The Global Powerhouse Regions

Benchmarking Holland Metropole against the world's best

Dr Tim Moonen & Prof Greg Clark

MIPIM

March 2017

Holland Metropole

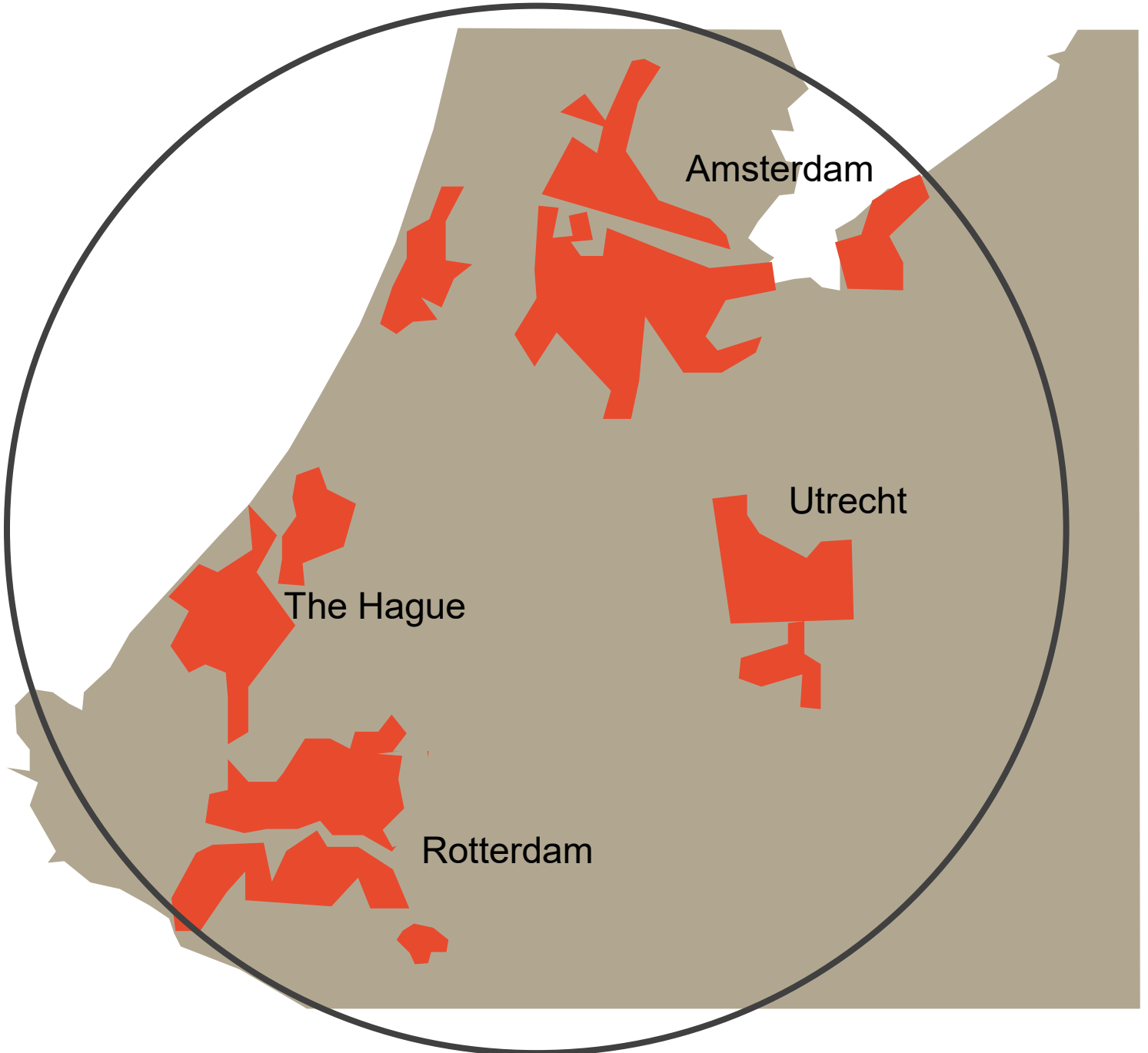
Summary

Holland Metropole

1. Holland Metropole has the scale, diversity and dynamics to deserve comparison with the world's best.
2. Other regions lead the way in terms of raw economic size (London), population growth (Toronto), science (Paris), start-ups (San Francisco) and air pollution (Munich).
3. But Holland Metropole has unique air, sea, rail and digital connectivity. In fact it is one of the most important junction boxes for global trade, talent and investment.
4. Its world-class university mix offers a path to the tech, science and business specialisations of the future.
5. It has a critical mass of cosmopolitan talent to compare with anyone.
6. Its innovation eco-system is starting to register major returns and attract global interest.
7. It holds huge appeal for high value visitors + has top 3 combinations of lifestyle assets.
8. Its model offers flexibility but also ensures integrated, healthy and environmentally friendly growth.
9. Its affordability is a big advantage as other cities run out of growth options.
10. Holland Metropole is a region fit for the big global challenges of the 21st century.

Four cities but 1 metropolitan region

How does Holland Metropole really perform against the world's best?

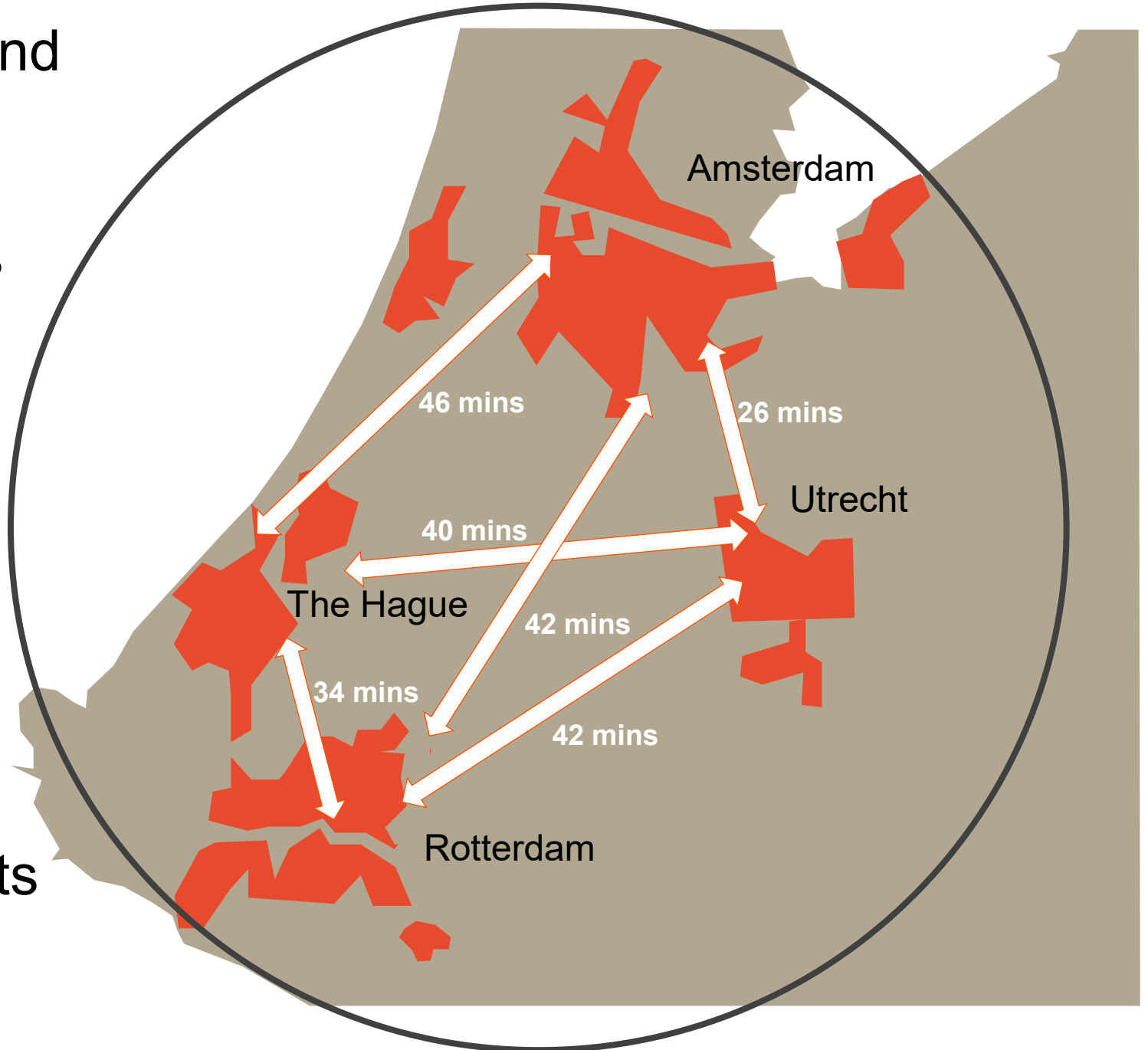


Regular commuting and relocation.

Shared airports, ports and specialisations.

