |
| 124 | Dalian                   | 76.4  |
| 125 | Shenyang                 | 76.4  |

| #   | City                        | Years |
|-----|-----------------------------|-------|
| 126 | São Paulo                   | 76.3  |
| 127 | Algiers <sup>1</sup>        | 76.3  |
| 128 | Belgrade <sup>1</sup>       | 76.1  |
| 129 | Ankara <sup>1</sup>         | 76.0  |
| 130 | Istanbul <sup>1</sup>       | 76.0  |
| 131 | Izmir <sup>1</sup>          | 76.0  |
| 132 | Glasgow                     | 76.0  |
| 133 | Harbin                      | 76.0  |
| 134 | Fuzhou                      | 75.8  |
| 135 | Ho Chi Minh City            | 75.8  |
| 136 | Xiamen                      | 75.8  |
| 137 | Belo Horizonte <sup>1</sup> | 75.7  |
| 138 | Brasília <sup>1</sup>       | 75.7  |
| 139 | Rio de Janeiro <sup>1</sup> | 75.7  |
| 140 | Chongqing                   | 75.7  |
| 141 | Monterrey                   | 75.6  |
| 142 | Saint Petersburg            | 75.5  |
| 143 | Kuala Lumpur <sup>1</sup>   | 75.5  |
| 144 | Beijing                     | 75.4  |
| 145 | Shanghai                    | 75.4  |
| 146 | Bucharest <sup>1</sup>      | 75.3  |
| 147 | Mérida                      | 75.3  |
| 148 | Guadalajara                 | 75.2  |
| 149 | Hanoi                       | 74.9  |
| 150 | Wuhan                       | 74.9  |

| #   | City                       | Years |
|-----|----------------------------|-------|
| 151 | Sofia <sup>1</sup>         | 74.8  |
| 152 | Kuwait City <sup>1</sup>   | 74.8  |
| 153 | Chengdu                    | 74.8  |
| 154 | Riyadh <sup>1</sup>        | 74.7  |
| 155 | Changsha                   | 74.7  |
| 156 | Xi'an                      | 74.7  |
| 157 | Vilnius <sup>1</sup>       | 74.7  |
| 158 | Zhengzhou                  | 74.6  |
| 159 | Kazan                      | 74.5  |
| 160 | Puebla                     | 74.5  |
| 161 | Bangkok                    | 74.4  |
| 162 | Fortaleza                  | 74.4  |
| 163 | Santa Domingo <sup>1</sup> | 74.0  |
| 164 | Almaty <sup>1</sup>        | 73.0  |
| 165 | Dhaka <sup>1</sup>         | 72.8  |
| 166 | Urumqi                     | 72.4  |
| 167 | Lanzhou                    | 72.2  |
| 168 | Novosibirsk                | 72.2  |
| 169 | Kiev <sup>1</sup>          | 71.8  |
| 170 | Cairo <sup>1</sup>         | 71.7  |
| 171 | Tashkent <sup>1</sup>      | 71.4  |
| 172 | Yekaterinburg              | 71.4  |
| 173 | Guatemala City             | 71.3  |
| 174 | Vladivostok                | 71.0  |
| 175 | Jakarta                    | 70.8  |

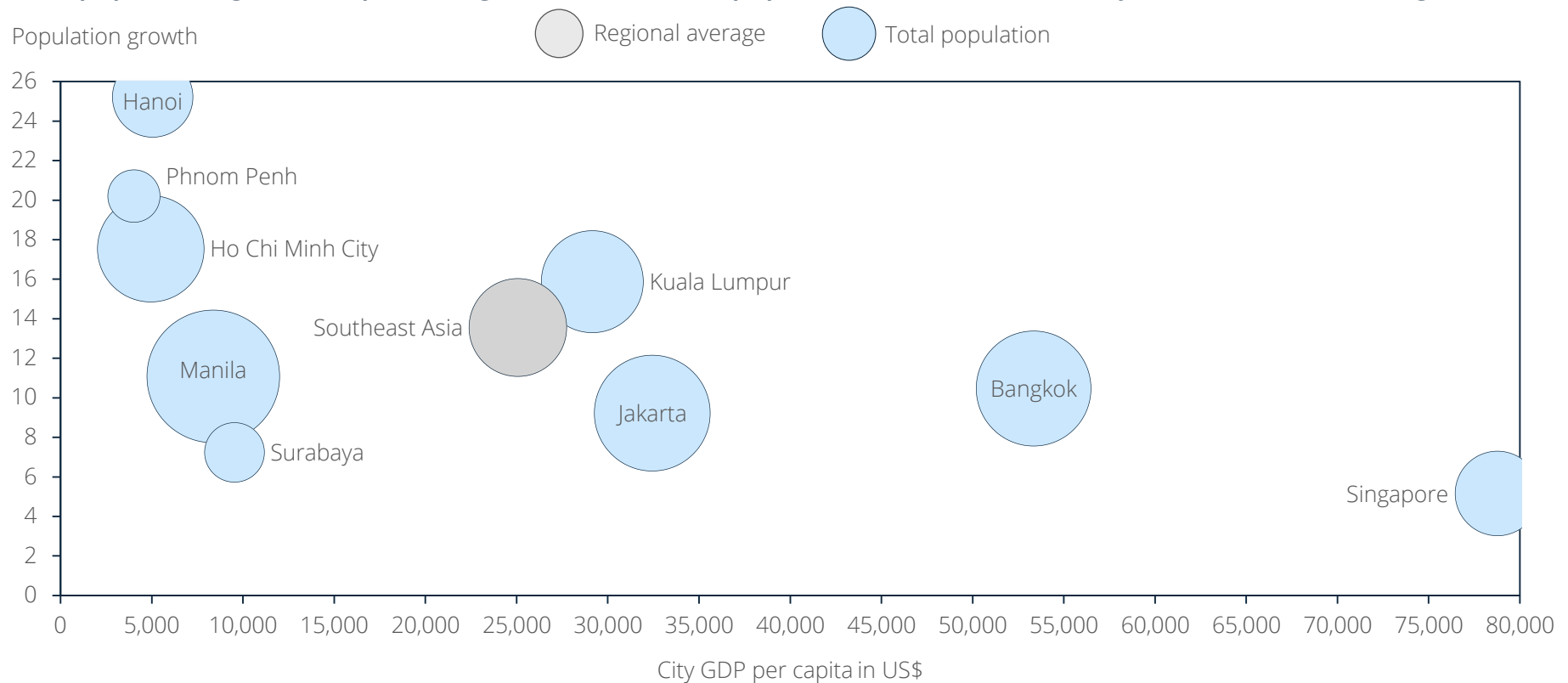
| #   | City                    | Years |
|-----|-------------------------|-------|
| 176 | Casablanca              | 70.2  |
| 177 | Kunming                 | 69.5  |
| 178 | La Paz <sup>1</sup>     | 69.5  |
| 179 | Surabaya <sup>1</sup>   | 69.4  |
| 180 | Phnom Penh <sup>1</sup> | 69.3  |
| 181 | Manila <sup>1</sup>     | 69.2  |
| 182 | Ahmedabad <sup>1</sup>  | 68.8  |
| 183 | Bangalore <sup>1</sup>  | 68.8  |
| 184 | Chennai <sup>1</sup>    | 68.8  |
| 185 | Delhi <sup>1</sup>      | 68.8  |
| 186 | Hyderabad <sup>1</sup>  | 68.8  |
| 187 | Jaipur <sup>1</sup>     | 68.8  |
| 188 | Kolkata <sup>1</sup>    | 68.8  |
| 189 | Lucknow <sup>1</sup>    | 68.8  |
| 190 | Mumbai <sup>1</sup>     | 68.8  |
| 191 | Nagpur <sup>1</sup>     | 68.8  |
| 192 | Pune <sup>1</sup>       | 68.8  |
| 193 | Karachi <sup>1</sup>    | 66.6  |
| 194 | Lahore <sup>1</sup>     | 66.6  |
| 195 | Luanda <sup>1</sup>     | 61.8  |
| 196 | Nairobi                 | 61.7  |
| 197 | Accra                   | 61.6  |
| 198 | Cape Town               | 56.7  |
| 199 | Johannesburg            | 56.7  |
| 200 | Lagos                   | 51.0  |

