

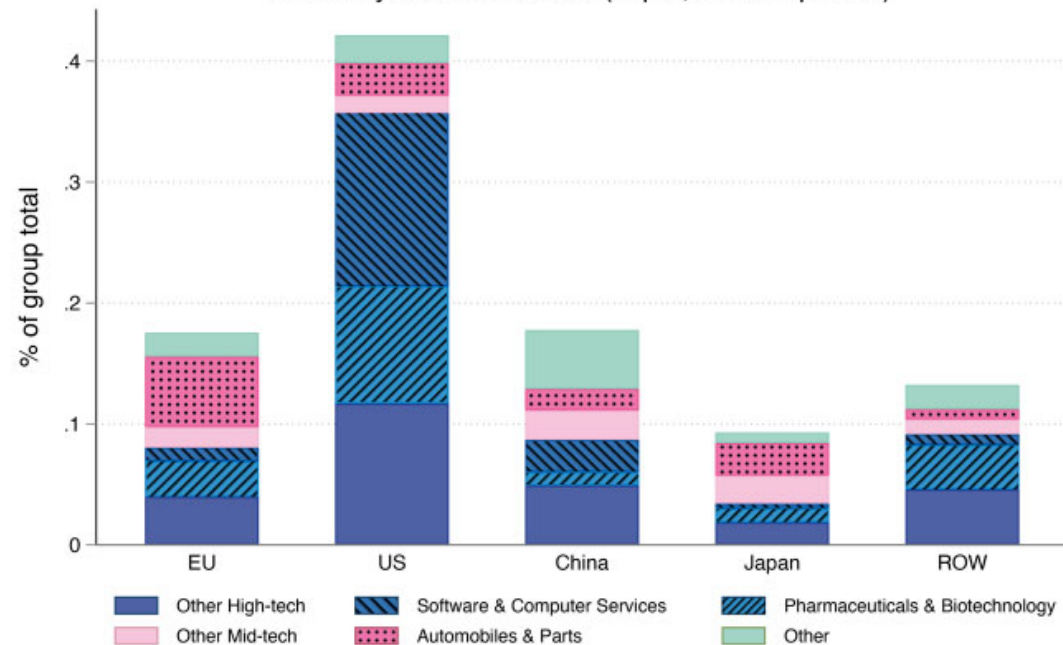
# EU's technology gap: corporate R&D spending



Technology gap

The EU is caught in middle technology trap

BERD by Tech-level 2022 (Top 2,500 companies)



# EU's technology gap: path dependency



Technology gap

There is strong path-dependency in EU's structural composition

Top-3 R&D spenders and their industries compared over time

	2003	2012	2022
<b>US</b>	Ford (auto) Pfizer (pharma) GM (auto)	Microsoft (software) Intel (hardware) Merck (pharma)	Alphabet (software) Meta (software) Microsoft (software)
<b>EU</b>	Mercedes-Benz (auto) Siemens (electronics) VW (auto)	VW (auto) Mercedes-Benz (auto) Bosch (auto)	VW (auto) Mercedes-Benz (auto) Bosch (auto)
<b>JPN</b>	Toyota (auto) Panasonic (electronics) Sony (electronics)	Toyota (auto) Honda (auto) Panasonic (electronics)	Toyota (auto) Honda (auto) NTT (telecom)

Source: Industrial R&D Investment Scoreboard (2004, 2013 and 2023).

# EU's technology gap: weak where it matters

The EU positioning in complex technologies vs the US and China, 2019-2022



## Technology gap

EU is strong in less sophisticated technologies, while US and China dominate in the most complex ones (digital).

More complex

Less complex

