

# Technopolitik: Trends and Assessments

## Australia India Tech Impact Assessment Project

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# The Big Picture

The narratives that emphasise the links between technology and national power have become more assertive. Technology will likely feature as **a means** and **an end** of geopolitical contestation this decade.

## Trade wars are likely to be tech competitions at their core

The emphasis on the importance of high-technology to national power means that governments are willing to incur the costs of high-technology decoupling. **This decoupling might happen at the level of materials, machines, humans, and values.** The precise pathway will be technology-specific.

# Visions of Tech Sovereignty will compete

Tech sovereignty as..

1. Autarky?
2. Base level capability?
3. Long-term innovation policy?
4. Asymmetric Deterrence?

# Aggressive national competition over high-technology might produce some non-linear breakthroughs this decade

When a nation-state enjoys a state of creative insecurity, its rate of innovation will tend to accelerate. (Taylor, 2016)

## There is likely to be higher alignment between private high-technology players and their national governments

- ▶ In China, US, and other countries
- ▶ Domestic Technology Industrial Policies
- ▶ Bricked stolen tractors

## We will likely encounter selective international cooperation on high-technology subject to geopolitical considerations

- ▶ iCET/TRUST, AUKUS, Quad.
- ▶ Costs of fragmentation will be significant, especially on developing countries

## Customers will have to foot the bill for decoupling

“A very serious decoupling scenario could cost up to 7 percent of global GDP”  
— Gita Gopinath, deputy managing director, IMF

# Technology dependence does not necessarily imply strategic vulnerability

The case of Gallium & Germanium vs US export controls is not comparable. Think about:

- ▶ Substitutability,
- ▶ Supply chain dominance, and
- ▶ Acquired capability/technological gap

# A Framework

Assumed Impact on National Power	Strategic Objective	Instruments Used	Underrated Repercussions
Technology X underlies other critical & emerging tech	Denial	Secondary Sanctions	Difficult to sustain; incentives for backroom deals with adversary
		restrictions on movement of high-tech labour	Can slow down technical progress
		Export controls, End-use restrictions	Encourages adversary to build local capacity in a focused manner
		Investment restrictions	Can slow down technical progress
	Outpace adversary	industrial espionage to steal secrets, targeted poaching	Invites stricter controls on professionals from the stealing country
		Build partnerships for resilience	Self-sufficiency is a myth.
		Indigenisation and industrial policy	Difficult to sustain.
		Sabotage	Self-damage
		Increase dependence and control	Helps manage the adversary's pace to an extent
	Remove major bottlenecks	Promote Open Source	Still a nascent field
Build partnerships		Self-sufficiency is a myth.	
Technology X can be used to influence	Influence	Espionage	Limited impact on national power