

BROOKINGS

ELECTION
'24 
ISSUES AT STAKE

**Revitalizing American industry:
Place-based innovation for economic development**

Alan Berube, Interim VP and Director, Brookings Metro

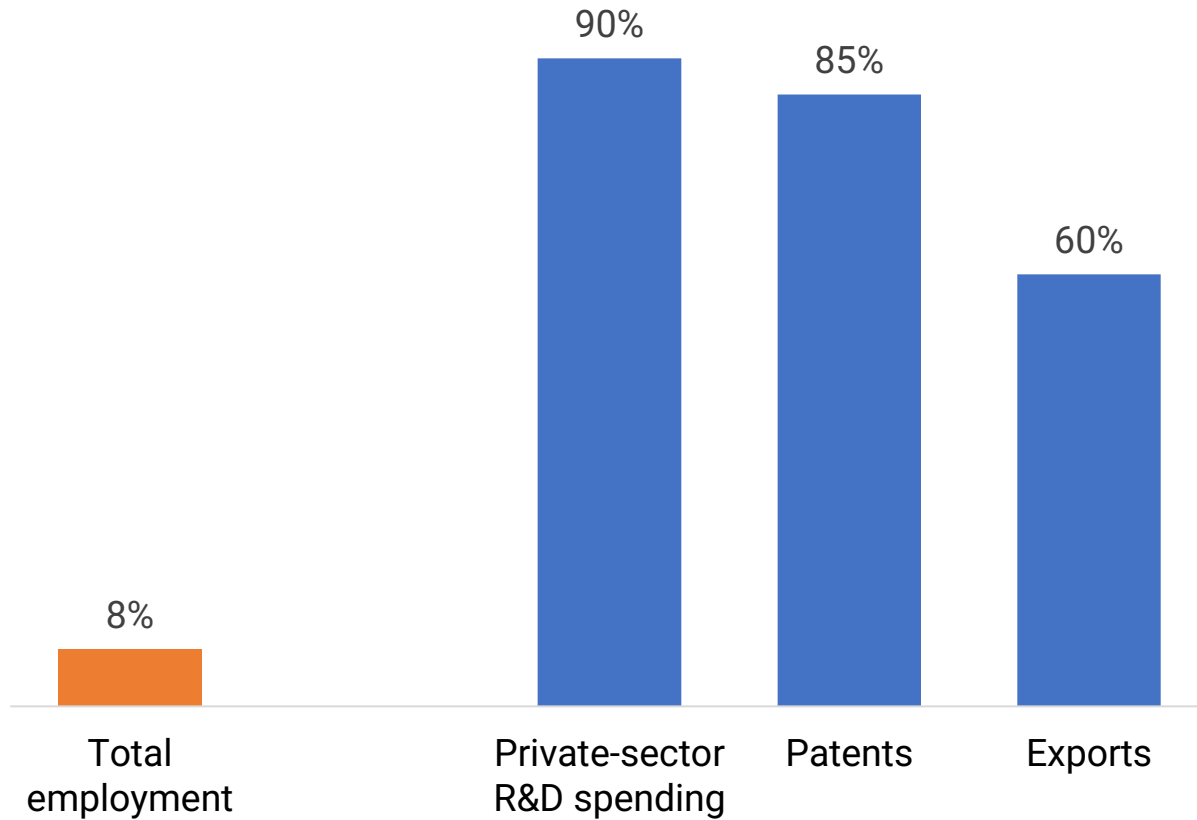
April 24, 2024

High levels of R&D and STEM workers characterize U.S. advanced industries

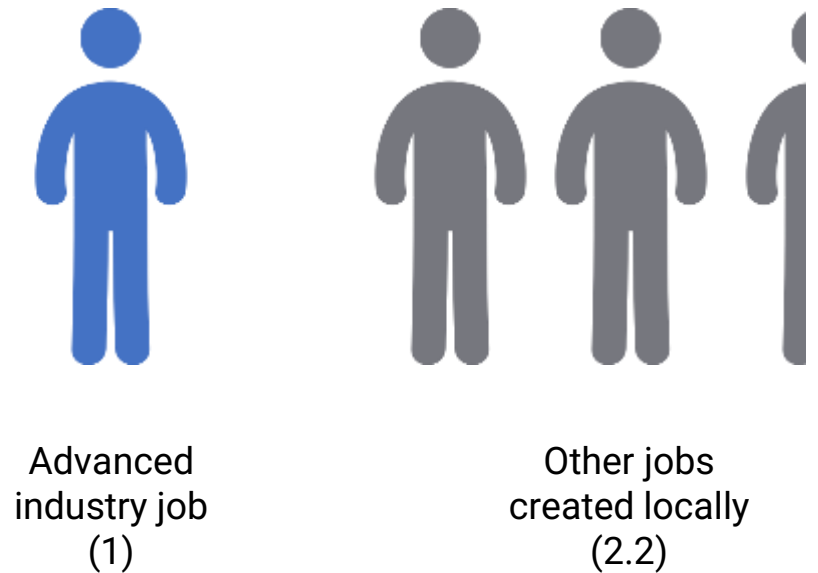


