

A Geoeconomic Perspective on Innovation and Development Cooperation: Türkiye and Azerbaijan

Halil DELIGOZ¹

Abstract: This study analyzes the education, technology and funding cooperation between Türkiye and Azerbaijan with references to the potentially restrictive development environment imposed by the new great power rivalry context. It is argued that under the current geoeconomic conditions, when security considerations has re-gained priority in the production and trade of technology, Türkiye and Azerbaijan might consider solidarity -rather than a narrow economic efficiency- as an indispensable principle while cooperating to meet each other's needs in terms of innovation and development.

Keywords: New economic statecraft, geoeconomic context, innovation/development gap, technological sovereignty, productive complementarity, development autonomy.

Introduction

This study analyzes the education, technology, and funding cooperation that form the basis of the development partnership and productive complementarity between Türkiye and Azerbaijan within the context of the new economic statecraft. It argues that economic complementarity should be reinforced through solidarity, which is more important than ever under today's geoeconomic context.

Some scholars capture today's geoeconomic context and policies with a notion of the "new economic statecraft." It refers to the limitations of market dynamics and the prevalence of the strategic government interventions to the economy in critical sectors as the new normal (Aggarwal & Reddie 2025, 1). According to Aggarwal and Reddie (2025, 1), this approach marks a "departure" from the efficiency-based global economic governance paradigm, which assumed that economic integration and global supply chains create profitability and welfare gains. It was correct, indeed. However, the return of the great power rivalry led by the USA and China asserts the priority of security over cost reduction and profitability (see Mastanduno 1992, 30). The primacy of security is reflected by a range of new policies, such as technological restrictions, techno-nation-

¹ PhD, Independent Scholar, halimdeligoz@gmail.com, ORCID iD: [0000-0003-0878-9299](https://orcid.org/0000-0003-0878-9299)

Acknowledgements: I would like to thank the scientists and intellectuals, including Prof. Saleh Sultansoy, Nigar Ogeday, Prof. Togrul İsmayıl, Prof. Murtaza Hasanoglu, and Ahmet Sönmez for their invaluable ideas and insights.

market for Turkish technological products but also helps bridge Türkiye's saving gap through direct investments. In this regard, both countries effectively complement each other's innovation and developmental capacities.

Strategic autonomy for development is key in the new geoeconomic environment. Therefore, the Turkish Investment Fund is a valuable step forward, though its size is comparably small. In this regard, the funding gap among Turkic states should be compensated through more solidarity, not least due to the fact that credit rating agencies identify most Turkic States below the "investable" threshold. As of July 2025, only two members of the Organization of Turkic States -Kazakhstan and Azerbaijan- hold sovereign credit ratings at the "investment grade" level, according to Moody's (Trading Economics n.d.).² As a result, their ability to attract foreign investment is limited which makes it even more crucial to mobilize development opportunities through solidarity.

Azerbaijan and Türkiye's politico-economic models imply on the future mode of their coordination. The Turkish economy is considered among the mixed market economies, where the state plays a significant role as an economic actor, and Azerbaijan has been evolving toward a mixed market economy while retaining some characteristics of the post-Soviet model. The state plays a central role in both models and it is presumed to continue to assume its primary role in collaborations for development. However, to expand productive capacity among a wider range of market actors including universities and industries, corruption must be prevented, as it poisons trust and stifles cooperation. For these purposes, a trust-building institutional framework, comprising joint judicial and law enforcement mechanisms, is key.

Further research can be suggested: First, how countries protect their development autonomy in an era of strategic competition poses a puzzle today. Second, studies on how solidarity can enhance economic development beyond a narrow definition of reciprocity and economic efficiency also would add value. Third, potential confidence-building mechanisms between investors from Türkiye and Azerbaijan can help policymakers to realize the two countries' development potentials.

References

- Aggarwal, V.K. and Reddie, A.W. (2025). New economic statecraft and global technology conflicts: the dilemma for middle powers. *Business and Politics*, 1–19. DOI: <https://doi.org/10.1017/bap.2025.10011>.
- Author's communication 1 (2025). On Türkiye's petroleum demand structure. With an employee at the Turkish Ministry of Energy and Natural Resources.

