TRENDS RESEARCH & ADVISORY
ترينـدز للبحـــوث والاستشـــارات

FUTURE TRENDS

Report

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CANADA VIRTUAL OFFICE

FUTURE TRENDS

Report

Future Trends Report, published in English and Arabic by TRENDS Virtual Office in Montreal, stands out as a distinctive publication dedicated to highlighting:

1. the most important forward-looking studies that aim to identify future trends, analyze various variables that may influence these trends, and determine the best future scenarios.
2. the most important applied studies that explore the application of knowledge, scientific theories, and information to solve current problems and overcome future challenges.
3. the most important illustrative and graphic forms that visually summarize significant studies, helping readers understand the trends and challenges of the future world.

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1 Prospective research

Globalization, Digital Transformation and the Unequal Future of Work in Europe

Hulsegge, G., Dhondt, S., & Van Den Tooren, M. (2026). Globalization and digital transformation: Are impacts on skills and inequality in four future scenarios converging? Innovation: The European Journal of Social Science Research.

In this paper, the authors examine how different trajectories of globalization and digital transformation could reshape labor markets, skills and socioeconomic inequality across the European Union by 2030. They use a strategic foresight approach to construct four plausible scenarios and assess their potential consequences.





The study combines recent academic literature, existing econometric analyses from the GI-NI project, expert workshops and an expert survey. Twenty-seven labor-market experts assessed major trends according to their likely effects on skills and inequality, while additional workshops were used to validate and refine the scenarios. The four scenarios are organized around two uncertainties: whether digital transformation accelerates or stagnates, and whether globalization expands or gives way to deglobalization.

The first scenario, "Empowered by Technology," combines rapid technological development with declining globalization. AI, automation and digital technologies increase productivity but also create significant disruption, particularly for workers performing routine tasks. The second, "Techtopia," combines accelerating digital transformation with continued globalization. This produces the strongest economic growth and productivity gains, but also the greatest increase in inequality between highly skilled and less-skilled workers. The third scenario, "Economic Minimalism," combines technological stagnation with deglobalization, resulting in economic contraction but potentially modest reductions in some inequalities. Finally, "Analog Alliance" combines continued globalization with limited technological advancement, producing slower economic change but opportunities for some less-developed regions to catch up.

Across the scenarios, the authors identify a common transformation in skill requirements. Digital, technical, analytical and communication skills become increasingly important, while workers will also need interpersonal abilities such as creativity, critical thinking, problem-solving and empathy. However, the capacity to acquire these skills is unevenly distributed.

An important contribution of the article is its distinction between convergence between regions and inequality within countries. Globalization and technological development can help poorer European regions catch up economically, yet the benefits may remain concentrated among highly skilled groups within those regions. The article concludes by emphasizing adaptive public policy. Continuous upskilling and reskilling, support for vulnerable workers and SMEs, occupational mobility and inclusive transition policies will be essential. Ultimately, the study demonstrates that the social consequences of globalization and digitalization are not predetermined: they depend heavily on how technological change interacts with economic integration and, crucially, on the policies used to distribute its benefits.



Digital and technical skills are increasingly important, alongside creativity, critical thinking, problem-solving and empathy.



The effects of globalization and digitalization depend on economic integration and how its benefits are distributed through policy.

Prospective research

Generative AI and the Future of Nuclear Crisis Decision-Making

Johnson, J. (2026). GenAI and synthetic foresight at the brink: The future of nuclear crisis decision-making. European Journal of International Security, 1–22.

Here, Johnson examines how generative AI could transform the way states anticipate, interpret and respond to future nuclear crises. The article introduces the concept of "synthetic foresight," referring to the use of generative AI to simulate adversary intentions, possible escalation pathways and alternative futures under conditions of uncertainty.





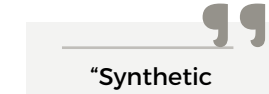
Johnson argues that this represents more than an improvement to existing intelligence or decision-support systems: GenAI may become an active force shaping how political and military leaders imagine and interpret future crises.

Johnson distinguishes synthetic foresight from established strategic practices such as scenario planning, wargaming, red teaming and early-warning systems. Traditional approaches generally encourage decision-makers to consider multiple possibilities while acknowledging uncertainty. Generative AI, by contrast, can rapidly produce large numbers of scenarios and assign apparently coherent interpretations to incomplete information. This creates the possibility that AI-generated forecasts could acquire an authority that exceeds their actual reliability.

The article identifies three major risks. First, GenAI may contribute to the normalization of low-probability but highly consequential escalation pathways. Repeatedly generating scenarios involving nuclear escalation could make such possibilities increasingly prominent in strategic planning and potentially alter perceptions of what constitutes a plausible crisis trajectory. Second, AI systems may produce misattributions of adversarial intent. Because algorithms can present complex assessments with an appearance of precision and certainty, ambiguous actions or signals might be interpreted as deliberate hostile behavior. Third, Johnson identifies the possibility of synthetic feedback loops, in which AI-generated predictions influence the behavior of decision-makers and adversaries, thereby changing the very circumstances that the AI was attempting to predict.

Johnson argues that foresight can become endogenous to the crisis: once governments act on an AI-generated scenario, adversaries may respond to those actions, potentially making the predicted outcome more likely. Synthetic foresight therefore risks transforming prediction into intervention and anticipation into action. GenAI could improve early threat detection, situational awareness and the speed and adaptability of strategic responses. The central problem is therefore not whether AI should be used, but how it should be integrated into high-stakes decision-making without displacing human judgement.

Johnson ultimately argues for maintaining human deliberation, uncertainty and critical interpretation at the center of nuclear crisis management. The article demonstrates that AI should not be understood simply as a forecasting tool: it is becoming an epistemic actor capable of influencing how strategic futures are imagined and acted upon.



"Synthetic foresight" uses generative AI to simulate adversary intentions, escalation pathways, and alternative futures under uncertainty.



GenAI could improve early threat detection, situational awareness and the speed and adaptability of strategic responses.

Prospective research

India's Arctic Future: Geopolitics, Strategic Choices and Competing Scenarios

Dauylbayev, A., Kamaljanova, T., Yelmurzayeva, R., & Ibragimova, G. (2026). India's role in the Arctic: Comparative scenarios and strategic foresight. Frontiers in Political Science, 8, 1758233.

In this paper, the authors examine how India's role in the Arctic could evolve amid climate change, geopolitical competition, resource interests and changing patterns of global governance. The article focuses on India as a non-Arctic state whose growing involvement reflects the expanding geopolitical importance of the region.





The authors argue that India's Arctic engagement is shaped simultaneously by environmental concerns, energy security, scientific diplomacy and its broader ambitions as an emerging global power. The authors employ scenario analysis and strategic foresight rather than attempting to predict one definitive future. Their methodology adapts established scenario-building approaches and identifies key drivers and uncertainties affecting India's Arctic policy. These include climate change, geopolitical transformation, energy and resource politics, international governance, and India's domestic institutional and economic capacity. The scenarios are cross-checked against India's 2022 Arctic Policy, existing literature and the experiences of other Asian observer states such as China, Japan and South Korea. The study develops three alternative scenarios. The first, Arctic Collaboration Deepens, presents a relatively cooperative future in which India expands its scientific diplomacy and becomes a more active participant in multilateral Arctic governance. India would strengthen its research activities, including through the Himadri research station and IndARC, contribute to international climate research and increase its participation in Arctic Council working groups. The second scenario, Polar Competition, imagines a more fragmented Arctic characterized by intensifying rivalry between major powers and declining effectiveness of multilateral institutions. Under these circumstances, India would adopt a more pragmatic strategy, particularly by cooperating with Russia to secure access to energy resources and transport routes such as the Northern Sea Route. The third scenario, Internal Constraints, sees India's Arctic ambitions weakened by domestic economic, institutional and security pressures. India would retain its formal observer status but become increasingly passive.

The authors ultimately argue that India's Arctic trajectory is not predetermined. Its future position will depend on the interaction between international geopolitical developments and domestic capabilities. Science and research emerge as particularly important instruments of India's Arctic influence, because scientific diplomacy can generate both knowledge and soft power. The article, therefore, demonstrates how strategic foresight can help policymakers move beyond linear assumptions and evaluate alternative geopolitical futures, their associated risks and the policy choices required to prepare for them.



India's Arctic engagement reflects environmental, energy, scientific, and geopolitical ambitions.



India's Arctic trajectory will depend on the interaction between international geopolitical developments and domestic capabilities.

Prospective research

Cold War 2.0: Geopolitical Fragmentation and Europe's Defense Readiness

Kancs, D. (2026). Cold War 2.0 and defense readiness. European Journal of Futures Research, 14, 13.

In this paper, d'Artis Kancs examines how a prolonged period of geopolitical confrontation could affect Europe's ability to defend itself and maintain societal resilience.





The study focuses on a hypothetical "Cold War 2.0" involving the CRINK grouping—China, Russia, Iran and North Korea—and asks what would happen if geopolitical tensions developed into a sustained low-intensity conflict accompanied by severe economic and trade fragmentation.

The analysis is situated within a changing European security environment marked by Russia's war against Ukraine, growing strategic competition with China, the possibility of reduced U.S. military engagement in Europe and increasing cooperation among CRINK countries. Kancs argues that contemporary security threats cannot be understood exclusively in military terms. Cyberattacks, disruption of critical infrastructure, supply-chain vulnerabilities, economic sanctions and trade restrictions increasingly blur the boundaries between economic competition and conventional warfare.

Methodologically, the article combines strategic foresight with quantitative economic modeling. Kancs constructs a worst-case scenario based partly on NATO's Strategic Foresight Analysis and Future Operating Environment exercises. The scenario assumes two major shocks: a complete cessation of trade between the Western alliance and CRINK countries and a full Chinese air and maritime blockade of Taiwan. These shocks are then introduced into an international, multisectoral macroeconomic model that incorporates defense industries and global supply chains.

The findings demonstrate that even a conflict that remains relatively "less kinetic" could seriously undermine European security. Disruptions to raw materials, intermediate goods and defense-related supply chains could constrain Europe's ability to expand military production. At the same time, if the United States redirected military resources toward the Indo-Pacific, European countries could face substantial capability gaps. The modeling suggests that replacing some redeployed U.S. capabilities could take years or even decades, with estimated replacement periods ranging from approximately 3.3 years for some ground systems to 19.4 years for space-based systems.

