

Industry policy, supply chain derisking, and economic security

**RIETI -ANU Symposium on Asian Agenda for Economic Security
and Prosperity**

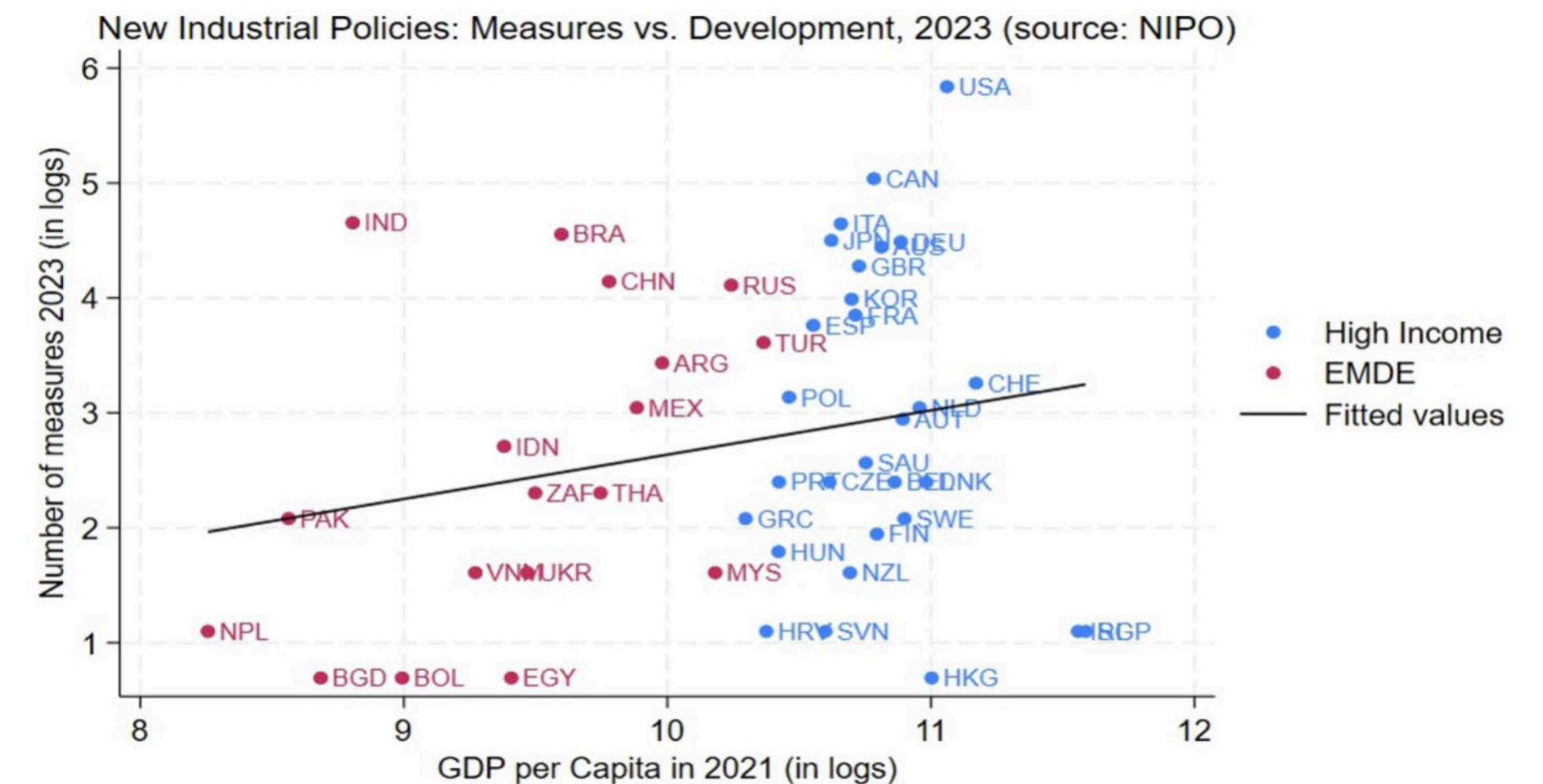
Jenny Gordon 26 September 2024

The motivation for industry policies is multifaceted

But economic security has become a major driver

- Economic security - to improve resilience to trade disruptions
- Social stability - to slow structural change, or to bring back jobs to trade affected areas
- Infant industry - to enable 'home grown' technologies to become competitive
- Market failure - to provide incentives for cooperation on platform investments, such as R&D
- Externalities - when first best policies are not politically feasible, eg. Energy transition

Figure 1 New industrial Policies and GDP per capita



Sources: World Bank (2024), using the NIPO Database (Evenett et al. 2024) and World Development Indicators.

Note: Vertical axis: log of numbers of all potentially trade distortive measures from NIPO. Horizontal axis: GDP per capita in 2021 (from WDI)

The problem: global value chains are most exposed to China as a source of ‘bottleneck’ inputs

Table 1.2: Top Exporters of Potential Bottleneck Products, 2000–2021
(%)

2000		2005		2010		2015		2021	
Economy	Share	Economy	Share	Economy	Share	Economy	Share	Economy	Share
PRC	19.1	PRC	32.2	PRC	35.7	PRC	39.5	PRC	36.3
US	18.4	US	10.0	US	8.5	US	8.3	US	6.4
Japan	9.4	Japan	7.2	Germany	4.4	Germany	4.3	Rep. of Korea	5.0
France	6.2	Germany	5.2	Japan	4.3	Rep. of Korea	4.0	Australia	4.2
Canada	5.2	France	4.9	France	3.6	France	3.2	Viet Nam	4.2
Germany	5.1	Netherlands	3.0	Brazil	3.6	Australia	3.2	Germany	3.4
Italy	3.4	Malaysia	2.8	Australia	3.0	Japan	3.0	Brazil	3.3
UK	3.3	Italy	2.6	Rep. of Korea	2.7	Viet Nam	2.8	Japan	2.7
Netherlands	2.2	Ireland	2.4	Netherlands	2.2	Brazil	2.2	Indonesia	2.4
Malaysia	1.6	UK	2.3	Malaysia	1.9	Netherlands	2.0	France	2.2
Total	74.0		72.5		69.8		72.5		70.2