**ECONOMY**



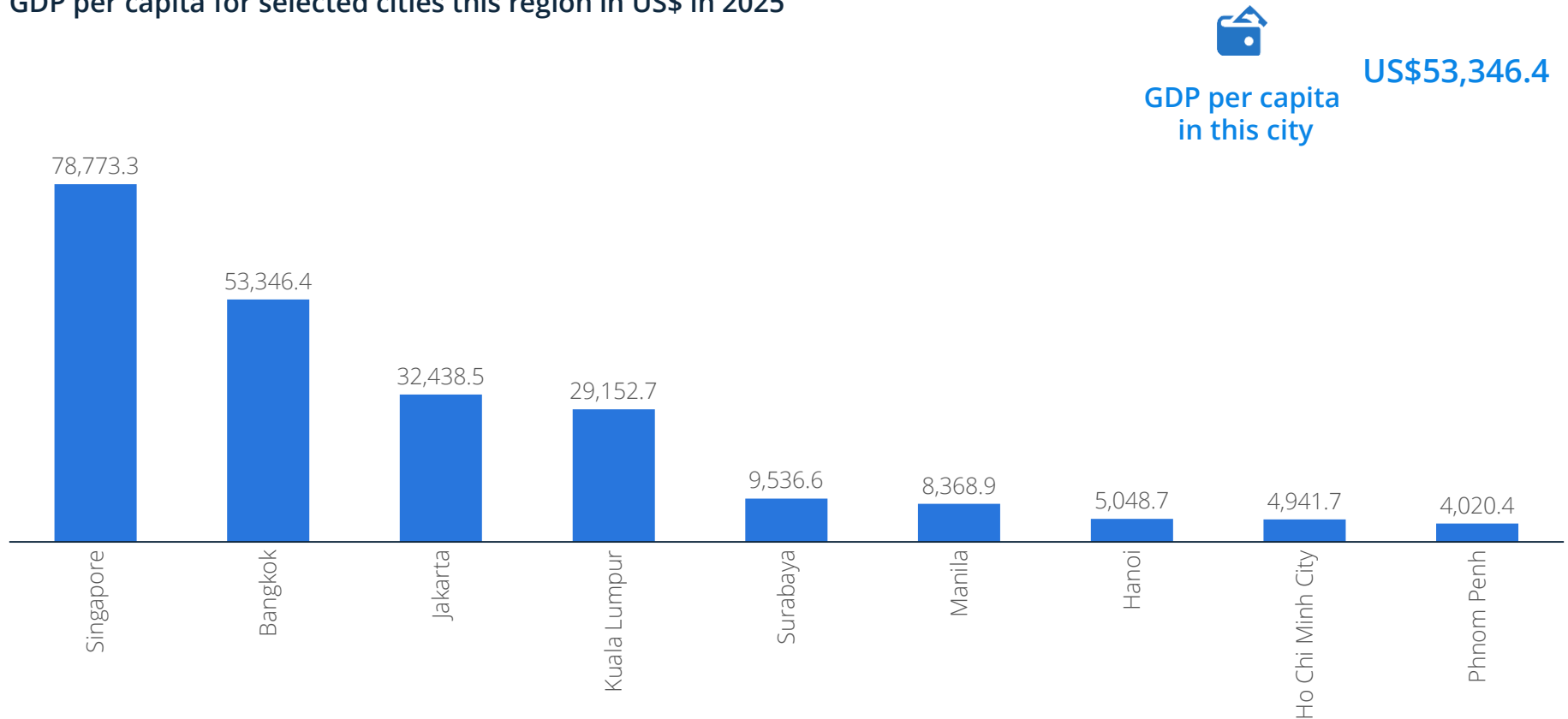
# The total population was larger and the city GDP higher in this city compared to general region

**Total population growth in percentage 2019-2025, total population in millions and City GDP in 2025 in the region**



The city GDP per capita in this city was US\$53,346.4, while it was US\$78,773.3 in regional high-performer

GDP per capita for selected cities this region in US\$ in 2025



It takes 4.5 days to start a business in Thailand compared to 5.6 days in the U.S.

## Business administration



|          |  | Time needed to start a business <sup>1</sup> | Time needed to register property | Time needed to fulfill tax requirements | Time needed to resolve insolvency <sup>1</sup> |
|----------|--|--|----------------------------------|---|--|
| Thailand |  | 4.5 days                                     | 7 days                           | 262 hours                               | 1.5 years                                      |
| The U.S. |  | 5.6 days                                     | 15.2 days                        | 175 hours                               | 1.0 years                                      |








## Delivery



|          |  | Time needed to export <sup>1</sup> | Time needed to import <sup>1</sup> | Efficiency of customs clearance <sup>1</sup> |
|----------|--|------------------------------------|------------------------------------|--|
| Thailand |  | 14 days                            | 13 days                            | 3.2  |
| The U.S. |  | 6 days                             | 5.4 days                           | 3.7  |



# In Bangkok, international restaurant chains have a strong presence

## Presence of international restaurant chains

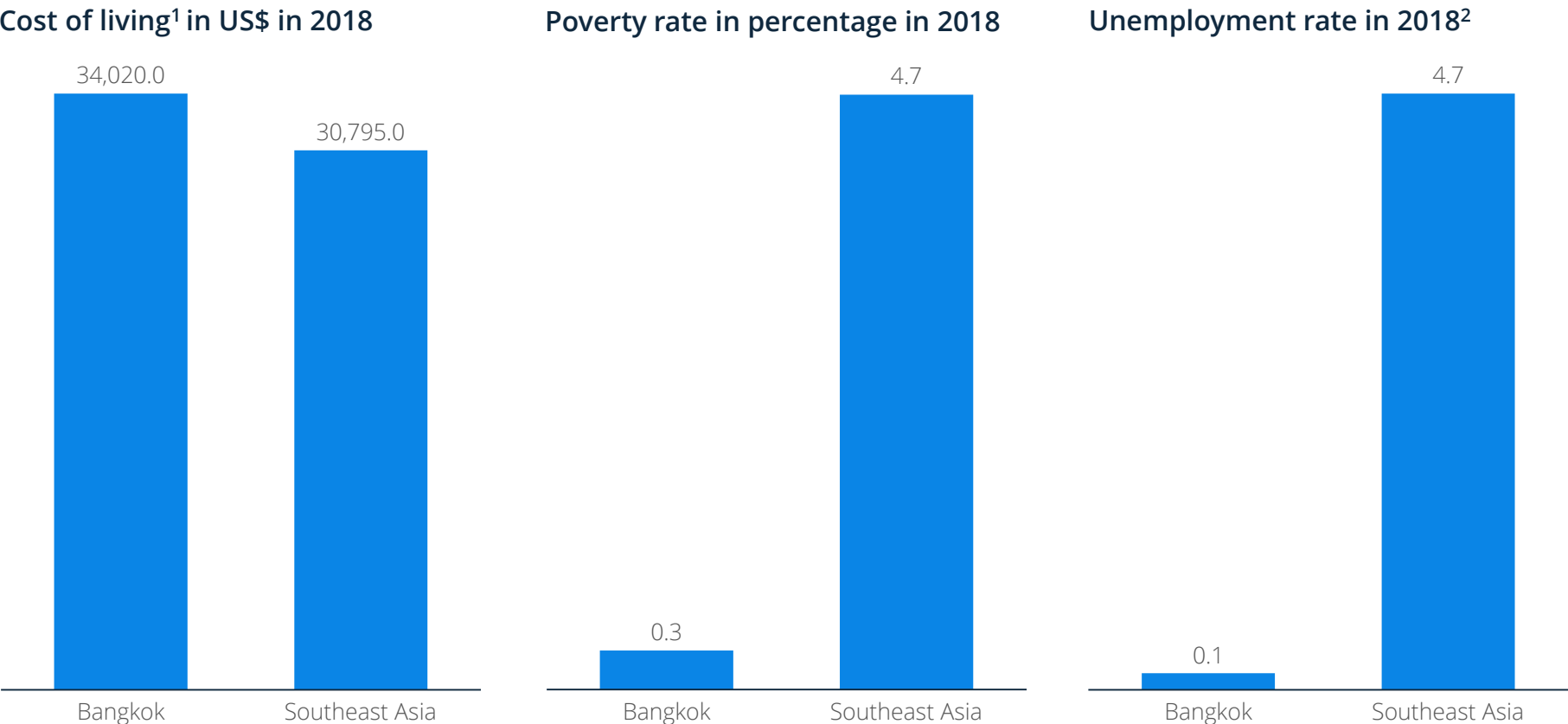
| International restaurant chains  | Restaurant presence | International restaurant chains   | Restaurant presence |
|--|---------------------|---|---------------------|
|                       | ✓                   | <i>Tim Hortons</i>  | ✗                   |
|                       | ✓                   |    | ✓                   |
|                       | ✓                   | <b>DUNKIN'</b>  | ✓                   |
|                      | ✗                   |   | ✓                   |
| <br><b>Domino's</b> | ✓                   |  | ✗                   |

# International hotel chains are well represented in Bangkok

## Presence of hotel restaurant chains

| International hotel chains  | Hotel presence | International hotel chains  | Hotel presence |
|---|----------------|---|----------------|
|    | ✓              |    | ✗              |
|    | ✓              |    | ✓              |
|    | ✓              |    | ✓              |
|   | ✓              |   | ✗              |
|  | ✓              |  | ✓              |