The article makes an important policy argument: preparedness cannot begin once a geopolitical crisis has already occurred. Kancs advocates gradual trade diversification and "de-risking" rather than waiting for an abrupt geopolitical shock. More broadly, the study demonstrates how futures research can be used as a practical policy tool: extreme scenarios allow governments to identify hidden dependencies, test institutional resilience and determine where investment is needed before vulnerabilities become critical.

Cyberattacks, infrastructure disruption, supply-chain risks, sanctions, and trade restrictions increasingly blur the line between economic competition and warfare.



Preparedness cannot begin once a geopolitical crisis has already occurred.

Prospective research

Mapping Possible Global Futures: The International Futures Model and the 2150 Horizon

Moyer, J. D., Hughes, B. B., Irfan, M., Solórzano, J., Petry, C. L., Xiong, Y., Hanna, T., Meisel, C. J., Sahadevan, D., & Sullivan, E. (2026). Broadly quantifying SSP elements for 188 countries to 2150 in International Futures. Nature Communications, 17, 7209.

This article develops an ambitious quantitative framework for exploring alternative long-term global futures. The authors expand the Shared Socioeconomic Pathways (SSPs) by projecting 188 socioeconomic indicators across 188 countries from 2024 to 2150.





The study addresses an important limitation of existing futures research: most SSP projections focus on a relatively small number of indicators and generally stop at 2100.

By extending projections to 2150 and integrating a much wider range of variables, the authors seek to provide a more coherent picture of how demographic, economic, political and social systems may interact over the very long term.

The research uses the International Futures (IFs) integrated assessment model, which allows relationships between different domains to be modeled simultaneously rather than treating them as independent systems. The authors operationalize the five SSP narratives, which represent alternative pathways for global development: sustainability, a middle-of-the-road trajectory, regional rivalry, inequality and fossil-fueled development. Rather than simply extrapolating current trends, the researchers translate the underlying assumptions of each narrative into quantitative interventions within the IFs model. This produces internally connected projections that reflect different combinations of economic development, inequality, governance, demographic change and international cooperation.

The results illustrate how dramatically global futures can diverge. Under SSP1, greater international cooperation, improved governance and inclusive development lead to declining inequality and stronger social investment. Under SSP2, historical trends broadly continue, with global population eventually declining after reaching a peak. SSP4 produces a much more unequal world, characterized by limited economic convergence, weaker improvements in education and greater conflict risks. By contrast, SSP5 assumes highly integrated global markets and rapid economic growth, alongside substantial improvements in health and education but also continued reliance on market-driven development.

Overall, the article makes a significant contribution to future studies, global development research and climate-related scenario analysis. Its greatest value lies in providing researchers and policymakers with a comprehensive dataset for examining alternative global trajectories well beyond the conventional 2100 horizon. Rather than predicting what will happen, the study provides a structured way to explore what could happen under different socioeconomic conditions, making it a valuable tool for anticipating risks, comparing policy pathways and understanding the interconnectedness of global futures.



Rather than predicting outcomes, the IF model offers a structured framework for exploring possible futures, anticipating risks, comparing policy pathways, and understanding global interconnections.

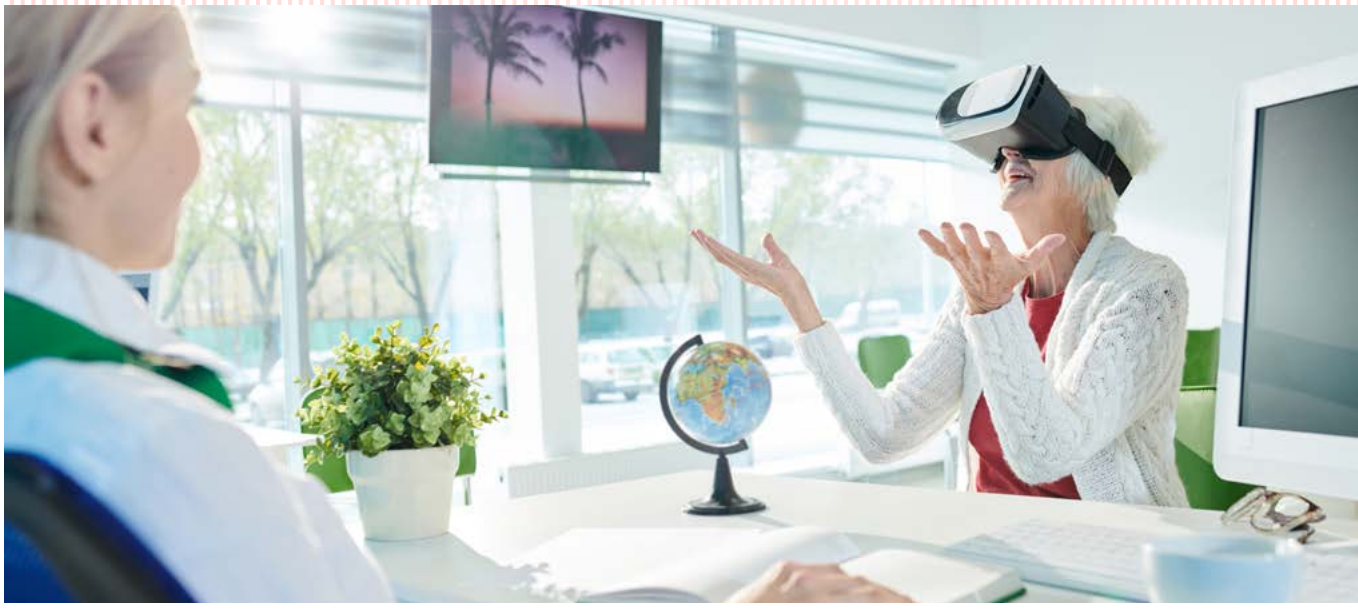
2 Applied research

Artificial Intelligence, Positive Youth Development and the Future of School-Based Intervention

Karaman, M. A., & Mahmud, A. (2026). Artificial intelligence-based positive youth development intervention protocol in school settings. Frontiers in Psychology, 17, 1901161.

In this article, the authors explore how generative AI could be incorporated into school-based programs designed to promote adolescents' positive development. The article proposes an eight-week, AI-supported intervention for high-school students aged 14–18, centered on self-regulation and school belonging.





The intervention is grounded in Positive Youth Development (PYD), which conceptualizes adolescents not primarily in terms of risks or deficits, but as active and adaptable individuals whose development is shaped by interactions between personal characteristics and their social environments. The authors argue that conventional school interventions may struggle to provide sufficiently frequent opportunities for adolescents to practice self-regulation and social skills in everyday situations. AI could potentially address this limitation by providing brief, repeated interactions without replacing human professionals. The proposed model combines two AI-based components with weekly human counseling. First, students receive daily motivational-interviewing-style "micro-nudges" of no more than approximately 40 words. Second, students can engage in short three-to-five-turn reflective conversations with the AI, either voluntarily or following a period of disengagement. These interactions focus on awareness, decision-making, emotional regulation, social cues, prosocial behavior and the application of skills in real-life situations.

The eight-week progression moves from awareness and recognition of emotions, through intentional choices and regulation strategies, to social connection, real-world practice, identity and values, and finally the transfer of skills to future situations. This progression is significant because the intervention does not treat AI as a therapist or counselor. Instead, the technology functions as a "dosage amplifier", increasing the frequency with which students encounter opportunities to practice developmental skills, while human counselors retain interpretive and safeguarding responsibilities.

Methodologically, the authors propose a feasibility-oriented mixed-method design rather than a conventional efficacy trial. The planned sample consists of approximately 40–60 students in mainstream high-school counseling settings. Quantitative measures assess self-regulation and school belonging before and after the intervention, while daily Ecological Momentary Assessment (EMA) captures changes in students' momentary regulatory experiences.

A central contribution of the article is therefore methodological and translational rather than evidentiary. It establishes a concrete framework for moving from theoretical discussions of AI in education toward an intervention that can be implemented and empirically tested in authentic school environments. Ultimately, the article presents AI as a potentially scalable tool for increasing opportunities for positive youth development while preserving human relationships, professional oversight and safeguarding at the center of school-based intervention.

Conventional school interventions may offer too few opportunities for adolescents to practice self-regulation and social skills in everyday situations.

AI could provide a scalable way to expand opportunities for positive youth development while preserving human relationships and professional oversight.

Applied research

Designing AI-Enabled Tourism Experiences for Children: The 7A Model in Tehran

Ziari, K., Dorostkar, E., & Derakhshan, A. (2026). Applying the 7A model to design AI enabled children's tourism experiences in Tehran. Discover Sustainability, 7, 785.

In this paper, the authors investigate how AI can be used to create more child-centered, engaging and educational tourism experiences in smart cities. The study addresses an important gap in tourism research: although AI is increasingly being incorporated into tourism services, children remain relatively overlooked as a specific group with distinct cognitive, emotional, developmental and safety needs.





The authors focus on Tehran as a case study and propose the 7A model as a practical framework for designing AI-supported tourism experiences that place children at the center.

The 7A model integrates seven dimensions: Awareness, Accessibility, Adaptability, Assurance, Autonomy, Aspiration and Affiliation. The framework brings together insights from several theoretical traditions, including Piaget's cognitive-development theory, Kolb's experiential learning theory, Self-Determination Theory, social learning theory and user-experience research. The underlying assumption is that children's tourism experiences should not simply provide entertainment or information. Instead, technology should encourage children to explore, learn, make choices, interact socially and develop a sense of autonomy while remaining safe and supported by adults.

The study uses a qualitative interpretivist approach and draws on four complementary sources of evidence: semi-structured interviews with families, participatory observation, children's creative outputs and an analytical checklist. The researchers used deductive–inductive thematic analysis and triangulated the different sources to identify recurring patterns. The findings reveal that Aspiration and Autonomy are the most prominent dimensions of children's AI-supported tourism experiences. Children responded particularly positively to opportunities for curiosity, discovery, independent decision-making and active participation. Technologies such as augmented reality and recommendation systems can therefore become valuable when they allow children to choose activities, discover information and interact directly with their surroundings.

The article's most important applied contribution is the transformation of the 7A model into a practical tool for tourism planners, app developers and policymakers. The authors suggest that municipalities could develop child-friendly smart tourism trails. However, they also highlight important barriers in Tehran, including weak technological infrastructure, uneven family digital literacy and uncertainties surrounding children's data protection.

