



THE ROLE OF LARGE MNCS IN BUILDING COMPETITIVE METROPOLITAN AREAS: COMMENTS

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3 December 2020



Better data relevant to policy

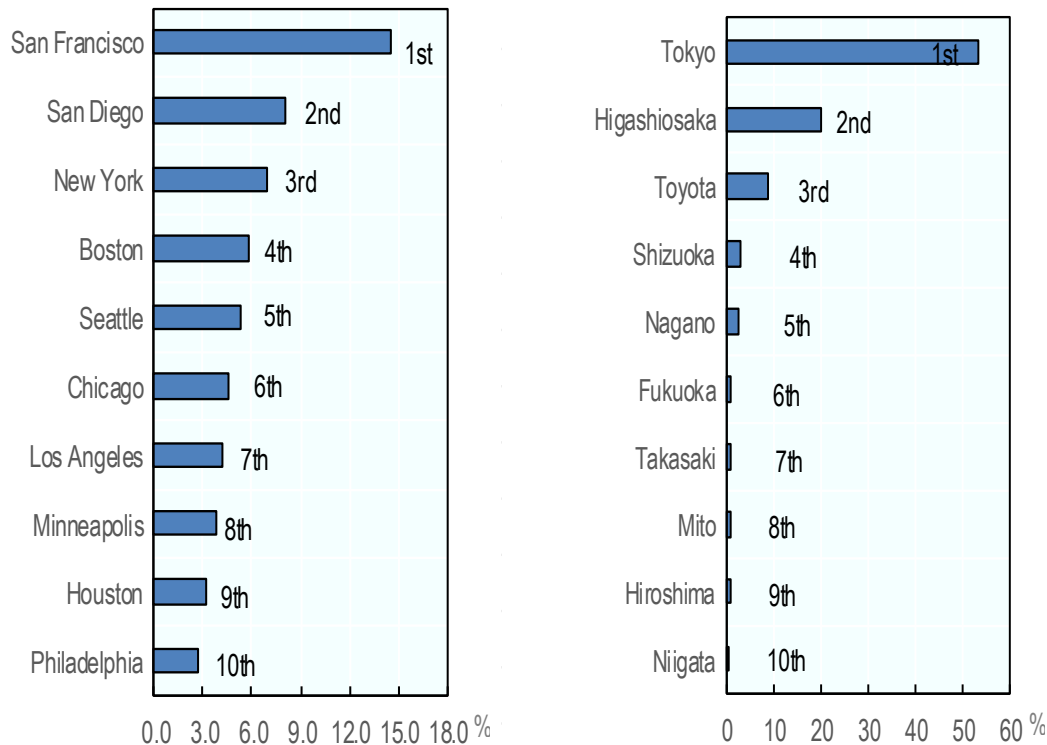
- Congratulations on creating a very valuable database!
- Impressive dataset to query many interesting questions:
 - rich data from patents that are granular with location information of inventors
 - Use of metropolitan areas (MA) rather than EC-OECD functional urban areas (-> note global expansion: <https://www.oecd.org/regional/regional-statistics/>)
 - disentangling complex MNC activities that are not straightforward
- Interested in seeing more analysis on factors driving this concentration & its benefits for innovation



Patenting activity is highly concentrated

- **One or two cities generally account for a large share** of overall patenting with a **gap to the next city** in the ranking (e.g. San Francisco in the USA, London in the UK, Paris in France, Tokyo in Japan)

Ranking and share of top 10 cities in patent applications, USA and Japan, 2014



Source: Paunov, C., et al. (2019), « On the concentration of innovation in top cities in the digital age », *OECD Science, Technology and Industry Policy Papers*, n° 85, <https://doi.org/10.1787/f184732a-en>.



Winner-take-all dynamics

‘Superstars’ phenomenon
reinforces concentration
(across regions, firms,
universities, researchers...)