Shared university system

Combined scale
Common factors
Complementary assets



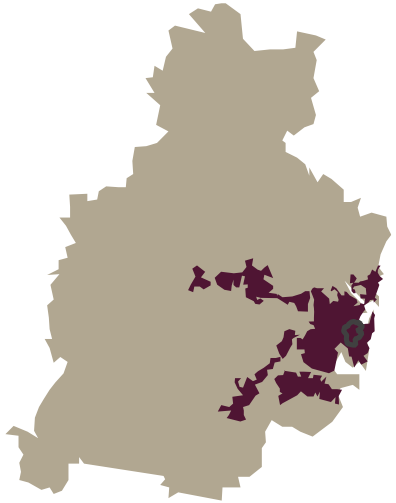

Holland
Metropole
Greater
London
Paris
Region
Munich
Metro Region
Greater Toronto
Area
Greater
Boston
San Francisco
Bay Area
Hong Kong
Singapore
Greater
Sydney

Why these 10 regions?

- Among the top 20 leading innovation regions (2thinknow, CITIE, Compass, MORI, PwC)
- Among the top 40 most globalised economies (AT Kearney, Economist Intelligence Unit)
- Top 30 most competitive cities (CASS, IBM)
- Top 25 global financial centres (Xinhua-Dow Jones IFC ranking)
- Comparable in size and population to the Holland Metropole



Munich Metropolitan Region



Greater Sydney



Paris Region



Greater Boston



San Francisco Bay Area



Holland Metropole



Greater London



Greater Toronto Area

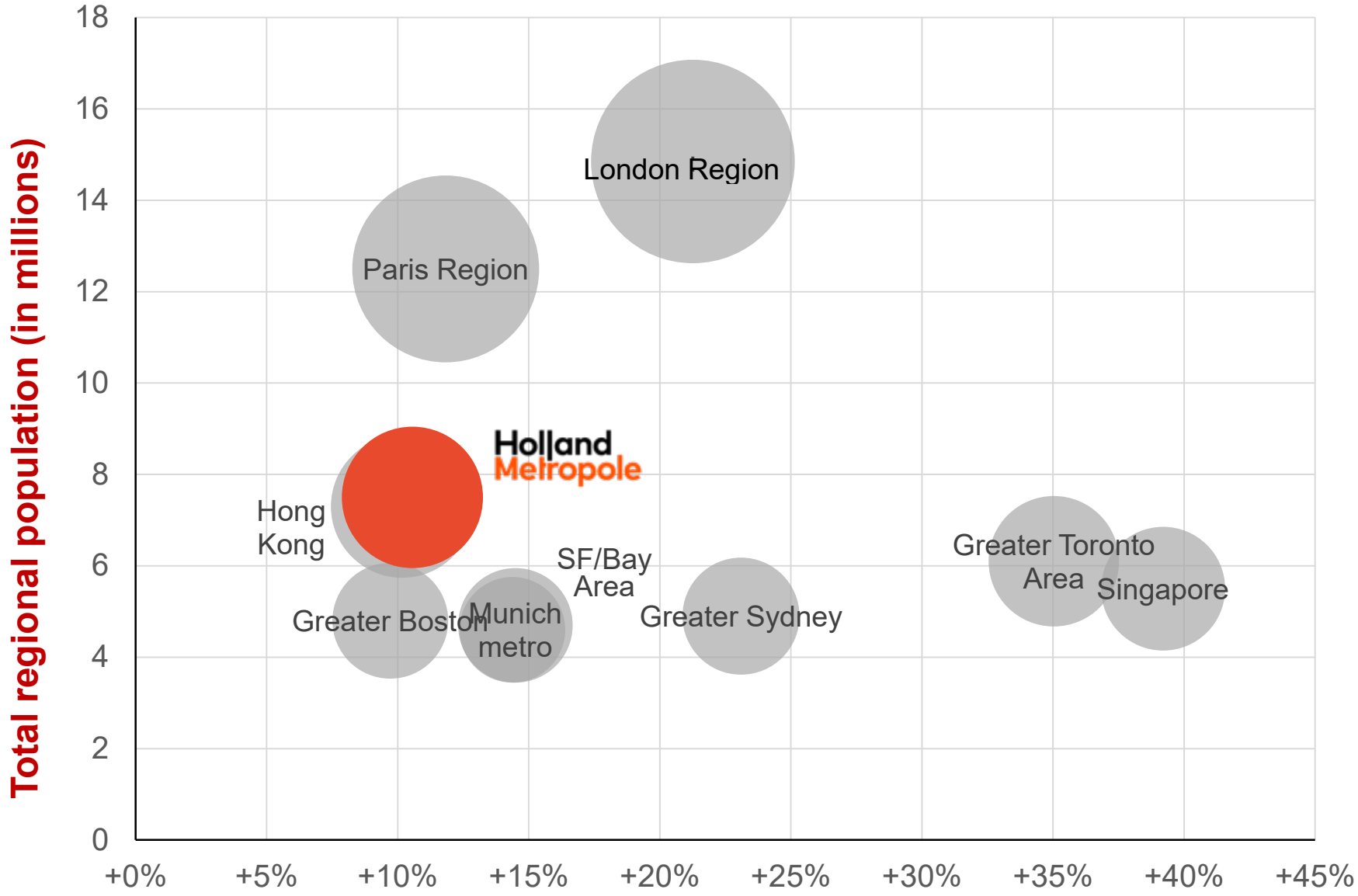


Hong Kong



Singapore

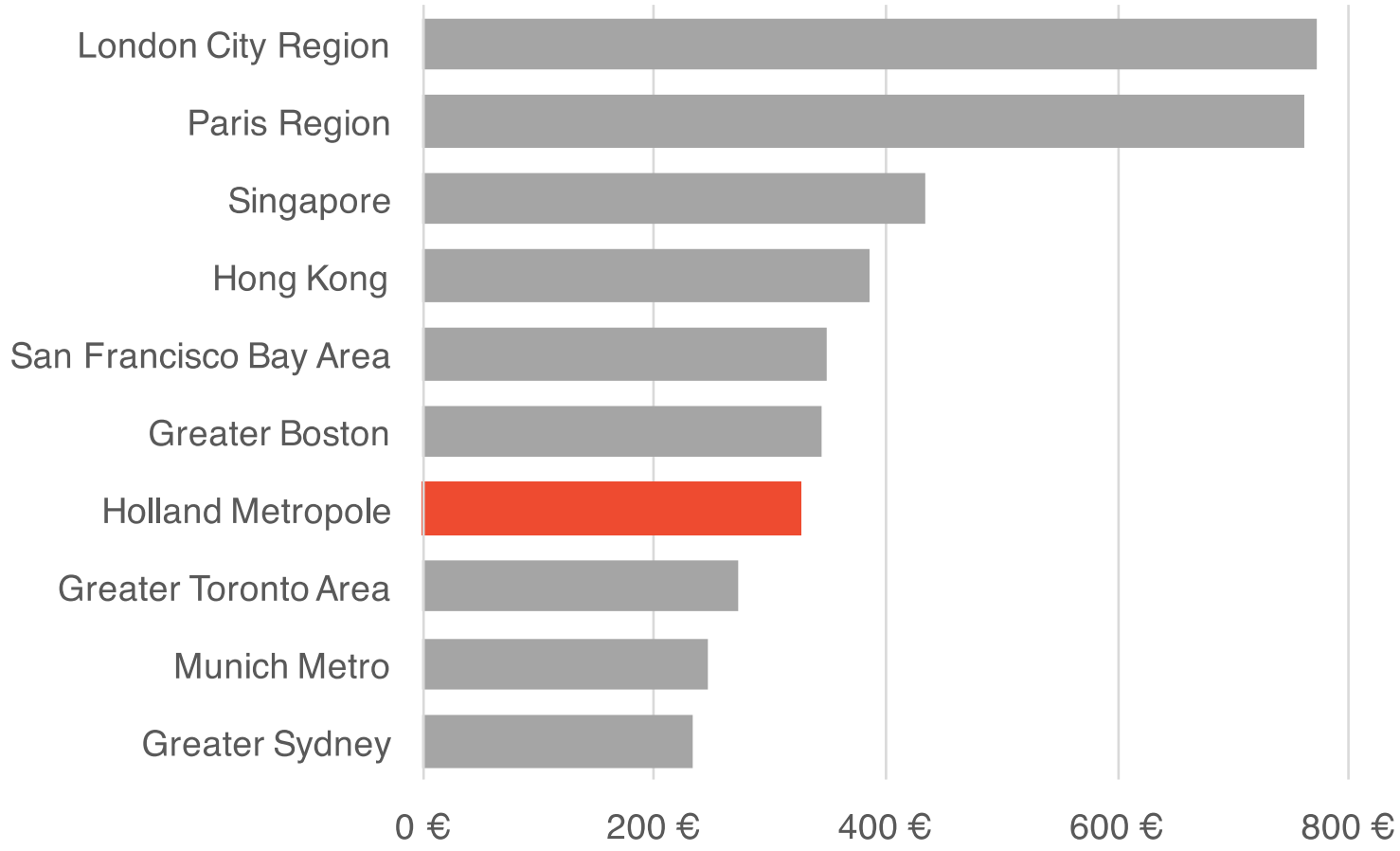
Holland Metropole – critical size and dynamic growth



The 10 regions have all experienced a strong cycle of population growth, which is set to continue into the next cycle.

