

SWP Comment

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The Trilemma of Turkish Techno-Nationalism

Choosing between Washington, Brussels and Beijing Çağdaş Üngör

Ankara's "techno-nationalist" policies aim to place Turkey among the innovation leaders of the 21st century. The country has already achieved notable progress in its defence industry, launched its own EV brand and is preparing a space mission. But creating "native and national" (yerli ve milli) alternatives to the big global players in artificial intelligence (AI), 5G or semiconductors is not an easy task. With few commercial success stories to show, Turkey still needs international partners to develop innovation in the twenty-first century. This is likely to become more challenging under the Trump administration, whose drastic trade policies have complicated the relationships between China, Europe and the United States. With different dependencies on each of these actors (American digital corporations, Chinese network infrastructure and EU tech norms) Turkey faces a geopolitical trilemma in the field of technology.

Technology used to be a peripheral topic in geopolitical discussions. The recent change in tone stems from the dramatic transformations associated with the rise of 5G technology, robotics, artificial intelligence (AI) and autonomous weapons systems. The challenges associated with the "Fourth Industrial Revolution" have become a hot topic for the global elite at gatherings such as the World Economic Forum. The supply chain disruptions of the Covid pandemic clearly contributed to this new atmosphere, while growing US-China geopolitical rivalry has produced export restrictions and sanctions with clear ramifications in the tech sphere. Last but not least, the Russian invasion of Ukraine has highlighted new geopolitical risks, leading many countries to prioritise access to strategic goods and critical resources. The rise of "techno-nationalism" should be understood in that light.

"Techno-nationalism" refers to policies advancing progress in the technological domain, ultimately seeking geopolitical leverage against rivals, while maintaining national security and welfare. In its zero-sum mentality, the main goal of technonationalism is to achieve self-sufficiency in the tech realm, or at least minimise dependence on unreliable partners. Such autarkic notions of technology are nothing new in Turkey, of course. One fundamental



objective of the founders of the Turkish Republic was to catch up with the Western civilisation - which clearly had a technology component. Turkey's early technonationalist spirit was visible in its first domestic car project, the "Devrim". Despite its utter failure in the 1960s, it remains a nostalgic ideal for many nationalist Turks. Ankara's emphasis on developing a national arms industry dates back to the Cyprus crisis of 1974 and the sanctions imposed in its aftermath. Today's Turkish technonationalism, on the other hand, owes much of its ideological shape to the ruling Justice and Development Party (Adalet ve Kalkınma Partisi or AKP), which has been in power since 2002.

In March 2025, President Erdoğan restated his ambition to place Turkey among the leading countries of innovation, as he announced the Turkish Industrial and Technology Strategy for 2030 (2030 Sanayi ve Teknoloji Stratejisi). This vision resonates with other AKP slogans like "Century of Türkiye" (Türkiye Yüzyılı) and "Digital Türkiye" (Dijital Türkiye), coined along with the country's National Technology Initiative (Milli Teknoloji Hamlesi). Launched in 2018 by the ruling AKP, the National Technology Initiative aims to create "native and national" (yerli ve milli) alternatives to the global tech majors. Efforts concentrate on the country's defence sector, with the arms industry constituting the backbone of Turkish techno-nationalism in the AKP era, both in terms of technical innovation and public discourse. To a lesser extent, Turkey's first EV brand, Togg, has also become a symbol of national pride, although the company's future remains shaky in the face of global competition.

One beacon of Turkish techno-nationalism is the Teknofest Aerospace and Technology Festival, the first of which was organised in 2018. The main attraction of the event, which draws more than one million visitors each year, is Turkey's domestically built jets, drones and other military hardware. AKP-era techno-nationalism is interwoven with the desire to extend Turkish leadership across its former Ottoman territories, stretching from the

Balkans to the Arab peninsula. Turkish drones, which are today exported to Ukraine, Azerbaijan, as well as several African and Asian countries, have more than symbolic significance in this context. Techno-nationalism is also in the background when AKP figures criticise Turkey's previously dominant Kemalist elites for failing to realise the goal of self-sufficiency in the military domain.