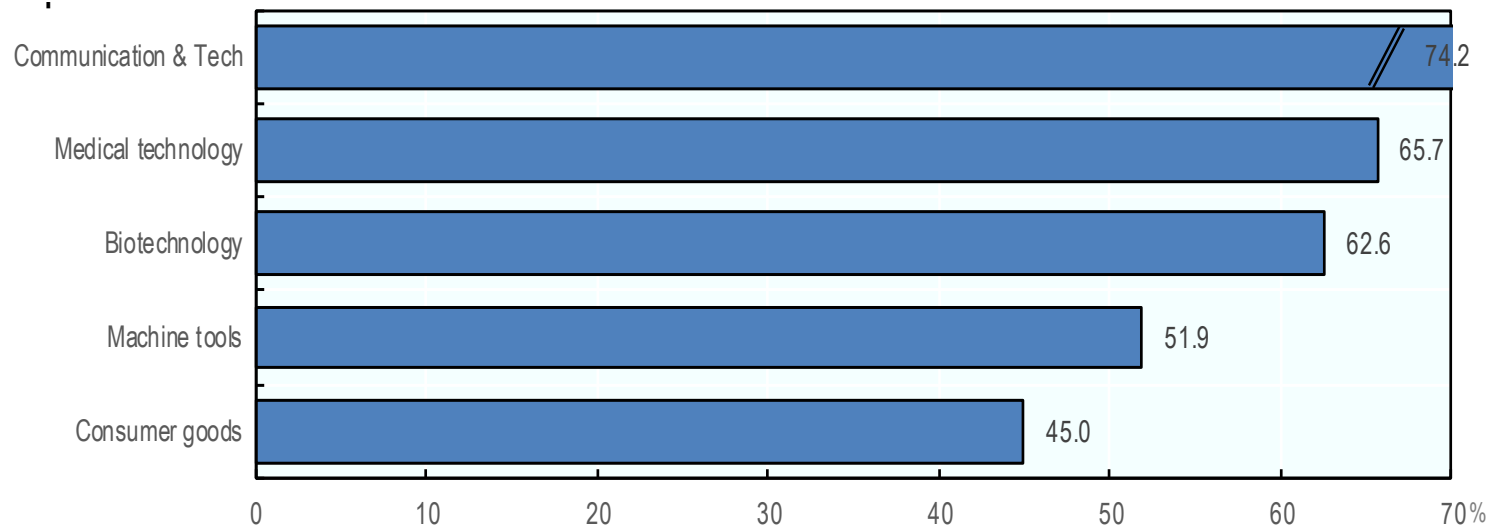
**Widening gap between
“the best” and “the rest”**





Digital technology patents are more concentrated geographically than other tech fields...

Share of the top 10% of cities by patent application technology, average for 1995-2014





What will be the impacts of COVID-19?



1. Massive experimentation in WFH and city dynamics?

2. Massive increase in demand for digital tech services while many other sectors were hit

zoom

slack

Doctolib

NETFLIX

amazon





Maybe a bit early for policy conclusions

BIG

IS

BEAUTIFUL

DEBUNKING THE MYTH OF
SMALL BUSINESS

ROBERT D. ATKINSON AND MICHAEL LIND

- Patents do not reflect inventive activities





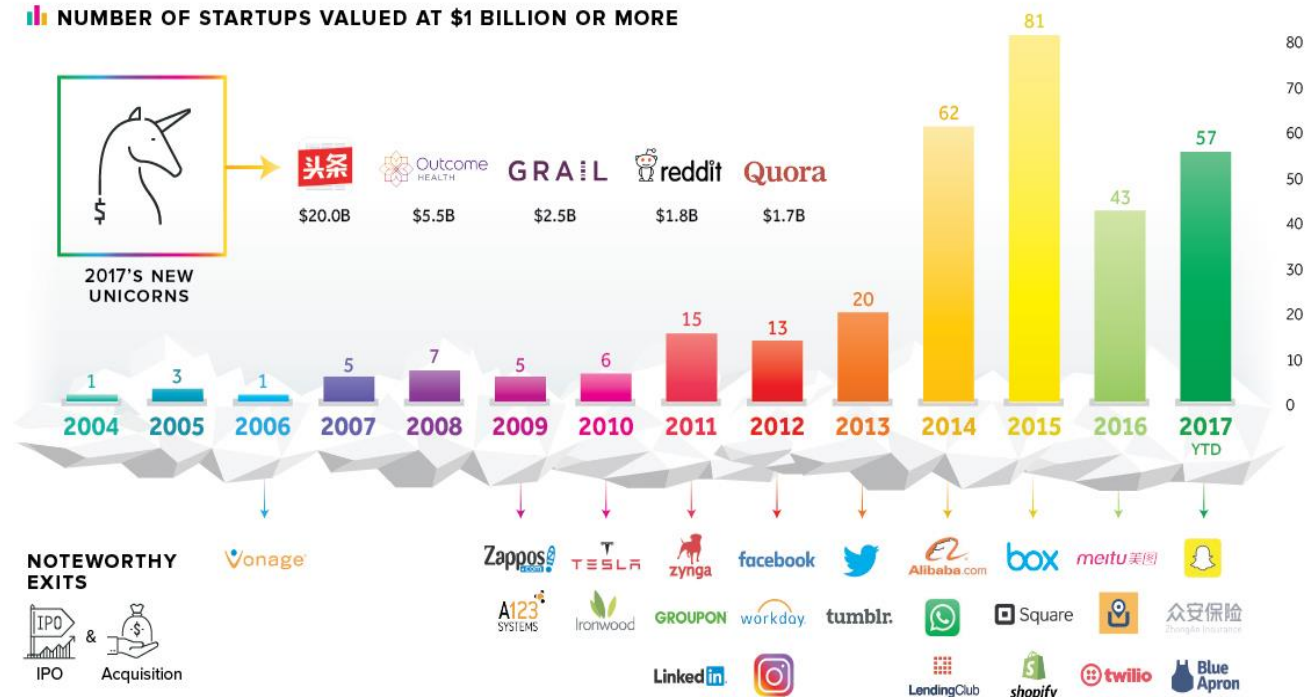
Maybe a bit early for policy conclusions