Advanced industries are critical to U.S. economic dynamism

Advanced industry share of total U.S. activity



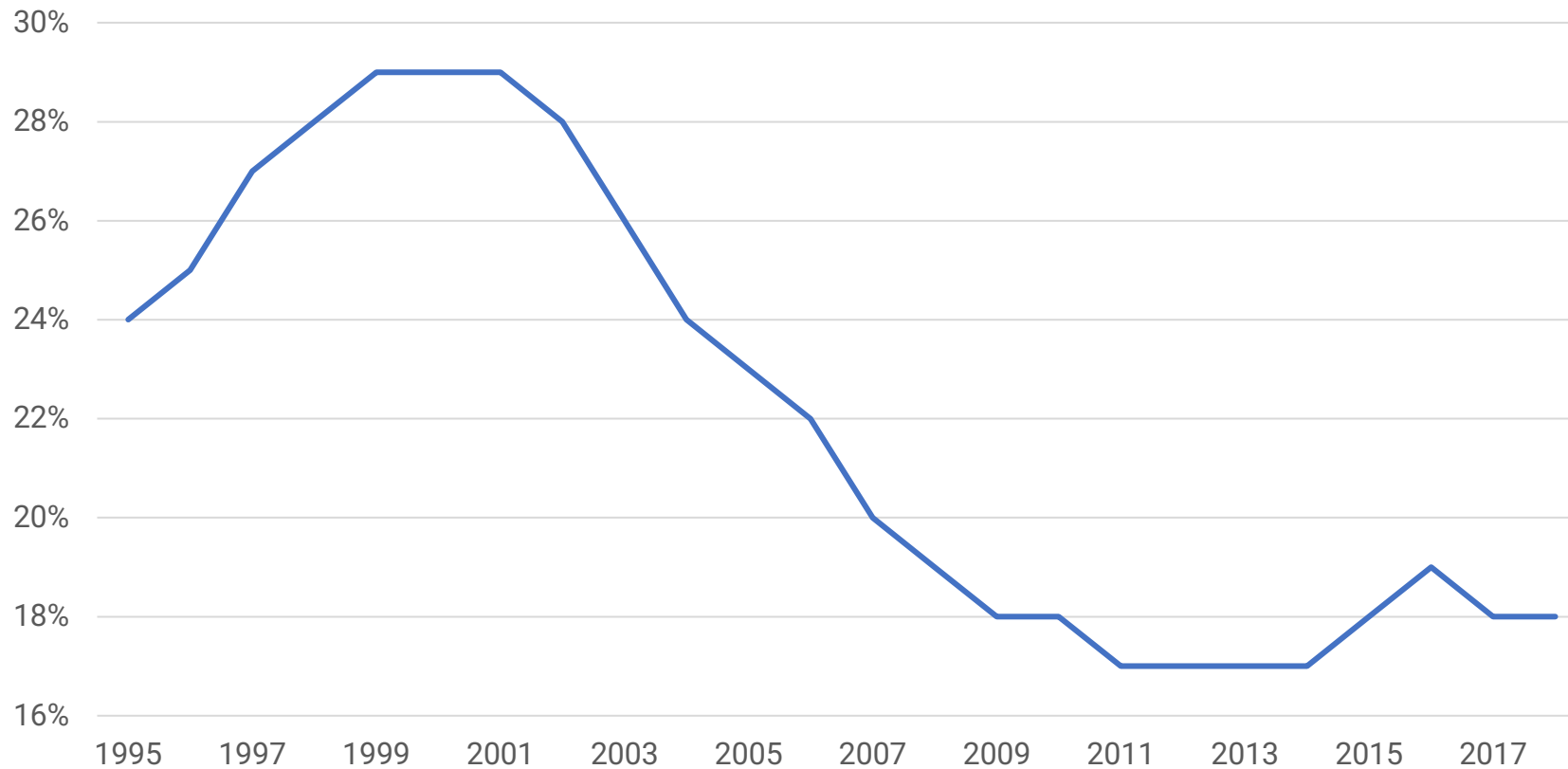
Multiplier effect of advanced industry jobs



Source: Muro and You, "The nation's advanced industries are falling behind, but place-based strategies can help them catch up" (Brookings, 2023)

