ECIPE | EUROPEAN CENTRE FOR INTERNATIONAL POLITICAL ECONOMY

ECIPE Policy Brief – No. 04/2026

From Factories to Ideas: The New Map of Global Power

When trade is driven by ideas, data and innovation rather than goods, alliances – not geography – determine global power. The world is reorganising into "idea blocs."

Erik van der Marel, *Chief Economist ECIPE / Associate Professor ULB & College of Europe*

EXECUTIVE SUMMARY

- **Globalisation is not collapsing but transforming.** Rather than retreating, global economic integration is shifting from a system organised around physical goods and factories to one increasingly driven by intangible assets such as data, services, intellectual property, and knowledge-intensive collaboration.

- **Intangible flows are reshaping how integration occurs.** Unlike goods trade, these flows are largely weightless, collaborative, scale at near-zero marginal cost, and are far less constrained by physical distance, weakening the traditional link between geography and economic exchange.

- **Distance has been redefined from geographic to geopolitical.** In the intangible economy, cross-border exchange depends less on how far countries are apart and more on political trust, security alignment, and institutional compatibility, including shared norms around governance, data, and the rule of law.

- **Economic power is reorganising around "idea blocs."** Because intangible assets are harder to protect than goods, firms and investors increasingly concentrate collaboration among politically aligned countries with strong institutions, producing new groupings that surpass geography and reshape global alliances.

- **This shift demands a new framework for understanding globalisation.** Existing models cantered on supply chains and production networks cannot explain current patterns of integration, power, and cooperation; globalisation must instead be understood through the political economy of intangibles, institutions, and trust.

1. INTRODUCTION

Globalisation is widely declared broken, if not dead.[1] Trade wars, great-power rivalry, and fears that economic conflict will spill into geopolitical confrontation have eroded confidence in the liberal economic order. Yet what is unfolding is not the collapse of globalisation but its transformation. The world economy is shifting from one organised primarily by geography to one increasingly structured around geopolitical alignment.

This shift is not driven by Donald Trump's tariff wars or by U.S. efforts to decouple from China. It is rooted instead in the rise of an idea-based global economy in which access to knowledge matters far more than access to factories, and in which knowledge increasingly circulates among trusted partners. In every era, innovation runs ahead of policy, and today digital technologies are already redrawing the map of economic power and relations. As Western governments scale up efforts to reduce dependencies on authoritarian regimes such as China, the deeper reality is that the emerging configuration of the global economy is already doing much of that work on its own.

The world economy is becoming increasingly intangible.[2] Countries now exchange data, ideas, services, and intellectual property, and collaborate across borders in advanced technologies such as quantum computing. These flows are reconfiguring global trade relationships in the process. They are often invisible, non-storable, and network-driven. They rely on cutting-edge knowledge and offer vast economic potential to countries that can create, protect, and trade them.

Crucially, intangible flows are far less constrained by geography, challenging power structures long built around global supply chains for goods. For centuries, geography determined the patterns of trade in raw materials, commodities, and manufactured products and decisively conditioned how intensively countries could collaborate.

But the globalisation of intangible assets is much less sensitive to the friction of distance. Services, ideas, and technologies can be produced and traded digitally across borders at near-zero marginal cost, enabled by the global reach of the internet. In this economy, location matters less than connectivity. The result is a "weightless economy," in which physical proximity no longer anchors trade and the long-predicted "death of distance" is becoming an economic reality.

Yet distance has not disappeared; it has been redefined. In today's intangible economy, the main obstacle to cross-border exchange is no longer geography but geopolitical distance: the degree of political trust, security alignment, and institutional compatibility between countries.

In traditional goods trade, geography still matters. The farther apart countries are, the less they trade. For intangibles, that friction declines sharply. Physical distance has little effect on cross-

[1] Cook, E. (2025, April 6). Globalisation era dead since new tariffs, US ally says. Newsweek; Braw, E. (2024). Goodbye globalisation: The return of a divided world. Yale University Press.

[2] Haskel, J., & Westlake, S. (2018). Capitalism without capital: The rise of the intangible economy. Princeton University Press. See for a good review on the de-globalisation narrative: Evenett, S. (2022). What endgame for the deglobalisation narrative? Intereconomics, 57(6), 345–351.

border flows in areas such as quantum research or data exchange. Instead, geopolitical alignment becomes decisive. Trade in intangibles slows when countries diverge on foreign policy, security, or core norms governing the rule of law and rights.

These divergences, often captured by voting patterns in the UN General Assembly, signal deeper divides in political trust and institutional compatibility.[3] Moreover, their negative effects are amplified when countries lack strong domestic institutions to protect intangible assets. In the weightless economy, geopolitics, legal certainty, and institutional trust increasingly determine who collaborates, who trades, and who leads, rather than physical proximity.

Technologies such as the internet, cloud computing, and artificial intelligence have accelerated this shift from a tangible, industrial economy to one defined increasingly by intangible assets.[4] But technology alone did not drive the transformation. Market forces reinforced it. Firms and investors gravitated toward assets that could scale globally, depreciate slowly, and generate high returns. Today, most intra-corporate flows within multinational firms consist not of goods but of intangibles such as R&D, intellectual property, software, and brands.[5]

In this environment, value is increasingly tied to networks, data flows, and knowledge capital. Software, algorithms, and code can be deployed across borders in real time, while digital services scale at near-zero marginal cost. As a result, innovation driven by intangible flows is outpacing the policies governments have put in place to regulate markets or secure technological leadership.

As governments seek to reduce economic dependence on authoritarian regimes such as China, a geopolitical bifurcation of the global economy appears increasingly likely.[6] Yet paradoxically, intangible globalisation itself is already shifting the balance of economic power. Because intangible flows deepen fastest among politically aligned partners, the emerging global economy is taking shape around new groupings built on shared standards for technology, data, research, and trust. These "idea blocs" often transcend geography, operating in a largely borderless economic space.

In this new global order, the competitive frontier no longer lies in assembling production networks near regional hubs but in owning and orchestrating alliances that support the intangible infrastructure of global innovation. It is an order built on trust, intellectual property protection, the rule of law, and strong regulatory institutions.

---

[3] Bailey, M. A., Strezhnev, A., & Voeten, E. (2017). Estimating dynamic state preferences from United Nations voting data. Journal of Conflict Resolution, 61(2), 430–456.