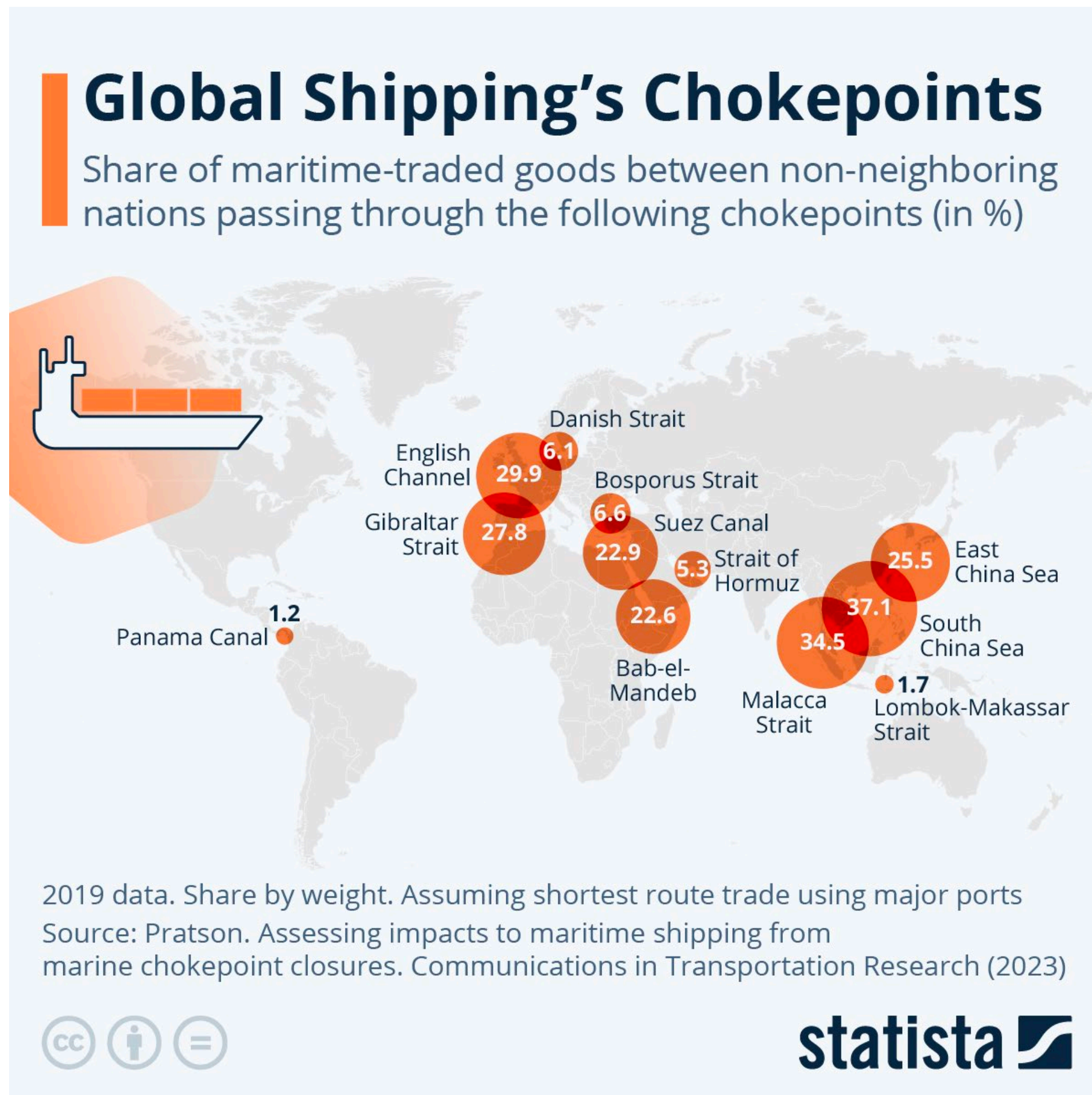
PRC = People’s Republic of China, Rep. = Republic, UK = United Kingdom, US = United States.

Sources: United Nations Comtrade data, 2000–2021; and World Trade Organization estimates.