The U.S. has lost ground globally in advanced industries

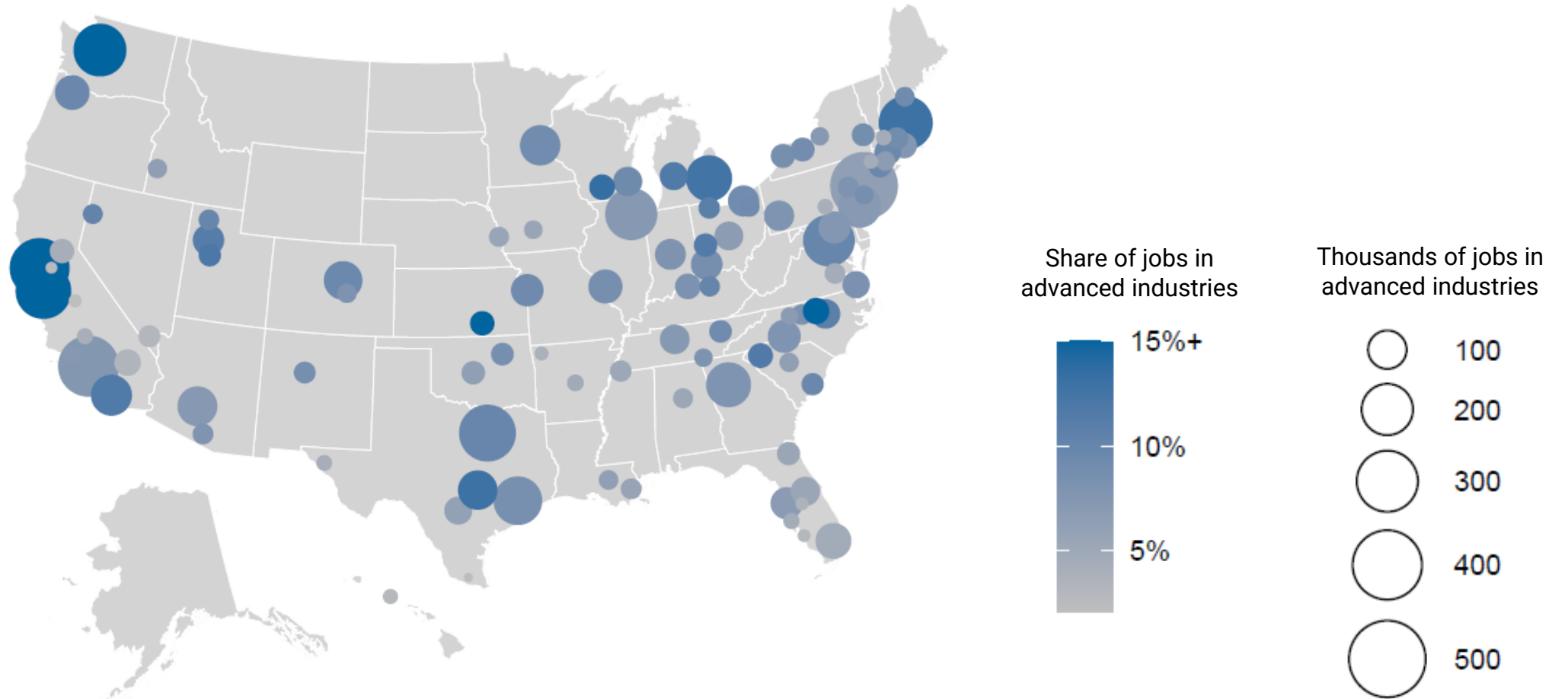
U.S. share of global gross output in advanced industries
1995 to 2018



Source: Muro and You, “The nation’s advanced industries are falling behind, but place-based strategies can help them catch up” (Brookings, 2023)

