

Decision-Making Frameworks, China and the UK Economy

Prof. Sir Anthony Finkelstein CBE FREng FRS

Introduction

1. I welcome the Committee's decision to examine how the United Kingdom approaches economic decision-making in relation to China. Much of the current debate has understandably focused on particular technologies, sectors or transactions. These are, in my judgment, important questions, but they are secondary to a more fundamental one: by what method should government arrive at such decisions?
2. My submission is that the United Kingdom lacks a sufficiently coherent analytical framework for addressing questions which simultaneously engage science and technology, economics, national security and international relations. Individual departments possess considerable expertise within their own disciplines and operate under well-developed statutory and policy frameworks. The difficulty arises because the questions themselves no longer respect those disciplinary boundaries. The result is a succession of sound analyses, each undertaken from a different perspective, but with no common conceptual structure to bring them together.
3. This is apparent in decisions concerning semiconductors, artificial intelligence, telecommunications infrastructure, advanced manufacturing, critical minerals, biotechnology and quantum technologies. These are often described as economic issues with security implications, or security issues with economic implications. Neither description captures the nature of the problem. They concern strategic capability, of which economic performance, scientific leadership, national resilience and security are all components.
4. Accordingly, the principal requirement is not another individual policy instrument, but a stronger analytical architecture capable of supporting strategic judgements across government.

The changing character of strategic competition

5. For much of the post-war period it was possible to distinguish reasonably clearly between industrial policy, economic policy, science policy and national security. Those distinctions reflected the underlying structure of government and, to a significant extent, the structure of the problems being addressed. That separation is no longer satisfactory.
6. Scientific discovery now passes rapidly into commercial deployment, and commercial technologies become embedded within critical national infrastructure. Industrial capacity shapes military capability, standards influence market access, and research partnerships affect technological leadership. Supply chains have become both a means of achieving resilience and, in some circumstances, instruments of coercion. The interactions between these elements have become as important as the elements themselves.
7. Questions that appear narrowly commercial may therefore have strategic consequences extending well beyond their immediate economic effect. Equally, decisions taken primarily on security grounds may have major impacts on innovation, investment and industrial competitiveness. These interactions cannot be understood adequately if each dimension is examined independently.

8. The United Kingdom has adapted many of its policy instruments to this changing environment. It has devoted much less attention to the analytical methods used to select, coordinate and apply those instruments.

Current approaches

9. The United Kingdom already possesses mechanisms addressing investment screening, export controls, procurement, competition, sanctions, research security and supply-chain resilience. Each performs a distinct function, and each reflects its own statutory purpose. Taken together, however, they do not amount to a unified decision-making framework.
10. Security assessments naturally focus upon vulnerability, resilience and threat. Economic assessments examine productivity, efficiency, growth and consumer welfare. Industrial policy considers capability, investment and competitiveness. Diplomatic advice introduces further considerations relating to alliances, international obligations and wider foreign policy.
11. These perspectives are individually satisfactory but collectively difficult to reconcile. They employ different concepts, assumptions and time horizons. Their conclusions may therefore be entirely reasonable within their own disciplines whilst proving difficult to compare across disciplines.
12. This is not principally an organisational problem. It reflects the absence of a shared analytical model that can integrate these perspectives into a single strategic assessment.

Capabilities rather than technologies

13. Public discussion frequently proceeds through lists of technologies regarded as strategically important. Artificial intelligence, quantum technologies, semiconductors, advanced telecommunications, batteries and synthetic biology all regularly appear. Such lists are necessary for policy purposes but are a less satisfactory foundation for analysis.
14. Technologies evolve rapidly. They converge, fragment and become commoditised. Capabilities endure for much longer. The capability to design advanced semiconductors remains strategically significant even as manufacturing techniques evolve. Trusted communications remain essential irrespective of the cryptographic protocols employed. The capability to integrate complex software-intensive systems continues across successive generations of technology.
15. For that reason, capabilities rather than technologies should become the principal unit of strategic analysis.
16. This also changes what government examines. The relevant object is seldom an individual product or company. It is more often a network comprising scientific research, skills, finance, intellectual property, manufacturing capacity, software, standards, infrastructure, supply chains and international partnerships. Strategic advantages and vulnerabilities commonly emerge through the relationships between these elements rather than from any individual component viewed in isolation.

Time and strategic judgement

17. Strategic assessments are often presented as though they concern a single point in time. In practice, technologies pass through recognisable stages of development. Scientific discovery is followed by industrial scaling, international diffusion, commoditisation and eventual replacement. The strategic significance of a capability changes across that lifecycle.
18. Technologies may justify protection while they remain scarce, become widely available through commercial markets and later re-emerge as strategically significant if supply chains become concentrated or geopolitical conditions alter.
19. A coherent framework should therefore examine decisions across multiple interacting timescales. Such an approach is already familiar in systems engineering and defence planning but has been adopted less consistently within wider economic decision-making.