Global Value Chain Report 2023,

https://www.wto.org/english/res_e/booksp_e/gvc_dev_rep23_e.pdf

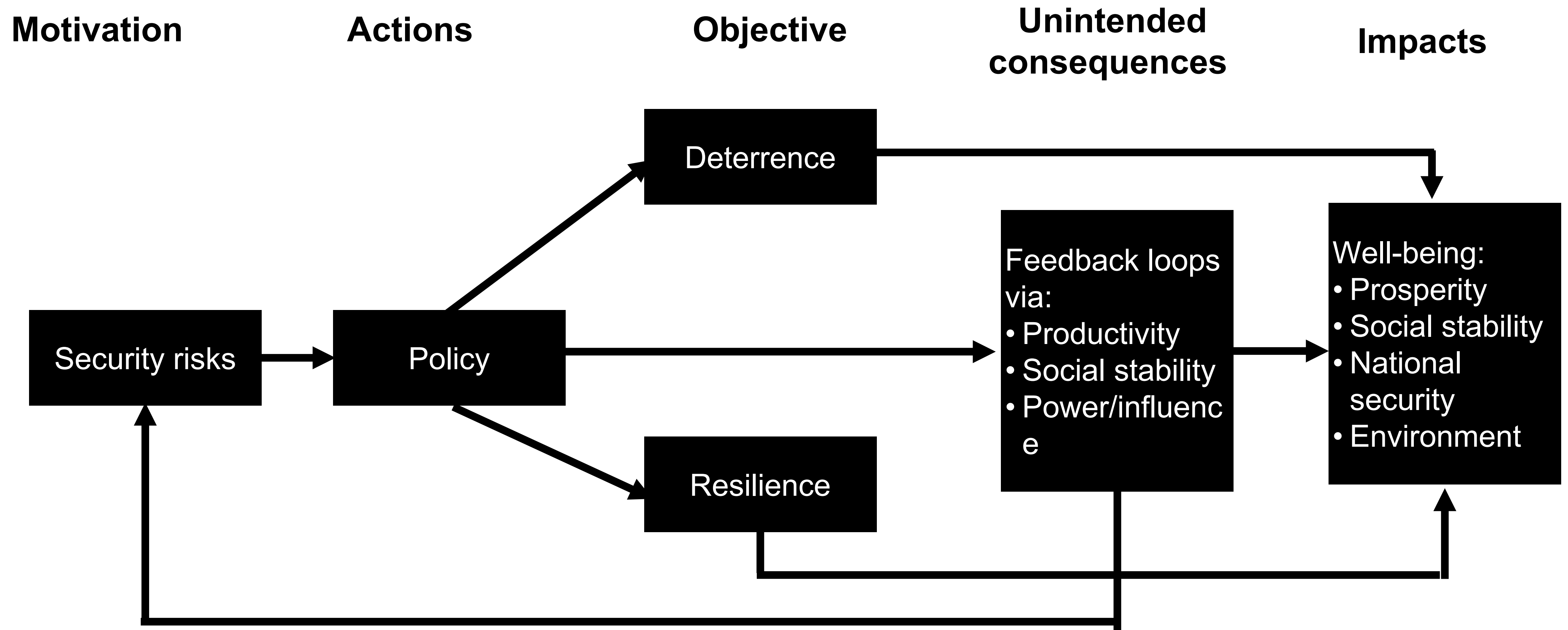
Economic weaponisation of supply chain vulnerabilities is just one source of economic disruption



There are others sources:

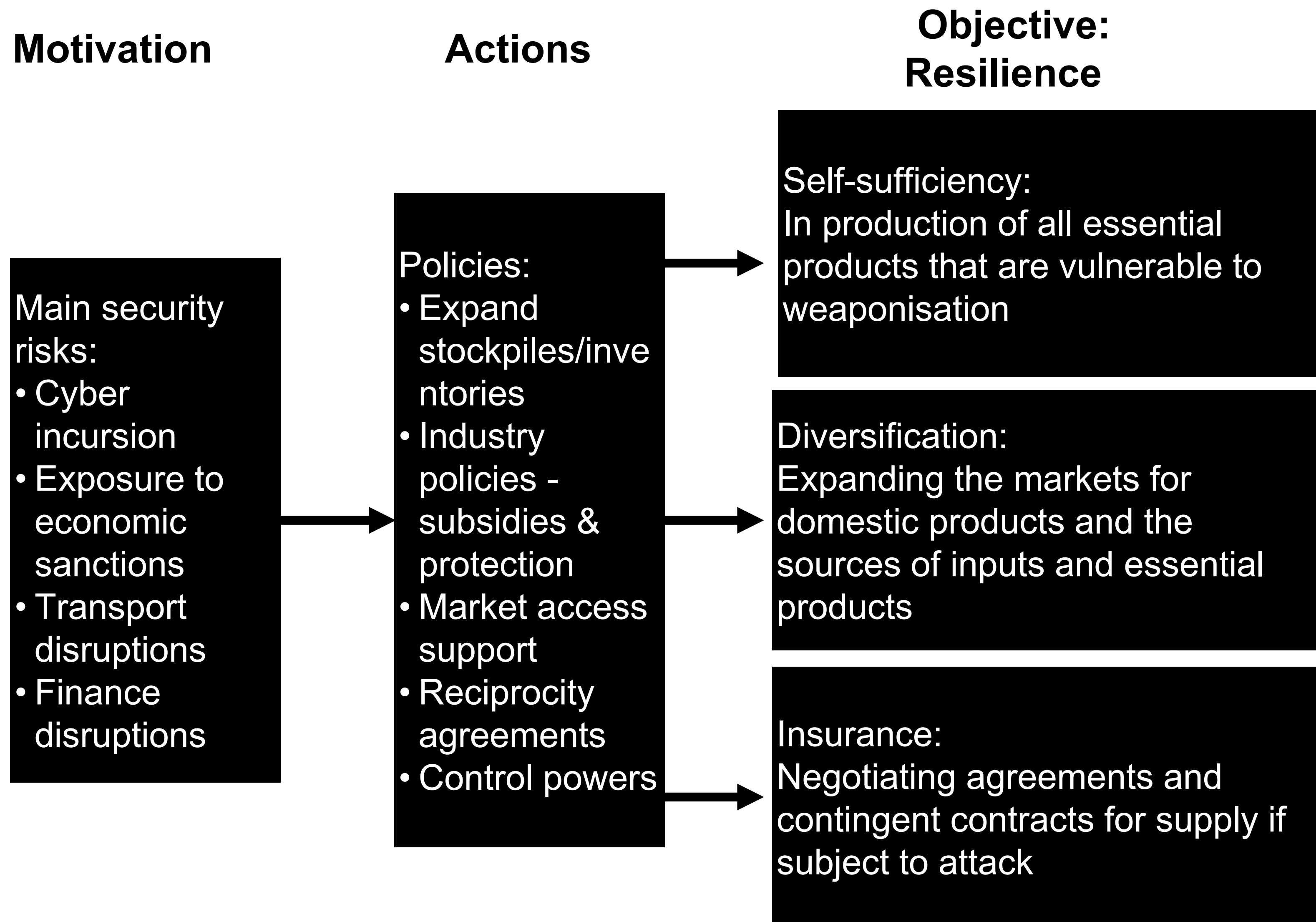
- Pandemic disruptions to production
- Pandemic impacts on transport - port operations, crewing ships and demand for shipping
- Ukraine war and blockades of grain exports by Russia
- Houiti attacks on commercial shipping in the Red Sea
- Climate change and water levels - Panama Canal restrictions due to drought
- Accidents - Ever Given in the Suez Canal