[4] World Intellectual Property Organization, & Luiss Business School. (2025). World intangible investment highlights 2025. World Intellectual Property Organization. https://www.wipo.int/web-publications/world-intangible-investment-highlights-2025/en/world-intangible-investment-highlights-2025.html

[5] Atalay, E., Hortaçsu, A., & Syverson, C. (2014). Vertical integration and input flows. American Economic Review, 104(4), 1120–1148; Ramondo, N., Rappoport, V., & Ruhl, K. J. (2016). Intrafirm trade and vertical fragmentation in U.S. multinational corporations. Journal of International Economics, 98, 51–59.

[6] Gopinath, G. (2024, May 7). Geopolitics and its impact on global trade and the dollar [Speech]. Geopolitics and its Impact on Global Trade and the Dollar International Monetary Fund; Wolf, M. (2025, November 25). The fracturing of the world economy. Financial Times. https://www.ft.com/content/b5157c3c-568e-4a49-ba19-e8bda1fc7bec; Gopinath, G., Gourinchas, P.-O., Presbitero, A. F., & Topalova, P. (2025). Changing global linkages: A new Cold War? Journal of International Economics, 153, Article 104042.

2. OLD GLOBALISATION: WHEN GEOGRAPHY RULED THE WORLD

The law of gravity determined much of the earlier era of globalisation built on goods trade and cross-border supply chains. Newton's insight, adapted to international economics by Jan Tinbergen, remains one of the most powerful tools for explaining global trade patterns: the farther countries are from one another, the less they trade. Distance raises transport costs, making it more expensive for exporters and importers to move goods across borders.[7]

Distance also raises search costs. Firms entering unfamiliar markets face limited information, different regulations, divergent consumer preferences, and uncertainty about product quality or contract enforcement. These informational frictions make entering distant markets riskier and often deter trade altogether. Geography therefore also conditions a wider set of trade-related frictions. Countries with a common language, shared borders, overlapping time zones, or historical ties consistently trade more with one another than with distant partners.

At no other point in globalisation was the role of distance more decisive than in the twentieth century. From the mid-1980s onward, manufacturing multinationals began outsourcing production lines to low-wage countries. This shift was driven by the entry of China and Eastern Europe into the world economy, the spread of containerization and the internet, and the removal of regulatory barriers in services such as transport and finance. Collectively, these developments reduced transaction costs and eased the coordination of supply-chain logistics. Firms increasingly specialised in ever-finer tasks, generating trade in hundreds of intermediate inputs before final assembly.[8]

This process gave rise to international production hubs. European multinationals outsourced to Eastern Europe, China to its South and Southeast Asian neighbours, and the United States to its NAFTA partners. In each case, geography provided the organising principle of globalisation. Despite its name, globalisation remained regional in practice. Economists describe these regional production groupings as "Factory Asia," "Factory Europe," and "Factory North America," clusters anchored by a major economy and surrounded by neighbouring countries specialising in intermediate goods.[9]

Over time, trade within these blocs became even more concentrated. China and Japan in Asia, Germany and France in Europe, and the United States in North America emerged as centres that pulled in surrounding economies through tightly integrated value chains. These hubs were reinforced not only by proximity but also by the gravitational pull of large consumer markets, which encouraged firms to co-locate, exchange know-how, and deepen agglomeration economies.

---

[7] Head, K., & Mayer, T. (2014). Gravity equations: Workhorse, toolkit, and cookbook. In G. Gopinath, E. Helpman, & K. Rogoff (Eds.), Handbook of international economics (Vol. 4, pp. 131–195). Elsevier.

[8] World Bank. (2020). World Development Report 2020: Trading for development in the age of global value chains; Antràs, P. (2015). Global production: Firms, contracts, and trade structure. Princeton University Press; Antràs, P., & Chor, D. (2013). Organizing the global value chain. Econometrica, 81(6), 2127–2204.

[9] Baldwin, R. (2016). The great convergence: Information technology and the new globalisation. Harvard University Press.

As technology improved, the internet became nearly costless to use, and tariff and non-tariff barriers continued to fall. Globalisation entered a period of rapid expansion often described as hyper-globalisation.[10] During this era, trade stretched beyond regional boundaries as multinationals sourced intermediate inputs from increasingly distant markets, loosening the traditional constraints of geography, particularly in North America. The availability of global talent, cheaper travel, and more sophisticated management structures allowed firms to oversee remote affiliates with unprecedented ease. Geography therefore declined in importance during this phase, as the world economy moved from regional production hubs toward a more integrated "Factory World," even though most trade still took place within regions.

Since the global financial crisis, however, gravitational forces have reasserted themselves. Supply chains have become more regional as U.S. tariffs on China during President Trump's first term, the COVID-19 pandemic, and growing national security concerns exposed vulnerabilities associated with long-distance production. A surge in behind-the-border measures, including export controls and technology restrictions, has reinforced efforts to shield domestic industries. Policies aimed at increasing economic resilience through nearshoring or "friend-shoring" have made long-distance trade less attractive and further concentrated production geographically.[11]

In recent years, the United States has increasingly framed economic policy through the lens of national security. A central priority has been to prevent China and other authoritarian regimes from gaining strategic advantages from U.S. technological leadership, particularly in sensitive sectors with dual-use military applications such as semiconductors. This concern has intensified Washington's push to lead in artificial intelligence and has fuelled broader efforts to reduce reliance on the Chinese market.

The United States has also pressured allies to restrict advanced technology exports to China, as illustrated by the Dutch government's decision to limit ASML's sales of chipmaking equipment. Since 2018, the U.S. share of imports from China has steadily declined, accelerating economic decoupling between the world's two largest economies. Indirect dependence nonetheless persists, with many Chinese goods still reaching the U.S. market through third countries.[12]

As the pendulum of goods globalisation swings back toward regionalism, distance has regained its influence over trade. A convergence of technology restrictions, tariffs, and security concerns has made long-distance production riskier and more costly, prompting multinational firms to reorganise supply chains into more geographically concentrated blocs.

---

[10] Antràs, P. (2020). De-globalisation? Global value chains in the post-COVID-19 age (NBER Working Paper No. 28115). National Bureau of Economic Research.

[11] Global Trade Alert. (2025). G20 trade policy factbook: 2025 edition. Global Trade Alert. https://www.globaltradealert.org/

[12] Alfaro, L., & Chor, D. (2025). An anatomy of the great reallocation in US supply chain trade (NBER Working Paper No. 34490). National Bureau of Economic Research.