Overall, the study demonstrates how AI can move beyond simply making tourism more efficient to potentially making it more participatory, educational and child-centered. Its broader contribution lies in showing how applied tourism research can combine AI, developmental psychology and smart-city planning to design experiences around children's actual needs rather than treating them as passive users of adult-oriented tourism technologies.



AI can be used to create more child-centered, engaging and educational tourism experiences in smart cities.



The 7A model comprises: Awareness, Accessibility, Adaptability, Assurance, Autonomy, Aspiration, and Affiliation.

Applied research

Strategic Knowledge Networks and the Construction of Geopolitical Power

Ewaida, S. S. (2026). American strategic knowledge networks and the global order: Narratives and competition. Frontiers in Political Science, 8, 1730872.

Ewaida examines here how American think tanks, policy institutes and elite advisory organizations contribute to the production and circulation of geopolitical narratives. This article argues that institutions such as Brookings, RAND, CSIS, Carnegie and the Atlantic Council should not be understood simply as neutral producers of policy expertise.





Instead, they form interconnected Strategic Knowledge Networks (SKNs) that can transform expert knowledge into political legitimacy and influence the way international conflicts and rivalries are understood.

Ewaida conceptualizes SKNs as broader epistemic infrastructures linking think tanks with policymakers, legislators, media organizations, advisory bodies and international partners. Rather than assuming that expertise automatically produces policy influence, the author is interested in the mechanisms through which particular interpretations of geopolitical events become accepted as legitimate or authoritative.

The study uses a qualitative comparative research design based on Critical Discourse Analysis (CDA). The empirical corpus consists of 104 primary documents produced between 2022 and 2023, including policy reports, congressional testimonies, expert interviews and media commentaries. The analysis examines material from major American strategic institutions and compares their discourse across the two cases. Ewaida identifies three principal mechanisms through which SKNs generate and circulate geopolitical legitimacy. The first is media legitimation, through which expert discourse is presented to wider audiences and particular interpretations of international events acquire moral authority. In the Ukraine case, for example, the "Frontline of Democracy" narrative framed the conflict as a broader struggle between democracy and authoritarianism. In discussions of China, the "Techno-Authoritarian Rival" narrative similarly positioned technological and geopolitical competition within a broader ideological framework.

The second mechanism is legislative translation: strategic recommendations produced by experts are incorporated into congressional and executive policy discourse. The third is transatlantic coordination, whereby American institutions collaborate with European counterparts to circulate common narratives and policy recommendations. The study identifies numerous joint reports involving organizations such as the Atlantic Council, Carnegie, CSIS, ECFR, GLOBSEC and Chatham House, illustrating how American strategic discourse can become embedded within wider allied policy networks.

Overall, the article's main contribution is to show that geopolitical power operates not only through military, economic or diplomatic capabilities but also through the production and circulation of knowledge. Strategic knowledge networks help determine how conflicts are interpreted, which policy responses appear legitimate and how particular understandings of the international order become institutionalized.



Think tanks operate as interconnected Strategic Knowledge Networks (SKNs) that turn expert knowledge into political legitimacy and shape interpretations of international conflicts and rivalries.

Applied research

The Economic and Humanitarian Costs of War: Comparative Evidence from Five Conflict-Affected Countries

Ayalew, B. B. (2026). An analysis of the economic and humanitarian consequences of war in selected conflict-affected countries. Discover Sustainability, 7, 757.

This article provides a comparative examination of the consequences of prolonged armed conflict in Sudan, Libya, Syria, Afghanistan and Yemen. Ayalew investigates how war affects not only human lives and displacement but also national economies, infrastructure, public services and long-term development.





The study is theoretically informed by Human Security Theory, Conflict Theory and Dependency Theory. This framework allows Ayalew to move beyond a conventional state-centered understanding of security and focus on the consequences of conflict for individuals and communities. Human security is particularly important because war creates multiple forms of insecurity simultaneously, including economic insecurity, food insecurity, displacement and restricted access to healthcare and education. Dependency theory is used to understand how prolonged conflict can destroy productive capacity and increase countries' dependence on international aid and external actors.

The research adopts a descriptive and analytical comparative design. Ayalew relies on secondary information from organizations including the United Nations, World Bank, International Monetary Fund and humanitarian agencies. Data covering the period from the early 1990s to 2024 are used to compare economic and humanitarian indicators across the five countries.

The findings reveal a pattern of economic collapse and humanitarian deterioration. Prolonged conflict destroys infrastructure, disrupts trade, reduces productive capacity and undermines human capital. The economic consequences include GDP contractions, inflation, unemployment and the collapse of foreign direct investment. Afghanistan, for example, experienced a dramatic economic contraction following the withdrawal of international support, while Syria's economy suffered enormous losses following years of civil war.

The humanitarian consequences are equally severe. The cases examined involve hundreds of thousands of deaths and millions of displaced people, alongside widespread destruction of healthcare, education and energy infrastructure. Syria and Sudan stand out for the exceptionally high levels of displacement, while Yemen experienced an enormous combined human and humanitarian toll. The author emphasizes that these consequences extend beyond immediate battlefield casualties: war produces poverty, food insecurity, loss of livelihoods and dependence on humanitarian assistance.

The article concludes with a strong policy-oriented argument for prevention and peacebuilding. Ayalew recommends inclusive, locally owned negotiations involving women, youth, displaced populations, civil society and local authorities, combined with humanitarian ceasefires, reconstruction, institutional reform and international support. Overall, the study demonstrates that war generates interconnected economic, humanitarian and developmental crises and argues that diplomatic conflict resolution and inclusive peacebuilding are considerably more sustainable than military confrontation.

War affects not only lives and displacement but also economies, infrastructure, public services, and long-term development.



War creates economic, humanitarian, and developmental crises, making diplomacy and inclusive peacebuilding more sustainable.

Applied research

Globalization and Youth Progress: Unequal Effects Across Middle-Income Countries

Imani, N., & Shahabadi, A. (2026). Globalization and youth progress: Heterogeneous effects across lower-and upper-middle-income countries. Research in Globalization, 100380.

This paper examines how globalization influences the developmental progress of young people in middle-income countries. Although globalization has been widely associated with economic growth and human development, considerably less attention has been given to its specific consequences for youth.





The authors, therefore, investigate whether economic, political and sociocultural globalization contribute equally to youth development and whether their effects differ between lower-middle-income and upper-middle-income countries.

The study conceptualizes youth development through the Youth Progress Index (YPI), a multidimensional measure designed to capture young people's social and economic conditions. Rather than reducing youth progress to employment or income, the index reflects broader dimensions of young people's opportunities and well-being. The authors distinguish between economic globalization, which includes international trade and economic integration; political globalization, involving international political cooperation and institutional connections; and sociocultural globalization, referring to the international circulation of ideas, information, culture and social interactions. The article uses quantitative comparative research based on dynamic panel-data models. The sample covers 27 lower-middle-income countries and 29 upper-middle-income countries over the period 2011–2022. Four Generalized Method of Moments (GMM) models are estimated to examine the relationship between overall globalization and its three dimensions and youth progress. The analysis also controls for important national-level factors, including per-capita income, government expenditure on education, unemployment and government effectiveness.

The results reveal that all dimensions of globalization have positive and statistically significant effects on youth progress in both groups of countries. However, the magnitude of these effects differs considerably. In lower-middle-income countries, overall globalization and particularly political globalization have the strongest estimated effects. This suggests that greater integration into international political and institutional networks may provide important opportunities for youth development in countries where domestic institutions and resources remain comparatively limited. In upper-middle-income countries, sociocultural globalization has the strongest estimated effect, highlighting the importance of international cultural exchange, information flows and social connections as countries become more economically developed.

Overall, the article makes an important contribution by showing that globalization has heterogeneous rather than uniform consequences for youth. The findings suggest that policymakers should not simply pursue greater global integration but should strengthen institutional quality, invest in education and human capital, reduce youth unemployment and build state capacity so that young people are able to benefit from globalization.