A framework for assessing the effectiveness and impact of economic security policies



Will derisking supply chains make
countries more secure?

Policies must improve economic resilience

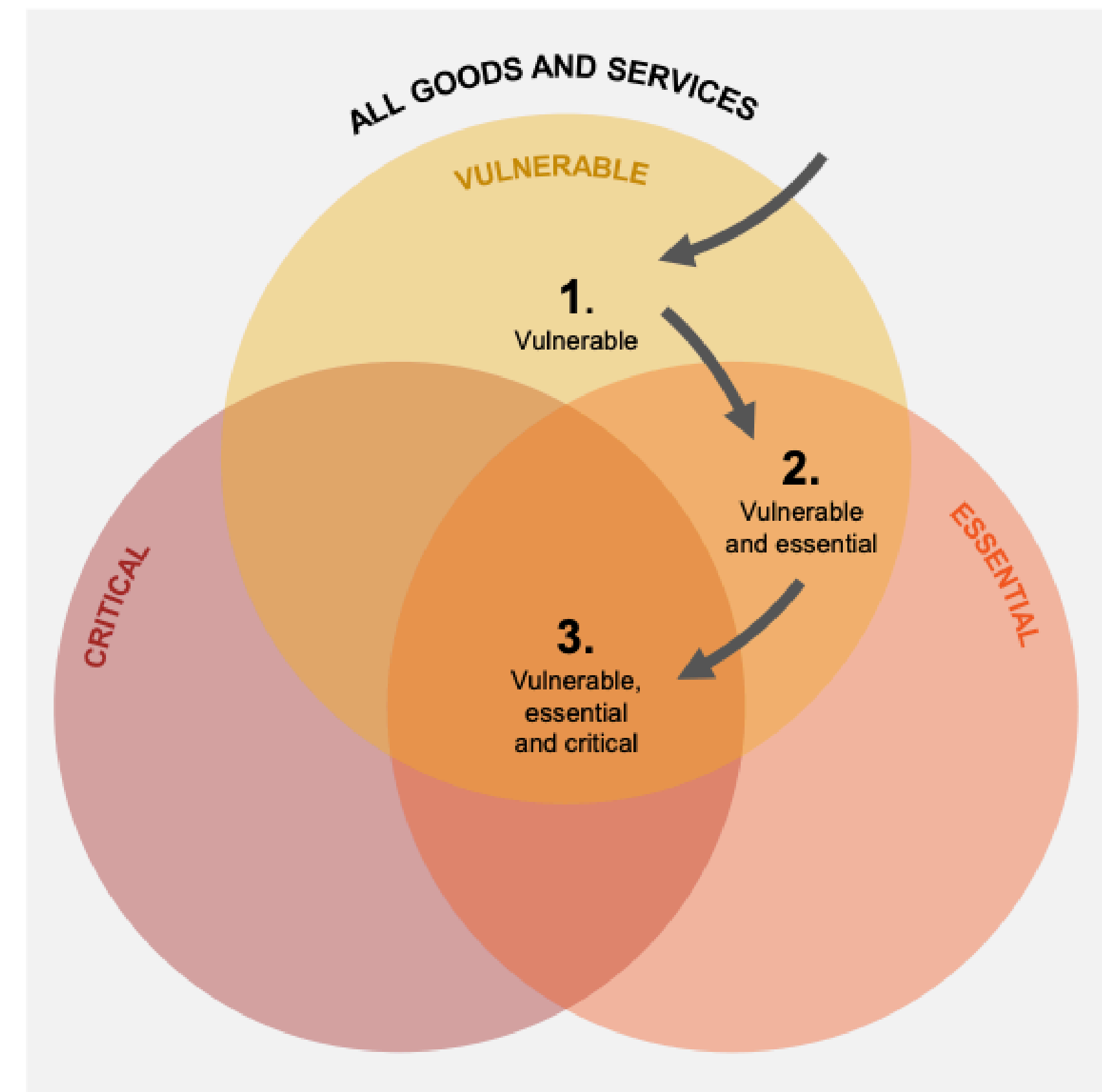


What is at risk from supply chain disruption?

What products are vulnerable, essential and critical?