3. NEW GLOBALISATION: IDEAS FLOW FASTER THAN GOODS

As hyper-globalisation in intermediate goods began to slow, a new wave of globalisation took hold. Since the global financial crisis, flows of intellectual property, digitally deliverable services, and cross-border data have surged. At the same time, innovation in areas such as artificial intelligence, cloud computing, and quantum technologies has intensified new forms of international collaboration, including remote teams and global research partnerships, partly reflecting the large fixed costs involved in these activities. Unlike traditional goods, these idea-based flows are powered by digital technologies, reconfiguring how countries form economic ties.[13]

This new wave of globalisation is inherently borderless, allowing firms to exchange intangible assets faster than any physical good in history. Enabled by the global reach of the internet, services can be delivered instantly across continents with virtually no transportation costs. Data flows, for example, move continuously through global networks of cloud servers and undersea cables rather than along linear, bilateral routes. A video call between Japan and India may pass through data centres in Europe or the United States, depending on latency and speed rather than physical distance.

Advanced software tools also allow global talent to collaborate simultaneously across borders on tasks ranging from artificial intelligence architecture to bioinformatics and advanced engineering. Online platforms reduce language barriers and search frictions, enabling firms and individuals to find partners and clients abroad without face-to-face interaction.

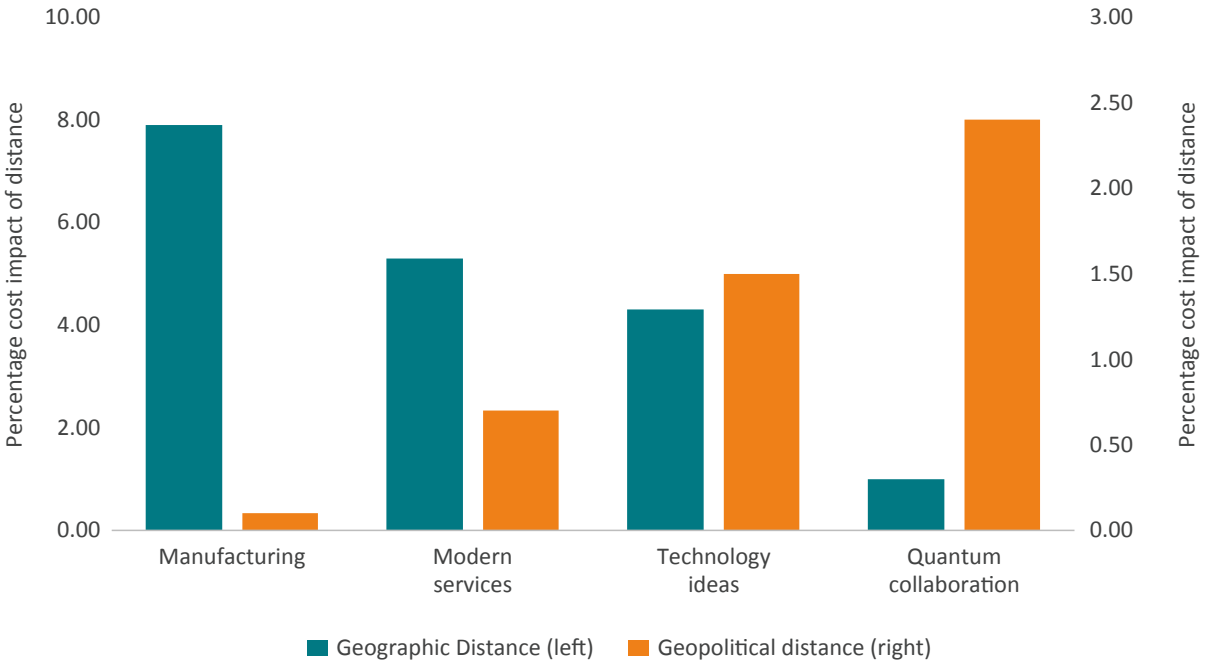
Ideas therefore travel across borders far more easily than physical goods. Consider a London-based firm that shifts its primary market from Doha to Tokyo, effectively doubling physical distance. For goods trade, such a shift would reduce trade volumes by roughly 40 percent. For digital and data-based activities, however, the effect is far smaller. Online services would decline by less than 30 percent, intellectual-property royalties by about 11 percent, and cross-border technology collaboration in fields such as quantum computing or artificial intelligence by roughly 10 percent. At the extreme, cross-border data flows are nearly distance-independent, falling by just 3 percent.[14]

The lesson is clear. As globalisation becomes more intangible, idea-based, and digitally delivered, it becomes less constrained by the gravitational forces that have long governed trade in goods, as Figure 1 shows.

[13] McKinsey Global Institute. (2022, November 15). Global flows: The ties that bind in an interconnected world [Discussion paper]. McKinsey & Company

[14] Author's own calculations based on results discussed in the annex.

FIGURE 1: COST OF PHYSICAL DISTANCE FADES WHILE THAT OF GEOPOLITICAL DISTANCE GROWS



Source: author's calculations using data from the WTO, USITC, CEPII and ECIPE. Notes: the percentage costs impact reflects a 10 percent increase in bilateral economic or geopolitical distance. See annex for further explanations.

Yet as distance loses influence over economic exchange, it also alters how countries create value in the global economy. Instead of operating within regional production blocs cantered on a dominant market, as during the peak of global value chains, firms increasingly compete and cooperate through globally distributed networks of talent, suppliers, and customers.

Data provide the clearest example of this transition, but modern services follow a similar pattern. Many professional firms operate within international partnership networks. Member firms pay affiliation fees, gain access to shared systems, and rely on the regulatory expertise of locally licensed partners abroad. Transactions such as fees, royalties, and service payments move through these networks rather than through traditional supply chains.

This shift is visible across much of the services economy. Law, consulting, engineering, design, and accounting increasingly rely on cross-border affiliation contracts that allow firms to serve clients in multiple jurisdictions without establishing a physical presence. Online platforms likewise operate through global service networks that match users, workers, and advertisers in real time. In research and development, multinational firms depend on cross-border teams collaborating across laboratories, campuses, and time zones.[15]

[15] OECD. (2017). The links between global value chains and global innovation networks: An exploration (OECD Science, Technology and Industry Policy Papers, No. 37). OECD Publishing.

In an economy where intangible assets matter more than physical inputs, globalisation is organised less by proximity than by connectivity.[16] The links that connect coders, researchers, service professionals, and data systems now define international competition far more than the traditional geography of factories and ports. Firms increasingly generate returns not by completing discrete transactions, but by operating within shared digital and knowledge infrastructures that enable collaboration across borders and continuous value creation.