Source: Eurostat, Brookings, City and National Statistic Agencies

10 world leading metro economies

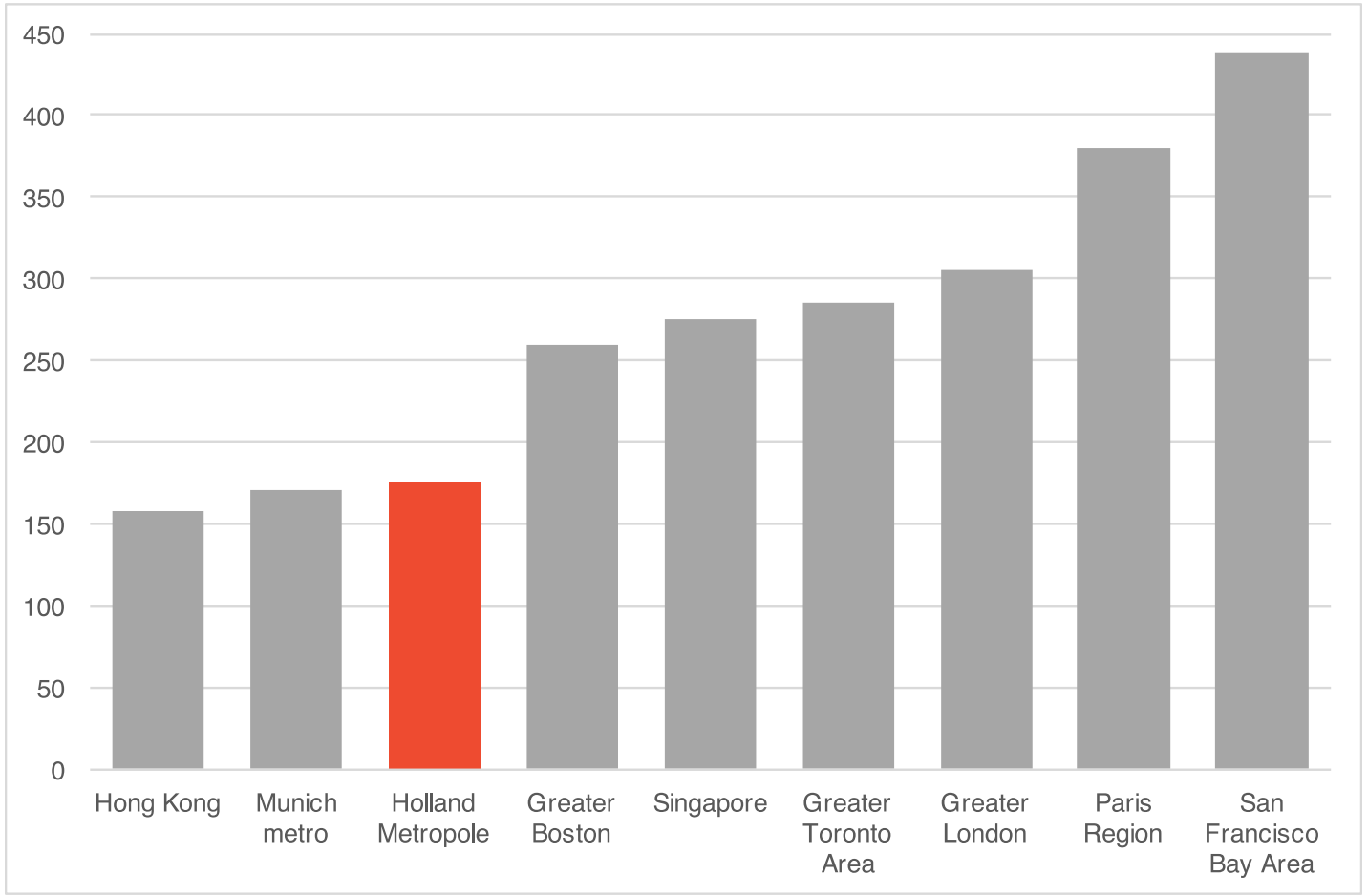


GDP, 2015, in billions

Source: Eurostat, Brookings, Oxford Economics

Major centres of science and engineering

Science and technology employment in thousands (2015)

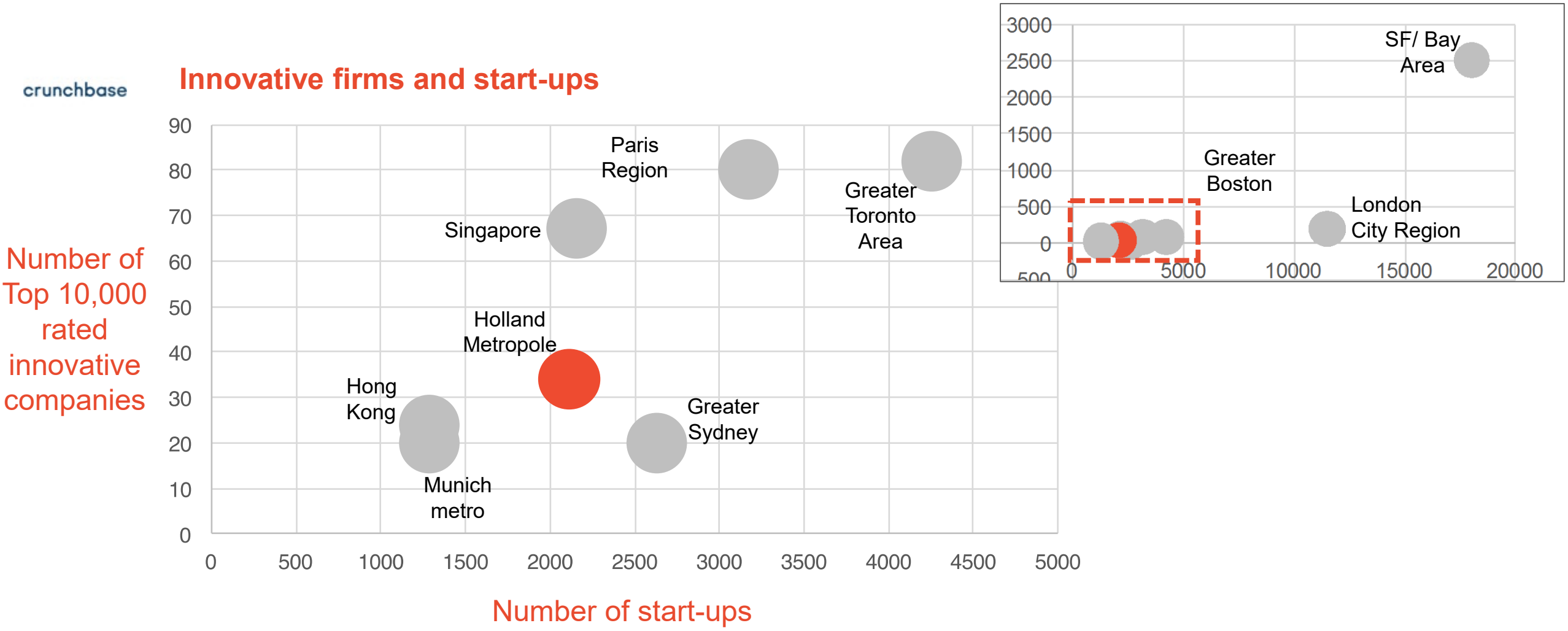


Sources: Eurostat, city-level statistics agencies and US B.L.S.

San Francisco remains the global epicentre for science and tech talent, but European and Asian leaders are catching up.

Holland Metropole: a region of start-ups

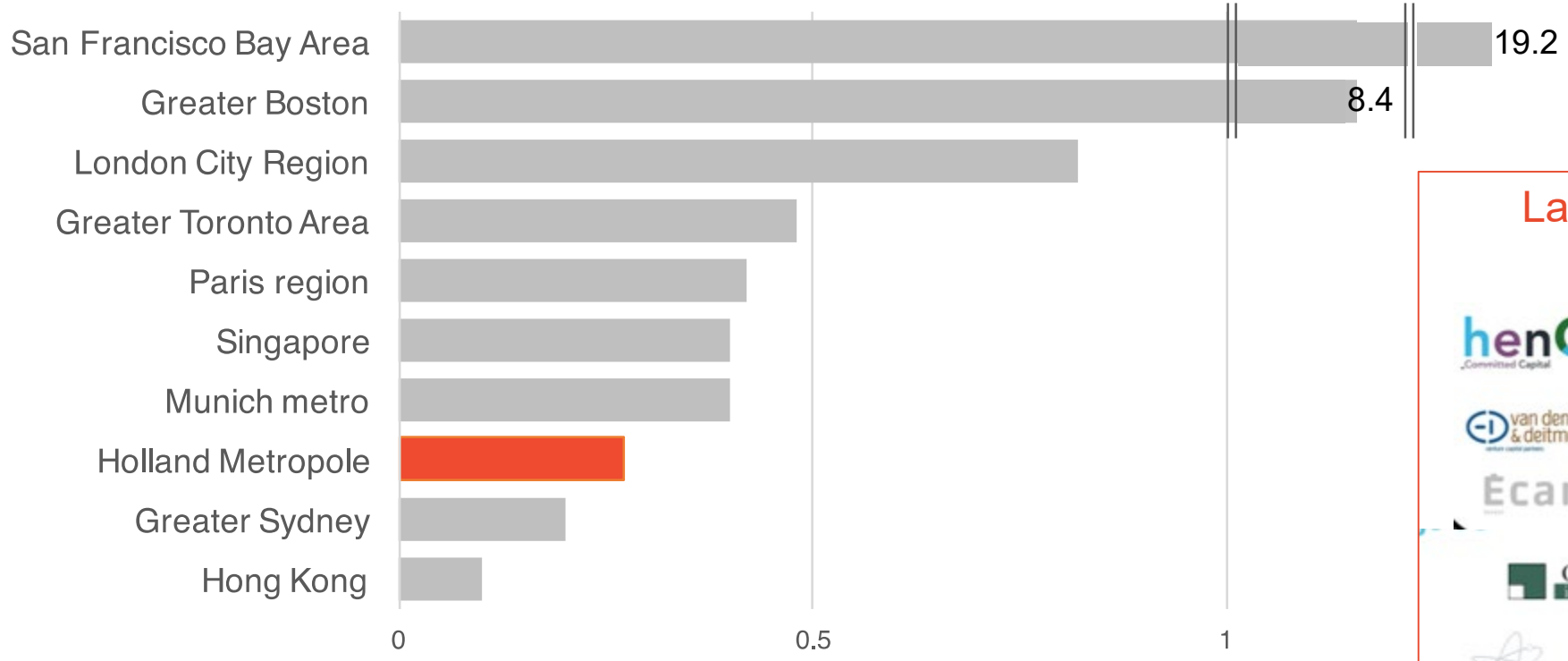
crunchbase



Source: Crunchbase.
Number of top ranked firms based on projections for some regions due to data limitations