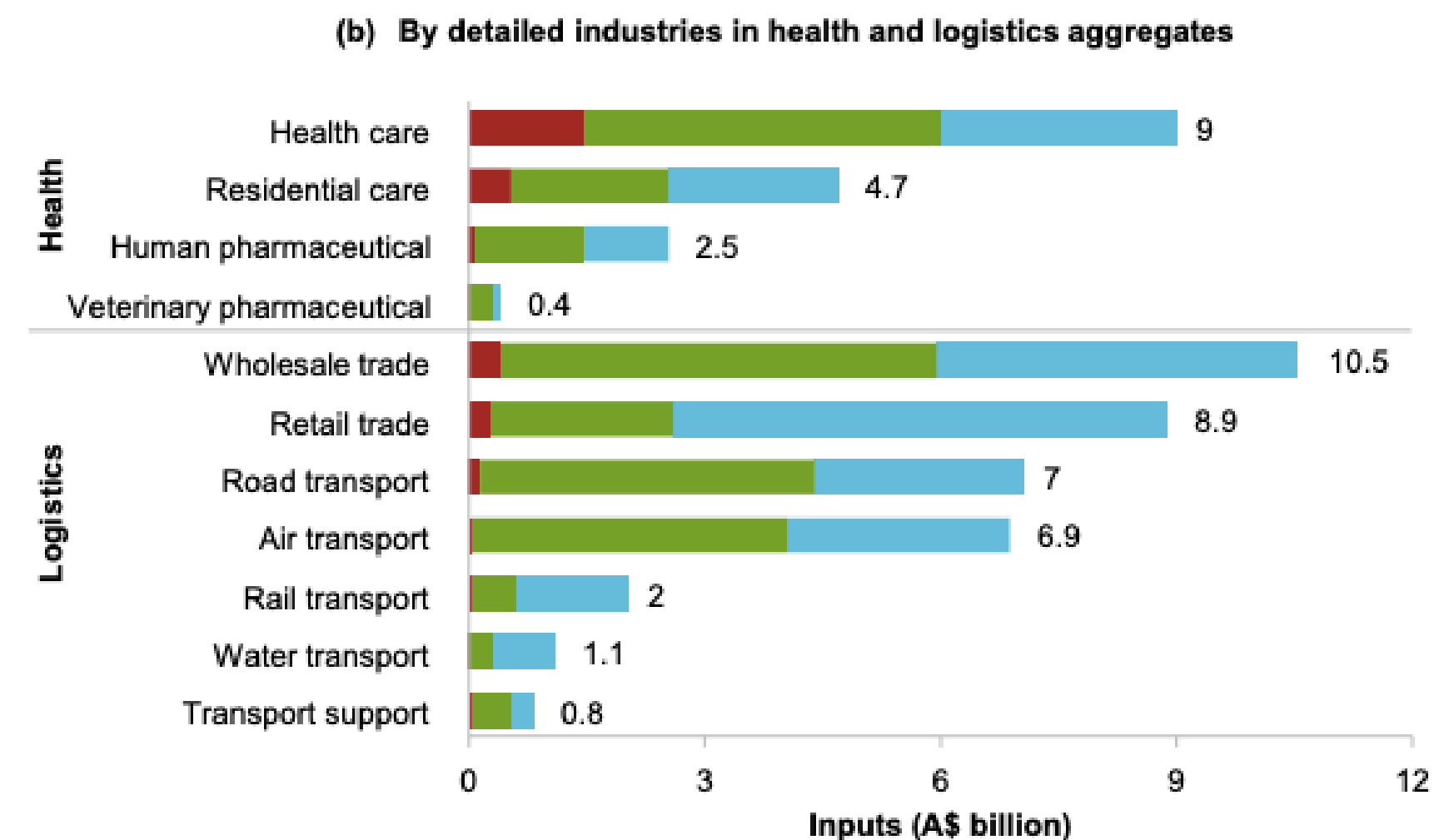
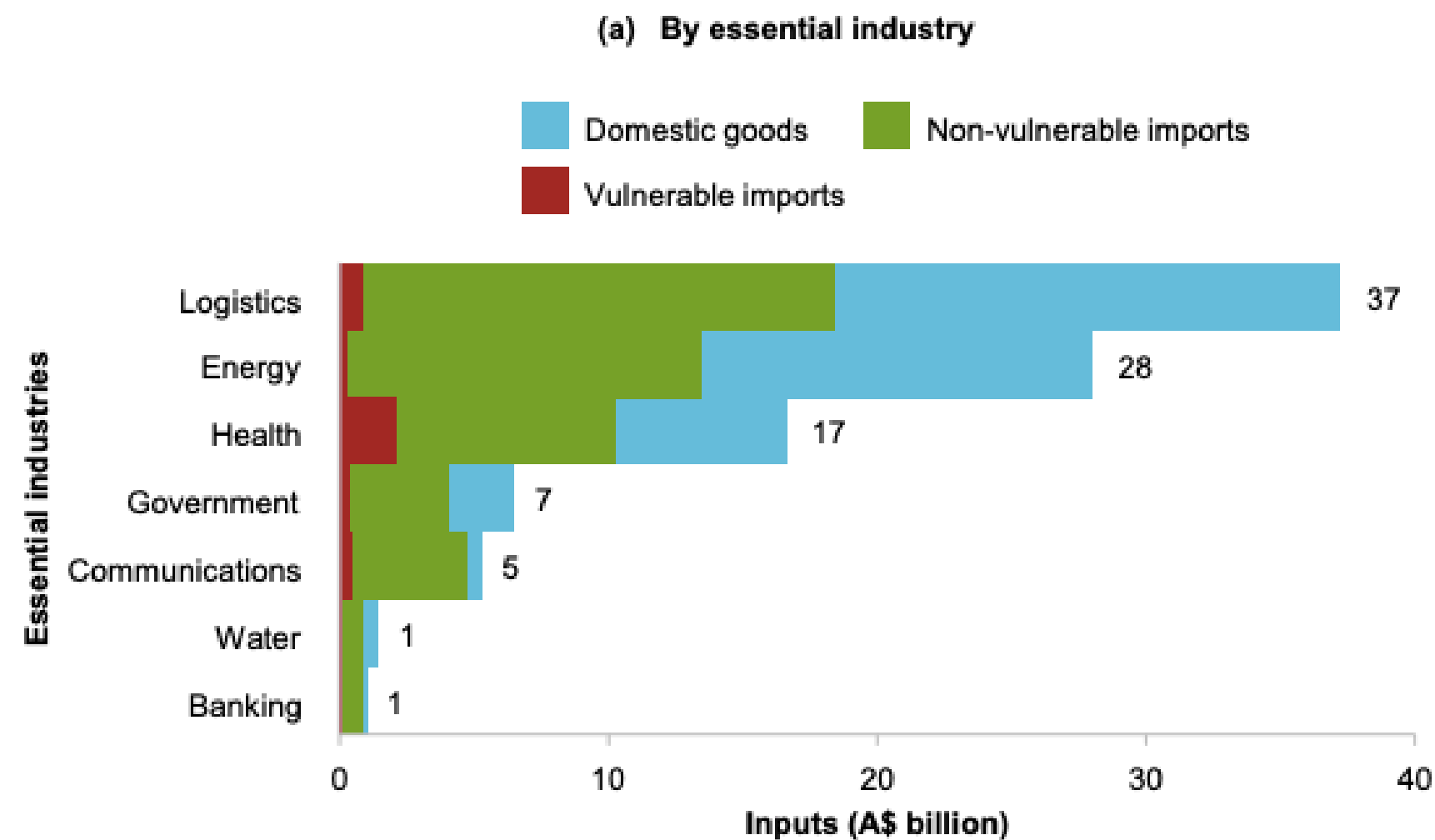
- Step 1 - assess the risk of disruption (vulnerable)
- Step 2 - assess the cost of a disruption (essential to wellbeing)
- Step 3 - identify if the input is necessary for production (critical)
- Step 4 - look for policy options that lower the risk of disruption
- Step 5 - look for policy options that mitigate the impact of a disruption