U.S. metro areas concentrate advanced industry clusters

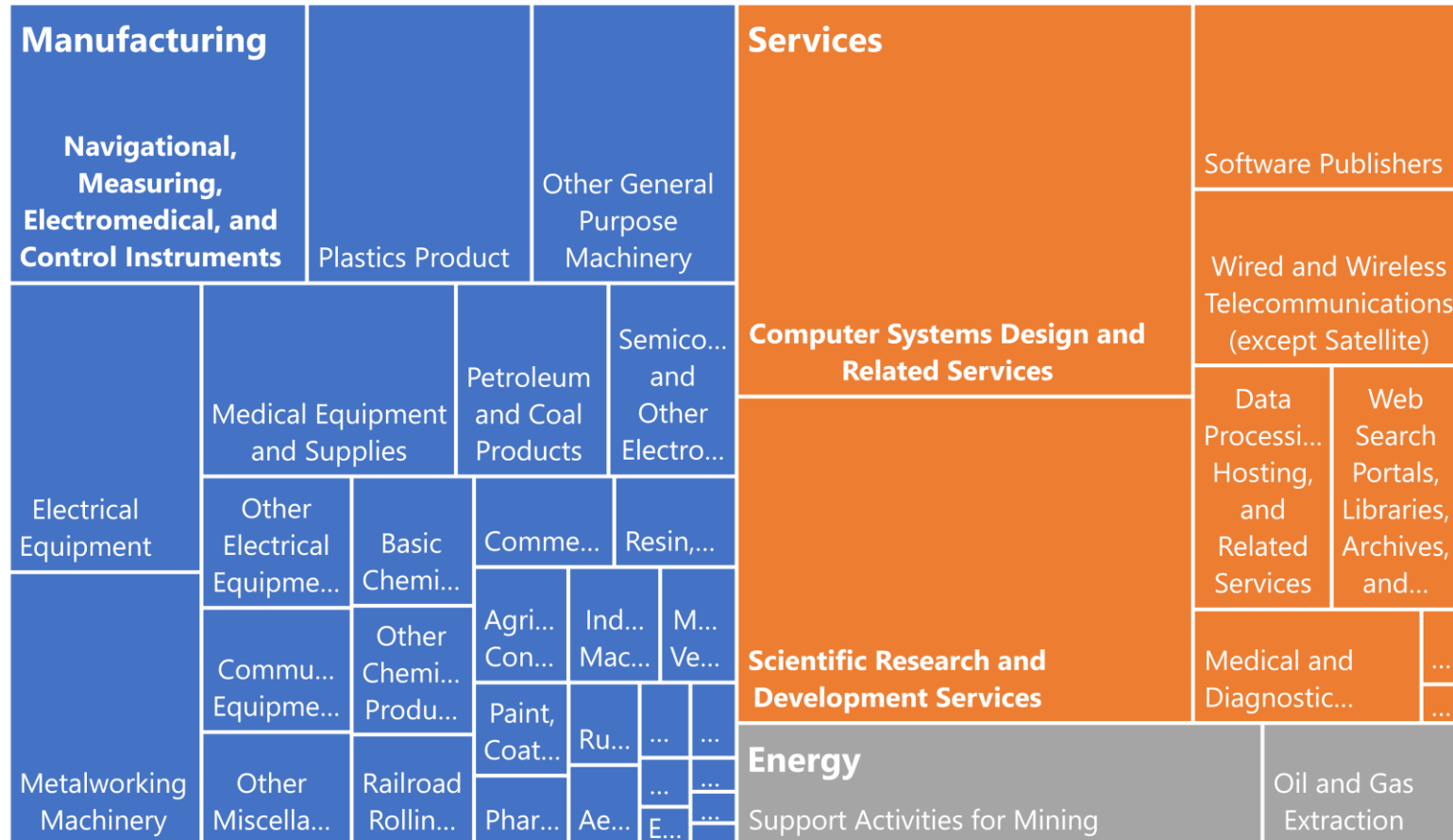
Advanced industry jobs, 100 largest metro areas, 2024



Source: Brookings analysis of Lightcast data

The Pittsburgh region's two largest advanced industry sectors are in services

Advanced industry jobs by total employment, Pittsburgh metro area, 2023



Source: Brookings analysis of Lightcast data

Pittsburgh's advanced industries contributed to the region's recent economic progress

Pittsburgh region rankings on Brookings
Metro Monitor, 2012-22 (out of 55 regions)