The Pfizer-BioNTech COVID-19 vaccine illustrates this dynamic with unusual clarity. Few examples better capture how ideas-based globalisation functions, or how invisible many of its flows have become. The breakthrough mRNA technology originated with Katalin Karikó, a Hungarian-born researcher working in the United States. BioNTech, a German company specialising in immunotherapy, recognised its potential and pivoted rapidly toward vaccine development. Lacking the capacity to conduct large-scale trials or commercialise a vaccine globally, it partnered with Pfizer, drawing on the company's regulatory expertise, clinical-trial infrastructure, and global distribution capabilities. More than 43,000 volunteers from the United States, Europe, Latin America, Africa, and Turkey participated in trials, generating vast quantities of data that moved instantly across borders for analysis using cloud computing and artificial-intelligence tools.

This web of collaboration, linking scientists of different nationalities, firms with complementary capabilities, and data flows spanning continents, is what globalisation increasingly looks like today. It is driven not by container ships but by coders, researchers, intellectual property, digital services, and cross-border teams. Even Moderna, which licensed the same underlying mRNA technology, relied on a globally distributed research operation to develop a parallel vaccine.

4. THE RISE OF "GEOPOLITICAL DISTANCE" – AND THE DECLINE OF PHYSICAL DISTANCE

Yet even in a world where borders matter far less, distance has not disappeared; it has taken on a different form. In an economy driven increasingly by ideas rather than physical goods, institutional trust and political alignment now matter more than shipping costs. When countries collaborate on intangible assets such as data, intellectual property, research, and digital services, they must be confident that a partner's security priorities will not undermine those exchanges. The risk is not logistical disruption but political interruption.

Foreign-policy preferences now influence international markets more directly than ever by signalling which partnerships are stable enough to sustain long-term cooperation. Where political convergence exists, collaboration can proceed smoothly. Where it does not, even highly capable partners struggle to work together. The possibility of strategic retaliation or abrupt policy shifts introduces an unavoidable layer of geopolitical uncertainty.

These pressures are especially acute in sectors central to national power, most notably technology. The intensifying rivalry between the United States and China over artificial intelligence,

[16] World Trade Organization. (2019). World Trade Report 2019: The future of services trade. World Trade Organization.

semiconductors, quantum computing, and biotechnology illustrates how geopolitical competition can quickly reconfigure the organisation of global innovation.[17] As geopolitical distance widens, meaning countries' foreign-policy orientations diverge, the risk of fractured cooperation rises accordingly.

Intangible flows are far more vulnerable to geopolitical distance than traditional trade in goods. Advanced technologies depend on collaboration, and such cooperation is inherently fragile. Partners must share knowledge and data at the outset, expose proprietary methods and services, and jointly develop ideas whose value emerges only through mutual contribution. These exchanges create opportunities for appropriation and raise the cost of failure.

Once shared across borders, knowledge is extremely difficult to recover. Because the gains from collaboration must be divided through a bargaining process conditioned by each actor's leverage, asymmetries in interdependence heighten risk. The same logic applies to licensed technologies.[18] A licensee may continue to profit even after violating an agreement, while the licensor bears most of the loss. When geopolitical tensions overlay this fragile arrangement, the potential for disruption multiplies.

These vulnerabilities do not apply to the same extent in goods trade. Physical products reveal far less about underlying technologies, and terminating a contract rarely entails catastrophic loss. Buyers and sellers usually have alternative suppliers or markets. Bargaining power is therefore more evenly balanced, and exposure to strategic risk is lower. Technologies embodied in goods are also easier to protect through contracts than the intangible, easily transferable assets that dominate today's knowledge economy.

As a result, the primary constraint on cross-border exchange is no longer physical distance but geopolitical distance, defined by the degree of political trust and security alignment between countries. As intangible flows become more sensitive to political considerations, their dependence on geography diminishes, as shown in Figure 1.

Political trust, however, does not arise on its own. It is built through institutional compatibility between countries. Just as high-quality ports, roads, and customs systems facilitate trade in goods, strong and interoperable institutions enable cooperation in intangibles.[19] Robust protections for intellectual property and source code, reliable contract enforcement grounded in the rule of law, and trusted data-governance frameworks all help reduce the strategic risks that can derail collaboration in a knowledge-based economy.

These institutional foundations reinforce political alignment rather than substitute for it. When legal and regulatory systems are compatible, political preferences are more likely to converge, making long-term cooperation in idea-based sectors both viable and secure.

---

[17] Kahl, C. H. (2025, January 17). America is winning the race for global AI primacy – for now. Foreign Affairs.

[18] Lam, L. C., & Santacreu, A. M. (2025). Technology, geopolitics, and trade (Federal Reserve Bank of St. Louis Working Paper No. 2025-029). Federal Reserve Bank of St. Louis.

[19] Haskel, J., & Westlake, S. (2024). Restarting the future: How to fix the intangible economy. Princeton University Press.

Where domestic institutions are weak, the negative effects of geopolitical distance become far more pronounced. Countries with poor intellectual-property protection, unreliable contract enforcement, or weak data-governance regimes experience roughly twice the adverse impact of geopolitical distance on intangible trade.[20] Fragile institutional environments amplify fears of political disruption and raise doubts about partners' capacity or willingness to uphold commitments. The result is greater asymmetry between collaborators and sharply reduced returns from exchanging intangible assets.

As the guiding principle of globalisation shifts from efficiency toward reliability, political alignment increasingly determines which countries can share technology, data, and ideas. Data cannot move freely to adversaries when personal protection cannot be guaranteed. Nor can frontier technologies be easily shared, since collaboration in these areas requires common norms, mutual confidence, and a secure operating environment.

This also means that geographic proximity no longer ensures partnership. A nearby country may be an unreliable collaborator, while a politically aligned partner on the other side of the world may be far better suited for knowledge-intensive exchange. What ultimately matters is whether countries can build institutional relationships strong enough to support collaboration at a distance. These relationships rest on credible rules, trusted governance, and confidence that shared technologies and data will not be turned against those who provide them.

5. THE IDEAS SLOWDOWN IN THE WEST RAISES THE STAKES

For advanced economies that increasingly rely on ideas rather than factories, the need for trusted collaboration and exchange in intangible assets has become more urgent. This is not because good ideas are plentiful, but because they are becoming harder to find.

For more than two decades, most advanced economies have struggled with sluggish productivity growth. For years, the dominant economic view held that expanding a country's stock of knowledge would reliably lift its growth trajectory by generating new ideas. Add more researchers to laboratories, raise firms' R&D spending, upgrade human capital, and growth would follow. This logic, formalised in the work of Nobel laureate Paul Romer, treated ideas as the ultimate engine of prosperity: non-rival, endlessly replicable, and capable of scaling without limit. In theory, the more ideas an economy produced, the faster living standards would rise.[21]

Since the early 2000s, however, this relationship has weakened. Even as countries expanded their R&D workforces and increased the share of researchers in the labour force, growth rates stagnated or declined. In practice, ideas are becoming harder to discover. Whether in semiconductors, agriculture, or medical research, firms must now invest far more in research to achieve modest

[20] Author's own calculations based on results discussed in the annex.