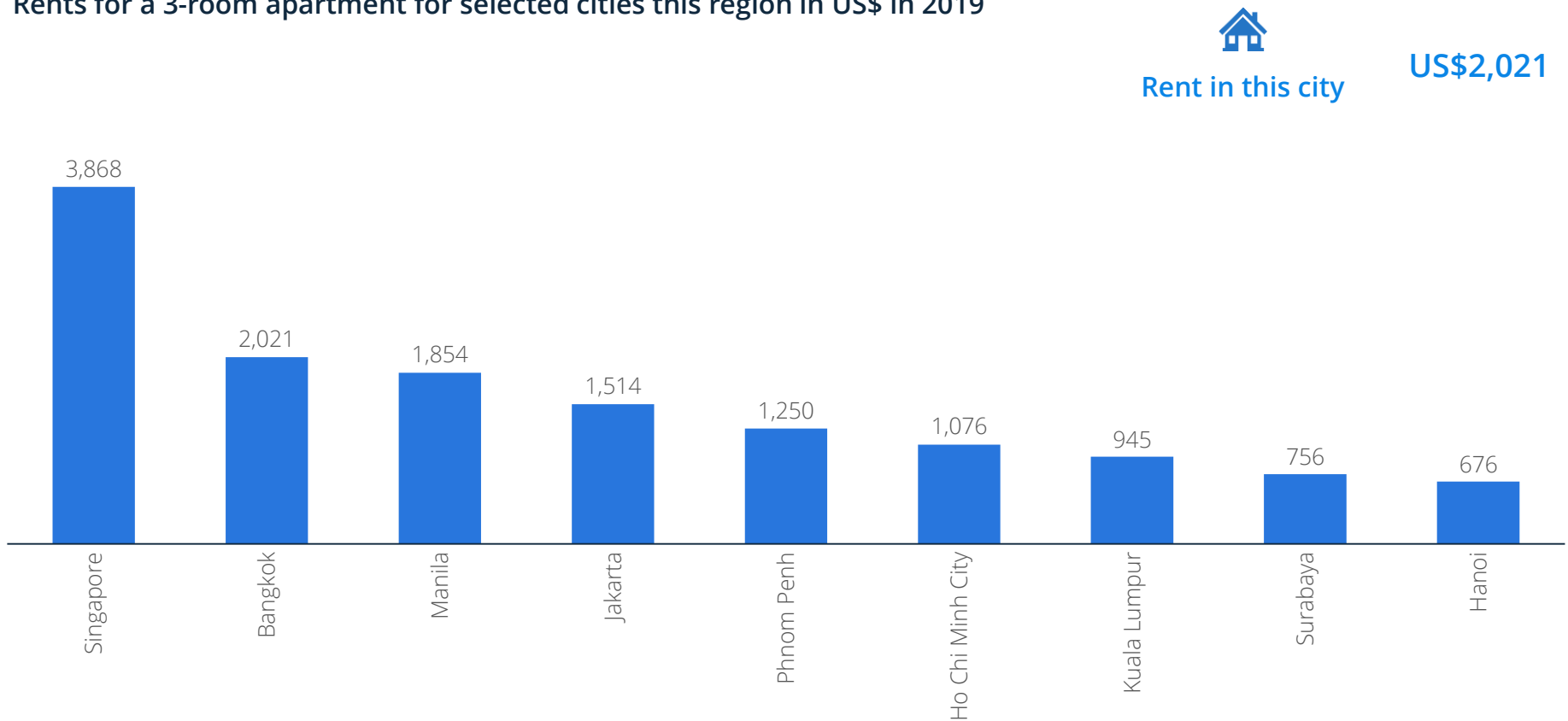
# Cost of living was higher than in this region in general



1: See glossary for definitions 2: In percentage  
Note: Cost of living based on a fairly affluent family of three with two adults and one child studying at a university. Regional average based on cities in this region covered by Global Business Cities 2025 reports  
Sources: [STC](#) 2018, Statista 2019

At US\$2,021, the average rent in this city was US\$1,847 lower than the highest for this region

Rents for a 3-room apartment for selected cities this region in US\$ in 2019

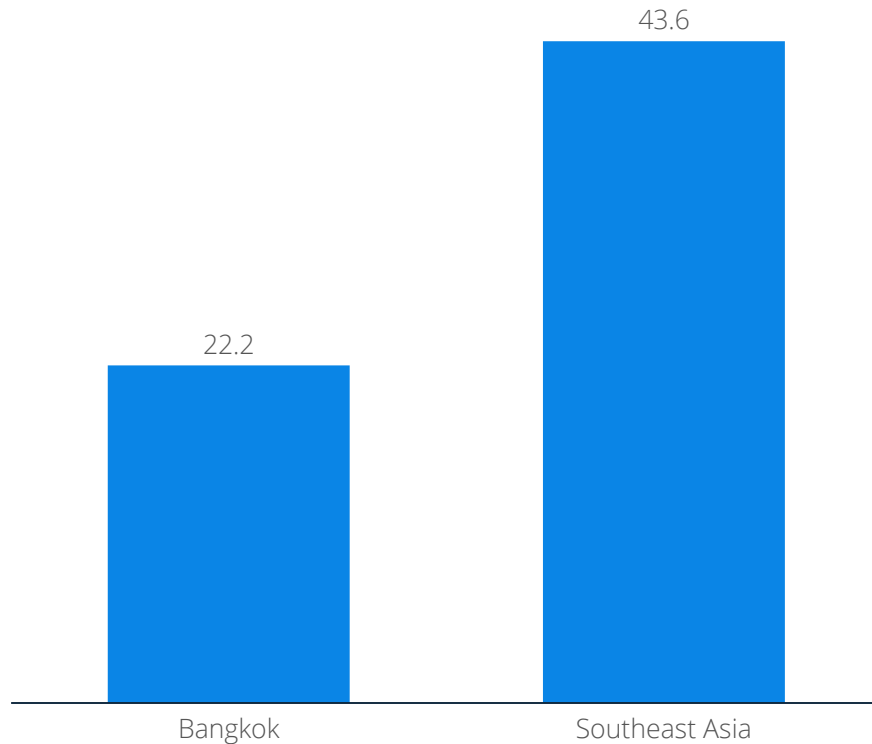


# **OPERATIONAL ENVIRONMENT**

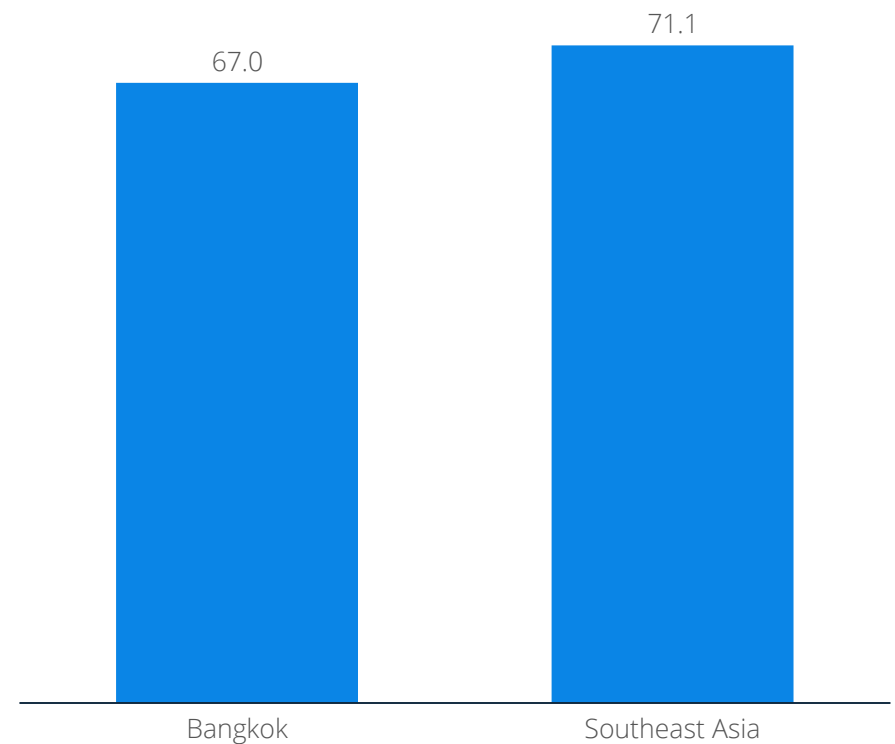


# The internet penetration in this city is lower than in the general region

Internet penetration in percentage in 2015



Smartphone penetration in percentage in 2025<sup>1</sup>



1: Country level data

Note: Regional average based on cities in this region covered by Global Business Cities 2025 reports