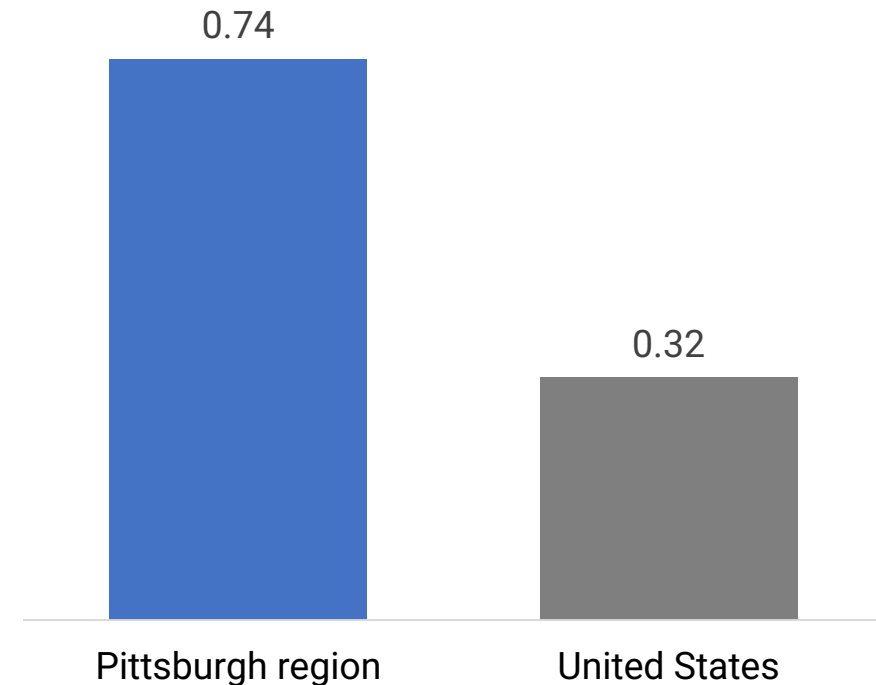
17

Change in productivity
+12.9%

16

Change in median earnings
+23.1%

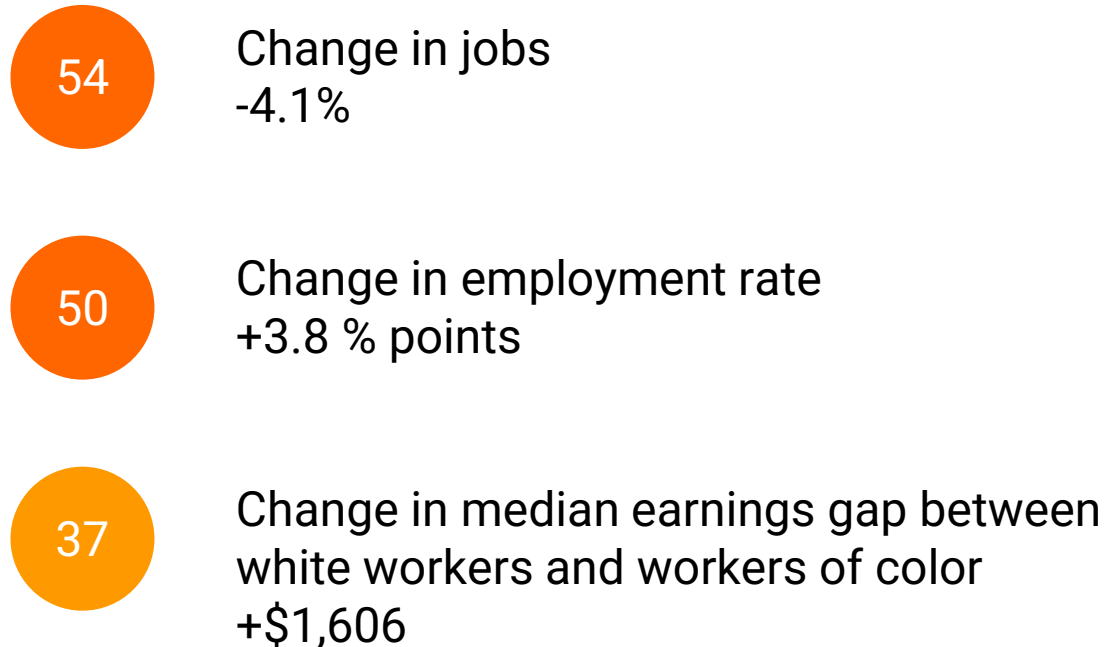
Change in share of all jobs in advanced
industries (% points), 2013-2024



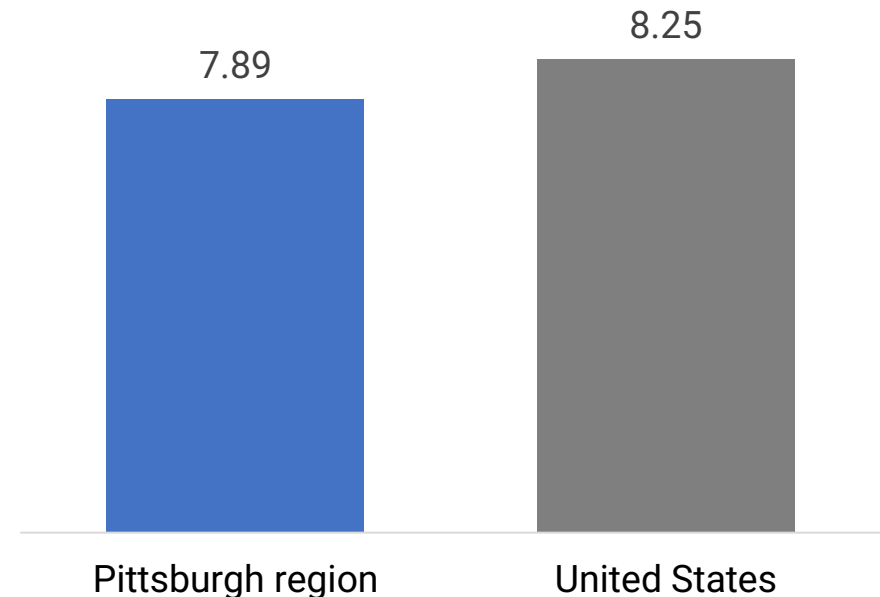
Source: Brookings Metro Monitor 2024; Brookings analysis of Lightcast data