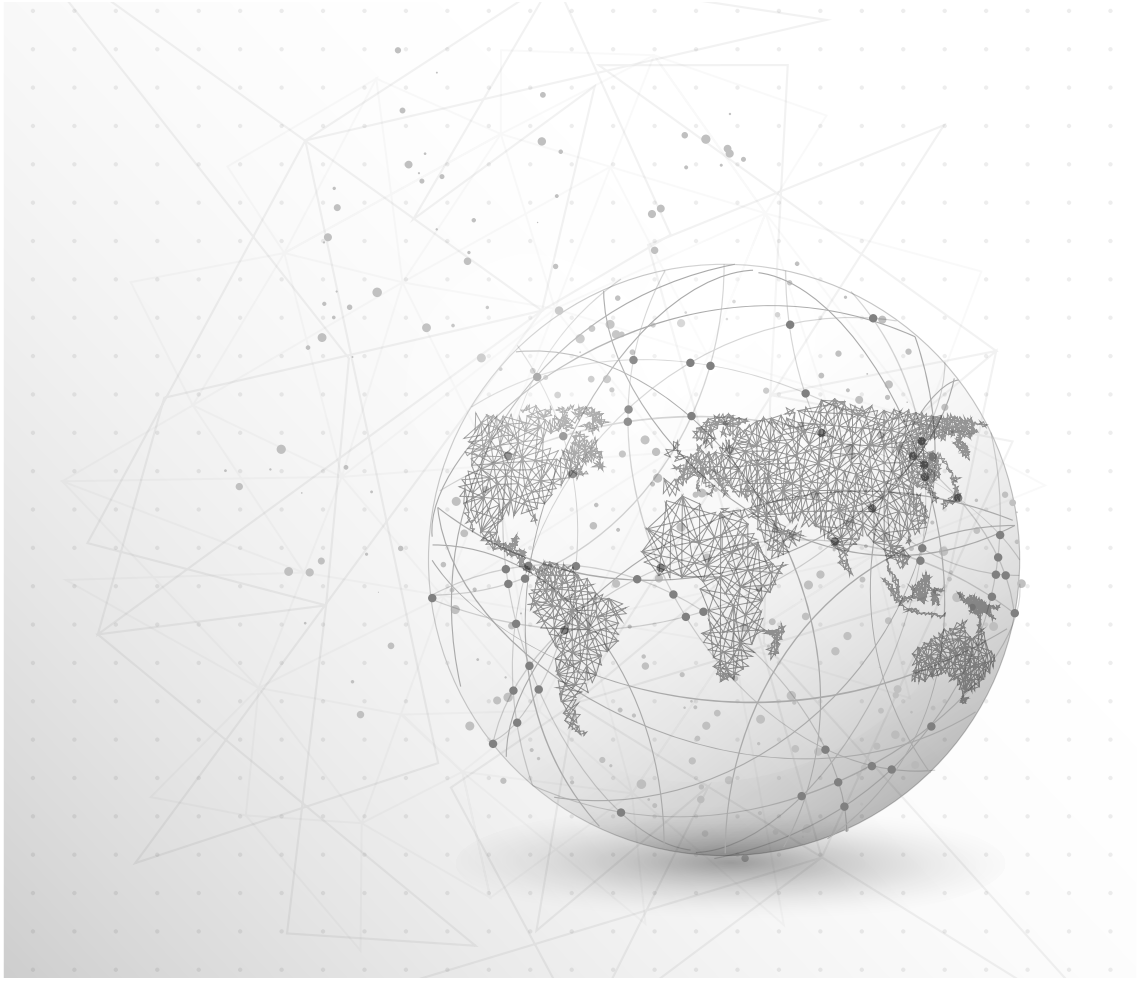


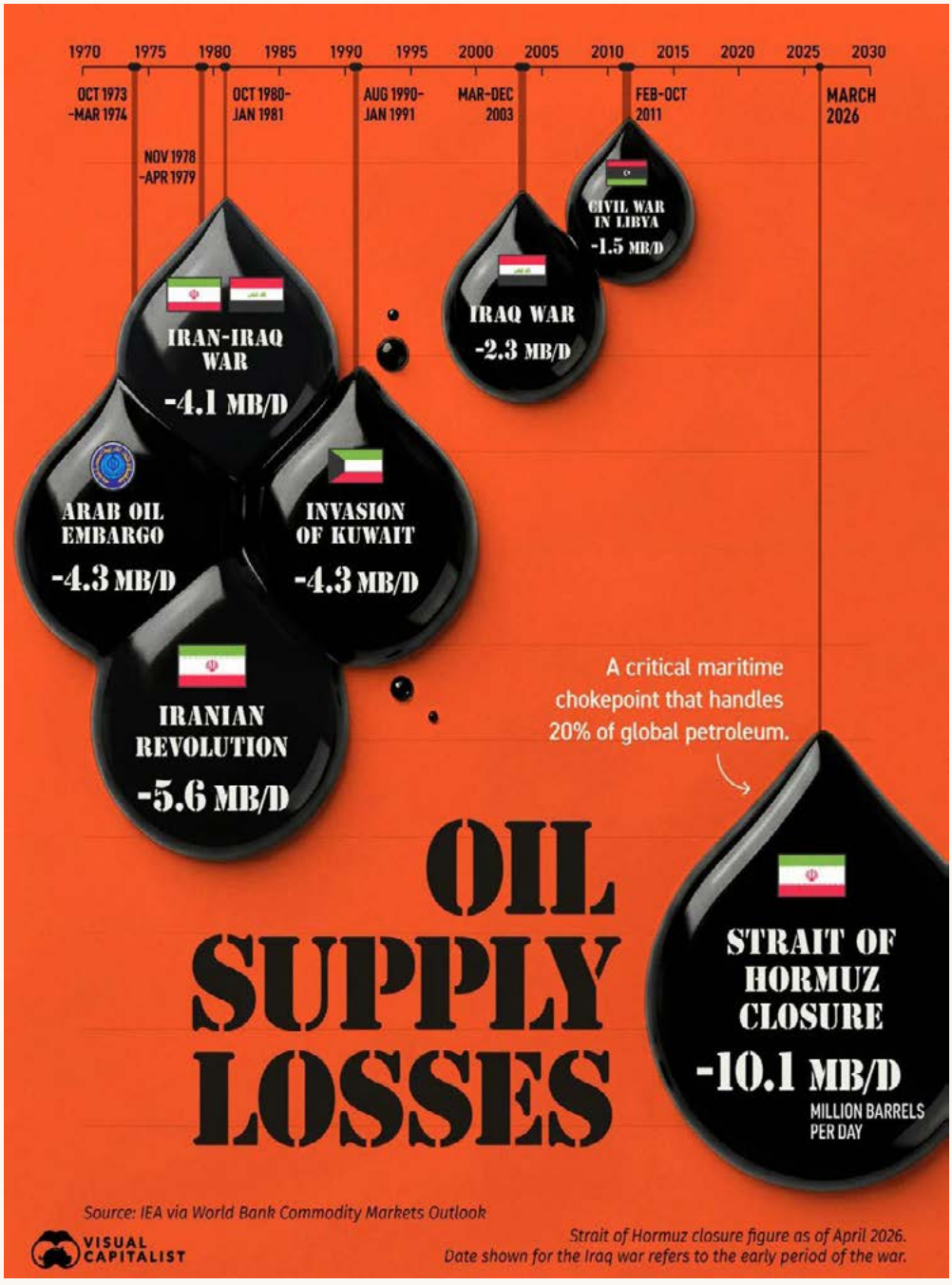
Beyond employment and income, the Youth Progress Index (YPI) captures young people's broader opportunities and well-being.