But Turkey's success story in the military field does not extend to the civilian sphere, or the broader realm of commercial technologies such as AI or robotics. Having identified this deficit, the Ministry of Industry and Technology recently launched the HIT-30 (High Tech Türkiye) programme to channel financial support to domestic companies specialising in semiconductors, digital technologies and mobility. The larger goal of the programme is to turn Turkey into a global innovation powerhouse by 2030. This will require a drastic increase in the proportion of high-tech products in Turkey's exports, which currently stands at a meagre 3.6 per cent.

Creating "native and national" alternatives for strategic items is no easy task. During Covid the urgency of the pandemic obliged the Health Ministry to buy its first batch of coronavirus vaccines from a Chinese company, even though Turkish scientists were working on a domestic version. While Turkey has a vibrant technology ecosystem with 106 technoparks, mostly attached to its public and private universities, commercialising innovation remains a persistent problem. Other challenges include Turkey's democratic backsliding, deep political polarisation and rampant corruption, which constrain Turkey's talent pool. While the Scientific and Technological Research Council (TÜBİTAK) and the Small and Medium Enterprises Development Organisation (KOSGEB) offer grants for science projects and innovation schemes, these cannot sustain new tech companies indefinitely. Venture capital financing is a problem amidst Turkey's ongoing economic crisis. Not surprisingly, Turkish tech start-ups often turn to inter-

SWP Comment 25 May 2025 national financiers when they need investment beyond their initial launch.

While the AKP's primary motivation for promoting "native and national" technologies is economic, there are others too. Technology is also used to control domestic dissent and manage public opinion. While Turkish public opinion is shaped quite effectively by conventional media outlets close to the government, managing social media is a headache for the AKP regime. Turkey's younger generation get much of their news from social media outlets such as YouTube, X, Instagram and TikTok. In the past decade, Ankara has imposed complete or partial bans on some of these platforms, often with significant domestic backlash. Current laws require the major digital platforms to open local branches and maintain legal representations in Turkey. This enables Ankara to communicate official demands concerning content removal and account restrictions. While these official measures are not always politically motivated, existing practice often blurs the line between technological sovereignty and censorship.

Turkey's techno-geopolitical trilemma: Choosing between the United States, the European Union, and China

Ankara's techno-nationalist policies face a geopolitical trilemma. The Turkish social media scene is dominated by American big tech and the US holds a monopoly on the design of the high-end semiconductors used to train and run large language models for AI. Ankara seeks investment from China to renovate its telecommunications networks and energy infrastructure. And at the same time it has to adjust its digital legislation to satisfy the EU's norms and values. These priorities may prove harder to reconcile under the Trump administration, which has caused havoc in transatlantic relations and put a distance between Washington and Brussels. Brussels regards Trump's protectionist tariff policies as an assault on

global free trade — a conviction largely shared by Beijing. In such a constellation, it might even be possible for China and the EU to pull in the same direction and formulate policies to minimise harm to their respective markets.

The complicated nexus between Washington, Beijing and Brussels creates problems for Turkey's technology ecosystem, which remains dependent on each of these three poles for different reasons. The real difficulty for Ankara stems from the interconnected tasks of pushing innovation and maintaining technological sovereignty. While reducing regulation may not guarantee innovation (and may even risk reinforcing Turkey's existing dependencies), tighter regulation could cause trouble with the new US administration, which closely guards American big tech's interests abroad. While Erdoğan remains optimistic about his relationship with Trump, prevailing geopolitical uncertainties may still create risks for Turkey. Although Turkish technology policy is driven primarily by domestic concerns, the larger geopolitical context shapes and limits these choices. Trump's close ties with US big tech may come to pose problems for Ankara. The AKP government has grown increasingly sceptical of global corporations over the past decade, and has banned several American platforms in Turkey; these currently include Discord, Roblox, PayPal and Apple Pay.