Pittsburgh's advanced industries are not yet generating inclusive growth and prosperity

Pittsburgh region rankings on Brookings
Metro Monitor, 2012-22 (out of 55 regions)



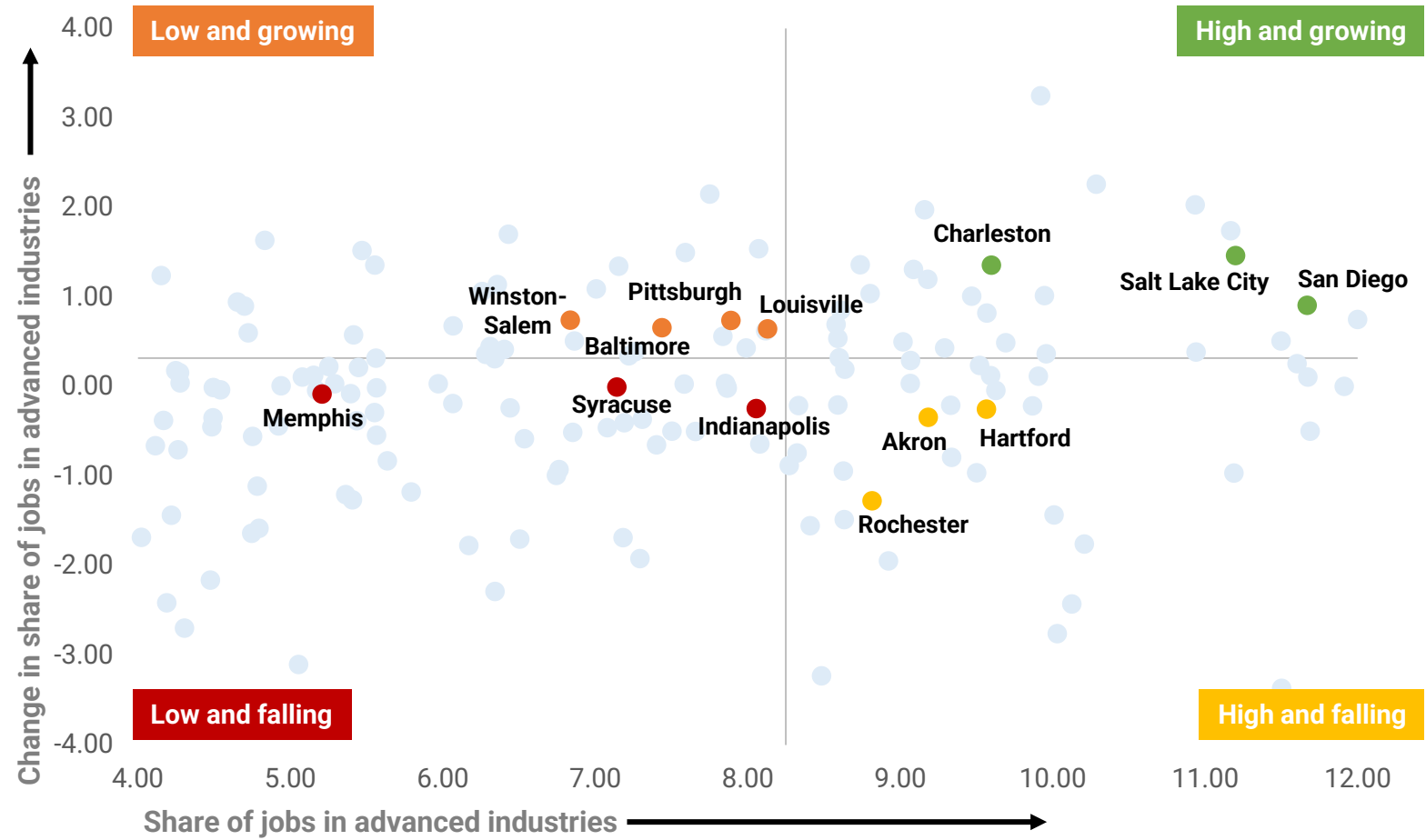
Share of jobs in advanced industries
(%), 2024