Sources: Statista 2019, [Statista Digital Market Outlook](#) 2019

# This city has a stock exchange

## Stock exchange locations



# Grab, Blacklane, and Talixo are ride-hailing apps used in Bangkok

## Ride-hailing apps in this city



## Public transportation options available



Bus



Ferry



Train



Tram / Metro



Bike-sharing

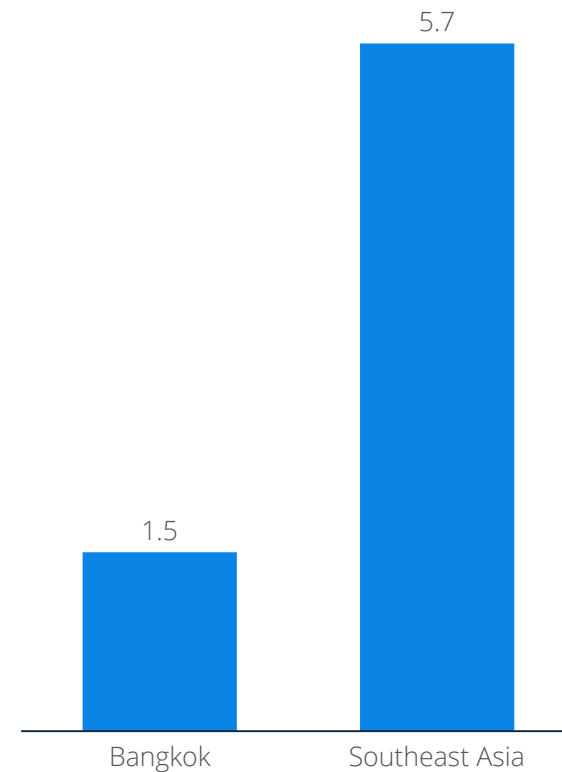


# Shipping freight volumes at 1.49 mTEU were lower than the regional average

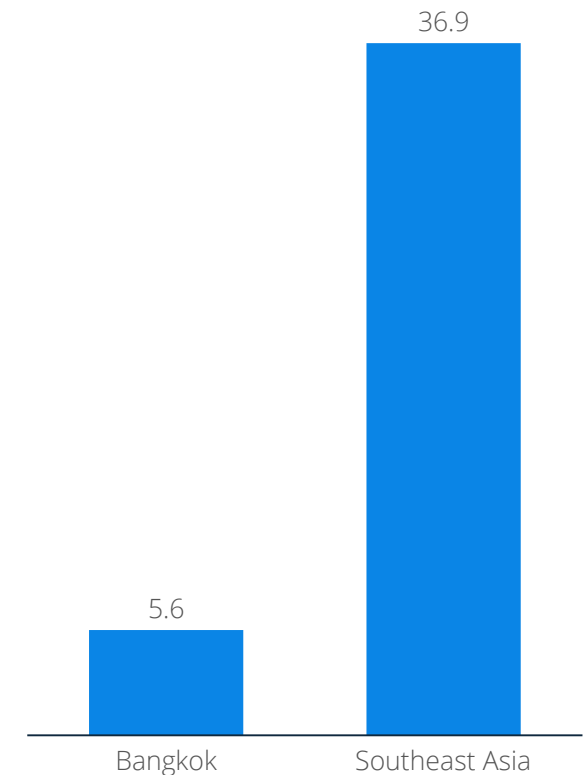
Air freight in kt<sup>1</sup> in 2019



Shipping freight in mTEU<sup>2</sup> in 2016



Air passengers in million in 2017



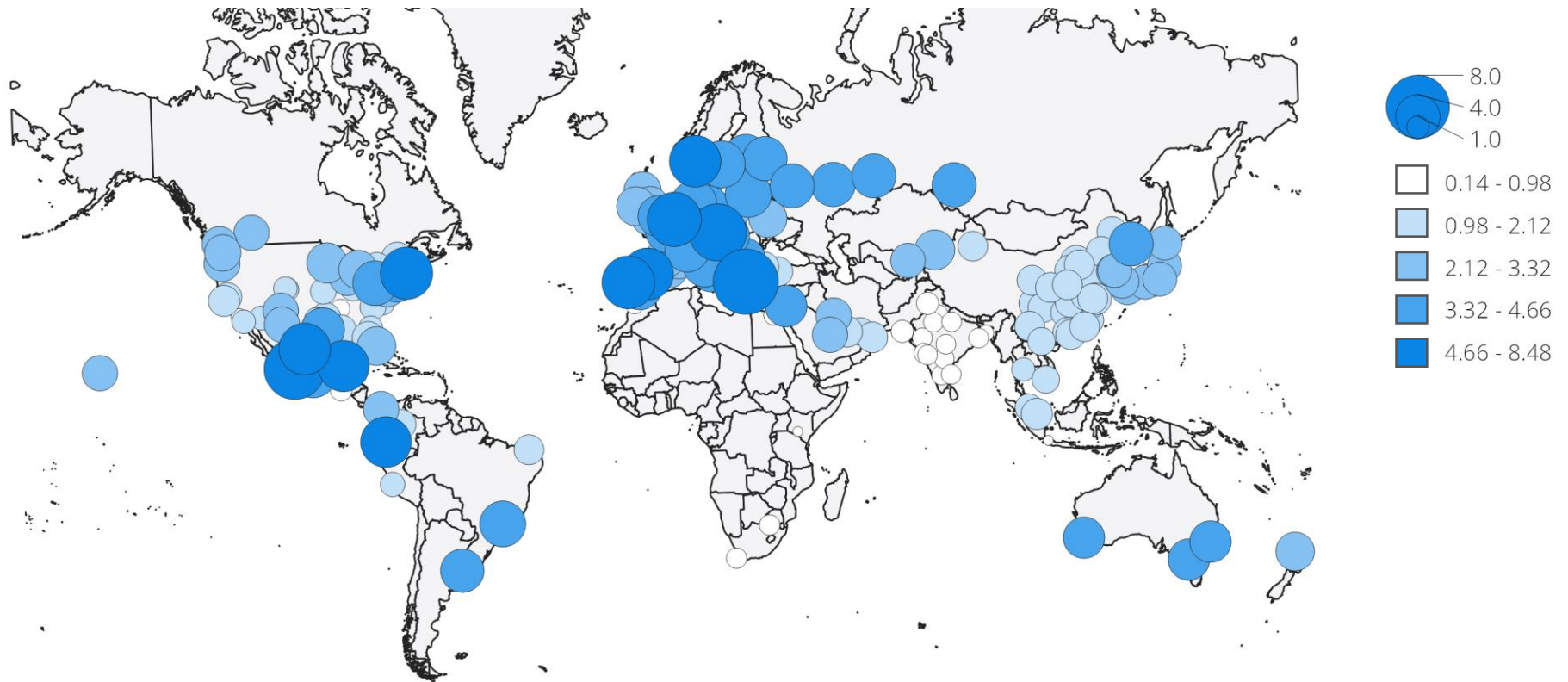
1: Thousand metric tons 2: million TEU

Note: Regional average based on latest available data and on cities in this region covered by Global Business Cities 2025 reports

Sources: Statista 2019

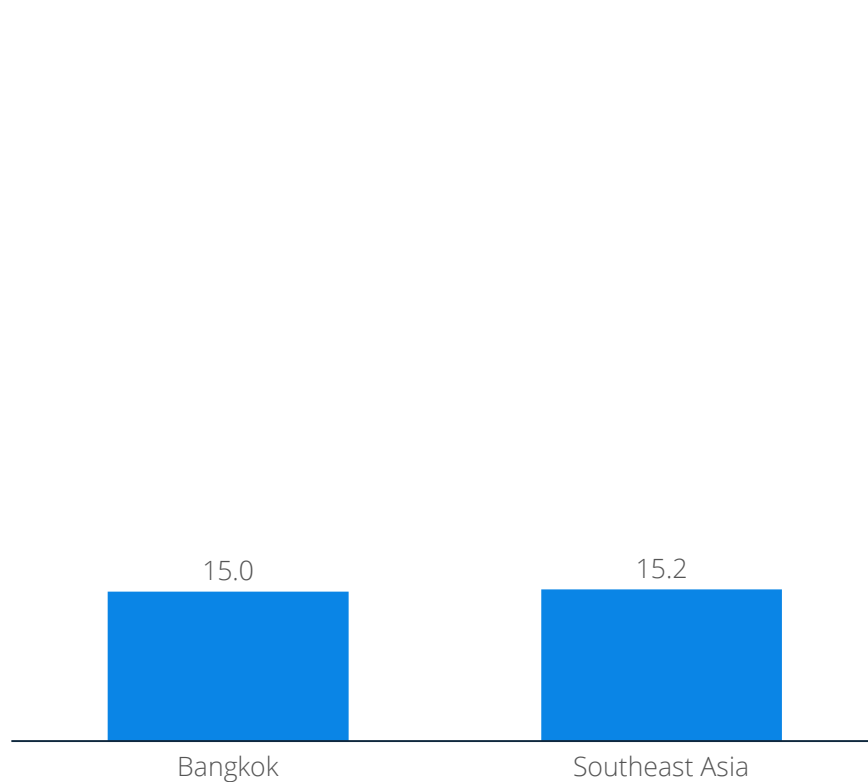
# There are 1.1 physicians per 1,000 inhabitants in this city