Attracting investment in innovation

Venture funding per capita, 2009-2015 ($US '000)

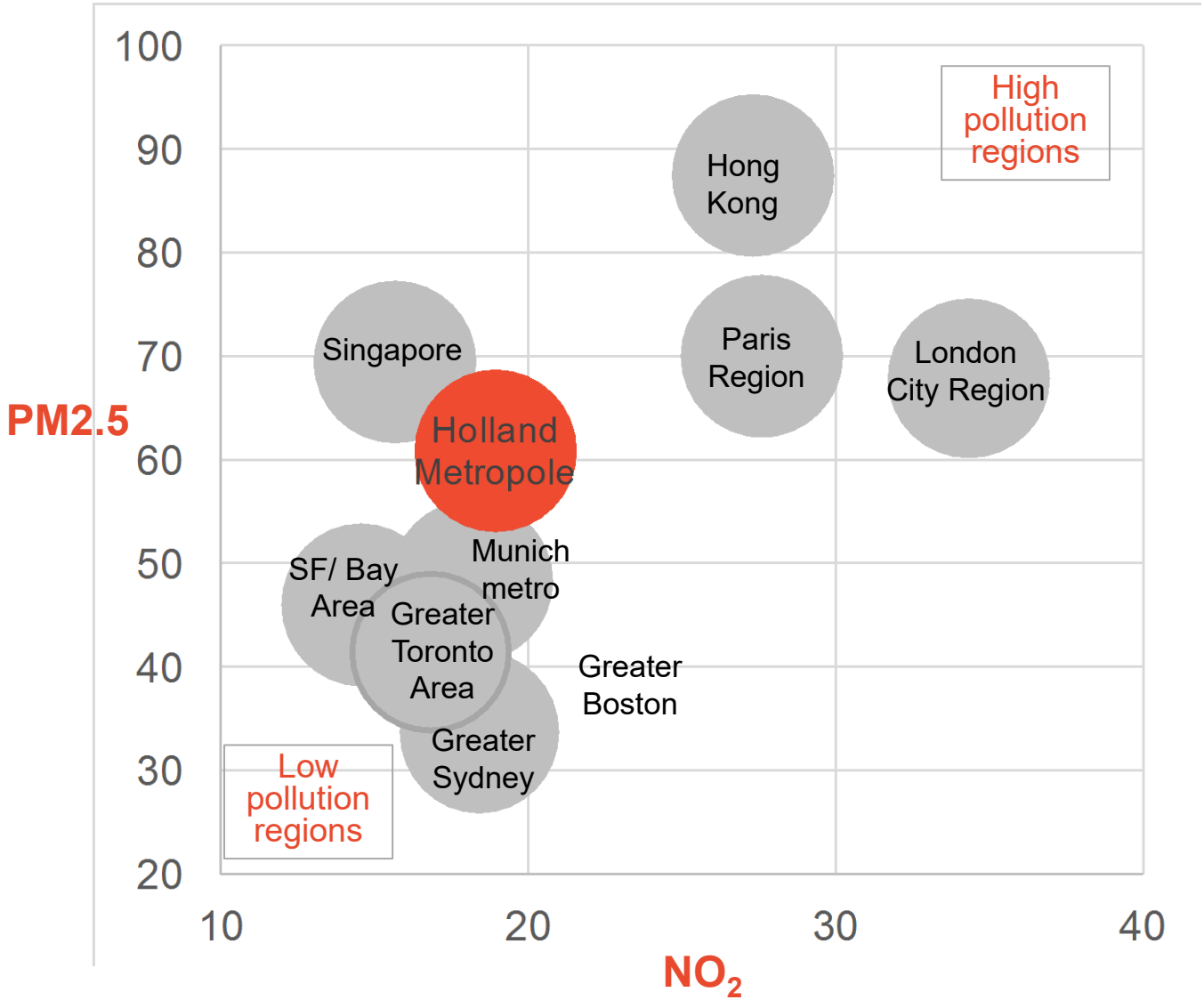


Late stage VCs active in Holland Metropole

henQ
HPE Growth Capital
AVEDON
van den ende & deitmers
ppm oost
Pulsar Network Capital
Ecart
clever clover
PRIMEVENTURES
Otterloo Ventures
investment and advice
NXG ventures
filsa
newion investments
asym
investment strategies
VORTEX
CAPITAL PARTNERS
Percival
TOHARU VENTURES

Sources: Brookings

Air pollution in the global city regions



- Holland Metropole less polluted than its larger European peers
- Greater Sydney and San Francisco both perform well.
- Hong Kong, Paris and London currently struggling.

Source: Real-time Air Quality Index (AQI); based on average year-round and monthly high scores of 5 locations in region in 2016

So Holland Metropole is competitive in the league of the world's most successful metros…

But more than that…….

Holland Metropole is super-connected globally

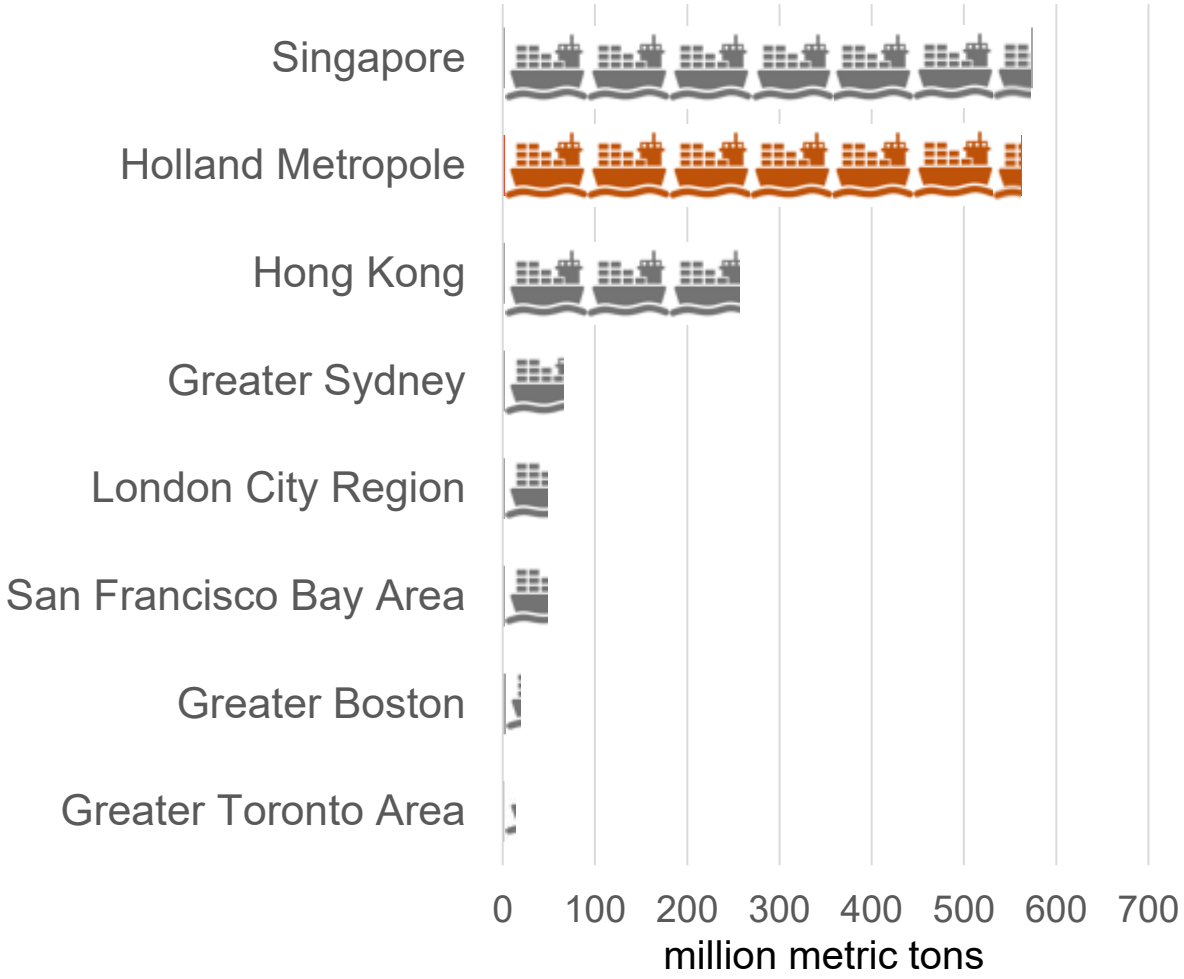
	Number of direct international flight connections	Global rank
London City Region	351	1
Paris Region	291	2
Holland Metropole	**242**	**4**
Munich Metro	217	6
Greater Toronto Area	154	17
Hong Kong	147	20
Singapore	129	29
Greater Boston	55	119
San Francisco Bay Area	49	133
Greater Sydney	46	139



