## Correlating Economic and National Security Under Intensifying Great Power Rivalry

NUS Economics Society and University of Chicago Fri 07 Feb 2025, FASS AS6-0212

Danny Quah

Lee Kuan Yew School of Public Policy, NUS



#### "Geopolitics is the dust bin of bad economics"

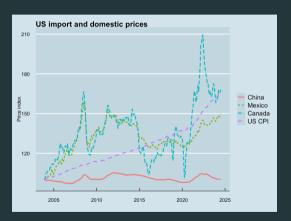


Figure 1: US import and domestic prices. The graph shows, from 2003 to 2024, prices of imports into the US from China, Mexico, and Canada, alongside the US Consumer Price Index.

#### Whatever doesn't fit...

- Guns or butter?
- Free markets and open trade.

  Comparative advantage. Efficient allocations.
- Other models too of course. Industrial policy.

#### Conclusion

Strengthening national security need not degrade economic prosperity. But that doesn't mean national security actions can be arbitrary or random. Policymakers still need to be mindful how such actions can self-harm even when justified in the name of national security. This paper has provided an analytical model and historical examples to help identify the tradeoffs that matter.

In the model, a tipping point emerges endogenously as national security concerns vary. Near that tipping point, minimal efforts have higher than proportional impact, so that nudges, even by small states, can have significant effects on world order. Thus, the model is suggestive on how small states can help Great Powers evade gridlock.

Applying the model, the paper provides case study and statistical evidence on the directedness and negative spillovers in historical episodes where national security concerns have been evoked. The paper thus highlights the importance of clearer and more precise descriptions of what national security actions seek to achieve.

## Industrial Policy and National Security: A Model and Evidence

## Geopolitics over economics

- Democracy and political freedoms
- "Not Cold War 2.0": Trade. Shock. Lifestyle
- Economic statecraft for the middle class
- Special place of industrial policy

# Assess industrial policy and national security: Model

- "Not to approve or disapprove, but to ask what is the smartest thing to do"
- Distort to improve
- Strategic responses.
  Third Nations

# Case studies and statistics

- Varying  $\lambda$ : Japan, China
- CFIUS
- Statistics

## Geopolitics over economics

## Democracy and political freedoms

## Business gets a scolding ...

- "Newsflash: democracy is good for your business. Rule of law, here and around the world, is good for your businesses. It might make for a tough quarterly shareholder call, but in the long run, it's worth you working for us to defend our national security." (Raimondo, 2023)
- It's not all guns and butter any more.

#### ... because before then:

• "International economic policymaking emerged as the near-exclusive province of economists and like-minded policymakers. No longer was it readily available to foreign policy practitioners as a means of working the US's geopolitical will in the world. (...) The consequences have been profound (...). China (...) and other countries now routinely look to geoeconomics as a means of first resort, often to undermine US power and influence." (Blackwill and Harris, 2016)

## Urgency

#### Directed

- US needs to "prevent a hostile hegemonic power from gaining ascendancy over the Asia-Pacific region", as this would sharply restrict America's freedom of actions and future prospects
- China's "... ambitions to create an enhanced sphere of influence in the Indo-Pacific and to become the world's leading power" (NSS, 2022)
- US leading the West in a campaign of "containment, encirclement, and suppression" (Xi, NPC 2023)



Figure 2: China's FOBS allows nuclear warhead launch from hypersonic glide vehicles in orbit, 2021.

## Economics is not that resolute anyway

### New Economic Philosophy

- "Economics will determine the US's success or failure in geopolitics (...) when it comes to dealing with China" (Harris and Sullivan, 2023)
- China Shock. "Stealing our jobs, hollowing out our industry, turning into ghost towns once-thriving American middle-class communities"
- Not every trade deal is a good deal; markets don't always do the right thing; not all growth is good growth (Harris and Sullivan, 2023; Sullivan 2023)



## Whatever else it might or might not do, trade disrupts price ratios

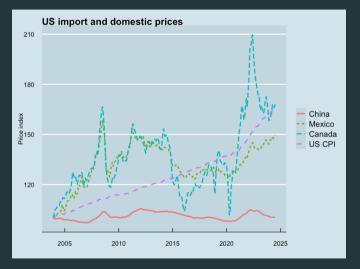


Figure 3: US import and domestic prices. The graph shows, from 2003 to 2024, prices of imports into the US from China, Mexico, and Canada, alongside the US Consumer Price Index.

Industrial policy and national

security

## "Something close to obvious"

#### Model

- Not "protectionism", "market distortion", ...
- Economic performance and national security interact
- Policies can industry-disrupt or industry-enable

## Optimum security and industrial policy

- Not "anything can happen"
- Threshold effect: Range of inaction for low national security

# Strategic national security

- Strategic national security: Prisoners
   Dilemma ("Epic Fail")
- Third Nations/small states nudge to disrupt Great Power gridlock: "small action, high payoff"

## Model

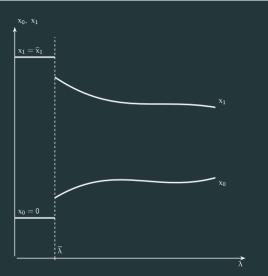
$$\begin{aligned} \max_{\mathbf{x}=(\mathbf{x}_0,\mathbf{x}_1)} & (1-\lambda)\mathbf{y}(\boldsymbol{\omega}(\mathbf{x})) + \lambda S(\mathbf{x}) \\ \text{s. t.} & \begin{cases} C(\mathbf{x}) = \mathbf{p}_0\mathbf{x}_0 + \mathbf{p}_1\mathbf{x}_1 \leqslant \overline{C}; \\ \mathbf{x}_0 \geqslant 0, \ \mathbf{x}_1 \geqslant 0. \end{cases} \\ V_{\lambda}(\mathbf{x}) &= (1-\lambda)\mathbf{y}(\boldsymbol{\omega}(\mathbf{x})) + \lambda S(\mathbf{x}) \\ \omega(\mathbf{x}_0,\mathbf{x}_1) \text{ has } \frac{\partial \boldsymbol{\omega}}{\partial \mathbf{x}_0} < 0 \text{ and } \frac{\partial \boldsymbol{\omega}}{\partial \mathbf{x}_1} > 0; \end{aligned}$$

