

CHINA'S INDIGENOUS INNOVATION POLICIES

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EAI Background Brief No. 1433

Executive Summary

1. In China, the promotion of indigenous innovation officially began with the adoption of the 2006–2020 Medium- and Long-Term National Science and Technology Development Plan by the State Council in 2006. To the Chinese, indigenous innovation – 自主創新 – implies innovations that are under sovereign control by China, rather than “native innovation”, as suggested by the English translation.
2. The policies supporting the quest for indigenous innovation capability are for research and development in megaprojects, guidelines for public procurement, developing Chinese technical standards and intellectual property rights protection.
3. The government adopted a new procedure for the accreditation of indigenous innovation products in public procurement. This led to severe criticism from trading partners such as the United States and EU even though China has yet to join the WTO (World Trade Organisation) Government Procurement Agreement.
4. Similar controversies have erupted over standardisation and intellectual property rights, and lately over the “China Manufacturing 2025” plan that in many ways represents a more conventional industrial policy.
5. Chinese policy support for indigenous innovation has been particularly prominent in high technology sectors such as telecommunications and information technology, reflecting an ambition to increase market shares and capture more value in production chains. The high-speed train, automobile and energy sectors have also witnessed important achievements.
6. Research on the impact of the increased resources for research and development (R&D) and indigenous innovation in Chinese firms demonstrate that firms which rely on indigenous innovation are more dynamic and successful than those which merely rely on foreign technology. This was a trend that predated the official launch of the indigenous innovation policies in 2006.

7. The US-China rivalry can be interpreted in terms techno-nationalism or import substitution. A better theoretical approach is to identify negative externalities for the dominant state due to a rising state's promotion of innovation. Historically, experience shows that rising states have seldom been deterred by dominant states' efforts to impede a catching-up process in innovative capabilities.
8. China's efforts to build indigenous innovation capabilities are likely to persist. The question is what kind of global contributions China could offer in the future. China may advance innovation frontiers in areas that other states perhaps ignore, or spearhead new and more effective modes of innovation "with Chinese characteristics".