© Rome2Rio

An outstanding logistics platform

Port cargo tonnage, 2014



Airport cargo tonnage, 2015 (million metric tons)



Source: World Shipping Council and ACI

Exceptional internal transport connectivity



Citymapper

Average Travel Time to key destinations by public transport

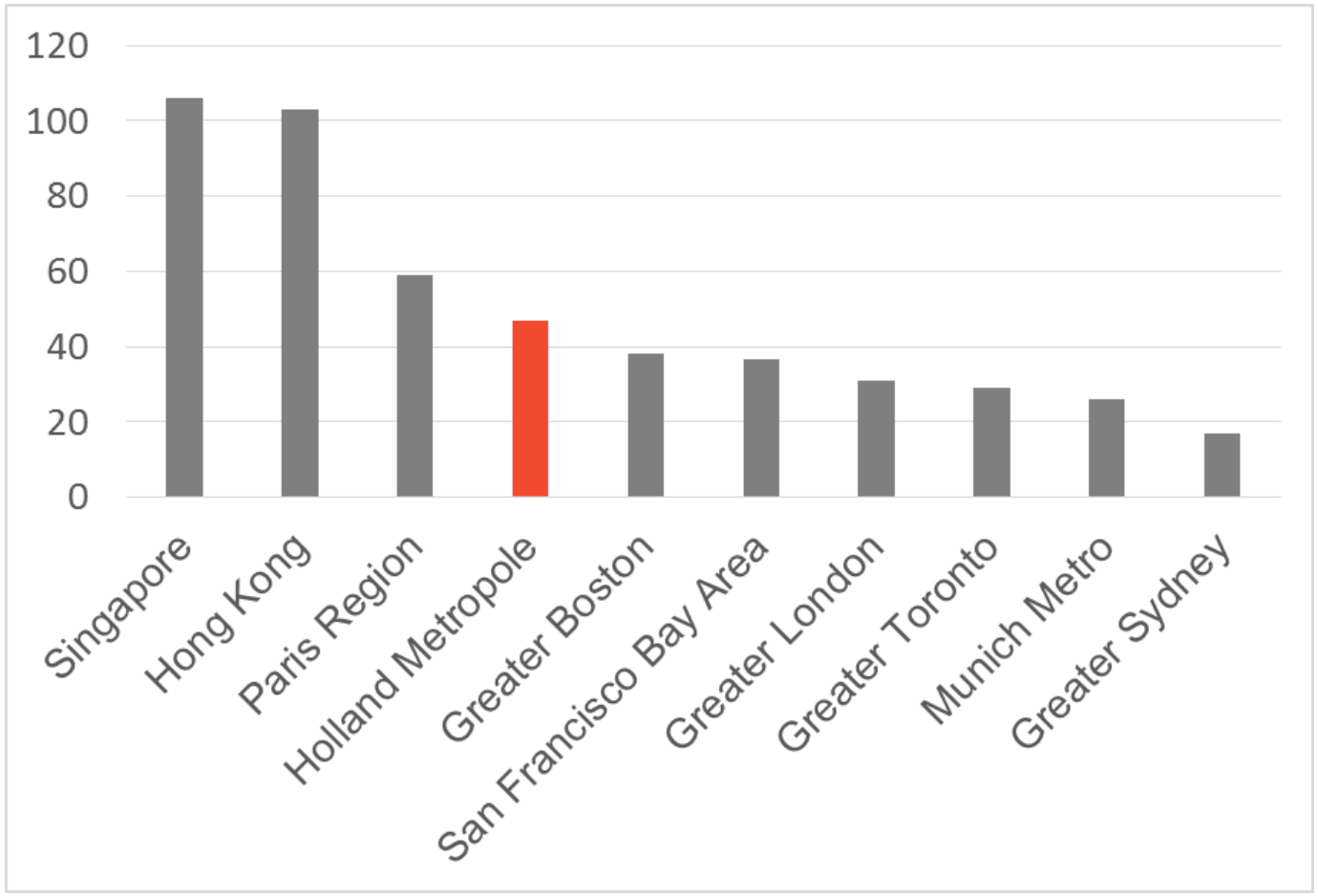
	Region	Suburbs to CBDs	Key centres to airport	Main stadium to main University/ CBD/ Gov HQ	Average Travel Time
1	Holland Metropole	38mins	25mins	30 mins	**31 mins**
2	Hong Kong	28mins	46mins	20 mins	**31.3 mins**
3	Greater Boston	30mins	53mins	28 mins	**37 mins**
4	Greater Toronto	45mins	49mins	19 mins	**37.7 mins**
5	London Region	54mins	53mins	24 mins	**43.7 mins**
6	Singapore	38mins	58mins	38 mins	**44.7 mins**
7	Munich Metro	39mins	66mins	33 mins	**46 mins**
8	Paris Region	43mins	78mins	24 mins	**48.3 mins**
9	San Francisco Bay Area	47mins	75mins	31 mins	**51 mins**
10	Greater Sydney	66mins	54mins	56 mins	**56.7 mins**

- Holland Metropole's inter-connectivity between cities, key business, residential, sporting and cultural locations leads other 'single city' regions.
- Hong Kong also excels
- Greater Sydney and Bay Area much less well integrated

Source: City Mapper and Google Maps

Rapid internet speeds

Internet speeds, Mbps, 2014



Holland Metropole among fastest in Europe, higher download speeds than London or Boston.

Asia-Pacific cities and city regions lead the way here.

Sources: Brookings

Holland Metropole is a ‘Giant’ of Globalization



DHL Globalization Giants Index

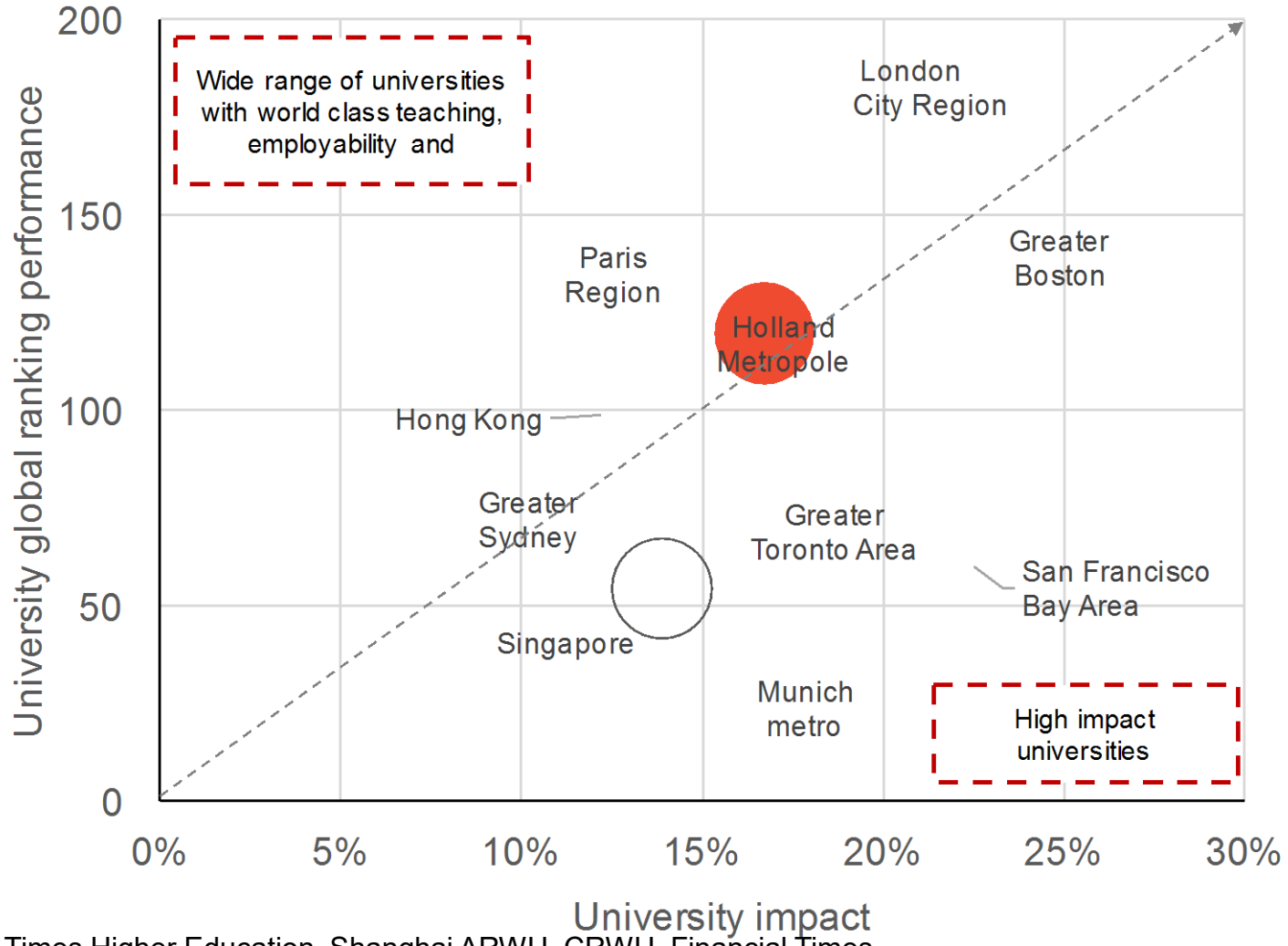
1	Singapore
2	Hong Kong
3	London City Region
4	New York Region
5	Holland Metropole*
6	Paris Region
11	Greater Toronto Area
24	San Francisco Bay Area
26	Munich metro
29	Greater Sydney
58	Greater Boston

Based on
- Exports – Incoming and Outgoing
- Outward FDI
- Inward FDI
- International internet traffic
- International students
- Cosmopolitan population

Holland Metropole taps in to more international flows (people + trade + capital) than nearly all other regions

* HM scores based on available aggregate data. Netherlands is ranked 1st globally as a country and Amsterdam by itself is ranked 14th.