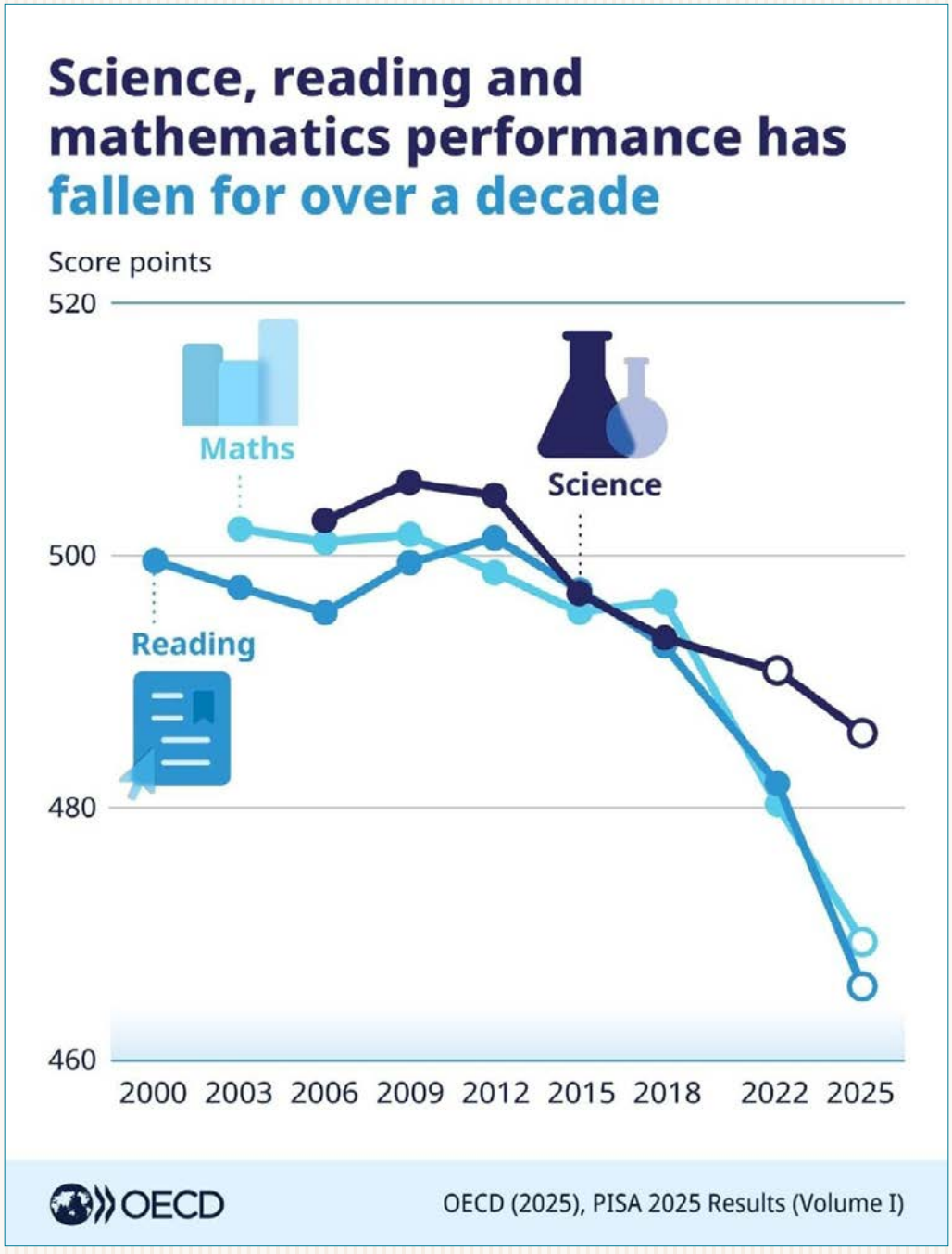


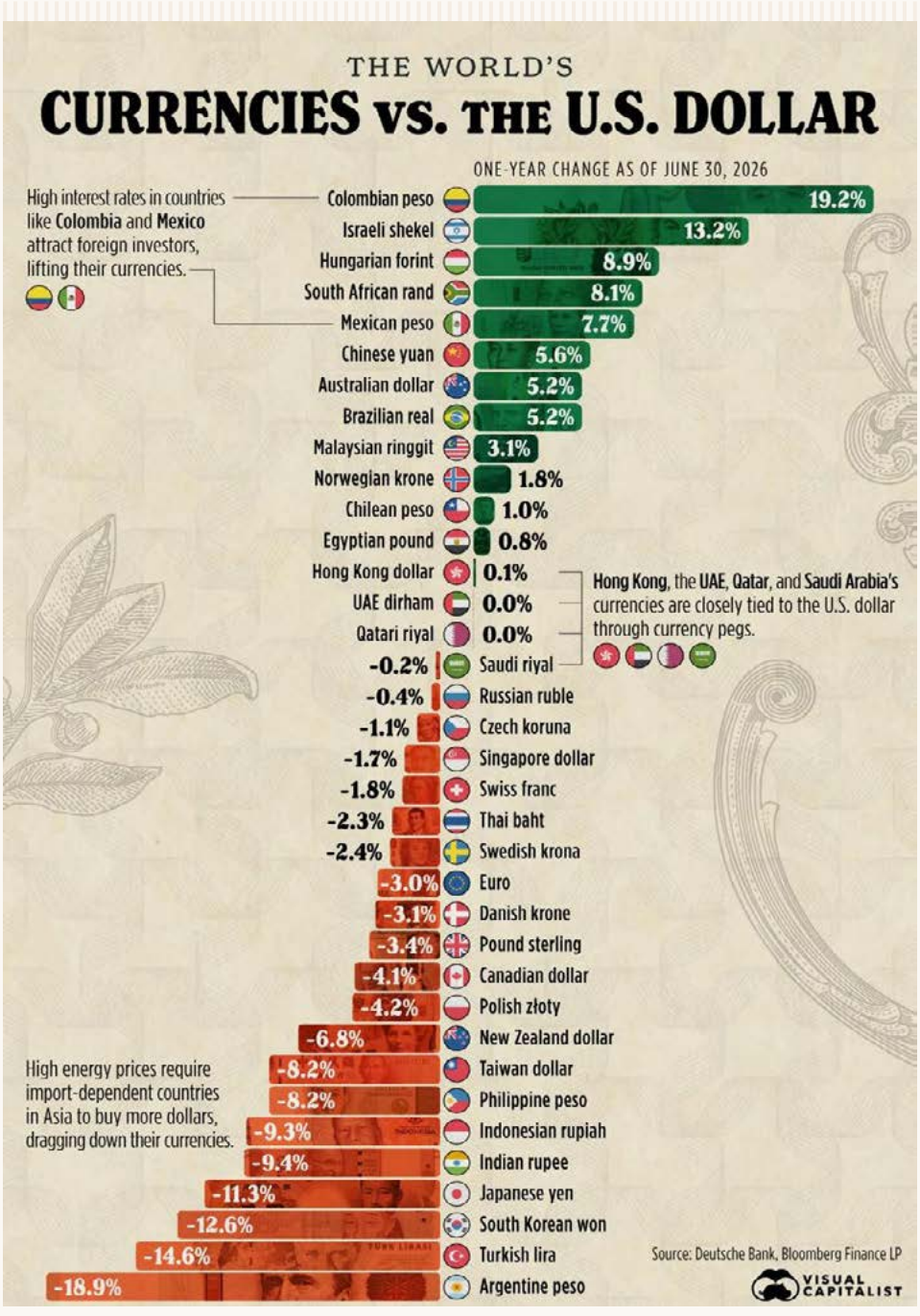
All dimensions of globalization have positive and statistically significant effects on youth progress.