Number of physicians per 1,000 inhabitants

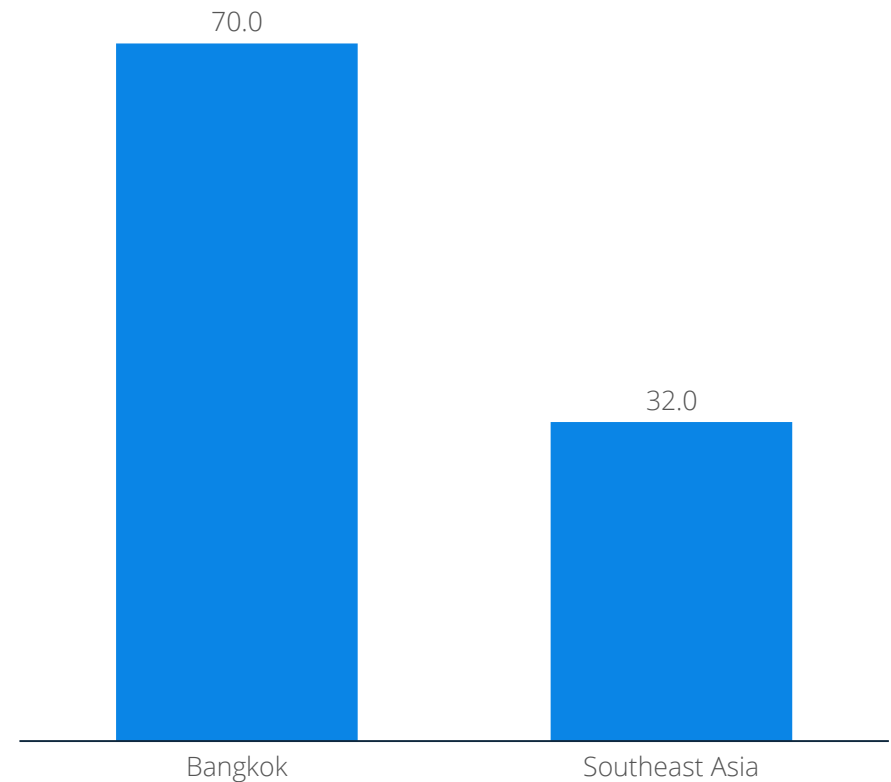


# The density of universities in this city was lower than regional average

Number of universities in this city in 2019<sup>1</sup>



Number of international schools in this city in 2019



1: The regional averages of the universities are only representative within the region and not for a worldwide comparison because of different educational standards and classification of qualifications

Note: Regional average based on cities in this region covered by Global Business Cities 2025 reports

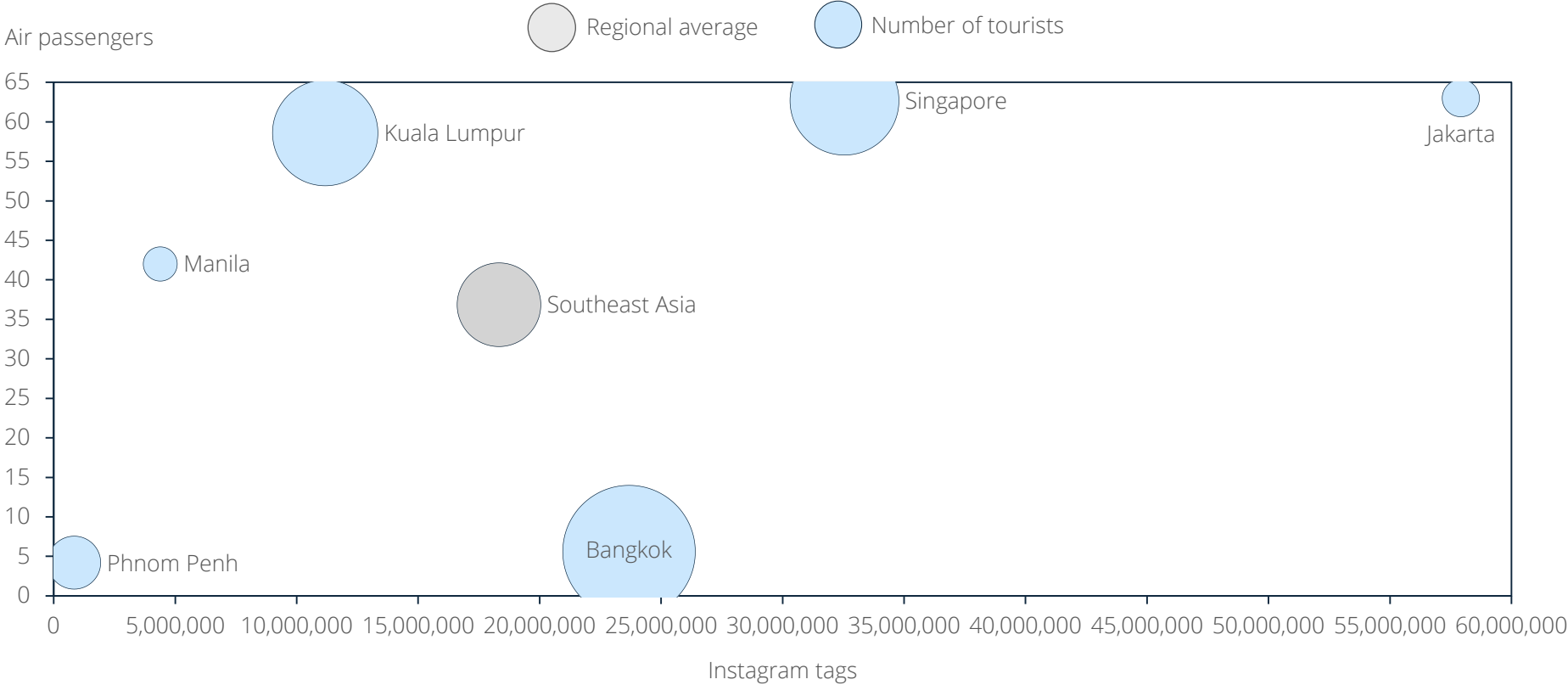
Sources: Statista 2019

**CHARISMA**



# Bangkok was more popular on Instagram than cities in this region

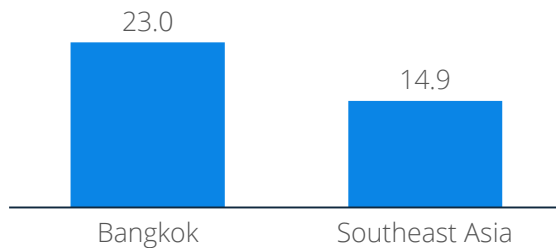
Number of Instagram tags, air passengers<sup>1</sup> and number of tourists<sup>2</sup> in this region in million in 2018



1: In million 2: Number of international tourists  
Note: Regional average based on cities in this region covered by Global Business Cities 2025 reports  
Sources: Statista 2019