Sovereignty, resilience and strategic freedom

20. Debates concerning sovereignty frequently become entangled with assumptions about domestic ownership or self-sufficiency. Neither adequately describes the choices confronting advanced economies.
21. The United Kingdom will remain deeply integrated within international markets, global supply chains and scientific collaborations. That condition is neither temporary nor undesirable. The relevant question is whether those interdependencies preserve sufficient freedom of action under changing political and economic circumstances.
22. Strategic dependence arises when another actor gains the capacity to constrain future choices through concentrated control of technology, infrastructure, manufacturing capacity, data or essential materials. Conversely, resilience is strengthened where optionality is preserved through diversified suppliers, modular architectures, interoperability, trusted partnerships and the ability to substitute components when conditions change.
23. Viewed in this way, sovereignty concerns the preservation of strategic freedom rather than the elimination of dependence.

China as a case study

24. China illustrates these issues with particular clarity, although the analytical framework I have described should apply more generally.
25. The significance of China's successive Five-Year Plans lies less in the individual policies they contain than in the conception of national capability which they reveal. Scientific research, education, industrial investment, infrastructure, standards, finance, digital technologies and national security are treated as components of a single long-term programme. Whether those objectives are achieved is a separate question. The coherence of the analytical approach is nevertheless evident.
26. The United Kingdom approaches many of the same questions through separate institutional processes. Each process serves a legitimate purpose, yet no equivalent strategic synthesis is routinely undertaken.

27. China's use of export controls affecting rare earth elements and other critical materials illustrates another characteristic of contemporary strategic competition. Commercial relationships may acquire geopolitical significance where production becomes sufficiently concentrated. Similar considerations arise across advanced semiconductors, telecommunications infrastructure, software platforms and elements of the energy system. These are not isolated examples but manifestations of a wider pattern in which technological capability, industrial policy and strategic influence are no longer separable.
28. None of this implies that every economic relationship with China should be viewed primarily through a security lens. Nor does it support generalised economic disengagement. The framework itself should remain stable while its application varies according to the characteristics of individual sectors, technologies and capabilities.

Analytical capacity

29. The United Kingdom possesses substantial analytical expertise distributed across government, industry and academia. It has distinguished economists, scientists, engineers, intelligence professionals and diplomats. The greater weakness lies in bringing those disciplines together within a common strategic assessment.
30. Addressing that weakness would require a permanent multidisciplinary analytical function drawing upon scientific expertise, economics, industrial analysis, intelligence, supply-chain research and systems engineering. It would also benefit from greater investment in technical and economic open-source intelligence, particularly relating to technological developments, industrial ecosystems and international supply chains.
31. Such an organisation would not replace departmental expertise. Its role would be to provide the analytical architecture within which departmental advice could be considered collectively and strategic judgements reached consistently across government.

Conclusion

32. The Committee's inquiry presents an opportunity to address a question extending beyond the economic relationship with China. Technological competition, scientific capability, industrial resilience and national security have become interconnected. Government has responded by developing new policies and new regulatory powers. The analytical methods supporting those decisions have evolved less quickly.
33. The principal recommendation of this submission is therefore to develop a common analytical architecture for strategic decision-making, capable of integrating technological, economic, security, and geopolitical analysis within a single methodology. Such an approach should be organised around capabilities rather than lists of technologies; examine systems rather than individual assets; operate across multiple timescales; and assess strategic freedom alongside economic performance.
34. The United Kingdom has repeatedly demonstrated an ability to establish institutions suited to changing strategic circumstances. The challenge now is to develop the analytical architecture required for an era in which technological capability, economic prosperity and national security have become increasingly intertwined.

Selected Articles

The following articles develop a number of the themes discussed in this submission.

- **Reading China's 15th Five-Year Plan** (2026). An examination of China's emerging Five-Year Plan as an expression of long-term strategic thinking across technology, industrial policy, research, infrastructure and national capability. Available at: <https://profserious.substack.com/p/reading-chinas-15th-5-year-plan>
- **How Should We View China?** (2026). A discussion of the analytical frameworks through which democratic states should understand China, arguing for a capability-based rather than binary conception of strategic competition. Available at: <https://profserious.substack.com/p/how-should-we-view-china>
- **Technology and Sovereignty** (2026). An exploration of sovereignty as the preservation of strategic freedom of action within systems of interdependence, with particular reference to critical technologies and infrastructure. Available at: <https://profserious.substack.com/p/technology-and-sovereignty>
- **A Simple Guide to National Security** (2026). A short essay on the relationship between national capability, strategic advantage and the changing nature of security in an era of technological competition. Available at: <https://profserious.substack.com/p/a-simple-guide-to-national-security>
- **Inverters, Infrastructure and Intrigue** (2026). A case study illustrating how apparently routine technological choices can acquire wider strategic significance through software, supply chains and operational dependence. Available at: <https://profserious.substack.com/p/inverters-infrastructure-and-intrigue>