[21] Romer, P. M. (1990). Endogenous technological change. Journal of Political Economy, 98(5, Part 2), S71–S102.

advances in output.[22] Research productivity has fallen across much of the modern economy even as research effort has intensified. At the very least, advanced economies have struggled to translate a growing stock of knowledge into higher overall growth.[23]

As the stock of knowledge expands, managing it has also become more difficult. Societies are increasingly challenged by the sheer volume of new information produced across disciplines; a phenomenon scholars describe as the "burden of knowledge." [24]

This burden extends well beyond a handful of frontier technologies or formal R&D settings. It is visible across advanced economies, particularly in fields central to technological progress. Mastering a larger body of existing knowledge requires longer periods of education and training, raising the cost for each successive generation of researchers to reach the frontier.[25] The time spent absorbing prior knowledge reduces the capacity for breakthrough innovation, further weakening the ability of economies to turn knowledge accumulation into sustained growth.

In combination, these trends have pushed firms to look beyond their own borders for new ideas. With domestic innovation slowing, international knowledge sourcing has become a strategic necessity. Firms increasingly specialise in narrower segments of technological activity while relying on partners abroad to focus on complementary tasks. No firm, and often no country, can do everything on its own.[26]

As a result, national innovation systems now depend less on self-contained domestic research environments and more on cross-border comparative advantages. Companies are also assembling larger and more international research teams that combine distinct areas of expertise.[27] At the technological frontier, where the burden of knowledge is greatest, no single researcher, firm, or country can master every domain. Turning outward has therefore become essential to sustaining innovation.

As ideas become scarcer and innovation more complex, firms are increasingly compelled to seek partners abroad for exchange and collaboration. But they will do so only where institutions credibly protect intangible assets. In this context, trusted frameworks for cross-border collaboration are no longer a technical regulatory concern. They are a source of competitive advantage. That growing premium on institutional trust is beginning to reorganise globalisation itself.

---

[22] Bloom, N., Jones, C. I., Van Reenen, J., & Webb, M. (2020). Are ideas getting harder to find? American Economic Review, 110(4), 1104–1144.

[23] Fort, T. C., Goldschlag, N., Liang, J., Schott, P. K., & Zolas, N. (2025). Growth is getting harder to find, not ideas (CES Working Paper No. 25-21). Center for Economic Studies, U.S. Census Bureau.

[24] Jones, B. F. (2009). The burden of knowledge and the "death of the Renaissance man": Is innovation getting harder? The Review of Economic Studies, 76(1), 283–317.

[25] Jones, B. F. (2010). Age and great invention. Review of Economics and Statistics, 92(1), 1–14.

[26] Pearce, J. (2023). Idea production and team structure (Working paper). University of Chicago. https://jeremypearce.com/assets/pdfs/Pearce_ideaproduction_012023.pdf

[27] Forman, C. C., & van Zeebroeck, N. (2012). From wires to partners: How the Internet has fostered R&D collaborations within firms. Management Science, 58(8), 1549–1568.

6. THE WORLD IS FORMING "IDEA ALLIANCES" – THE NEW ARCHITECTURE OF POWER

The result is that knowledge scarcity is turning geopolitical alignment into a means of economic advantage. As innovation networks increasingly replace supply chains as the core infrastructure of global power, countries are reorganising cooperation around intangible assets rather than geography alone. In this new architecture of globalisation, trust determines who can share, co-develop, and commercialise the ideas that drive growth – not proximity.

These dynamics are giving rise to what might be called "idea alliances": coalitions of countries that deliberately align institutions, rules, and trust frameworks to enable the cross-border creation, sharing, and commercialisation of knowledge-intensive assets.

These alliances, or "idea blocs", govern the flow of data, research, and frontier technologies by reducing the risks inherent in knowledge sharing and by structuring control over the ideas that sustain economic and strategic power. Unlike trade blocs, which manage market access, idea alliances manage risk. That risk stems from sharing scarce, valuable, and politically sensitive knowledge. In this next phase of globalisation, countries will compete less for factories and more for access to ideas, and that competition will be organised through alliances built on trust.

In such a system, alignment matters more than proximity: a distant partner may be a more valuable collaborator than a nearby one embedded in a traditional supply chain. Data governance offers a clear illustration of how these alliances are taking shape. Countries' data-protection regimes increasingly align with one of three broad models – European, American, or Chinese – often regardless of their position in regional manufacturing networks (see Figure 2).[28]

Membership in "Factory Asia," for example, does not automatically translate into adherence to China's data rules: Cambodia and Thailand follow different regulatory paths. Nor do close manufacturing partners of the European Union necessarily adopt EU standards. Turkey and Egypt, despite deep trade ties with Europe through integrated supply chains, operate data-protection regimes more closely aligned with China's approach. Conversely, both Canada and Mexico, integral parts of "Factory North America", have adopted frameworks broadly aligned with the EU model.

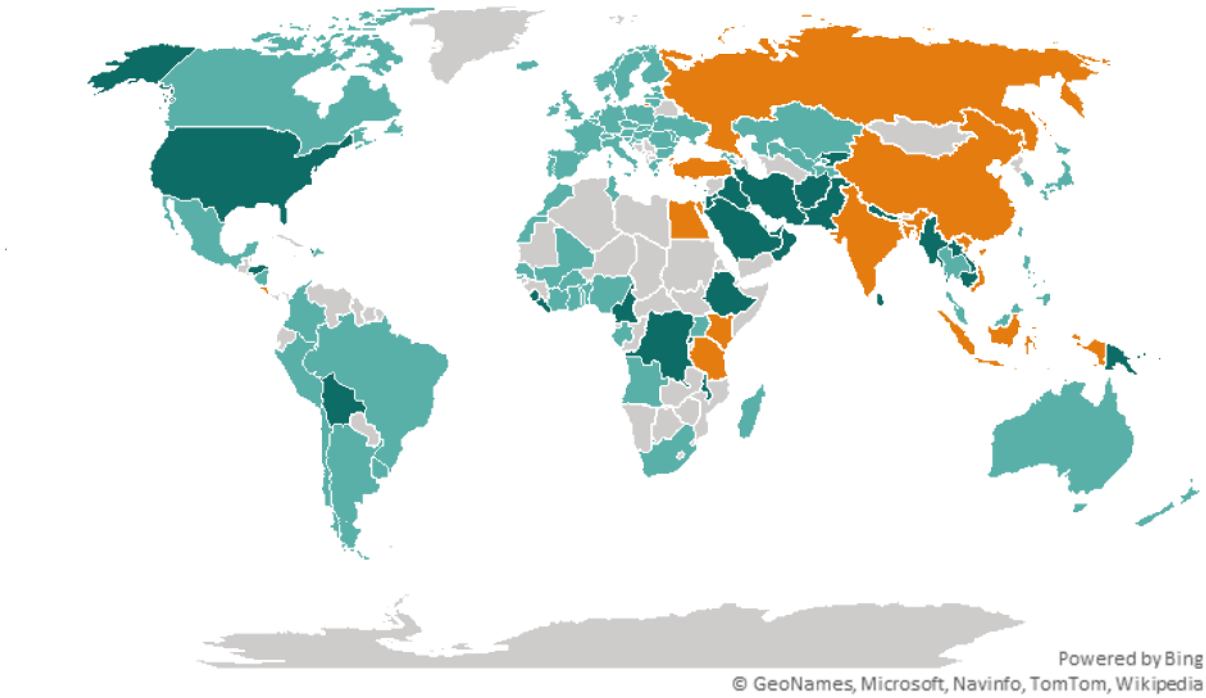
What data governance reveals, then, is not a narrow regulatory debate but the emerging architecture of globalisation itself. Across artificial intelligence, advanced semiconductors, and frontier research, international cooperation increasingly rests on shared rules, trusted institutions, and political alignment. U.S. cooperation with Japan and Korea illustrates this shift.[29] Through dedicated technology partnerships, the United States has committed to deepening joint research