# This city had more museums than the regional average

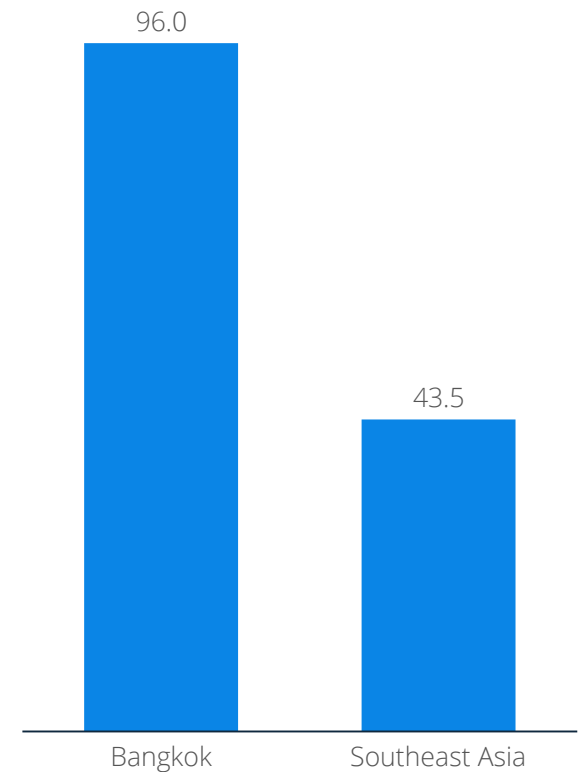
Number of sister cities in 2019



Number of UNESCO heritage sites<sup>1</sup>



Number of museums in 2019



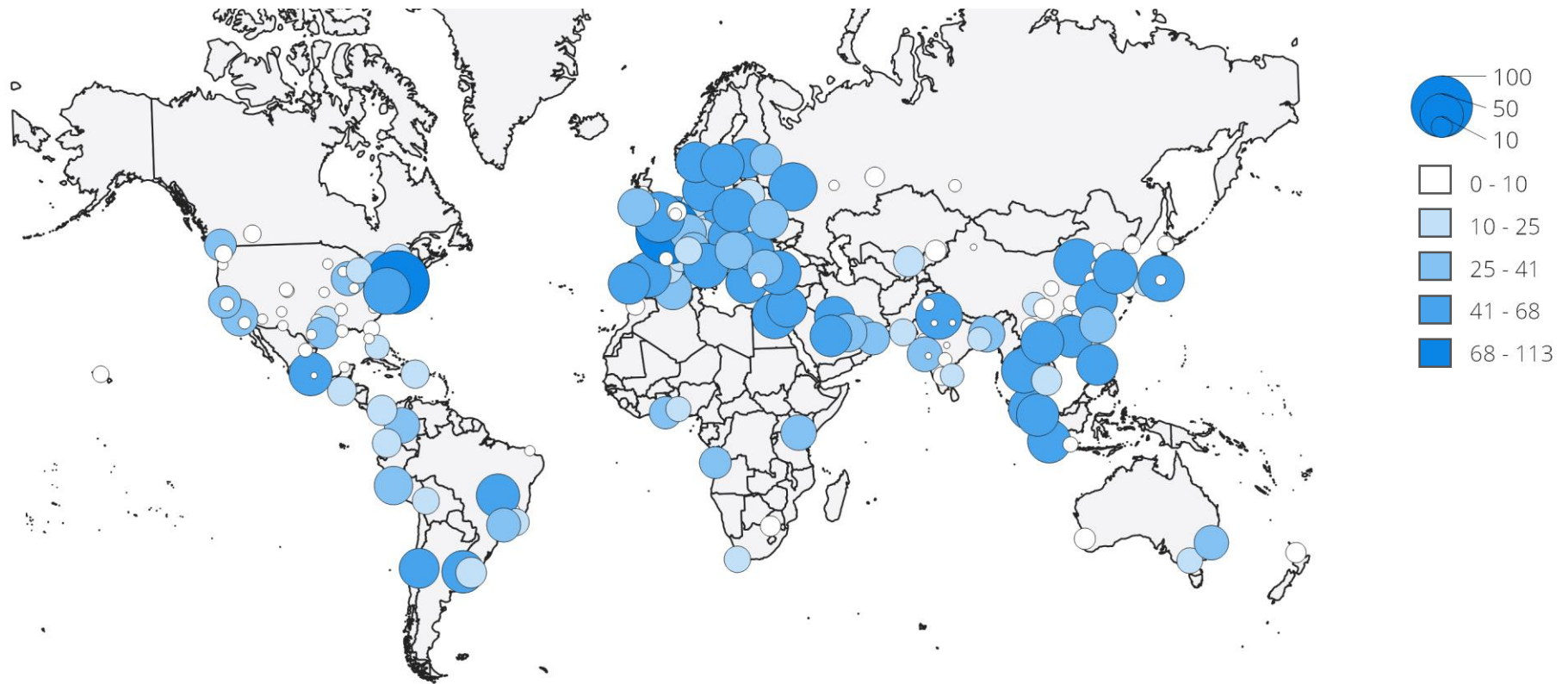
1: in 2019

Note: Regional average based on cities in this region covered by Global Business Cities 2025 reports

Sources: [UNESCO](#) 2019, Statista 2019

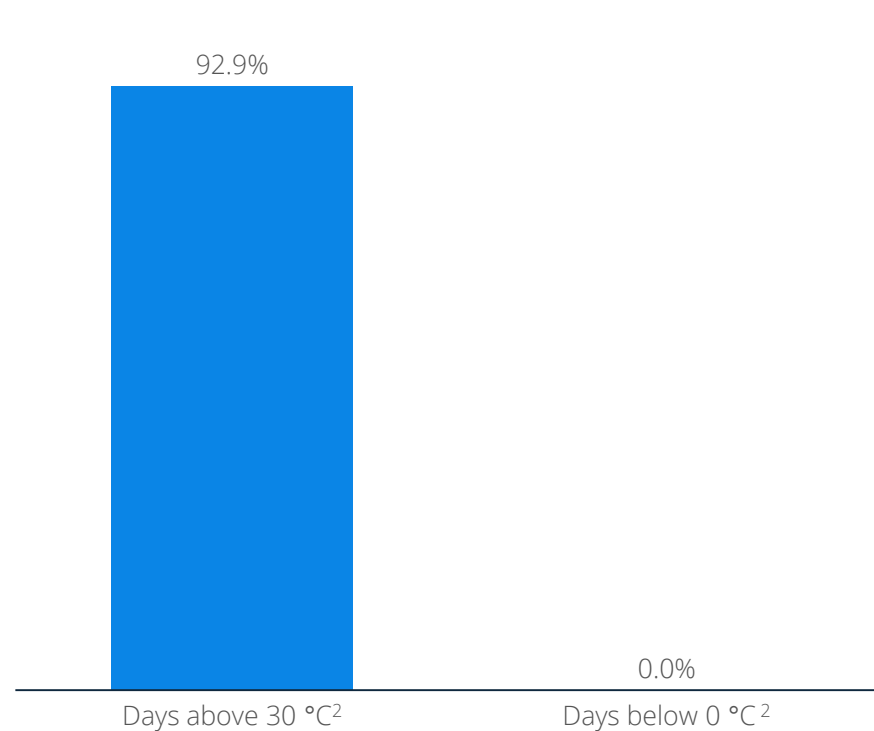
# There are 55 embassies or consulates in this city

Number of embassies or consulates in 2019

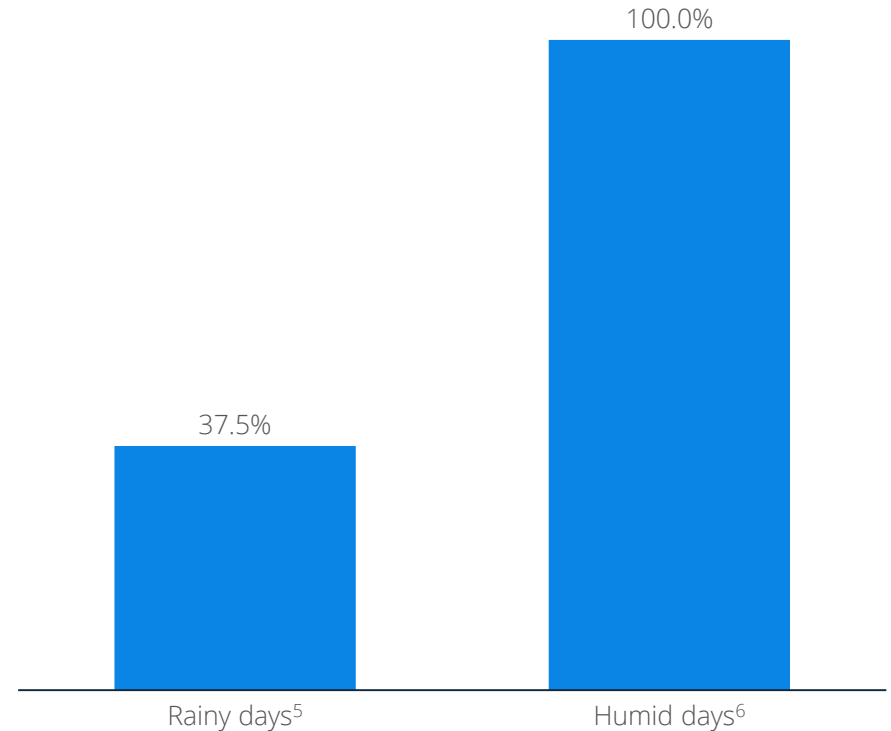


In a year, there were 0 days under 0°C and 339 days above 30°C in this city

Shares of days with extreme temperatures yearly<sup>1</sup>



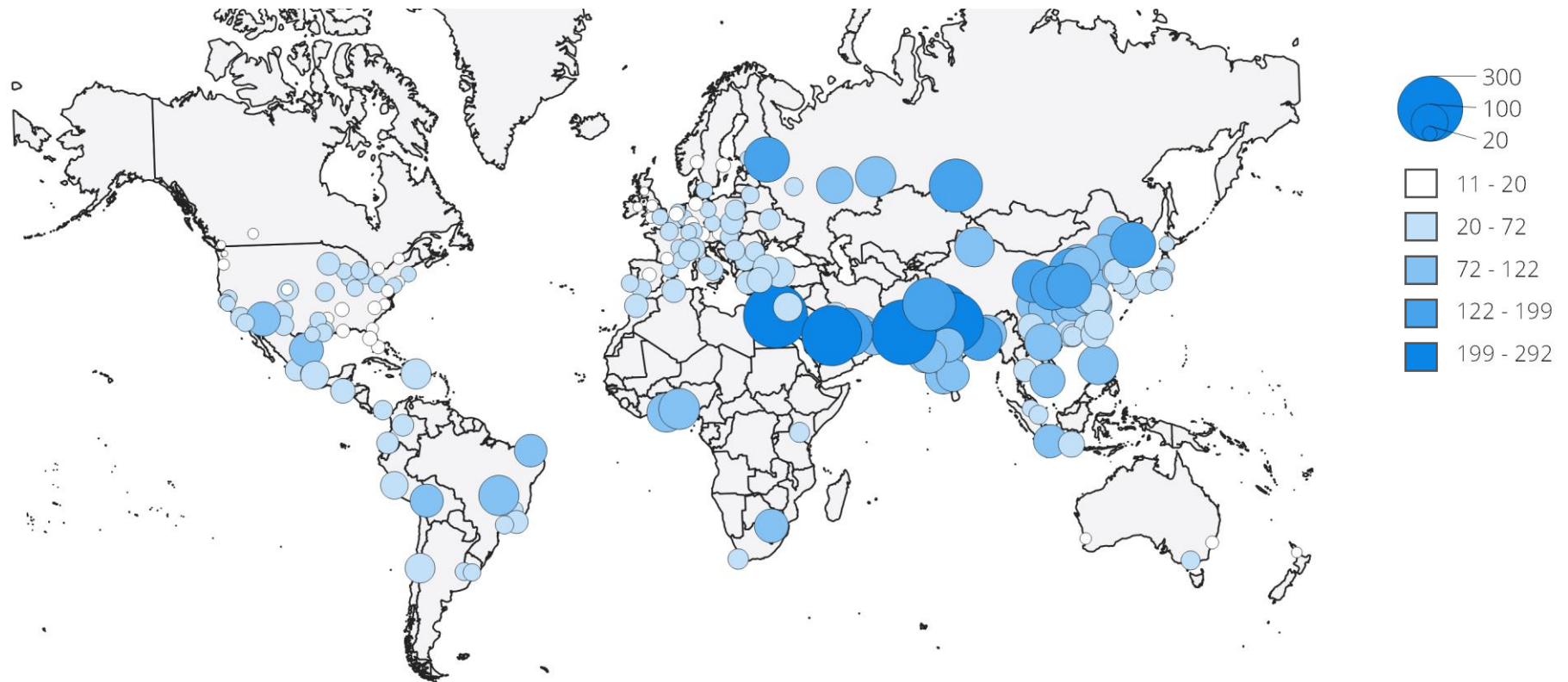
Shares of days with rain<sup>3</sup> and humid conditions yearly<sup>1,4</sup>