2 Although Hungary also holds investment level grade, she still remains an observer in the Organization of Turkic States (Trading Economics n.d.).

- Author's communication 2 (2025). On the positive impact of Azerbaijani students' education in the Turkish universities. With an academic person at the Azerbaijan Oil and Industry University.
- Avcı, C. (2024). Folklor ve Kültürel Güvenlik (II): Türk Devletleri Teşkilatı 2040 Vizyon Belgesi'nin Sunduğu İmkânlar. *Folklor Akademik Dergisi*. Cilt:7, Sayı:3, 1260 – 1275. DOI: <https://doi.org/10.55666/folklor.1553027>.
- Baldwin, D. A. (2020). *Economic statecraft* (New Edition). Princeton, New Jersey: Princeton University Press.
- Blackwill, R. D., & Harris, J. M. (2016). *War by other means: Geoeconomics and statecraft*. Cambridge, Massachusetts: Harvard University Press.
- Chow, P.C.Y. (2024a). The Shifting Paradigm of Global Trade in Technology. In: C.Y. Chow, P. (eds). *Technology Rivalry Between the USA and China*. Palgrave Studies in Global Security. Palgrave Macmillan, Cham. DOI: https://doi.org/10.1007/978-3-031-76169-0_1.
- Chow, P.C.Y. (2024b). Chip-Four Alliance for a Resilient Global Semiconductor Industry. In: C.Y. Chow, P. (eds). *Technology Rivalry Between the USA and China*. Palgrave Studies in Global Security. Palgrave Macmillan, Cham. DOI: https://doi.org/10.1007/978-3-031-76169-0_9.
- Çalkaya, M. (2022, May 9). Türkiye ile Azerbaycan ortak teknopark kuracak. *AA*. <https://www.aa.com.tr/tr/teknofest/turkiye-ile-azerbaycan-ortak-teknopark-kuracak/2600440>
- Daily Sabah* (30 June 2023). "Turkmenistan becomes 3rd country to receive Türkiye's domestic car, Togg". <https://www.dailysabah.com/business/automotive/turkmenistan-becomes-3rd-country-to-receive-turkiyes-domestic-car-togg>
- Daily Sabah* (5 November 2024). Togg for a horse: Erdoğan, Kyrgyz leader swap gifts. <https://www.dailysabah.com/politics/diplomacy/togg-for-a-horse-erdogan-kyrgyz-leader-swap-gifts>
- Deligöz, H. (2024a). US technological statecraft towards China. *Journal of International Trade Law and Policy*, Vol. 23 No. 2/3, pp. 85-100. DOI: <https://doi.org/10.1108/JITLP-10-2023-0059>.
- Deligöz, H. (2024b). Technological Restrictions, Industrial Policy, and High-Tech Industry's Changing Strategies. In: C.Y. Chow, P. (eds). *Technology Rivalry Between the USA and China*. Palgrave Studies in Global Security. Palgrave Macmillan, Cham. DOI: https://doi.org/10.1007/978-3-031-76169-0_3.
- Deligöz, H. (2024c). International Political Contextuality and Development. *Türk İdare Dergisi*, June 2024, Issue 499, pp. 97-116. Available at: <http://dx.doi.org/10.2139/ssrn.4899567>.
- Draghi, M. (2024, September 17). Address by Mr. Draghi – Presentation of the report on the Future of European competitiveness – European Parliament – Strasbourg – 17 September 2024. [chrome-extension://efaidnbmnnnibpcajpcgglefndmkaj/https://commission.europa.eu/document/download/fcbf7ada-213b-4679-83f7-69a4c2127a25_en?filename=Address%20by%20Mario%20Draghi%20at%20the%20Presentation%20of%20the%20report%20on%20the%20future%20of%20European%20competitiveness.pdf](https://commission.europa.eu/document/download/fcbf7ada-213b-4679-83f7-69a4c2127a25_en?filename=Address%20by%20Mario%20Draghi%20at%20the%20Presentation%20of%20the%20report%20on%20the%20future%20of%20European%20competitiveness.pdf)
- Edler, J. (2024). Technology Sovereignty of The EU: Needs, Concepts, Pitfalls And Ways Forward. In Fraunhofer-Institut für System- und Innovations forschung. DOI: <https://doi.org/10.24406/publica-3394>.
- EIC (2021). Statement to accompany the launch of the full EIC. https://eic.ec.europa.eu/system/files/2021-03/EIC%20Advisory%20Board%20statement%20at%20launch%20of%20EIC_1.pdf
- EC & High Representative of the Union for Foreign Affairs and Security Policy (2023). Joint Communication To The European Parliament, The European Council And The Council On "European Economic Security Strategy" (20.6.2023). <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52023JC0020>
- EPDK (2023). Petroleum Market Annual Report 2023. <https://www.epdk.gov.tr/Detay/Icerik/3-0-107/yillik-sektor-raporu>
- Eurostat (2024). R&D expenditure. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=R%26D_expenditure.