[28] Ferracane, M. F., & van der Marel, E. (2025). Regulating personal data: Data models and digital services trade. Review of International Economics, 33(1), 243–264; Bradford, A. (2023). Digital Empires: The global battle to regulate technology. Oxford University Press.

[29] The White House. (2025, October 29). The United States signs Technology Prosperity Deals with Japan and Korea. https://www.whitehouse.gov/articles/2025/10/the-united-states-signs-technology-prosperity-deals-with-japan-and-korea/

in areas ranging from artificial intelligence to quantum computing, explicitly grounding that cooperation in shared standards and mutual trust with the two countries.

FIGURE 2: ALLIANCES OF DATA PROTECTION DO NOT FOLLOW FACTORY REGIONS



Source: author using data from Ferracane and van der Marel (2024). The American model is marked in dark green, the European model in light green, and the China model in orange.

Most global trade in ideas, measured through intellectual property payments, takes place among advanced economies that share one defining feature: robust systems for protecting and enforcing intellectual property rights. In fields such as quantum technologies, formal cooperation agreements link partners with deep and trusted research capacity, including the European Union and Japan, as well as the United States and South Korea. Likewise, trade agreements that contain binding provisions on source-code protection and data use are overwhelmingly concluded among countries with judicial systems capable of enforcing them.

These agreements and aligned policy frameworks do more than facilitate market access. They enable access to ideas, talent, intellectual property, and data – the core inputs of an intangible economy. More fundamentally, they transform trust from a political prerequisite into an economic asset. Because intangible assets are inherently mobile and vulnerable, countries increasingly prioritise institutional reliability over geographic proximity when choosing partners.

Under these conditions, compatibility in rules and institutions substitutes for the scale advantages once delivered by traditional trade agreements, marking a shift from cost-driven integration toward trust-based economic alignment. As a result, these arrangements increasingly span continents rather than reinforce traditional regional blocs.

This shift is already reconfiguring global competition. In an economy driven by intangible assets, value creation increasingly depends on access to data, ideas, and intellectual property held beyond national borders. Countries that possess advanced intangible assets, and the legal and institutional frameworks needed to protect them, gain privileged entry into high-value networks of exchange.

Those that lack these capabilities are increasingly excluded, even when they are geographically proximate or deeply embedded in global manufacturing supply chains. Governments therefore face a strategic choice: whether to join a trusted framework for the exchange of ideas, and if so, which one. In this environment, legal compatibility, institutional trust, and shared rules increasingly determine who can collaborate, and who cannot.

That choice is not always straightforward, particularly for countries positioned between competing regulatory models rather than firmly anchored in one camp. Economies with high-trust institutions aligned with the Western alliance are likely to benefit most in the next stage of globalisation.

Despite recent transatlantic frictions, the European Union and the United States continue to rank among the world's strongest systems of rule of law, regulatory enforcement, and accountability. These are foundations that support unparalleled levels of bilateral investment in intangible and idea-based activities. Although governance quality has shown signs of backsliding on both sides of the Atlantic, both partners have demonstrated a capacity to bridge differences, as illustrated by the recent adoption of the EU–U.S. Data Privacy Framework.

This dynamic also creates opportunities for countries that are institutionally strong, even if they sit outside the core Western alliance. In an idea-based global economy, regulatory alignment matters far more than location, and geographic proximity offers diminishing advantages. Countries such as the United Arab Emirates and Qatar, though not formally aligned with the Western bloc, score far closer to Western economies on measures such as the rule of law and regulatory quality than do many geographically nearer powers. By contrast, Mexico, traditionally part of the North American manufacturing base, exhibits institutional governance characteristics closer to China's than to those of most Western economies.[30]

Together, these cases point to a broader transformation. In an era of idea-based globalisation, choices about trust, legal compatibility, and shared rules increasingly shape countries' economic opportunities and strategic partnerships, much as tariff preferences and market access once did. States that align their institutions to participate in trusted frameworks for data, technology, and knowledge exchange gain privileged access to the ideas that drive growth. Those that do not risk being sidelined, deepening fragmentation in the global economy along geopolitical lines.

[30] Author's own calculations based on results discussed in the annex.

REFERENCES

Alfaro, L., & Chor, D. (2025). An anatomy of the great reallocation in US supply chain trade (NBER Working Paper No. 34490). National Bureau of Economic Research.

Antràs, P. (2015). Global production: Firms, contracts, and trade structure. Princeton University Press;

Antràs, P. (2020). De-globalisation? Global value chains in the post-COVID-19 age (NBER Working Paper No. 28115). National Bureau of Economic Research.

Antràs, P., & Chor, D. (2013). Organizing the global value chain. Econometrica, 81(6), 2127–2204.

Atalay, E., Hortaçsu, A., & Syverson, C. (2014). Vertical integration and input flows. American Economic Review, 104(4), 1120–1148.

Bailey, M. A., Strezhnev, A., & Voeten, E. (2017). Estimating dynamic state preferences from United Nations voting data. Journal of Conflict Resolution, 61(2), 430–456.