Source: Brookings Metro Monitor 2024; Brookings analysis of Lightcast data

Other Industrial Heartland regions exhibit advanced industry challenges

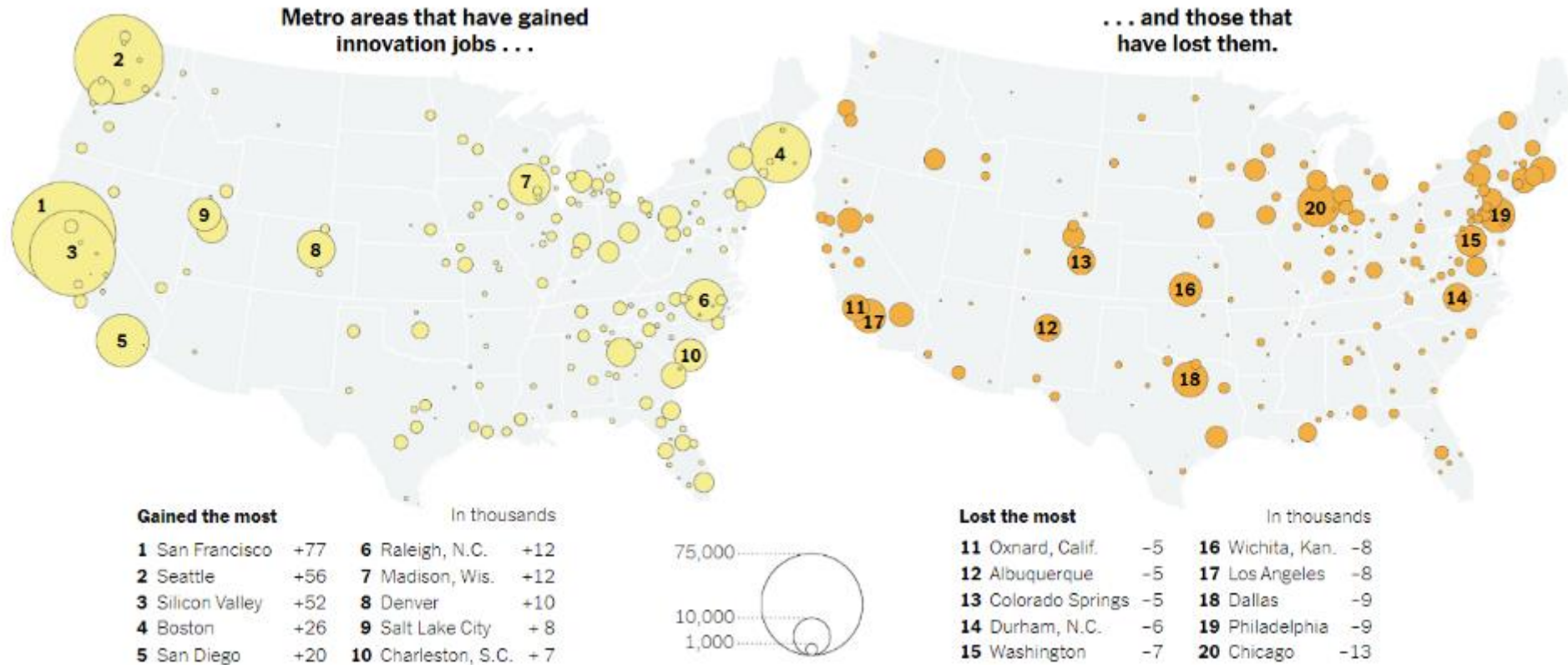
Share (2024) and change in share (2013-24), advanced industry jobs, metro areas



Source: Brookings analysis of Lightcast data

The U.S. innovation economy has become highly geographically unbalanced

Change in innovation-sector jobs, 2005 to 2017



Source: Porter, "A Few Cities Have Cornered Innovation Jobs. Can That Be Changed?" (*New York Times*, 2019)

The federal government invests significantly in university-based R&D at Pitt and CMU

University rankings for federally financed R&D expenditures



6th

Total NIH Funding, 2023



2nd

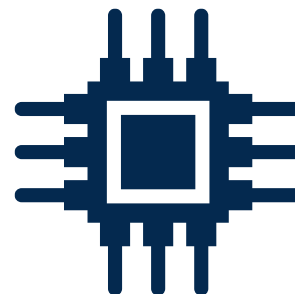
Total Federal Funding for
Computer/Information Sciences, 2022

Source: NIH; National Center for Science and Engineering Statistics

Three major bills are unleashing substantial investment in U.S. advanced industries