- Foy, H. & L. Fisher (2025, Mart 19). EU to exclude US, UK and Turkey from €150bn rearmament fund. *Financial Times*. <https://www.ft.com/content/eb9e0ddc-8606-46f5-8758-a1b8beae14f1>
- Gowa, J. & Mansfield, E.D. (1993). Power Politics and International Trade. *American Political Science Review*, 87 (2): 408–420. DOI: <https://doi.org/10.2307/2939050>.
- Güldogan, D. (2023, July 18). President Erdogan gifts Türkiye's 1st indigenous electric car to Qatari emir. *AA*. <https://www.aa.com.tr/en/middle-east/president-erdogan-gifts-turkiyes-1st-indigenous-electric-car-to-qatari-emir/2948922>
- Hall, P. A., & Soskice, D. (Eds.) (2001). *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*. Oxford: Oxford University Press.
- MFA (t.y.). Azerbaijan'ın Ekonomisi. <https://www.mfa.gov.tr/azerbaycan-ekonomisi.tr.mfa>
- Ocindex (2023). Global Organized Crime Index 2023. <https://ocindex.net/report/2023/0-3-contents.html>
- Pashayeva, A. (2022). Karabağ'ın "Akıllı Şehir" Ve "Akıllı Köy"leri Hakkında. Ateş, H. (Ed.). *Dirençli Şehirler İçin Vizyoner Yönetim*. 24-27 Mart 2022 Kartepe Zirvesi Konferans Kitabı, s. 501-512).
- Rehimov, R. (2024, January 22). Türkiye ile Azerbaycan arasındaki ticaret hacmi 2023'te 7,65 milyar dolar oldu. *AA*. <https://www.aa.com.tr/tr/ekonomi/turkiye-ile-azerbaycan-arasindaki-ticaret-hacmi-2023te-7-65-milyar-dolar-oldu/3115551#:~:text=Azerbaycan%2C%20%4B0talya%20ile%2015%2C68,35%20milyar%20dolarla%20Rusya%20oldu>
- Sakarya Üniversitesi (2024). Azerbaycan'la Siber Güvenlik Alanında İşbirliği Görüşmesi. <https://haber.sakarya.edu.tr/azerbaycanla-siber-guvenlik-alaninda-isbirligi-gorusmesi-h121519.html>
- SOFAZ (2025, January 1). Recent figures. <https://www.oilfund.az/en/report-and-statistics/recent-figures>
- Soylu, R. (2025, January 6). Azerbaijan's state oil company to invest \$7bn in Turkey. Middle East Eye. <https://www.middleeasteye.net/news/azerbaijan-oil-company-socar-invest-7bn-turkey>
- Sultansoy, S. (2023). Türkiye Yüzyılı'nda Bilim Teknoloji. *Sosyal Politika*. Year: 16, Issue: 46. pp.60-67.
- TDT (2022, November 11). Türk Devletleri Teşkilatı 9. Zirvesi Semerkant Bildirisi. <https://www.turkicstates.org/u/d/haberler/semerkant-bildirisi-2679-164.pdf>
- TDT (2024, November 6). Türk Devletleri Teşkilatı 11. Zirvesi Bişkek Bildirisi. https://turkic-states.org/u/d/temel_belgeler/5-tr-bis%CC%A7kek-deklarasyonu-nihai.pdf
- Ticaret Bakanlığı (2019). Azerbaycan Ülke Profili. <https://ticaret.gov.tr> (Access date:6/6/2020).
- Ticaret Bakanlığı (2025). Azerbaycan Ülke Profili. https://ticaret.gov.tr/data/5eb-6749913b8767e5c4b1fcd/Azerbaycan_2024.pdf
- Türk Yatırım Fonu Kuruluş Anlaşması, *Resmi Gazete* 13 Aralık 2023, Sayı: 32398. <https://www.resmigazete.gov.tr/eskiler/2023/12/20231213-2.pdf>
- Şuşa Beyannamesi (Türkiye Cumhuriyeti ile Azerbaycan Cumhuriyeti Arasında Müttefiklik İlişkileri Hakkında Şuşa Beyannamesi) (2021). <https://www.tccb.gov.tr/assets/dosya/2021-06-15-Azaebaycan-SusaBeyannamesi.pdf>
- TCDB (n.d.). Azerbaycan'ın Ekonomisi. <https://www.mfa.gov.tr/azerbaycan-ekonomisi.tr.mfa>
- TPE (t.y.). Patent Tescillerinin Türk Patent ve Marka Kurumu'na Başvuran Ülkelere Göre Dağılımı. <https://webim.turkpatent.gov.tr/file/9f99bdc3-a9e9-4158-a26f-6f6823eba156?download>
- TPE-Türk Patent Enstitüsü (2018) '2018 Faaliyet Raporu.' <https://www.turkpatent.gov.tr/TURK-PATENT/resources/temp/31D314B6-E387-4A2A-928B-D381F4CAB638.pdf;jsessionid=662C0200C4F8C439790E9101636160D1>.