World class mix of universities



The 10 regions account for 72 of the world's top 500 universities

Holland Metropole is home to six top 200 universities - four in the top 100

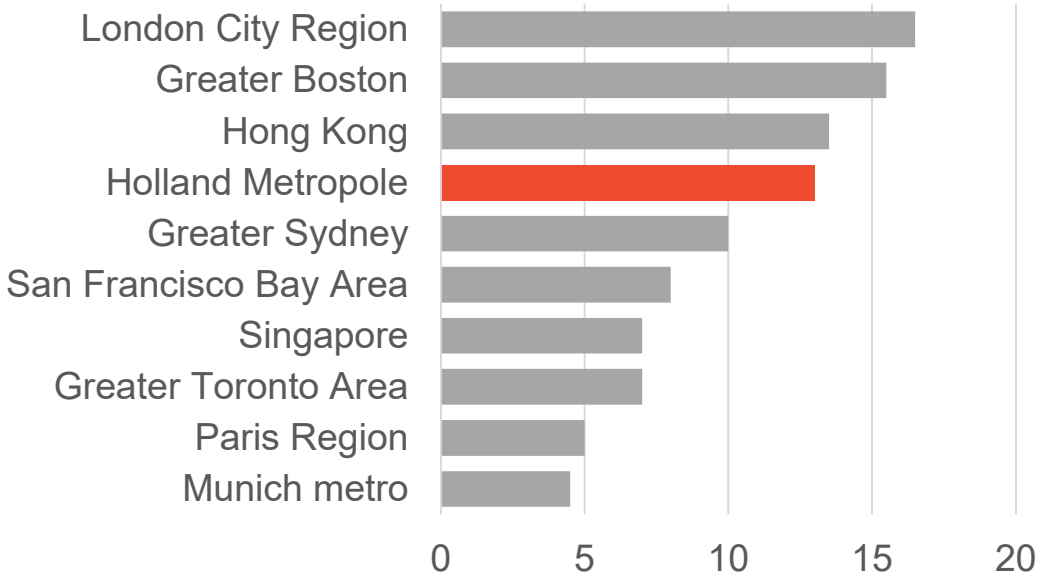
London has the most top 500 with 17, but U.S. regions excel for commercial impact.

Source: QS, Times Higher Education, Shanghai ARWU, CRWU, Financial Times

The next generation of tech and creative skills

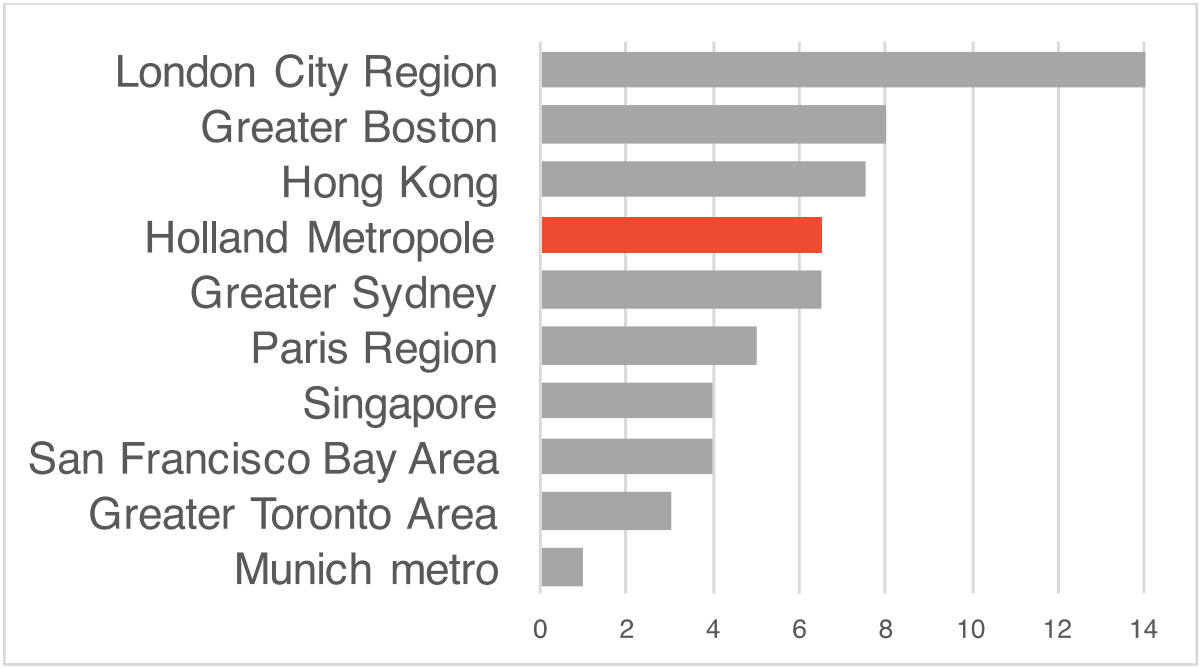


University specialisation in High Technology





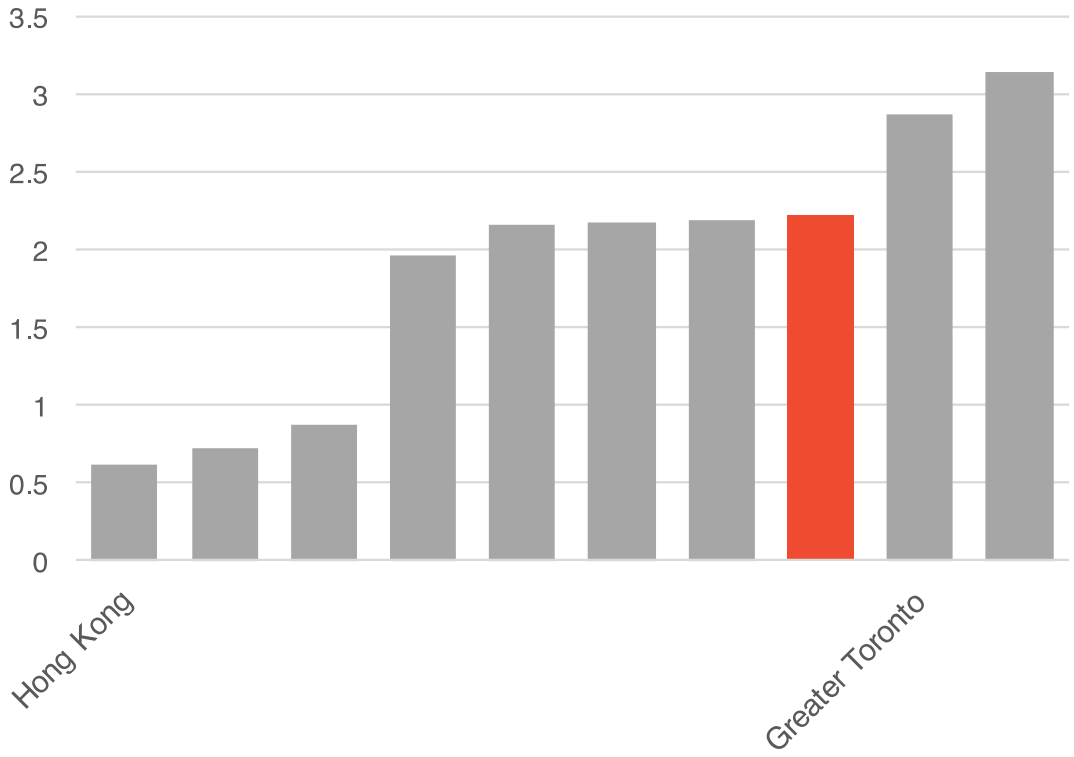
Specialisation in the Arts and Humanities