Baldwin, R. (2016). The great convergence: Information technology and the new globalisation. Harvard University Press.

Bloom, N., Jones, C. I., Van Reenen, J., & Webb, M. (2020). Are ideas getting harder to find? American Economic Review, 110(4), 1104–1144.

Bradford, A. (2023). Digital Empires: The global battle to regulate technology. Oxford University Press.

Braw, E. (2024). Goodbye globalisation: The return of a divided world. Yale University Press.

Cook, E. (2025, April 6). Globalisation era dead since new tariffs, US ally says. Newsweek. https://www.newsweek.com/donald-trump-tariffs-uk-globalization-2055985

Evenett, S. (2022). What endgame for the deglobalisation narrative? Intereconomics, 57(6), 345–351.

Ferracane, M. F., & van der Marel, E. (2025). Regulating personal data: Data models and digital services trade. Review of International Economics, 33(1), 243–264.

Forman, C. C., & van Zeebroeck, N. (2012). From wires to partners: How the Internet has fostered R&D collaborations within firms. Management Science, 58(8), 1549–1568.

Fort, T. C., Goldschlag, N., Liang, J., Schott, P. K., & Zolas, N. (2025). Growth is getting harder to find, not ideas (CES Working Paper No. 25-21). Center for Economic Studies, U.S. Census Bureau.

Global Trade Alert. (2025). G20 trade policy factbook: 2025 edition. Global Trade Alert. https://www.globaltradealert.org/

Gopinath, G. (2024, May 7). Geopolitics and its impact on global trade and the dollar [Speech]. International Monetary Fund. https://www.imf.org/en/news/articles/2024/05/07/sp-geopolitics-impact-global-trade-and-dollar;

Gopinath, G., Gourinchas, P.-O., Presbitero, A. F., & Topalova, P. (2025). Changing global linkages: A new Cold War? Journal of International Economics, 153, Article 104042.

Haskel, J., & Westlake, S. (2018). Capitalism without capital: The rise of the intangible economy. Princeton University Press.

Haskel, J., & Westlake, S. (2024). Restarting the future: How to fix the intangible economy. Princeton University Press.

Head, K., & Mayer, T. (2014). Gravity equations: Workhorse, toolkit, and cookbook. In G. Gopinath, E. Helpman, & K. Rogoff (Eds.), Handbook of international economics (Vol. 4, pp. 131–195). Elsevier.

Jones, B. F. (2009). The burden of knowledge and the "death of the Renaissance man": Is innovation getting harder? The Review of Economic Studies, 76(1), 283–317.

Jones, B. F. (2010). Age and great invention. Review of Economics and Statistics, 92(1), 1–14.

Kahl, C. H. (2025, January 17). America is winning the race for global AI primacy – for now: To stay ahead of China, Trump must build on Biden's work. Foreign Affairs.

Lam, L. C., & Santacreu, A. M. (2025). Technology, geopolitics, and trade (Federal Reserve Bank of St. Louis Working Paper No. 2025-029). Federal Reserve Bank of St. Louis.

McKinsey Global Institute. (2022, November 15). Global flows: The ties that bind in an interconnected world [Discussion paper]. McKinsey & Company.

OECD. (2017). The links between global value chains and global innovation networks: An exploration (OECD Science, Technology and Industry Policy Papers, No. 37). OECD Publishing.

Pearce, J. (2023). Idea production and team structure (Working paper). University of Chicago. https://jeremypearce.com/assets/pdfs/Pearce_ideaproduction_012023.pdf

Ramondo, N., Rappoport, V., & Ruhl, K. J. (2016). Intrafirm trade and vertical fragmentation in U.S. multinational corporations. Journal of International Economics, 98, 51–59.

Romer, P. M. (1990). Endogenous technological change. Journal of Political Economy, 98(5, Part 2), S71–S102.

The White House. (2025, October 29). The United States signs Technology Prosperity Deals with Japan and Korea. https://www.whitehouse.gov/articles/2025/10/the-united-states-signs-technology-prosperity-deals-with-japan-and-korea/

Wolf, M. (2025, November 25). The fracturing of the world economy. Financial Times. https://www.ft.com/content/b5157c3c-568e-4a49-ba19-e8bda1fc7bec

World Bank. (2020). World Development Report 2020: Trading for development in the age of global value chains.

World Intellectual Property Organization, & Luiss Business School. (2025). World intangible investment highlights 2025. World Intellectual Property Organization. https://www.wipo.int/web-publications/world-intangible-investment-highlights-2025/en/world-intangible-investment-highlights-2025.html

World Trade Organization. (2019). World Trade Report 2019: The future of services trade. World Trade Organization.

Yotov, Y. V., Piermartini, R., Monteiro, J.-A., & Larch, M. (2016). An advanced guide to trade policy analysis: The structural gravity model. World Trade Organization.

TECHNICAL APPENDIX: EMPIRICAL BASIS FOR FIGURE 1

The empirical analysis underlying Figure 1 is based on standard gravity regressions of bilateral flows across four domains: goods trade, modern services, technology ideas, and quantum collaboration using the most recent gravity methodology.[31] The regressions are estimated on a cross-section of countries, with the primary objective of identifying the distance elasticity associated with each type of flow. The regressions follow the approach taken by Lam and Santacreu (2025) to assess the impact of geopolitical distance interacted with domestic institutions on the outcome variables.

In addition to measures of geographical and geopolitical distance, the specifications control for a standard set of trade-cost variables, including common language, shared borders, historical colonial ties, common legal origin, membership in the World Trade Organization and the European Union, and the presence of regional trade agreements covering goods and services. The estimated coefficients on geographical and geopolitical distance are used to calculate the percentage cost effects reported in Figure 1. Consistent with the empirical trade literature, both distance measures yield negative coefficients, indicating higher trade costs and lower bilateral exchange as distance increases.

To assess the role of institutions, geopolitical distance is interacted with a composite measure of institutional quality. This index is constructed as the average of the six governance indicators from the World Bank's Worldwide Governance Indicators. The results show that stronger institutional quality amplifies the negative effect of geopolitical distance, effectively doubling its estimated impact. These findings are robust across alternative specifications and samples and are consistent with existing evidence in the literature on goods trade. All regressions include exporter and importer fixed effects, and standard errors are clustered at the exporter–importer pair level.

Data is drawn from publicly available sources, including the WTO, USITC, CEPII, and ECIPE. Goods and services trade data are taken from the USITC. Gravity-related variables are sourced from CEPII. Measures of geopolitical distance are drawn from an updated database based on Bailey et al. (2017). Trade in technology ideas, measured as charges for the use of intellectual property, is sourced from the WTO. Bilateral quantum collaboration data are drawn from the ECIPE Quantum Database.