- Trading Economics (n.d.). Credit rating. <https://tradingeconomics.com/country-list/rating> (Accessed: July 20, 2025).
- Turkicstates (n.d.). Türk Yatırım Fonu. <https://www.turkicstates.org/tr/partner-detay/turk-yatirim-fonu>
- UNECE (2024). Azerbaijan economic overview. <https://unece.org/sites/default/files/2024-08/Azerbaijan%20economic%20overview.pdf>
- Ünlü, A., Kabak, S. (2016), Türkiye ve Azerbaycan Ticaretinin Sürdürülebilirliği ve Ampirik Analizi. *Süleyman Demirel Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, CİEP Özel Sayısı, 962-985.
- Yanık, T. (2021, March 9). Teknopark İstanbul Azerbaycan’da yüksek teknoloji parkı kurulmasına destek olacak. *AA*. <https://www.aa.com.tr/tr/bilim-teknoloji/teknopark-istanbul-azerbaycan-da-yuksekteknoloji-parki-kurulmasına-destek-olacak/2169478>
- YTB- Yurtdışı Türkler ve Akraba Topluluklar Başkanlığı (2019) ‘YTB ve Azerbaycan Devlet İdarecilik Akademisi Arasında Eğitim İşbirliği Protokolü.’ <https://www.ytb.gov.tr/haberler/ytb-ve-azerbaycan-devlet-idarecilik-akademisi-arasinda-egitim-isbirligi-protokolu>.
- WIPO (2023a). Intellectual property statistical country profile 2023: Azerbaijan. <https://www.wipo.int/edocs/statistics-country-profile/en/az.pdf>
- World Bank (2023). GDP per capita (current US\$). <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD>
- World Bank (2024). Research and development expenditure (% of GDP). <https://data.worldbank.org/indicator/GB.XPD.RSDV.GD.ZS>
- World Bank (2025). GDP per capita (current US\$)-European Union. <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=EU>