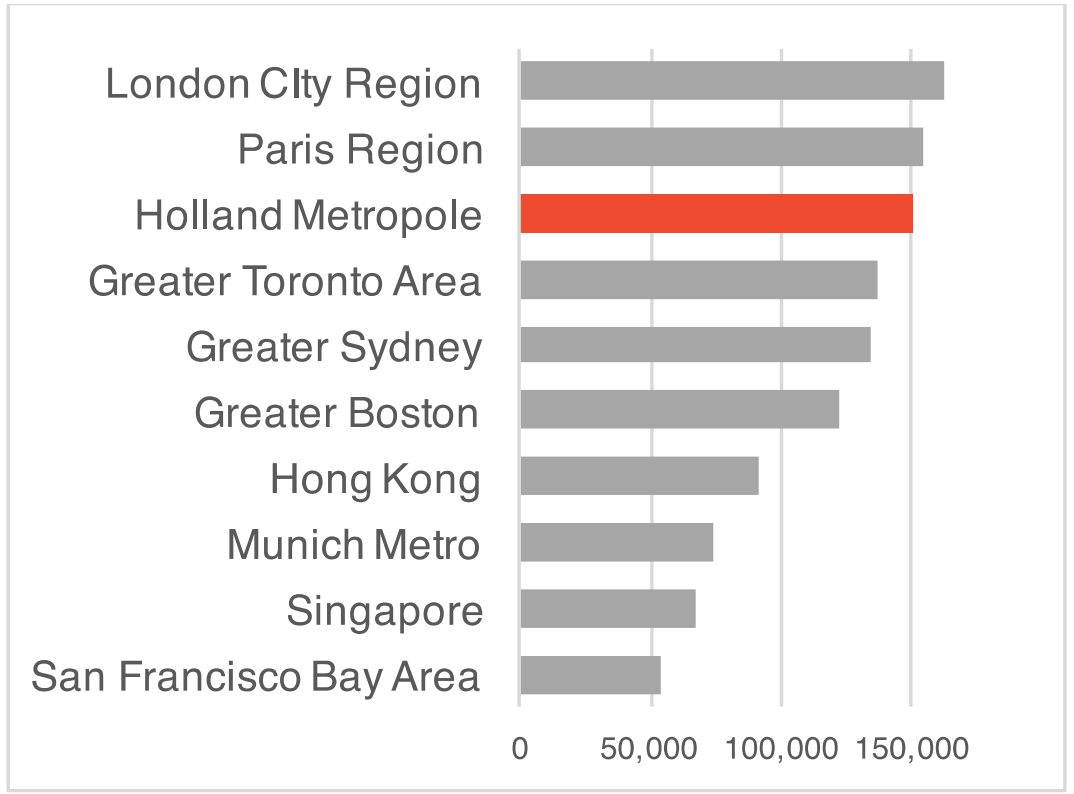
Sources: QS, Times Higher Education, CRWU, Shanghai ARWU, Financial Times

Global talent in droves

Foreign born population, 2015 or latest, in millions



Total high calibre students, 2016

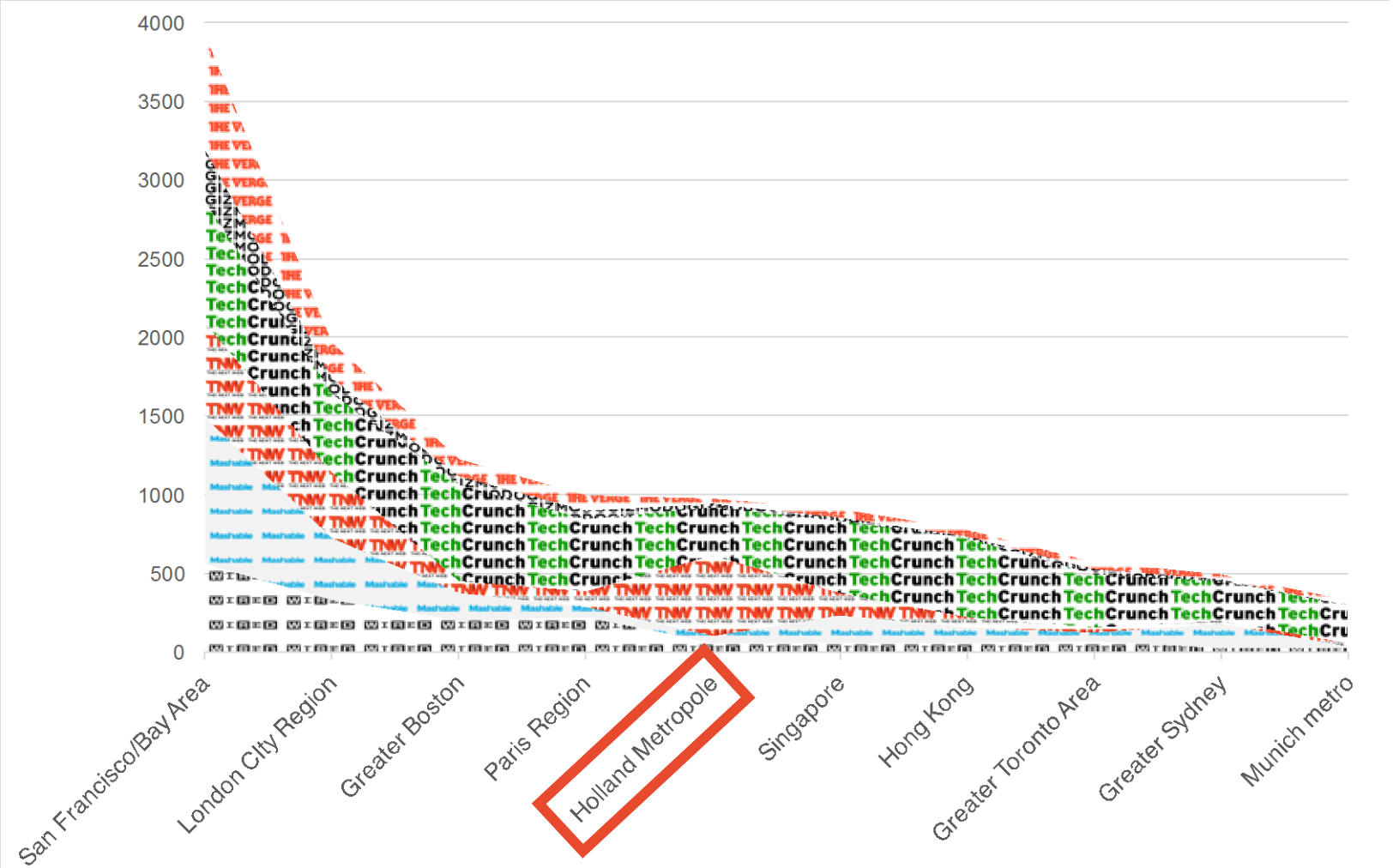


* At Top 500 ranked universities

Sources: City and national statistics agencies, QS

A growing innovation profile

Mentions in global tech media, 2014-2017

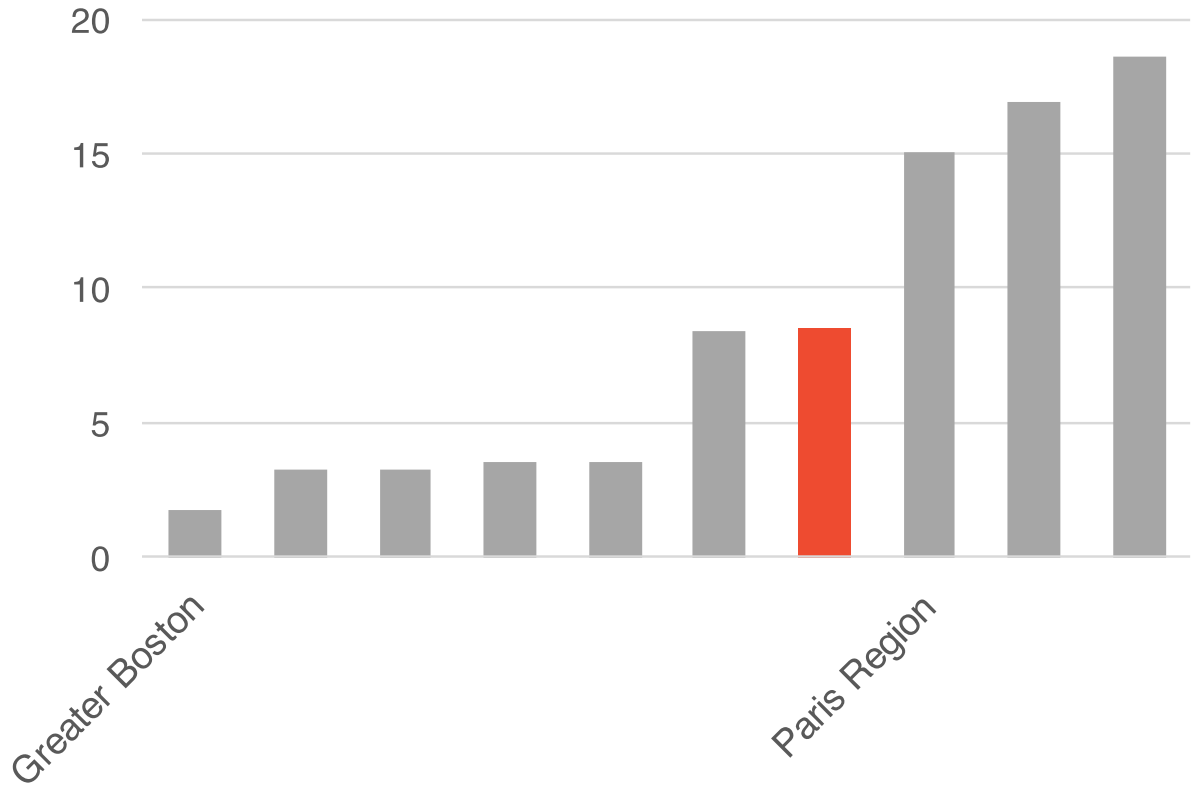


San Francisco and London dominate, but Holland Metropole is in the next group of most frequently mentioned tech hubs.