INFRASTRUCTURE
INVESTMENT AND JOBS ACT
\$1.2 TRILLION



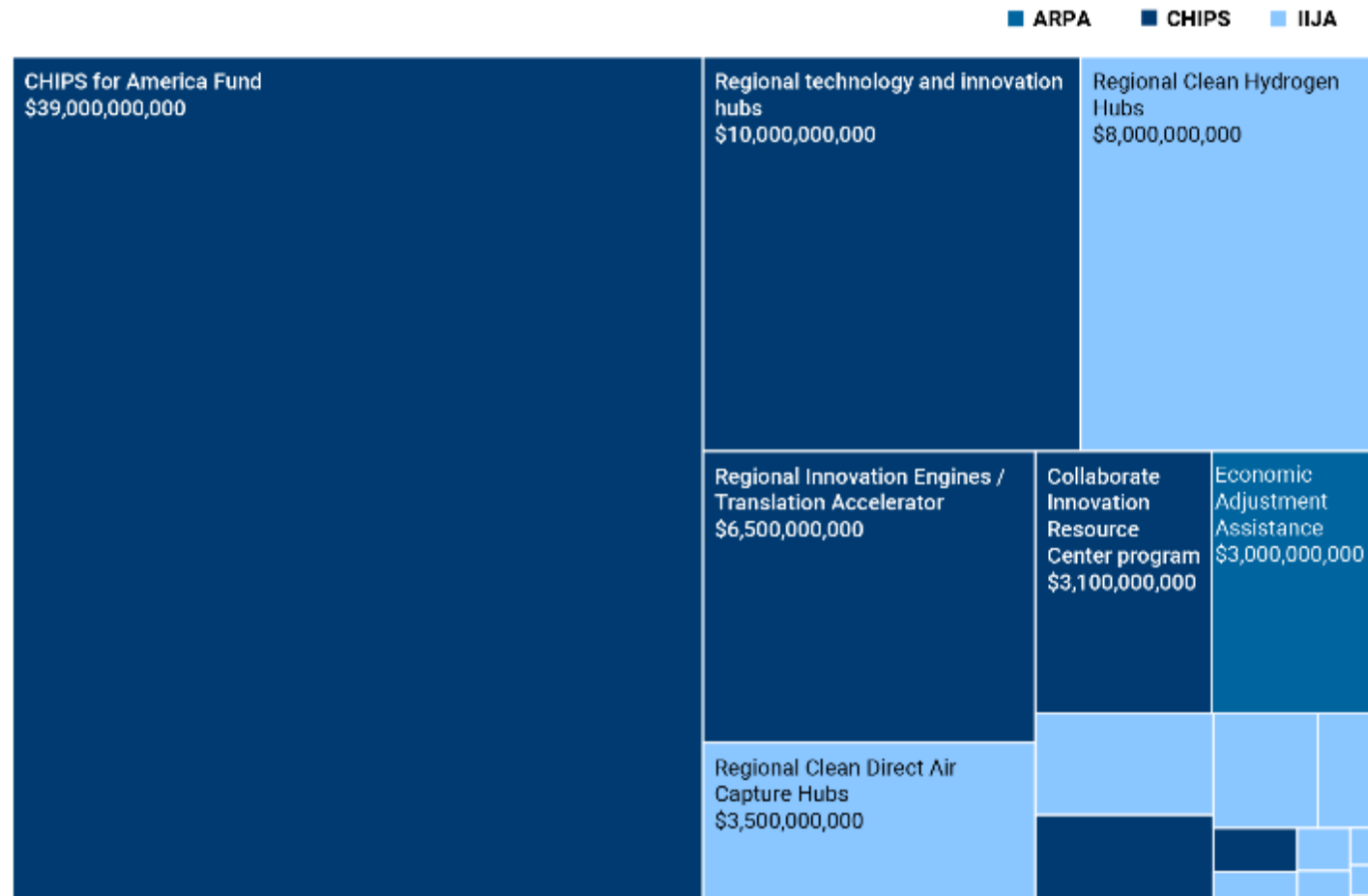
CHIPS AND
SCIENCE ACT
\$280 BILLION



INFLATION
REDUCTION ACT
\$433 BILLION

Washington is investing \$80 billion in place-based economic strategies

Place-based industrial policy investments, by bill/program



Source: Muro, Maxim, Parilla, and Briggs, "Breaking down an \$80 billion surge in place-based industrial policy" (Brookings, 2022)

Voters and policymakers face choices on how to further revitalize American industry



**Targeted, direct
government investment**



**Broader tax and
regulatory relief**



**Higher trade
barriers**

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