Figure 1 The Commission's analytical framework



Australia has only a few areas of import dependence with a concentrated source of supply in essential industries

Figure 4.8 **Vulnerable imports are a small fraction of essential industries' cost of goods inputs**
The use of goods inputs, A\$ billion, 2016-17^a

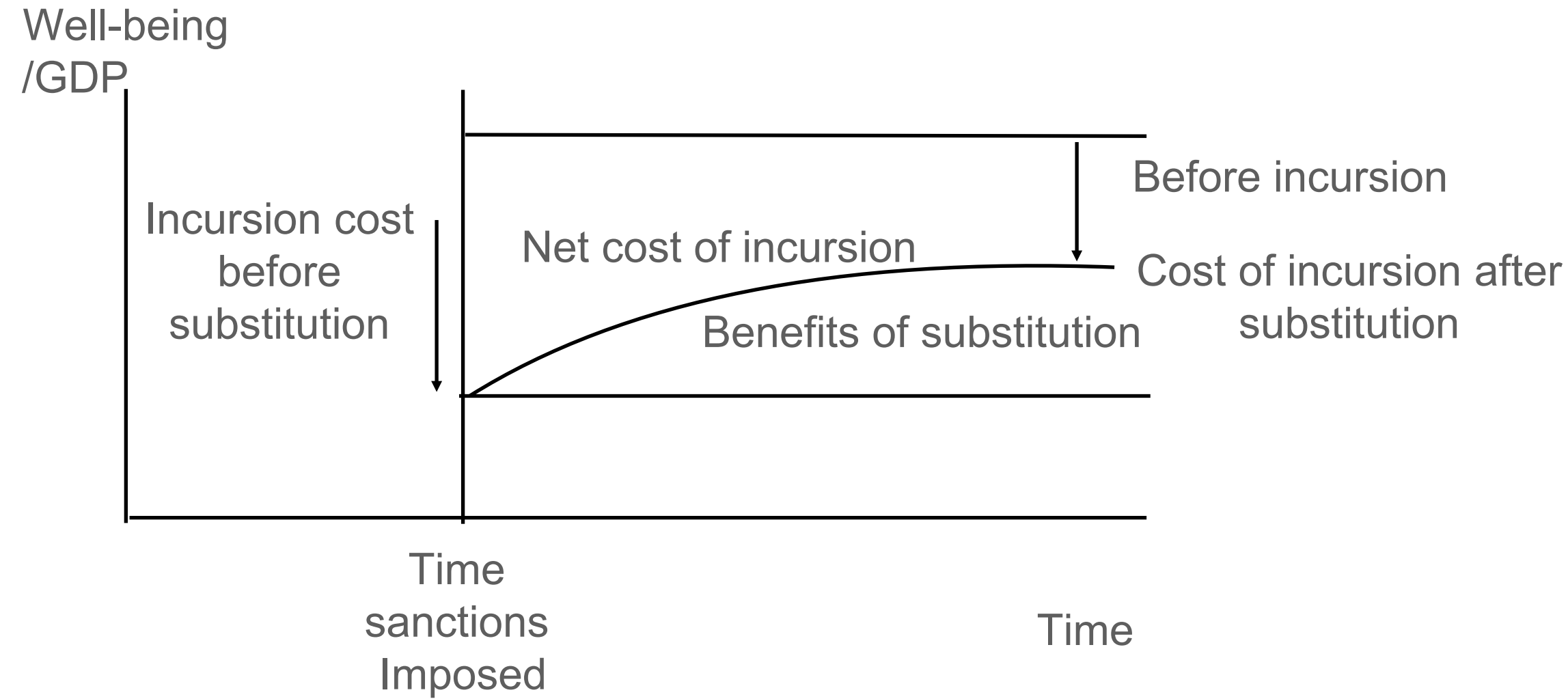


Main international supply chain exposures are:

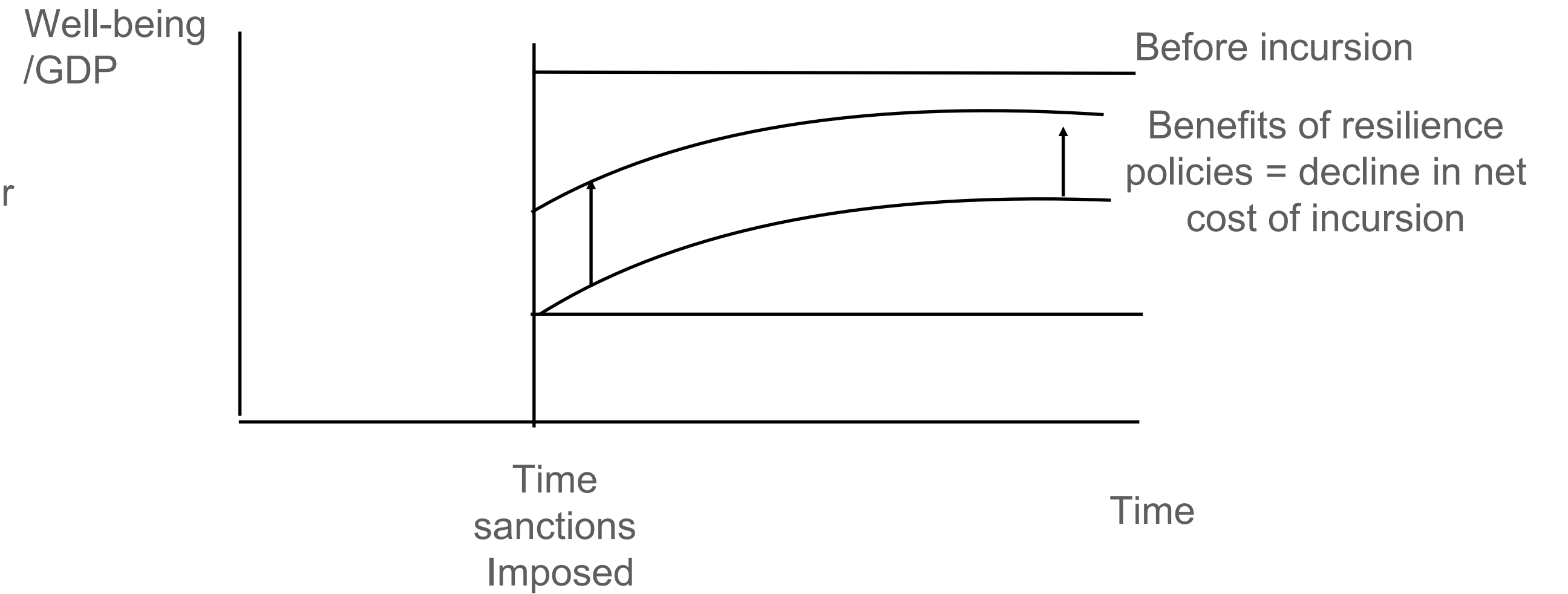
- Agricultural and veterinary chemicals
- Diesel fuel - direct
- Machine parts
- PPE
- Risks to logistics - all forms of transport and trade.

Return on policies to increase substitutes

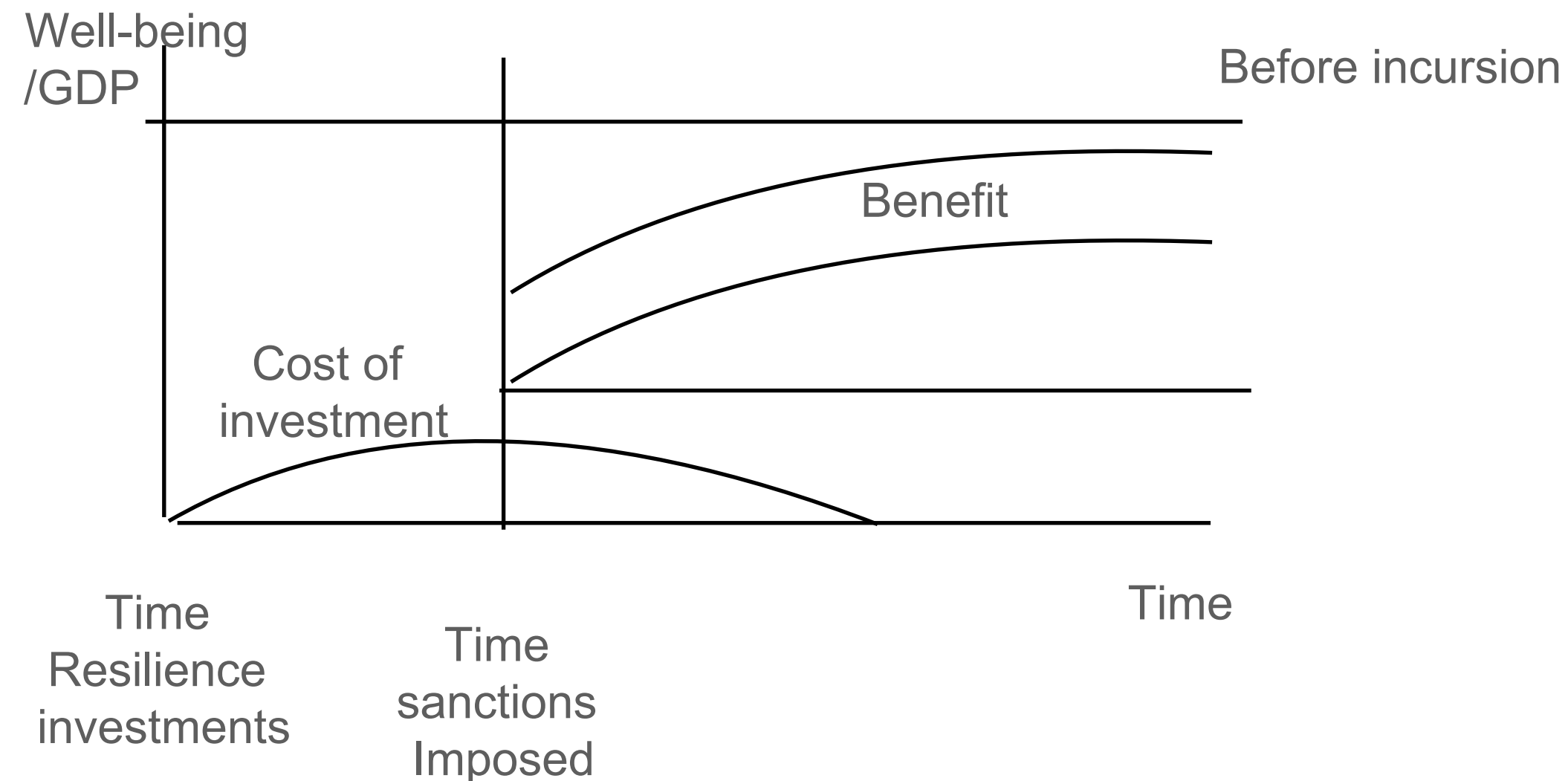
9a. Cost of an incursion before and after substitution