Innovation profile is consistently strong relative to the number of firms.

Attractiveness to visitors and conventions

Number of international visitors, 2015 or latest, in millions



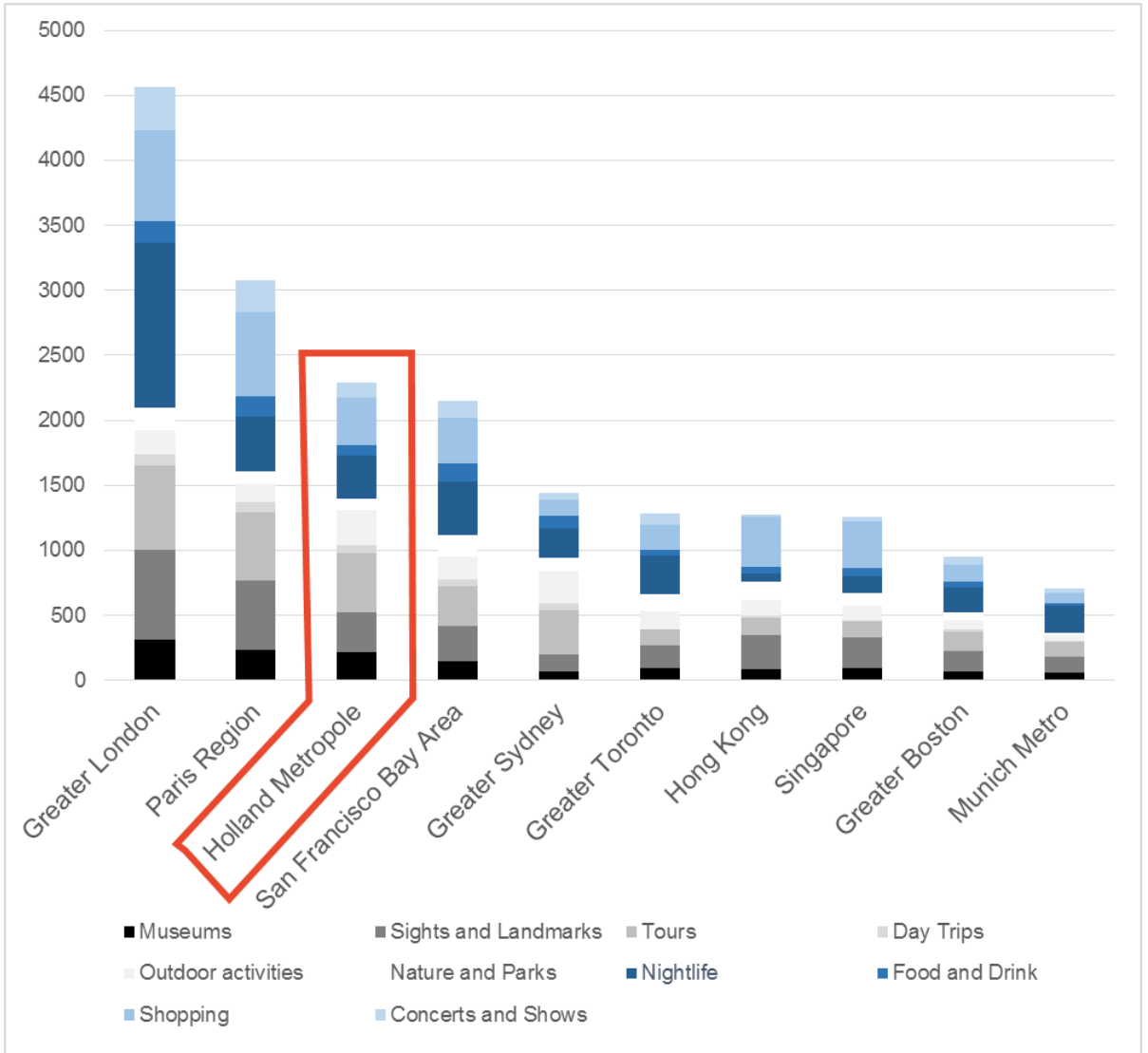
Number of rotating association meetings, 2015

		No. of meetings
1	Holland Metropole	291
2	Paris	186
3	London	171
4	Singapore	156
5	Hong Kong	112
6	Sydney	86
7	Munich	62
8	Toronto	60
9	Boston	55
10	San Francisco	30

*mostly city rather than regional data for the other cities

Sources: Euromonitor International, MasterCard, ICCA and national statistic agencies

Visitor and lifestyle attractions



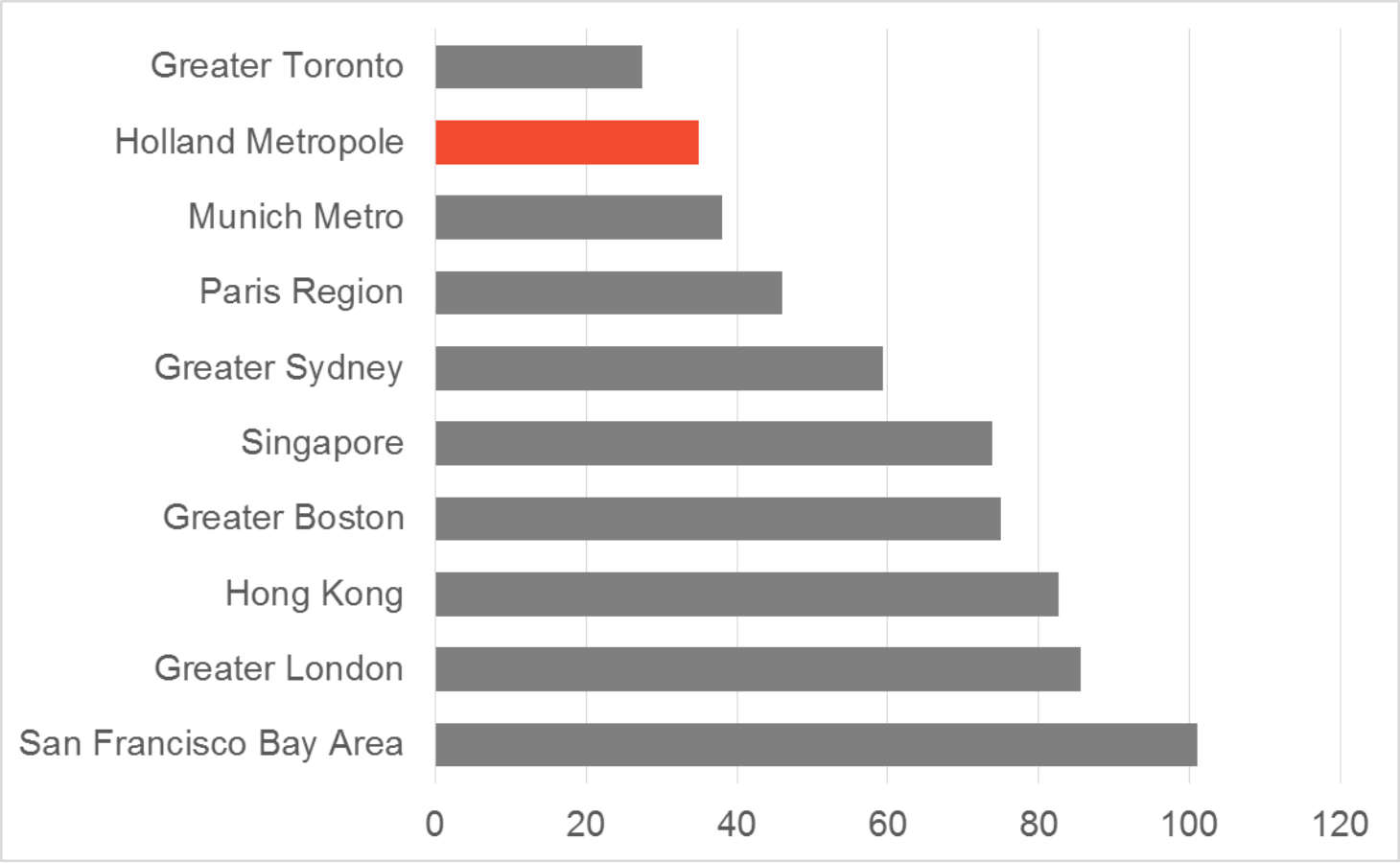
London and Paris regions lead the way for range of activities

Holland Metropole possesses a highly competitive and diverse entertainment offer

Source: Tripadvisor

Holland Metropole: an affordable global region

Numbeo Housing Rent Index, 2016



2nd most affordable after Greater Toronto

Price rises happening faster in other regions (e.g. Greater Sydney, San Francisco Bay Area)

Wide range of price points and living environments in HM.

Source: Numbeo Rent Index (0= cheapest)

Conclusion:
Holland Metropole is fit for the future!

- The future holds even more scale, agglomeration and opportunity.
- Holland Metropole matches the best medium-sized cities for quality and the best megacities for energy, infrastructure and diversity.
- Superb platform to tap into the new geography of global opportunity.
- Already competing in the top league…
- …and soon to be setting the global standard of what it means to be a sustainable, innovative, productive and affordable metropolis.