1: In 2018 2: Celsius 3: Minimum of 1mm of rain in a day 4: Based on dew point above 15 degrees 5: Average number of precipitation days  
6: Based on number of humid months multiplied by 30.42 for average days in a month  
Sources: [STC](#) 2019, [weatherbase](#) 2019, Statista 2019

At 41  $\mu\text{g}/\text{m}^3$ , the air pollution concentration was 105% higher than the WHO guideline

Air pollution in PM10  $\mu\text{g}/\text{m}^3$  as annual mean in 2018



Note: The data displayed in this graphic can be found in the associated data file. World Health Organization (WHO) has set air quality guideline at 20.0 PM10  $\mu\text{g}/\text{m}^3$  measured as annual mean. See appendix for definitions

Sources: Statista 2019



# APPENDIX

# Global Business Cities 2025

|   |  |  |  |   |  |
|---|--|--|--|---|--|
| <b>Algeria</b><br>Algiers   | Belo Horizonte   | Kunming  | <b>Ecuador</b><br>Quito  | <b>Greece</b><br>Athens   | <b>Ireland</b><br>Dublin   |
| <b>Angola</b><br>Luanda   | <b>Bulgaria</b><br>Sofia   | Lanzhou  | <b>Egypt</b><br>Cairo  | <b>Guatemala</b><br>Guatemala City  | <b>Israel</b><br>Tel Aviv  |
| <b>Argentina</b><br>Buenos Aires                                      | <b>Cambodia</b><br>Phnom Penh  | Qingdao  | <b>Finland</b><br>Helsinki   | <b>Hong Kong (SAR)<sup>1</sup></b><br>Hong Kong   | <b>Italy</b><br>Milan  |
| <b>Australia</b><br>Perth<br>Sydney<br>Melbourne                      | <b>Canada</b><br>Toronto<br>Montréal<br>Vancouver<br>Calgary   | Shanghai<br>Shenyang<br>Shenzhen<br>Shijiazhuang<br>Suzhou<br>Tianjin<br>Urumqi<br>Wuhan | <b>France</b><br>Lyon<br>Marseille<br>Paris<br>Strasbourg<br>Toulouse                            | <b>Hungary</b><br>Budapest  | Naples<br>Rome<br>Turin  |
| <b>Austria</b><br>Vienna  | <b>Chile</b><br>Santiago   | Xiamen   | <b>Germany</b><br>Berlin<br>Cologne<br>Düsseldorf<br>Frankfurt<br>Hamburg<br>Munich<br>Stuttgart | <b>India</b><br>Ahmedabad<br>Bangalore<br>Chennai<br>Delhi<br>Hyderabad<br>Jaipur<br>Kolkata<br>Lucknow<br>Mumbai<br>Nagpur<br>Pune | <b>Japan</b><br>Fukuoka<br>Nagoya<br>Osaka<br>Sapporo<br>Sendai<br>Tokyo<br>Yokohama |
| <b>Bangladesh</b><br>Dhaka  | <b>China (Mainland)</b><br>Beijing<br>Changsha<br>Chengdu<br>Chongqing<br>Dalian<br>Fuzhou<br>Guangzhou<br>Hangzhou<br>Harbin<br>Jinan | Zhengzhou  |  |   |  |
| <b>Belgium</b><br>Brussels  |  | <b>Colombia</b><br>Bogotá  |  |   |  |
| <b>Bolivia</b><br>La Paz  |  | <b>Czechia</b><br>Prague   |  |   |  |
| <b>Brazil</b><br>São Paulo<br>Rio de Janeiro<br>Brasília<br>Fortaleza |  | <b>Denmark</b><br>Copenhagen   | <b>Ghana</b><br>Accra  | <b>Indonesia</b><br>Jakarta<br>Surabaya   | <b>Kazakhstan</b><br>Almaty  |
|   |  | <b>Dominican Republic</b><br>Santo Domingo   |  |   | <b>Kenya</b><br>Nairobi  |

# Global Business Cities 2025

## South Korea

Busan  
Incheon  
Seoul

## Kuwait

Kuwait City

## Lithuania

Vilnius

## Malaysia

Kuala Lumpur

## Mexico

Guadalajara  
Mérida  
Mexico City  
Monterrey  
Puebla

## Morocco

Casablanca

## Netherlands

Amsterdam  
Rotterdam

## New Zealand

Auckland

## Nigeria

Lagos

## Norway

Oslo

## Oman

Muscat

## Pakistan

Karachi  
Lahore

## Panama

Panama City

## Peru

Lima

## Philippines

Manila

## Poland

Krakow  
Warsaw

## Portugal

Lisbon

## Qatar

Doha

## Romania

Bucharest

## Russia

Kazan  
Moscow  
Novosibirsk  
Saint Petersburg  
Vladivostok  
Yekaterinburg

## Saudi Arabia

Riyadh

## Serbia

Belgrade

## Singapore

Singapore

## South Africa

Cape Town  
Johannesburg

## Spain

Barcelona  
Madrid  
Sevilla

## Sweden

Stockholm

## Switzerland

Genève

Zürich

## Taiwan

Kaohsiung  
Taipei

## Thailand

Bangkok

## Turkey

Ankara  
Istanbul  
Izmir

## Ukraine

Kiev

## United Arab Emirates

Dubai

## United Kingdom

Birmingham  
Bristol  
Glasgow  
London  
Manchester

## United States of America

Austin  
Albuquerque  
Atlanta

Baltimore

Boston  
Columbus  
Charlotte  
Chicago  
Cleveland

Dallas

Denver

Detroit

El Paso

Honolulu

Houston

Indianapolis

Jacksonville

Kansas City

Los Angeles

Louisville

Memphis

Miami

Minneapolis

Nashville

New Orleans

New York

Philadelphia

Phoenix

Pittsburgh

Portland

Sacramento

San Antonio

San Diego

San Francisco

San Jose

Seattle

St. Louis

Tampa

Washington D.C.

## Uruguay

Montevideo

## Uzbekistan

Tashkent

## Vietnam

Ho Chi Minh City  
Hanoi

# Regional division for countries and territories covered in this report

**Africa:** Algeria, Angola, Egypt, Ghana, Kenya, Morocco, Nigeria, and South Africa

**Australia & Oceania:** Australia and New Zealand

**Central & Western Europe:** Austria, Belgium, Czechia, France, Germany, Hungary, Ireland, Netherlands, Poland, Switzerland, and United Kingdom

**East Asia:** China, Hong Kong, Japan, South Korea, and Taiwan

**Eastern Europe:** Bulgaria, Romania, Russia, and Ukraine

**Latin America:** Argentina, Bolivia, Brazil, Chile, Colombia, Dominican Republic, Ecuador, Guatemala, Panama, Peru, and Uruguay

**North America:** Canada, Mexico, and United States

**Northern Europe:** Denmark, Finland, Lithuania, Norway, and Sweden

**South Asia:** Bangladesh, India, and Pakistan

**Southeast Asia:** Cambodia, Indonesia, Malaysia, Philippines, Singapore, Thailand, and Vietnam

**Southern Europe:** Greece, Italy, Portugal, Serbia, Spain, and Turkey

**West & Central Asia:** Israel, Kazakhstan, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates, and Uzbekistan

# Methodology and data used in this report

## Data sources

The Global Business City 2025 Reports present quantitative data from various private and public sources of information. These sources include data providers such as the International Monetary Fund, the World Bank, the United Nations, the OECD, the World Economic Forum and Statista itself. The data sources are indicated in footnotes throughout the report.

## Forecasts and estimates

The population estimates for cities are based on forecasts by the United Nations. The original data provided with 5-year intervals was transformed with cubic spline interpolation to produce yearly values. The city GDP per capita forecasts for 2025 are based on the growth rates of the country level GDP growth forecasts by International Monetary Fund up to 2024 with those rates kept as constant for 2025. The total city GDP values for 2025 were achieved by multiplying the per capita values by the population estimates for 2025.

For English language skills in mostly anglophone countries, i.e. Canada, United States, Ireland, United Kingdom, Australia, and New Zealand, missing data was imputed for the subindex by assigning the highest value assigned in the data. In other cases, national level data or mean values were used to impute missing values.

## Real GDP calculation

A country's real GDP is an inflation-adjusted GDP assessment reflecting its net growth. It can be used to compare economy sizes across countries. The data in this report are presented in U.S. dollars and maintain the growth rates of the real GDP series. The data are expressed in the base year of each country's national accounts, the year is country specific. For more information please refer to [World Economic Outlook Database FAQ](#).