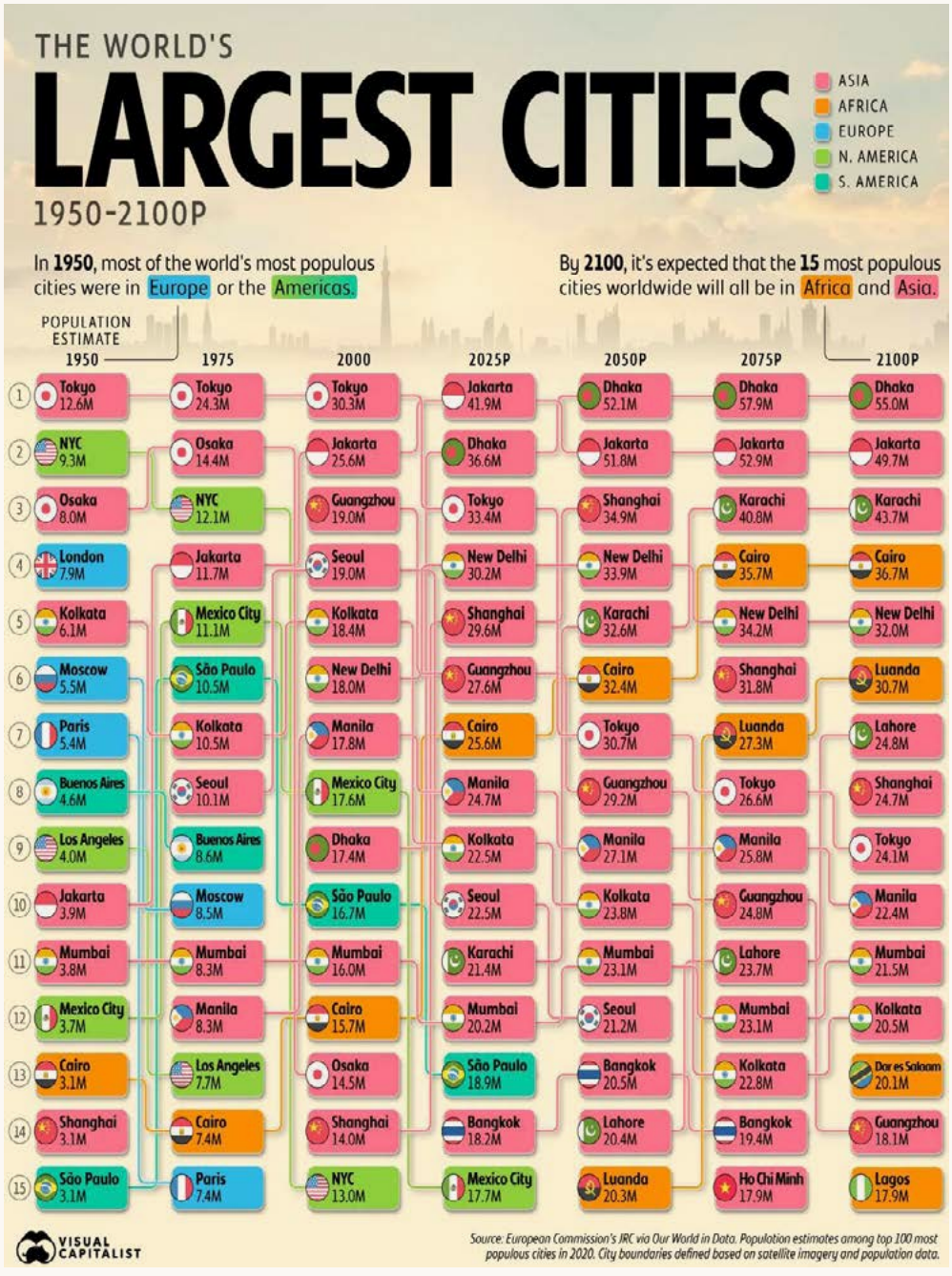
3 The future in numbers

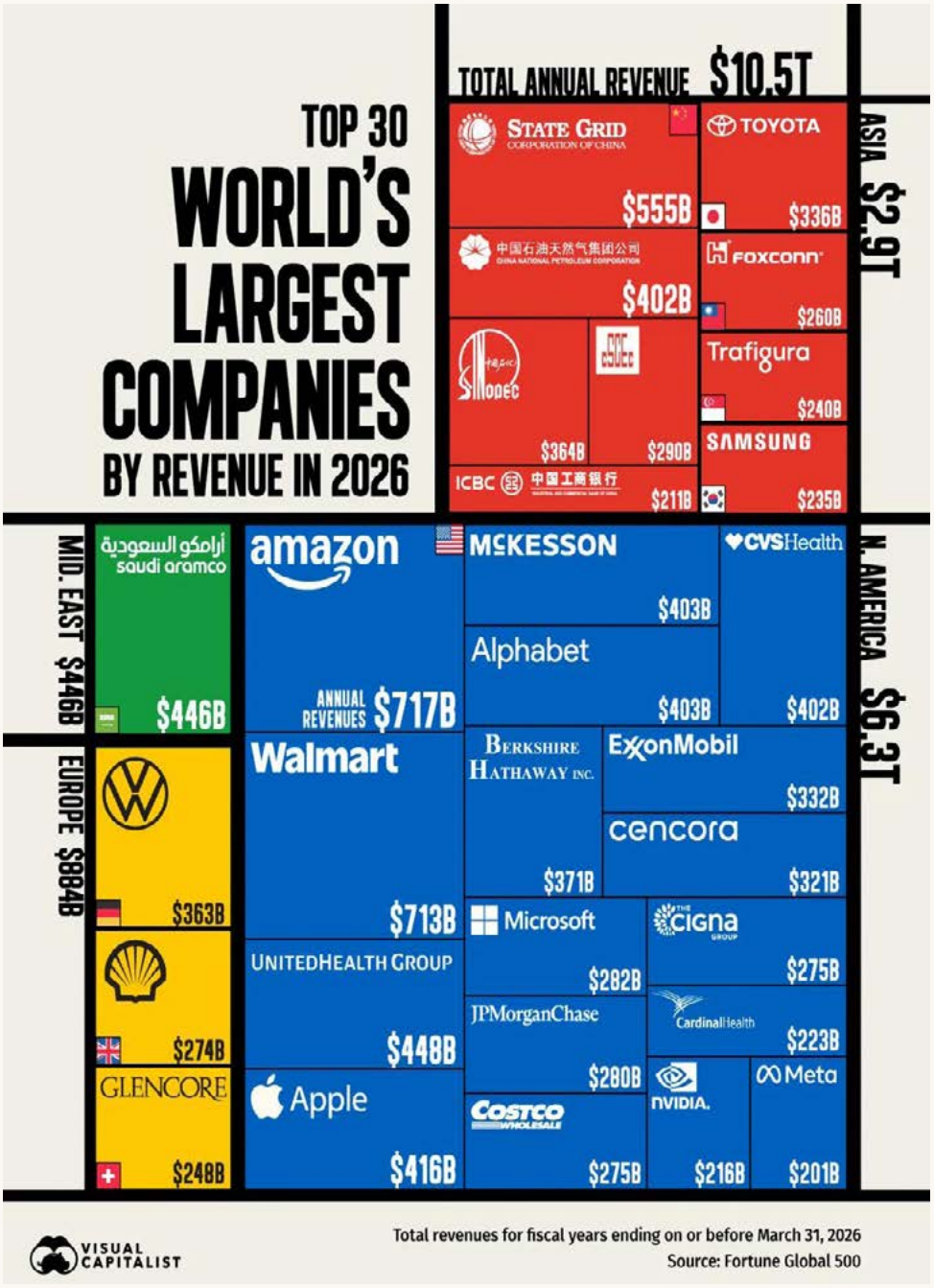


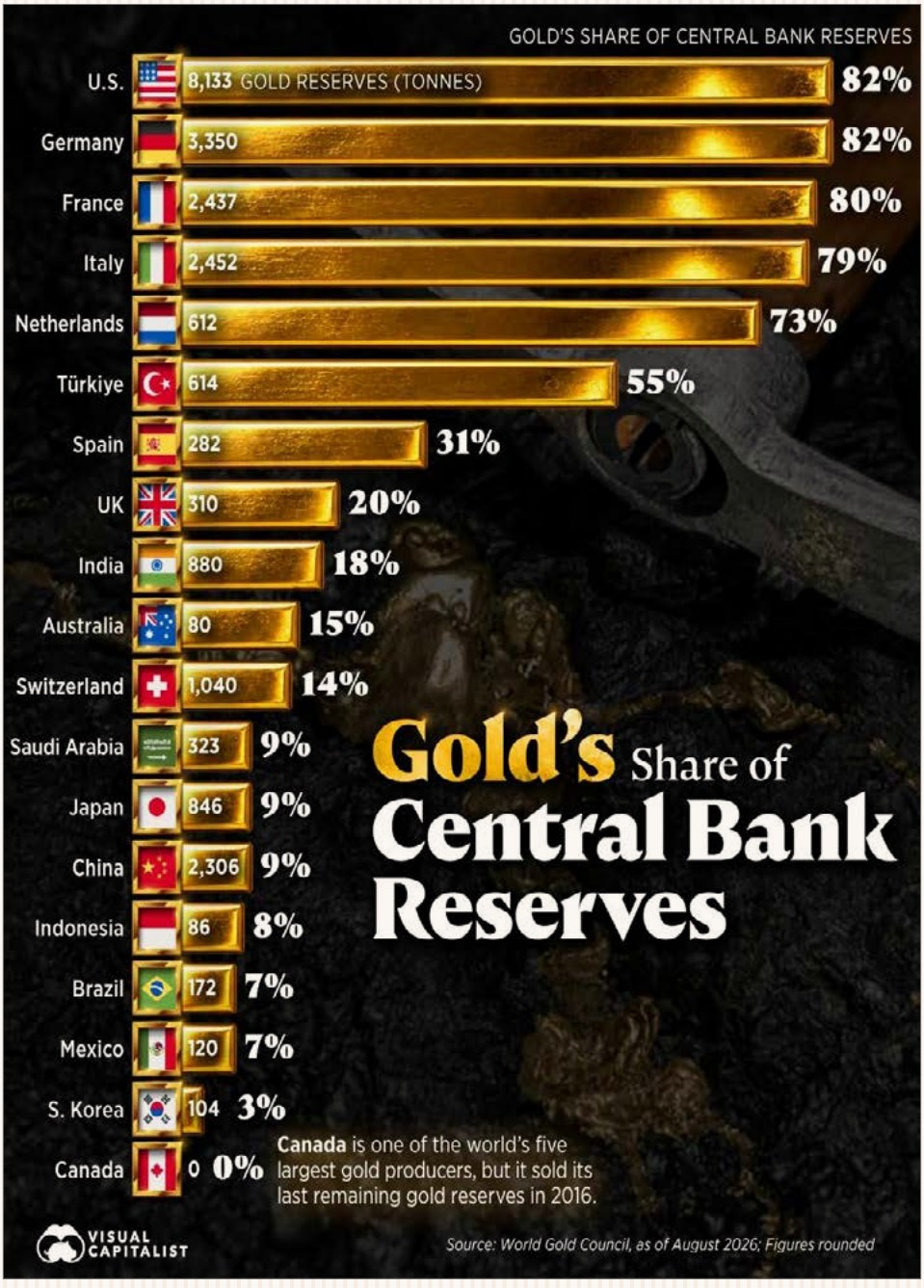

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IRANIAN REVOLUTION
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A critical maritime chokepoint that handles 20% of global petroleum.
OIL SUPPLY LOSSES
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Source: IEA via World Bank Commodity Markets Outlook
VISUAL CAPITALIST
Strait of Hormuz closure figure as of April 2026.
Date shown for the Iraq war refers to the early period of the war.


Science, reading and mathematics performance has fallen for over a decade
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THE WORLD'S
CURRENCIES VS. THE U.S. DOLLAR
ONE-YEAR CHANGE AS OF JUNE 30, 2026
High interest rates in countries like Colombia and Mexico attract foreign investors, lifting their currencies.
Colombian peso 19.2%
Israeli shekel 13.2%
Hungarian forint 8.9%
South African rand 8.1%
Mexican peso 7.7%
Chinese yuan 5.6%
Australian dollar 5.2%
Brazilian real 5.2%
Malaysian ringgit 3.1%
Norwegian krone 1.8%
Chilean peso 1.0%
Egyptian pound 0.8%
Hong Kong dollar 0.1%
UAE dirham 0.0%
Qatari riyal 0.0%
Hong Kong, the UAE, Qatar, and Saudi Arabia's currencies are closely tied to the U.S. dollar through currency pegs.
-0.2% Saudi riyal
-0.4% Russian ruble
-1.1% Czech koruna
-1.7% Singapore dollar
-1.8% Swiss franc
-2.3% Thai baht
-2.4% Swedish krona
-3.0% Euro
-3.1% Danish krone
-3.4% Pound sterling
-4.1% Canadian dollar
-4.2% Polish złoty
-6.8% New Zealand dollar
-8.2% Taiwan dollar
-8.2% Philippine peso
-9.3% Indonesian rupiah
-9.4% Indian rupee
-11.3% Japanese yen
-12.6% South Korean won
-14.6% Turkish lira
-18.9% Argentine peso
High energy prices require import-dependent countries in Asia to buy more dollars, dragging down their currencies.
Source: Deutsche Bank, Bloomberg Finance LP
VISUAL CAPITALIST


THE WORLD'S
LARGEST CITIES
1950-2100P
ASIA
AFRICA
EUROPE
N. AMERICA
S. AMERICA
In 1950, most of the world's most populous cities were in Europe or the Americas.
By 2100, it's expected that the 15 most populous cities worldwide will all be in Africa and Asia.
POPULATION ESTIMATE
1950 1975 2000 2025P 2050P 2075P 2100P
1 Tokyo 12.6M | Tokyo 24.3M | Tokyo 30.3M | Jakarta 41.9M | Dhaka 52.1M | Dhaka 57.9M | Dhaka 55.0M
2 NYC 9.3M | Osaka 14.4M | Jakarta 25.6M | Dhaka 36.6M | Jakarta 51.8M | Jakarta 52.9M | Jakarta 49.7M
3 Osaka 8.0M | NYC 12.1M | Guangzhou 19.0M | Tokyo 33.4M | Shanghai 34.9M | Karachi 40.8M | Karachi 43.7M
4 London 7.9M | Jakarta 11.7M | Seoul 19.0M | New Delhi 30.2M | New Delhi 33.9M | Cairo 35.7M | Cairo 36.7M
5 Kolkata 6.1M | Mexico City 11.1M | Kolkata 18.4M | Shanghai 29.6M | Karachi 32.6M | New Delhi 34.2M | New Delhi 32.0M
6 Moscow 5.5M | São Paulo 10.5M | New Delhi 18.0M | Guangzhou 27.6M | Cairo 32.4M | Shanghai 31.8M | Luanda 30.7M
7 Paris 5.4M | Kolkata 10.5M | Manila 17.8M | Cairo 25.6M | Tokyo 30.7M | Luanda 27.3M | Lahore 24.8M
8 Buenos Aires 4.6M | Seoul 10.1M | Mexico City 17.6M | Manila 24.7M | Guangzhou 29.2M | Tokyo 26.6M | Shanghai 24.7M
9 Los Angeles 4.0M | Buenos Aires 8.6M | Dhaka 17.4M | Kolkata 22.5M | Manila 27.1M | Manila 25.8M | Tokyo 24.1M
10 Jakarta 3.9M | Moscow 8.5M | São Paulo 16.7M | Seoul 22.5M | Kolkata 23.8M | Guangzhou 24.8M | Manila 22.4M
11 Mumbai 3.8M | Mumbai 8.3M | Mumbai 16.0M | Karachi 21.4M | Mumbai 23.1M | Lahore 23.7M | Mumbai 21.5M
12 Mexico City 3.7M | Manila 8.3M | Cairo 15.7M | Mumbai 20.2M | Seoul 21.2M | Mumbai 23.1M | Kolkata 20.5M
13 Cairo 3.1M | Los Angeles 7.7M | Osaka 14.5M | São Paulo 18.9M | Bangkok 20.5M | Kolkata 22.8M | Dar es Salaam 20.1M
14 Shanghai 3.1M | Cairo 7.4M | Shanghai 14.0M | Bangkok 18.2M | Lahore 20.4M | Bangkok 19.4M | Guangzhou 18.1M
15 São Paulo 3.1M | Paris 7.4M | NYC 13.0M | Mexico City 17.7M | Luanda 20.3M | Ho Chi Minh 17.9M | Lagos 17.9M
VISUAL CAPITALIST
Source: European Commission's JRC via Our World in Data. Population estimates among top 100 most populous cities in 2020. City boundaries defined based on satellite imagery and population data.