The first prong of Turkey's techno-nationalist trilemma is thus the United States. Although Turkey dedicates substantial funds to domestic research and development under its National Technology Initiative, its tech companies are far too small to compete against the likes of Google or Meta. The digital sphere is the weakest link in Turkish techno-nationalism, as reflected in Ankara's growing scepticism over big tech. In 2019, for instance, the Turkish Presidency warned public employees against sharing important information on messaging applications, referring implicitly to the widely popular WhatsApp. In 2021, Ankara took the opportunity offered by a controversy over WhatsApp's new privacy rules to pub-

licise Turkey's "native and national" alternative, Turkcell's BiP - albeit with little success. Web-based social media platforms such as X are even a bigger problem for the Turkish government, since they are central to shaping domestic public opinion. These platforms have been fined by Turkish courts when they fail to carry out legal demands, which usually include some degree of censorship. Other sanctions include bandwidth limitations imposed by Turkey's Information and Communications Technologies Authority (Bilgi Teknolojileri ve İletişim Kurumu). Such practices may come under greater scrutiny now, as the Trump administration has already accused other countries of "economic extortion" for fining American tech companies.

Nevertheless, US assistance remains crucial for developing Turkey's "native and national" AI tools (including a future Turkish ChatGPT). TÜBİTAK is currently working on a Turkish large language model, although its completion is not in sight. In order to carry out major AI projects, Turkey needs to do business with American chip companies such as NVIDIA, since Chinese corporations are not yet able to produce such sophisticated chips. Cooperation with Washington is also necessary for Turkey to compete against regional rivals such as the United Arab Emirates (UAE), whose recent advances in the AI field have been boosted by US tech companies. A second option for Turkey is to join the European Union's collaborative efforts to catch up with China and the United States in the semiconductor sector. While most EU countries remain dependent on global supply chains for their semiconductors, European Chips Act (2023) is designed to change that.

The EU is therefore the second prong of Turkey's techno-geopolitical trilemma. While European tech companies are less central to Turkish digital life than their American counterparts, Turkey is closely tied to the EU's technology norms and rules. Legal alignment is necessary for Turkey to access the European market, which is the most important destination for Turkish exports. Turkey is also part of the European

technology ecosystem through EU funding schemes, such as the framework programmes (Horizon Europe) and the Marie Sklodowska-Curie Actions. Although full EU membership remains a distant prospect, Europeanisation remains a central issue in commercial and institutional settings. Turkey's embrace of the EU's General Data Protection Regulation (GDPR) in the formulation of its own Personal Data Protection Law (KVKK) is a case in point. Likewise, the Turkish Competition Authority's (Rekabet Kurumu) draft legislation aiming to regulate global tech companies operating in Turkey is based largely on the principles of the EU Digital Markets Act.

Other factors, such as Turkey's authoritarian political leanings, may limit the prospects for a long-term technology partnership between Ankara and Brussels. While both Turkey and the EU are concerned about the impact of digital disinformation, for instance, Turkey's clampdown on "untruthful" information often translates into suppression of domestic dissent. The gulf between Turkish and European attitudes toward social media was spotlighted by the March 2025 imprisonment of Ekrem İmamoğlu — Istanbul's popular mayor and the most likely candidate to challenge Erdoğan in the next presidential elections. The Turkish government's digital censorship practices and the widespread use of surveillance cameras to identify protestors stand in sharp contrast to the ideals of the EU's tech governance.

This brings us to the third prong of Turkey's techno-geopolitical trilemma: China. The past decade of AKP rule has witnessed a growing partnership between China and Turkey, which now extends beyond bilateral trade and regular diplomatic exchanges. Turkey joined multiple Chinese-sponsored initiatives in the 2010s, from the Belt and Road Initiative (BRI) to the Asia Infrastructure and Investment Bank (AIIB), as well as expressing its willingness to join the Shanghai Cooperation Organisation (SCO). Technology is a crucial component of the Sino-Turkish partnership in the twenty-first century. Turkey's biggest telecommunica-

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tions operators, Turkcell and Türk Telekom, both have deals with Huawei to build the country's 5G network infrastructure. Ankara also expects Chinese investment in renewable energy and possibly nuclear power. In terms of tech governance, the Chinese Communist Party's almost full control over the internet is a great inspiration for AKP commentators who admire Beijing's style of technological sovereignty. Employing the "Chinese model" in Turkey would be impossible, of course, since the country lacks commercially viable "native and national" companies capable of dominating its own digital space. Nevertheless, Ankara is likely to draw on insights from China when incorporating new AI technologies and facial recognition systems into Turkey's conventional security apparatus.