Goods trade covers all manufactured products. Modern services include digitally deliverable services such as telecommunications, computer and information services, business and professional services, cultural services, and financial services. Technology ideas capture payments for the use of intellectual property, while quantum collaboration includes industry-related cooperation in quantum research and development and related activities.

Statements in this paper referring to the effects of doubling physical or geopolitical distance are derived directly from these regression estimates. Detailed regression results are available upon request.

---

[31] Head, K., & Mayer, T. (2014). Gravity equations: Workhorse, toolkit, and cookbook. In G. Gopinath, E. Helpman, & K. Rogoff (Eds.), Handbook of international economics (Vol. 4, pp. 131–195). Elsevier; Yotov, Y. V., Piermartini, R., Monteiro, J.-A., & Larch, M. (2016). An advanced guide to trade policy analysis: The structural gravity model. World Trade Organization.

TECHNICAL APPENDIX: DATA GOVERNANCE MODELS AND GLOBAL ALIGNMENT FOR FIGURE 2

Table A1 summarises three prevailing models of data governance, distinguishing how countries regulate cross-border data transfers and domestic data processing. These models capture different approaches to managing risk, trust, and state oversight in the global exchange of data and ideas and form the basis for the world map presented in Figure 2.

TABLE A1: GLOBAL DATA GOVERNANCE MODELS

Model	Core characteristics
Open	Minimal restrictions on cross-border data flows; reliance on firm-level accountability and self-regulation; limited comprehensive domestic data-protection frameworks.
Conditional	Legally binding, ex-ante conditions on data transfers and processing; strong domestic data-protection regimes; reliance on institutional and legal compatibility between partners.
Control	Extensive state oversight of data transfers and domestic processing; restrictions on cross-border flows; local processing requirements and government authorization tied to security concerns.

Source: Author based on Ferracane and van der Marel (2025)

The open model, led by the United States, places few formal restrictions on cross-border data flows and relies primarily on firm-level responsibility and ex post accountability. Countries following this approach emphasize flexibility and innovation, with limited centralized oversight of how personal data are processed domestically or transferred abroad.

The conditional model, pioneered by the European Union, is grounded in comprehensive data-protection frameworks that treat privacy as a fundamental right. Cross-border data transfers are permitted only when predefined legal and institutional conditions are met, such as regulatory adequacy or the use of approved contractual safeguards. This model prioritizes trust and legal compatibility as prerequisites for data sharing.

The control model, most prominently associated with China, closely links data governance to national security and state oversight. Under this approach, cross-border data transfers are tightly regulated or restricted, frequently requiring local data processing or prior government authorization following security assessments.

The world map classifies countries according to these three governance models, reflecting how differences in risk tolerance, institutional trust, and regulatory alignment influence participation in the global exchange of data and knowledge.

THE TECHNICAL APPENDIX: MEASURING INSTITUTIONAL STRENGTH

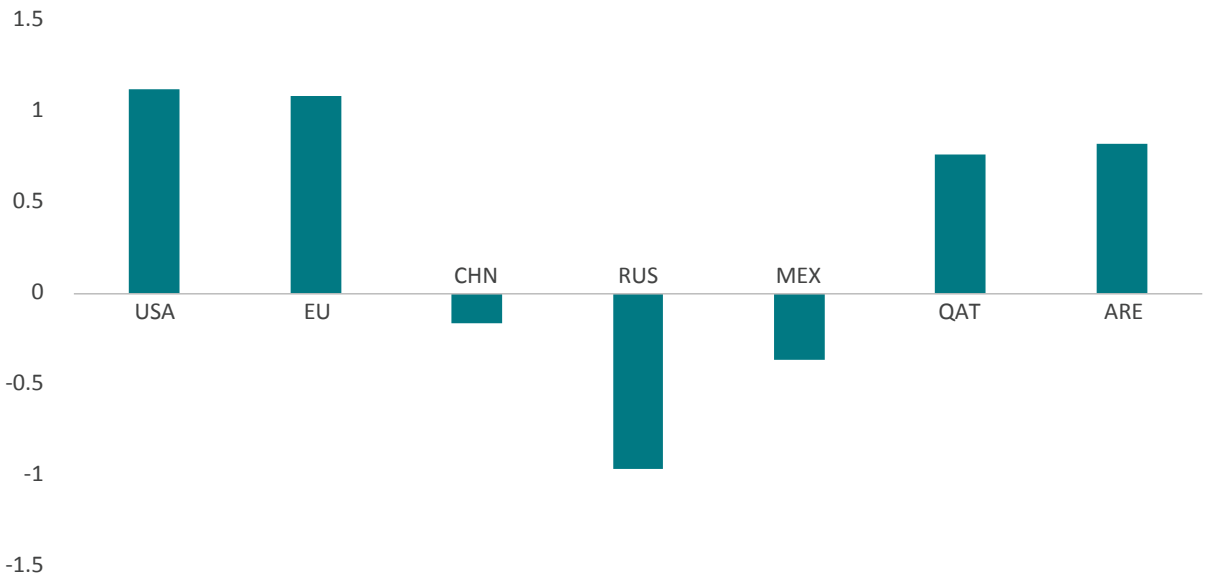
The assessment of institutional strength referenced in the article, including the relative positions of the European Union, the United States, China, Russia, Mexico, Qatar, and the United Arab Emirates, is based on a composite indicator constructed from the World Bank's Worldwide Governance Indicators (WGI). The index is calculated as the simple average of the six WGI dimensions: rule of law, regulatory quality, government effectiveness, control of corruption, political stability, and voice and accountability.

Each indicator is reported on a standardised scale ranging from −2.5 to +2.5, with higher values indicating stronger institutional quality. To facilitate cross-country comparison, institutional strength is expressed as the deviation of each country's score from the global average, which is −0.18 in the most recent data. For the European Union, the reported value represents the unweighted average across all 27 member states.

Consistent with the discussion in the main text, both the European Union and the United States rank well above the global average, reflecting strong systems of rule of law, regulatory enforcement, and accountability. China and Russia score below the global average, indicating weaker institutional performance across these dimensions. Mexico likewise falls below the global mean. By contrast, Qatar and the United Arab Emirates score above the global average, placing them closer to advanced economies in terms of institutional governance despite their geographic location.

The figure below illustrates these relative positions by plotting countries' institutional strength as deviations from the world average.

FIGURE A1: INSTITUTIONAL GOVERNANCE SCORES (2023), DISTANCE FROM WORLD AVERAGE.



Source: author using data from the World Bank. Notes: the year 2023 is latest year available.