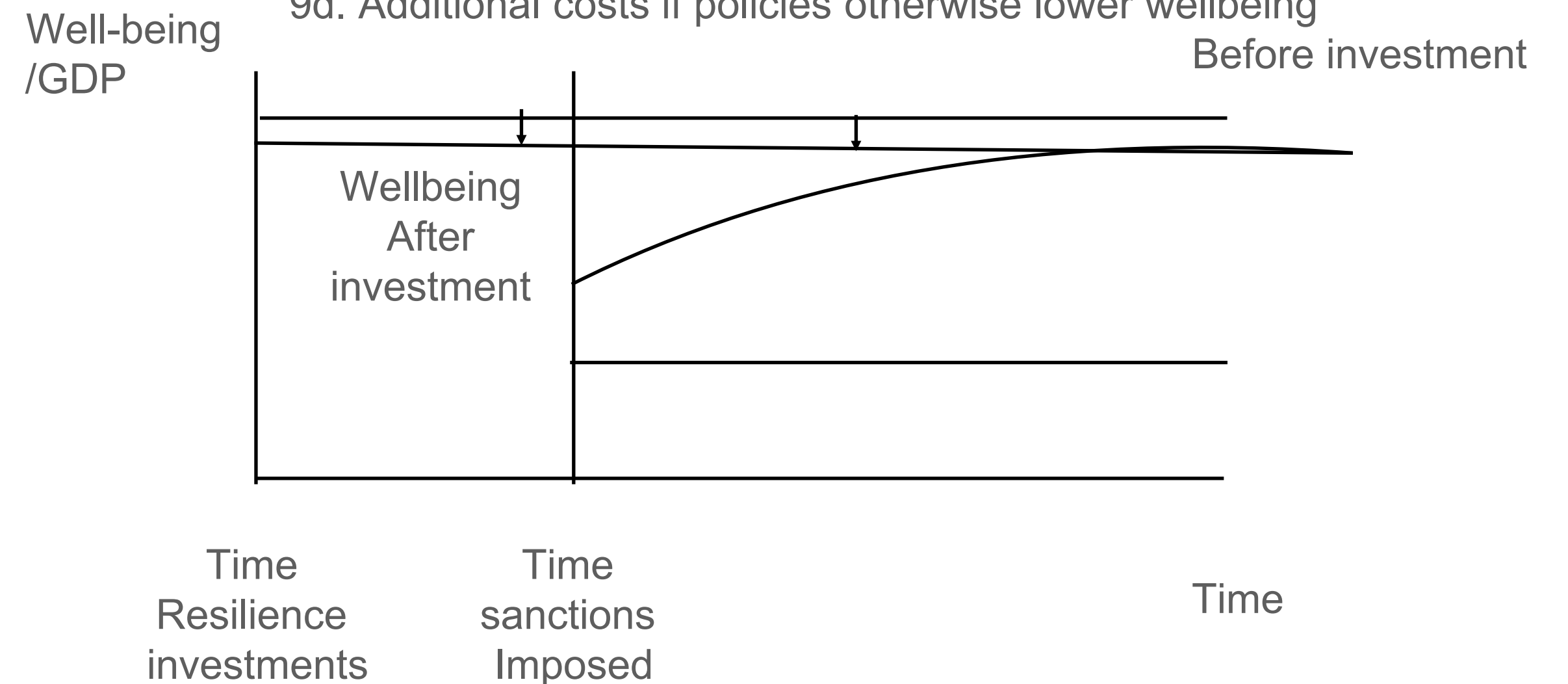
9b Benefits of improved resilience



9c. Cost and benefits of investment in resilience



9d. Additional costs if policies otherwise lower wellbeing



Research agenda

Supply chain security

- What really is at risk - vulnerable, essential and critical?
- What trade rules will improve the availability of substitutes from external sources?
- How much does the industry policy improve the availability of substitutes?
- What is the cost of that policy to the country - public investment and to productivity?
- What is the effect on other countries?