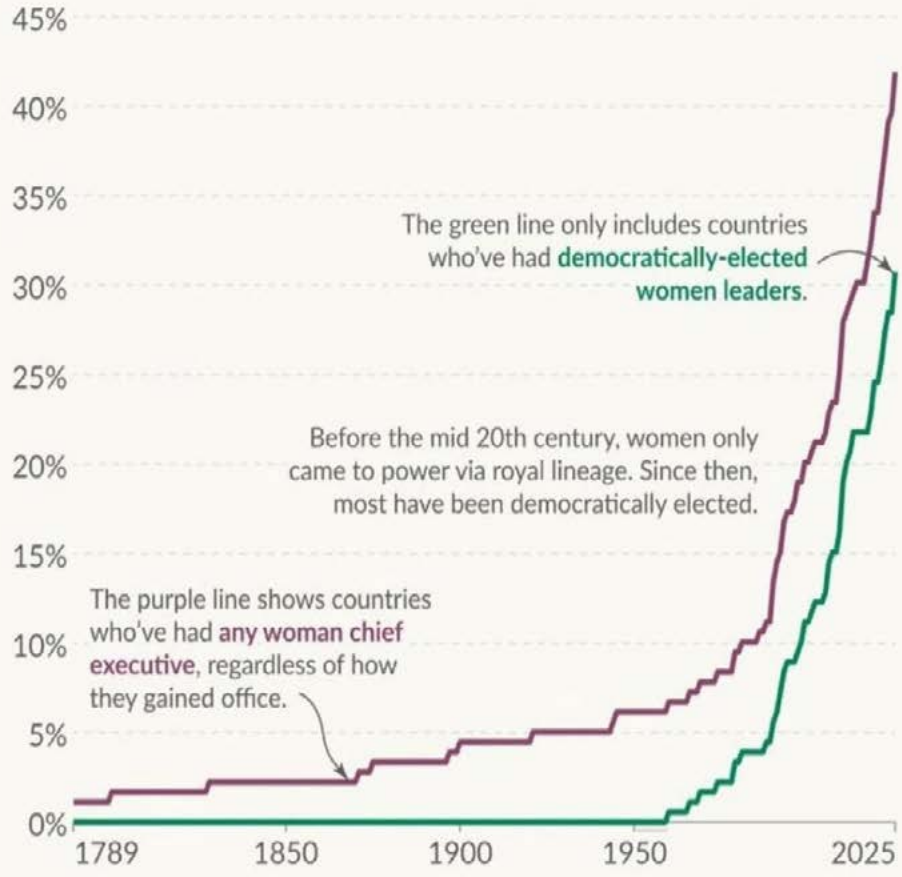

TOP 30
WORLD'S LARGEST COMPANIES
BY REVENUE IN 2026
TOTAL ANNUAL REVENUE $10.5T
ASIA $2.9T
MID. EAST $446B
EUROPE $884B
N. AMERICA $6.3T
STATE GRID CORPORATION OF CHINA $555B
TOYOTA $336B
中国石油天然气集团公司 CHINA NATIONAL PETROLEUM CORPORATION $402B
FOXCONN $260B
Sinopec $364B
CNOOC $290B
Trafigura $240B
SAMSUNG $235B
ICBC 中国工商银行 $211B
أرامكو السعودية saudi aramco $446B
amazon ANNUAL REVENUES $717B
McKESSON $403B
CVSHealth $402B
Alphabet $403B
Walmart $713B
BERKSHIRE HATHAWAY INC. $371B
ExxonMobil $332B
cencora $321B
$363B
Microsoft $282B
THE CIGNA GROUP $275B
UNITEDHEALTH GROUP $448B
$274B
JPMorganChase $280B
Cardinal Health $223B
GLENCORE $248B
Apple $416B
COSTCO WHOLESALE $275B
NVIDIA. $216B
Meta $201B
VISUAL CAPITALIST
Total revenues for fiscal years ending on or before March 31, 2026
Source: Fortune Global 500


GOLD'S SHARE OF CENTRAL BANK RESERVES
U.S. 8,133 GOLD RESERVES (TONNES) 82%
Germany 3,350 82%
France 2,437 80%
Italy 2,452 79%
Netherlands 612 73%
Türkiye 614 55%
Spain 282 31%
UK 310 20%
India 880 18%
Australia 80 15%
Switzerland 1,040 14%
Saudi Arabia 323 9%
Japan 846 9%
China 2,306 9%
Indonesia 86 8%
Brazil 172 7%
Mexico 120 7%
S. Korea 104 3%
Canada 0 0%
Gold's Share of Central Bank Reserves
Canada is one of the world's five largest gold producers, but it sold its last remaining gold reserves in 2016.
VISUAL CAPITALIST
Source: World Gold Council, as of August 2026; Figures rounded

More than 40% of all countries have been led by a woman

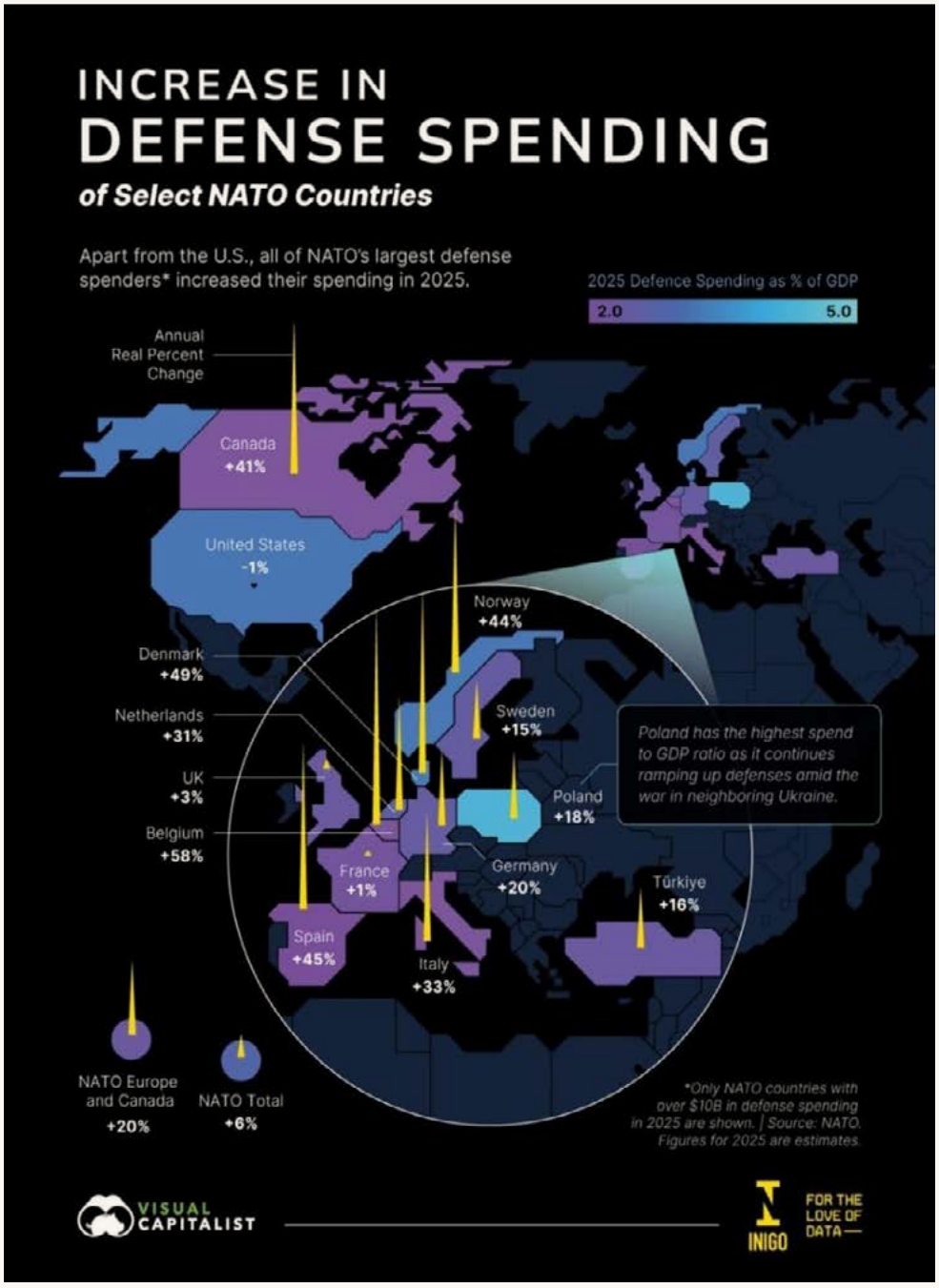
Our World in Data

% of current countries that have had a woman as chief executive since 1789. The chief executive is the head of government or the head of state, whoever has more power.

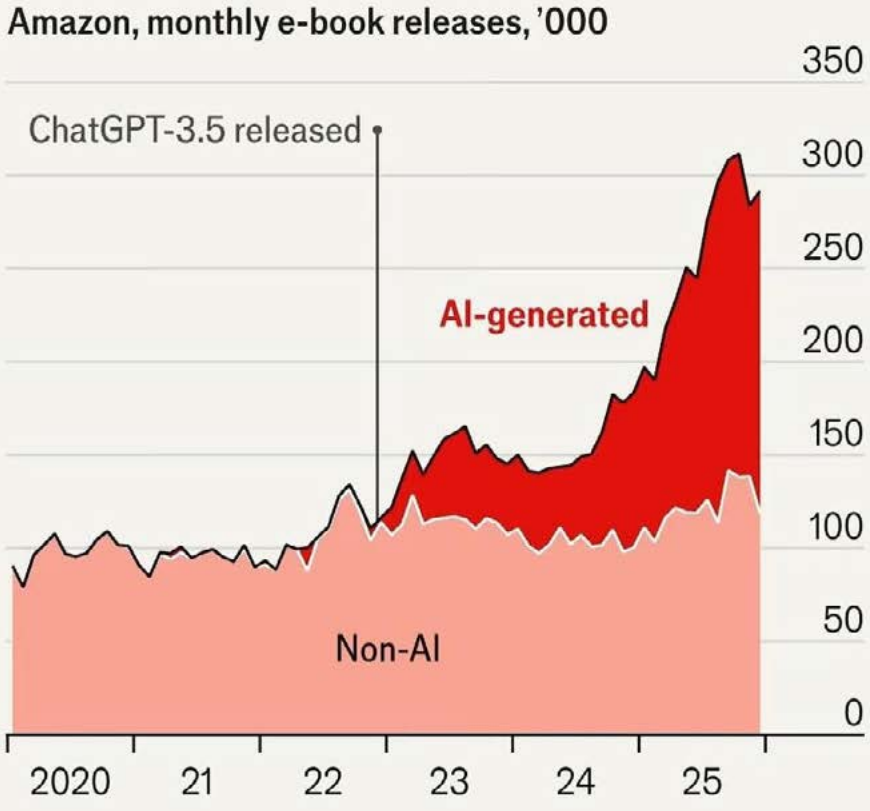


Data source: Varieties of Democracy Institute (V-Dem; 2026)