- Patents do not reflect inventive activities
- STI system plays complex and important roles in generating innovation (start-ups! & universities)

University-Industry Collaboration
NEW EVIDENCE AND POLICY OPTIONS



NUMBER OF STARTUPS VALUED AT \$1 BILLION OR MORE





Maybe a bit early for policy conclusions

OECD publishing

SUPPORTING RESEARCH FOR SUSTAINABLE DEVELOPMENT

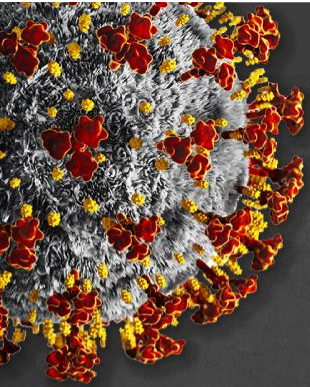
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POLICY PAPERS
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- Patents do not reflect inventive activities
- STI system plays complex and important roles in generating innovation (start-ups! & universities)
- STI policy to support systems transformations, address market failures (-> challenge of winner-take-all dynamics) & build inclusiveness incl. territorial inclusiveness



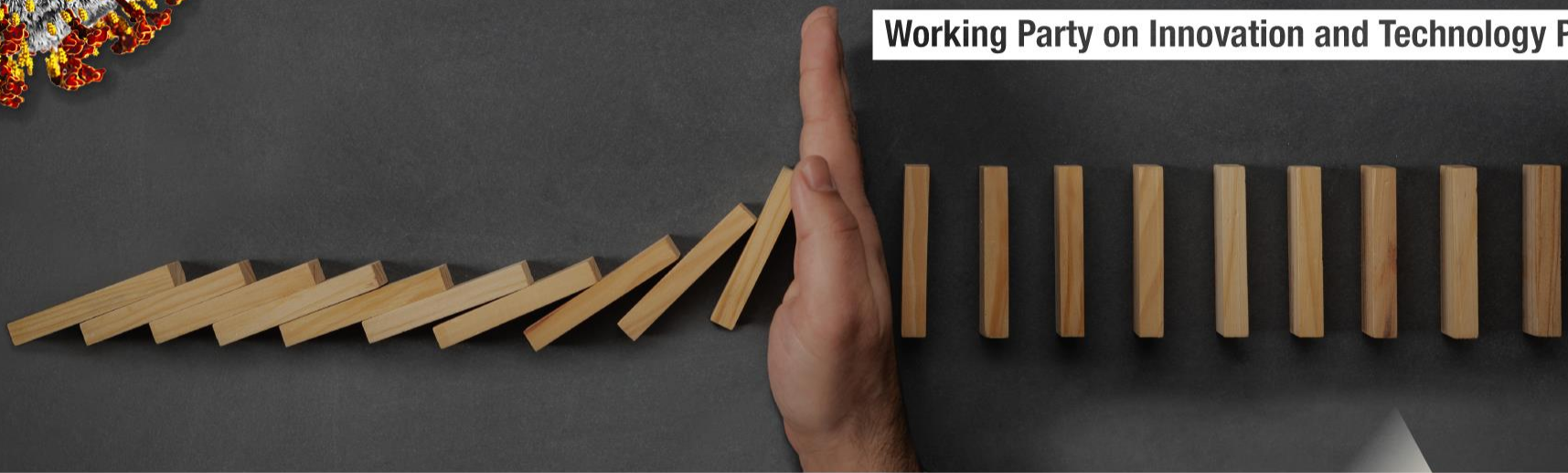


MNCs, concentration and resilience?



What role for science, technology and innovation in **building resilience**?

Working Party on Innovation and Technology Policy



OECD virtual workshop
9 December 2020 | oe.cd/tip-resilience1