The biggest challenge posed by China is Turkey's large bilateral trade deficit, which has grown steadily since 2000 to reach US\$40 billion by 2023. Given China's dominant role in the global EV and renewable energy markets, Turkey's trade deficit is likely to grow further - which could even encourage Ankara to follow Washington's lead on trade protectionism. In 2019, for instance, the Turkish government imposed additional taxes on international mail orders, implicitly targeting China's e-commerce giant Alibaba, whose growing sales in Turkey had become a cause for concern. More recently, TikTok has come under scrutiny in Turkey - albeit for a completely different reason. Hüseyin Yayman, an AKP deputy and spokesperson for the Turkish National Assembly's Commission on Digital Platforms (TBMM Dijital Mecralar Komisyonu) even referred to TikTok as a "national security issue" in 2024. Yayman's complaint did not concern the global debate on the Chinese platform's alleged privacy issues or its ties to the Communist Party. Instead, he took issue with TikTok's negative impact on the Turkish youth and traditional family values, and called for a nationwide ban. Had such a ban been imposed, it would have been interesting to see how Ankara could reconcile that with its "techno-nationalistic" narrative. Because unlike the United States

and Europe, China has not been a target of the AKP's domestic political discourse in recent years, nor has it been presented as Turkey's geopolitical rival.

Outlook and policy recommendations

European policy-makers should keep a keen eye on the development of Turkey's "technonationalism", as it will have repercussions in both the military and civilian aspects of Turkish-EU relations. Trump's re-election has shaken up European-American relations and American big tech companies are coming under closer scrutiny in Europe for their gatekeeping status and opaque algorithms. Turkey and the EU are pursuing similar efforts to regulate big tech and establish digital sovereignty. Turkish legislation on the digital economy (and possibly AI) is heavily influenced by the European initiatives. Furthermore, Turkey's scientific talent has strong connections with European institutions and EU funding schemes. But while there is ample scope for cooperation with Brussels, it is clear that Ankara's techno-nationalism is also predicated on the need to control public opinion at home. The most recent example is the Turkish government's attempts to silence opposition accounts on X during the protests following the detention of Ekrem İmamoğlu.

In terms of media freedoms, Turkey cites European anxieties over disinformation and fake news in the context of the Ukraine war to justify its own censorship in cyberspace. China's digital authoritarianism is a model for Turkish officials who dream of creating "native and national" alternatives to global tech platforms on the internet. China also offers affordable tech equipment for Turkey's strategic infrastructure, such as its 5G network, which is expected to be operational by 2026. How Brussels interprets Ankara's cosy relations with Beijing will depend on the future trajectory of the EU's own relations with China. If Brussels and Beijing join forces to counter Washington's highly disruptive policies under Trump, Turkey

may lose its only leverage vis-à-vis China, namely, its easier access to European markets due to its Customs Union with the EU.

Even if no such realignment takes place, Ankara still needs to find the right balance between the United States, China and the European Union in its national tech policy. This is will be hard, since global markets are decoupling through export restrictions, tariffs and other sanctions imposed by Washington or Beijing. A zero-sum game – a — "technological cold war" between the United States and China may ultimately force Turkey to choose one over the other. American companies dominate the global market for high-end semiconductors and the Turkish social media scene, while Ankara still needs China as an investor and an affordable technology provider. Meanwhile, Europe remains Turkey's biggest export market and its most significant scientific research partner. The trilemma, it would appear, is here to stay.



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