(2)

(3)

(1)

## Optimum state policies for national security and industrial policy



#### **Features**

- Range of inaction for national security concern  $\lambda$  in  $[0, \overline{\lambda}]$
- Nudge "small action, high payoff" in  $\overline{\lambda}$  neighborhood
- Monotone industry-disrupting  $x_0$  in  $\lambda > \overline{\lambda}$

Figure 4: Industry-disrupting and industry-enabling policies as national security concerns rise.

## Comovement: National security; Industrial policy

### Industrial policy $x_1$

- Dual-use technology
- "Foreign policy for the middle class": jobs creation; domestic investment
- Subsidies (externalities, coordination costs, information failures)
- Climate change mitigation

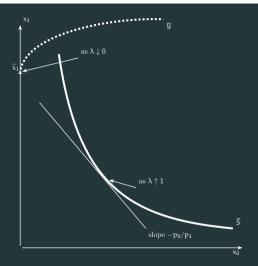
### Industrial policy $x_0$

- Tariffs
- Import barriers
- Sanctions
- Diversion
- Investment reduction

### National security $\lambda$

- Time pattern and activation
- Strategic national security: Prisoners
   Dilemma ("Epic Fail") game with endogenous
   λ
- Nudging out of Great Power gridlock ("small action, high payoff"):
   Push λ just below λ̄

### Convex combination of indifference curves



 ${\bf Figure~5:~} {\bf Industrial~Policy~and~National~Security~optima$ 

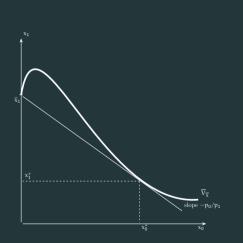


Figure 6: Integrated Performance optimum switching.

**Empirics** 

## Statistics (Preliminary)

#### **NIPO**

Instrument	Occurrence
$x_0$ import barriers	Developing countries 40%
$x_0$ subsidies	China 89%, EU 73%, US $46\%$
$x_0$ export subsidies	Japan 45%, ROK 28%

Table 1: Industrial policy distribution across nations.

Official reason	USD bn
Strategic competitiveness	545
Climate change	318
Supply resilience	167
National security; geopolitics	102
Digital transformation	9
Other	
Total	1720

Table 2: Industrial policy and national security (n=24,000). Announced subsidies 2024 by official reson, across all economies. Rows don't include all records; some announcements give multiple reasons. From NIPO, Global Trade Alert.

## Statistics: Directed national security

- 1. Over distinct historical episodes, how much of national security involves targeting?
- 2. Rules vs direction:
  - 2.1 How does that change industry-disrupting and industry-enabling policy?
  - 2.2 What are the consequences of targeting?

## Japan v China

A hostile hegemonic power, restricting America's prospects and freedom of actions? Or a liberal democracy, security partner, and treaty ally?

- Active industry-disrupting  $x_0$  even when  $\lambda$  low
- Misleading announcements on  $\boldsymbol{\lambda}$
- Unclear "foreign policy for the middle class"
- "(...) should not expect to find a big American market because they don't make the things we want. They must find markets elsewhere for the goods they export"
- "largely a land of rule-bound rote learners", whereas "advances in information technology could only be made in free societies by free thinkers"

- "a locked and closed civilization that reciprocates our hushed fear with veiled contempt"
- "(...) the most serious, most somber, most challenging? It is that they are very, very good, better at some things than Americans. They are brilliant, efficient, aggressive people who prize education as much or more than Americans and have learned to use it."

#### **CFIUS**

"CFIUS is an interagency committee authorized to review certain transactions involving foreign investment (...) in order to determine the effect of such transactions on the national security of the United States."

- Jobs creation ("foreign policy for the middle class")? Increased investment?
- Active industry-disrupting  $x_0$  with unclear, ill-explained  $\lambda$

Nippon Steel 2025 (Biden blocked).
 Broadcomm 2008 (Trump blocked). Dubai
 Ports World 2006 (CFIUS and Bush approved, but Congress objected; DPW sold off).

Conclusion

#### Conclusion

Strengthening national security need not degrade economic prosperity. But that doesn't mean national security actions can be arbitrary or random. Policymakers still need to be mindful how such actions can self-harm even when justified in the name of national security. This paper has provided an analytical model and historical examples to help identify the tradeoffs that matter.

In the model, a tipping point emerges endogenously as national security concerns vary. Near that tipping point, minimal efforts have higher than proportional impact, so that nudges, even by small states, can have significant effects on world order. Thus, the model is suggestive on how small states can help Great Powers evade gridlock.

Applying the model, the paper provides case study and statistical evidence on the directedness and negative spillovers in historical episodes where national security concerns have been evoked. The paper thus highlights the importance of clearer and more precise descriptions of what national security actions seek to achieve.

## Correlating Economic and National Security Under Intensifying Great Power Rivalry

NUS Economics Society and University of Chicago Fri 07 Feb 2025, FASS AS6-0212

Danny Quah

Lee Kuan Yew School of Public Policy, NUS



Appendix