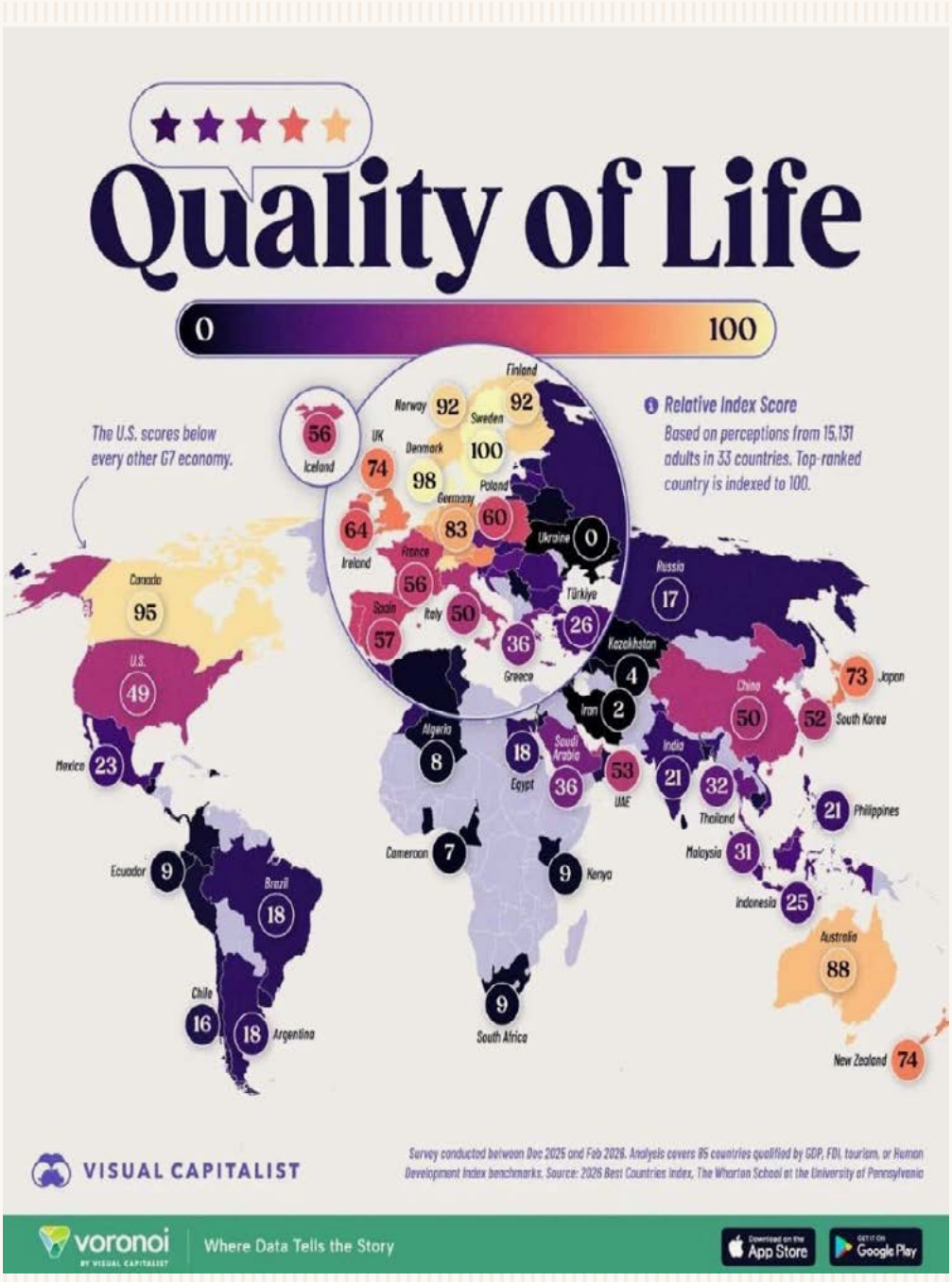
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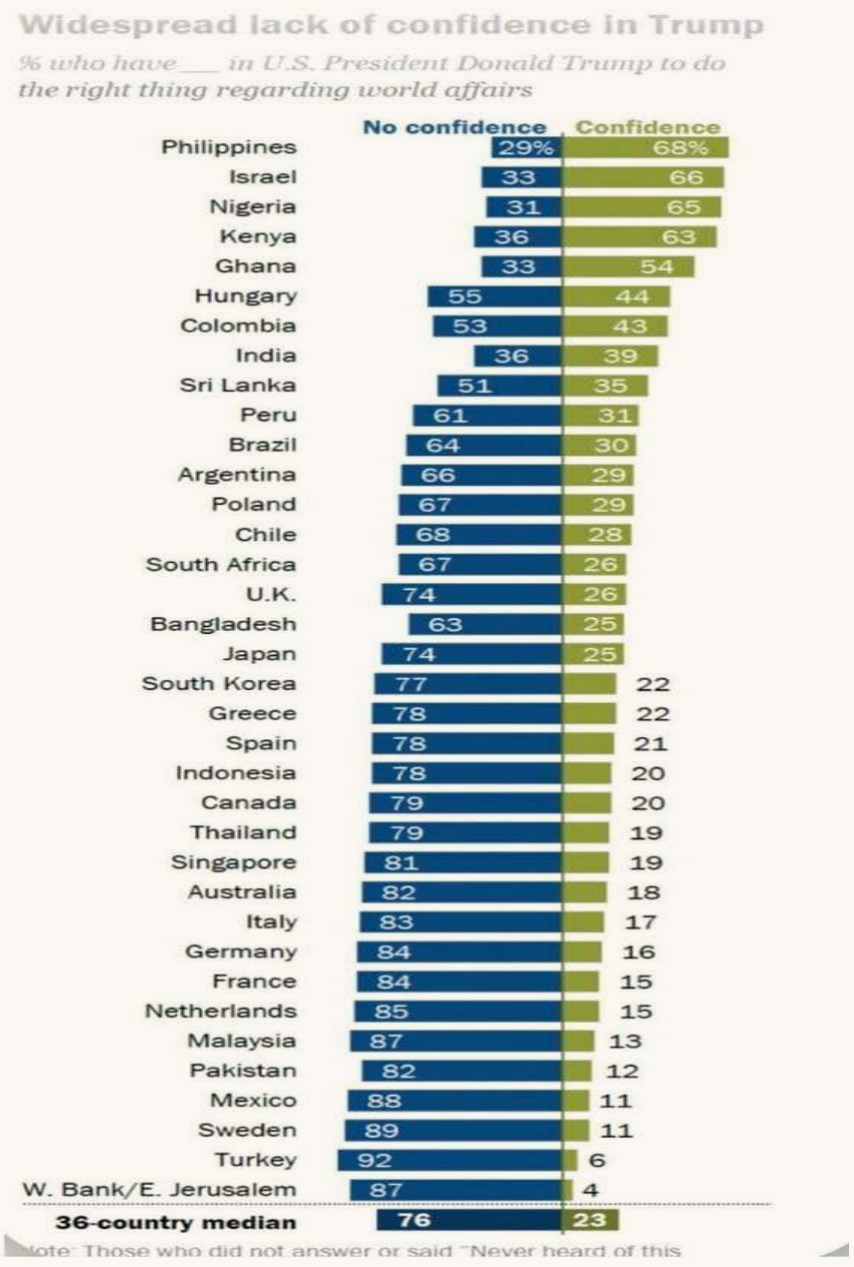

INCREASE IN
DEFENSE SPENDING
of Select NATO Countries
Apart from the U.S., all of NATO's largest defense spenders* increased their spending in 2025.
2025 Defence Spending as % of GDP
2.0
5.0
Annual Real Percent Change
Canada +41%
United States -1%
Norway +44%
Denmark +49%
Sweden +15%
Netherlands +31%
UK +3%
Poland +18%
Belgium +58%
France +1%
Germany +20%
Türkiye +16%
Spain +45%
Italy +33%
Poland has the highest spend to GDP ratio as it continues ramping up defenses amid the war in neighboring Ukraine.
NATO Europe and Canada +20%
NATO Total +6%
*Only NATO countries with over $10B in defense spending in 2025 are shown. | Source: NATO. Figures for 2025 are estimates.
VISUAL CAPITALIST
INIGO
FOR THE LOVE OF DATA

AI-generated books are on the rise



Source: "AI and the quantity and quality of creative products: have LLMs boosted creation of valuable books?", by I. Reimers and J. Waldfogel, 2026


Quality of Life
0
100
The U.S. scores below every other G7 economy.
Relative Index Score
Based on perceptions from 15,131 adults in 33 countries. Top-ranked country is indexed to 100.
Finland 92
Norway 92
Sweden 100
Denmark 98
UK 74
Iceland 56
Germany 83
Poland 60
Ireland 64
France 56
Spain 57
Italy 50
Greece 36
Ukraine 0
Türkiye 26
Russia 17
Kazakhstan 4
Iran 2
Canada 95
U.S. 49
Mexico 23
Algeria 8
Egypt 18
Saudi Arabia 36
UAE 53
India 21
China 50
Japan 73
South Korea 52
Thailand 32
Philippines 21
Malaysia 31
Indonesia 25
Australia 88
New Zealand 74
Cameroon 7
Kenya 9
South Africa 9
Ecuador 9
Brazil 18
Chile 16
Argentina 18
VISUAL CAPITALIST
Survey conducted between Dec 2025 and Feb 2026. Analysis covers 85 countries qualified by GDP, FDI, tourism, or Human Development Index benchmarks. Source: 2026 Best Countries Index, The Wharton School at the University of Pennsylvania
voronoi
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Widespread lack of confidence in Trump
% who have ___ in U.S. President Donald Trump to do the right thing regarding world affairs
No confidence
Confidence
Philippines 29% 68%
Israel 33 66
Nigeria 31 65
Kenya 36 63
Ghana 33 54
Hungary 55 44
Colombia 53 43
India 36 39
Sri Lanka 51 35
Peru 61 31
Brazil 64 30
Argentina 66 29
Poland 67 29
Chile 68 28
South Africa 67 26
U.K. 74 26
Bangladesh 63 25
Japan 74 25
South Korea 77 22
Greece 78 22
Spain 78 21
Indonesia 78 20
Canada 79 20
Thailand 79 19
Singapore 81 19
Australia 82 18
Italy 83 17
Germany 84 16
France 84 15
Netherlands 85 15
Malaysia 87 13
Pakistan 82 12
Mexico 88 11
Sweden 89 11
Turkey 92 6
W. Bank/E. Jerusalem 87 4
36-country median 76 23
Note: Those who did not answer or said "Never heard of this

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