## Difference between current and constant US\$

Data reported in current US\$ reflect the value the currency has in a particular year. Current data series are influenced by the effect of price inflation and differences in exchange rates and the comparability of growth rates between countries is limited.

Data expressed in constant US\$ reflect the value of a currency in a particular base year. The individual base year listed in a country's national accounts differs from country to country. Constant series are used to measure the true growth of a series by adjusting for the effects of price inflation.

# Methods for index construction (1/3)

## Index construction

- The indicators for the Global Business Cities 2025 index were chosen based on their relevance to the conceptual framework represented by the chapter and section divisions in this report as well as their availability on the level of analysis. The final choice of indicators included in the index was based on correlation, which was a requirement for assigning the indicator weights, and exploratory factor analysis
- The retained data frame had a value of 0.77 in Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy, which was well above the 0.60 required to proceed with factor analysis. The KMO is a set of statistics that is used to compare magnitudes of the observed correlation coefficients to the magnitudes of the partial correlation coefficients. In addition, the Bartlett's test of sphericity was implemented to test the null hypothesis of uncorrelated sub-indicators in the correlation matrix
- The weights for the included indicators were assigned based on factor analysis conducted with z-score normalized values for variables with moderate to high loadings (correlations larger than 0.5) in factors retained in the confirmatory factor analysis after orthogonal varimax rotation. The retained factors had associated eigenvalues larger than one based on the Kaiser criterion, explained individually at least 8.7% of the total variation, and cumulatively explained 57.3% of the total variation in the dataset
- The indicator values were aggregated to the final index with a linear aggregation in summation of weighted and min-max scaled individual indicators. Values for the indicators Freedom of Speech index and air pollution density were inverted prior to aggregation due to inverse scale in the original data. The final values featured in this report were also normalized with min-max scaling to facilitate easier interpretation of the values

# Methods for index construction (2/3)

## Formulas and technical descriptions

- Z Score formula where  $\mu$  is the mean of the population and  $\sigma$  is the standard deviation of the population

$$z = \frac{x - \mu}{\sigma}$$

- Min-max normalization where  $x$  is an original value and  $x'$  is the normalized value

$$x' = \frac{x - \min(x)}{\max(x) - \min(x)}$$

- Factor analysis is conducted on a set of intercorrelated variables. The analysis forms groups of highly intercorrelated variables that can be seen to measure underlying variables called “factors” that can’t be directly measured. Factor analysis model aims to describe a set of  $Q$  variables  $x_1, x_2, \dots, x_Q$  with a smaller number of  $m$  factors and to explain the relationship between these variables. In this model  $x_i$  ( $i = 1, \dots, Q$ ) represents the original values standardized with zero mean and unit variance,  $\alpha_{i1}, \alpha_{i2}, \dots, \alpha_{im}$  are factor loadings connected to the variable,  $X_i, F_1, F_2, \dots, F_m$  ( $j = 1, \dots, m$ ) are  $m$  uncorrelated common factors with zero unit variance and mean, and  $e_i$  are the  $Q$  specific factors supposed independently and identically distributed with zero mean

$$\begin{aligned}x_1 &= \alpha_{11}F_1 + \alpha_{12}F_2 + \dots + \alpha_{1m}F_m + e_1 \\x_2 &= \alpha_{21}F_1 + \alpha_{22}F_2 + \dots + \alpha_{2m}F_m + e_2 \\&\dots \\x_Q &= \alpha_{Q1}F_1 + \alpha_{Q2}F_2 + \dots + \alpha_{Qm}F_m + e_Q\end{aligned}$$

- The weights were assigned based on the results of the factor analysis with a statistic-based method where  $r_{F_j}$  is the proportion of the explained variance of the factor  $F_j$  (or the intermediate composite  $F_j$ ) in the dataset,  $\alpha_{ij}$  the factor loading of the  $x_i$  indicator on factor  $F_j$  and  $E_{F_j}$  the variance explained by factor  $F_j$

$$\begin{aligned}\omega_i &= r_{F_j} (\alpha_{ij}^2 / E_{F_j}) \\i &= 1, \dots, Q; j \in \{1, \dots, m\}\end{aligned}$$

# Methods for index construction (3/3)

## Formulas and technical descriptions

- The indicator aggregation was conducted with an additive aggregation where GBC is the Global Business Cities 2025 index,  $\omega_i$  the weight of the  $i^{th}$  indicator, and  $I_i$  the normalized score of the  $i^{th}$  indicator

$$GBC = \omega_1 I_1 + \omega_2 I_2 + \dots + \dots + \omega_Q I_Q = \sum_{i=1}^Q \omega_i I_i$$

# Variables in Global Business Cities 2025 index

## Variable list

- Shipping freight in million TEU
- Stock market prescience
- Internet penetration rate
- Physicians per 1,000
- Number of air passengers in million
- Air pollution density (PM 10)
- Number of embassies and consulates
- Number of museums
- Number of Instagram tags
- Mean years of schooling
- LGBTQ+ rights
- Gender gap index
- Freedom of speech index
- Level of proficiency in English
- Control on corruption
- Per capita city GDP in 2025
- Total city GDP 2025

# Glossary of terms

**City GDP:** The sum of the gross value added (wages plus business surplus plus taxes less imports) or the total final demand (consumption plus investment plus exports)

**City Product:** See City GDP

**Constant US\$:** Data expressed in constant US\$ show the data for each year in the value of a particular base year. The base year of each country's national accounts is country specific. Constant series are used to measure the true growth of a series by adjusting for the effects of price inflation

**Cost of living:** The cost of living incorporates most everyday expenses: groceries and restaurants, clothing, transportation and fuel, utilities, etc. These are the expenses of a fairly affluent family, but do not enter into the realm of luxury item expenses. Rent is calculated separately. The estimate is based upon three active spenders in the family (the couple and the oldest child attending university)

**Current US\$:** Data reported in current US\$ reflect the value the currency has in a particular year. Current data series are influenced by the effect of price inflation and differences in exchange rates, and the comparability of growth rates between countries is limited.

**Density of universities:** The amount of existing public and other relevant universities in a city and its surrounding area. Other relevant universities can be religious (ecclesiastical, islamic) or private institutions that are publicly funded. For the regions Australia & Oceania, Northern and Central & Western Europe only public universities are included. The regional averages are only representative within the region and not for a worldwide comparison because of different educational standards and classification of qualifications

**Efficiency of customs clearance:** Includes e.g. speed, simplicity, and predictability of customs clearance (5 = high efficiency, 1 = low efficiency)

**Internet penetration:** Share of individuals in the country who have used the Internet (from any location) in the last 3 months

**Mean years of schooling:** Average number of completed years of education of population aged 25 years and older, excluding years spent repeating individual grades

**PM10:** Particulate matter (PM) with particles smaller than 10  $\mu\text{g}$

# Glossary of terms

**Poverty rate :** Ratio of the number of people with income below the poverty line

**Purchasing Power Parity (PPP) :** Ratio of the number of people with income below the poverty line

**Real GDP:** Real gross domestic product (GDP) is an inflation-adjusted measure that reflects the value of all goods and services produced by an economy in a given year, expressed in base-year prices, and is often referred to as "constant-price", "inflation-corrected" GDP or "constant dollar GDP". Unlike nominal GDP, real GDP can account for changes in price level and provide a more accurate figure of economic growth

**Time needed to export:** Time necessary to comply with all the procedures required to export/import goods in calendar days

**Time needed to resolve insolvency :** Number of years from the filing for insolvency in court until the resolution of distressed assets

**Time needed to start a business:** Number of calendar days needed to complete the procedures to legally operate a business

**Unemployment rate:** Unemployment refers to the share of the labor force that is without work but available for and seeking employment

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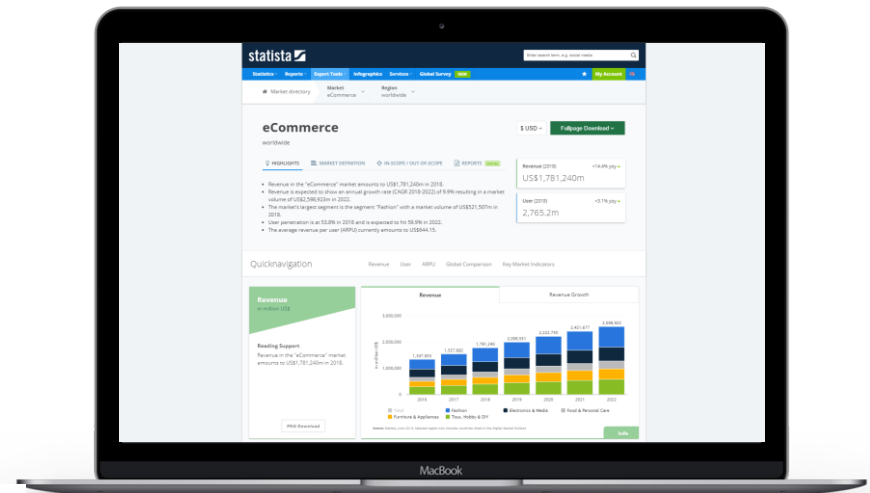
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