

2025 EDITION

Top 12 Geopolitical Megatrends

A roadmap for public and private sector stakeholders





About Government Analytica

We continuously gather government and economic data from a broad array of local, national and international sources. We carefully examine and organize this data by geography and industry sector. Our sophisticated analytical tools are then employed to pinpoint early, prime public value opportunities to shape the discourse for our clients.

We help you to:

- Unlock New Strategic Options to lead through our comprehensive landscape analysis and profiling of Government, Regulations, and Public & Private Stakeholders
- Unveil Superior Policies and deliver your message with our insightful Thought Leadership content backed by analytics
- Enrich Your Narrative and tell your story with our Data-Rich Proposals & White Papers



Contents

Preface Preface	6
Introduction	7
PV Quintet: Government-Economy-Environment-Innovation-Society	8
Connecting Megatrends to Private & Public Sector Strategy	8
Identification and Analysis of Megatrends:	8
Key Theme for 2025: Trade	9
Key Phases in the Evolution of the Global Trading System Post-WWII Foundations (1945–1970s) The Expansion of Trade Liberalization (1980s–1990s) The Globalization Boom (2000–2015) Trade Disillusionment and Retrenchment (2016–Present)	9 10
Deficiencies in the Current Global Trading System Institutional Limitations Decline of Multilateral Cooperation Persistent Economic Imbalances Challenges from State-Led Economic Models Shifts in Global Supply Chains Intersections of Trade and Security	10 10 11
Impact of Megatrends & What Is Next	11
12 Megatrends to Watch	12
Megatrend 1 - Weary Of Globalization, Countries Put a Premium On Access To Their Markets Top 10 Ways Countries Put a Premium on Access to Their Markets	14 15 15 15
Megatrend 2 - Governments Will Invest in National Sectors with Strong Global Competitive Advantages Top 10 Ways Governments Invest in Sectors with Global Competitive Advantage Government Response Economic Consequences Environmental Impact Impact on Innovation Societal Impact Additional Insights	19 20 20 21
Megatrend 3 - Foreign Policy Will Be Bipolar, Swinging Between Ideology And Pragmatism	22



Top 10 Ways Ideology-Pragmatism Spectrum is Managed	22
Government Impact	
Economic Impact	24
Environmental Impact	24
Innovation Impact	25
Societal Impact	25
Additional Insights	26
Megatrend 4 - Global Influence is Powered by The Strength of a Country's Economy, Its Sought-After	
Commodities, or Its Strategic Geography	27
Top 10 Ways Countries Project Their Global Influence	
Government Impact	
Economic Impact	
Environmental Impact	
Innovation Impact	
Societal Impact	
Additional Insights	
Megatrend 5 – Utilitarian Environmental Policy Will Shape a Growing Portion of Industrial and Economic	
Strategies	31
Top 10 Ways Industrial & Economic Strategies Mesh with Environmental Policies	
Government Impact	
Economic Impact	
Environmental Impact	
Innovation Impact	
Societal Impact	
Additional Insights	
<u> </u>	
Megatrend 6 - Nations Invest in Diversifying Supply Sources to Build Stronger, More Resilient Economies	
Top 10 Ways Nations Build Resilient Supply Chains	
Government Impact	
Economic Impact	
Environmental Impact	
Innovation Impact	
Societal Impact	
Additional Insights	
Megatrend 7 - Government Policies Is Influenced by The Citizen's Reaction to The Information They Con-	
Ton 10 Tranda Chaning On warmant Influence of Citizana Information Consumption	41
Top 10 Trends Shaping Government Influence of Citizens Information Consumption	41
Government Impact	
Economic ImpactEnvironmental Impact	
Innovation Impact	
·	
Societal ImpactAdditional Insights	
· · · · · · · · · · · · · · · · · · ·	
Megatrend 8 - Domestic and International Industrial Policies Remain Influenced by Political Systems	45
Top 10 ways Domestic & International Industrial Policy Are Shaped by Political Systems	
Government Impact	
Economic Impact	
Environmental Impact	
Innovation Impact	
Societal Impact	
Additional Insights	49
Megatrend 9 - Changes In Generational Expectations Will Reshape The Political Landscape	50



Top TO ways Generational Expectations will influence Policy	
Government Impact	
Economic Impact	
Environmental Impact	53
Innovation Impact	53
Societal Impact	54
Additional Insights	54
Megatrend 10 - National Demographic Differences, Labor Shortages and Ris	sing Costs Accelerate Innovation
Invention, and Adoption of New Technologies.	55
Top 10 Trends driven by Demographics, Labor Shortages and Rising Costs	55
Government Impact	
Economic Impact	
Environmental Impact	
Innovation Impact	
Societal Impact	
Additional Insights	
•	
Megatrend 11 - Political Upheavals And Economic Need For Talent Fuel Un	
Migration	60
Top 10 Impacts of Waves of Global Migration	
Government Impact	
Economic Impact	
Environmental Impact	
Innovation Impact	
Societal Impact	
Additional Insights	63
Megatrend 12 - Production Will Continue To Migrate To The Geographies C	of Lower Cost And Higher
Geopolitical Stability	65
Top 10 List Production Migration will Seek Low Cost and High Political Stabili	
Government Impact	
Economic Impact	
Environmental Impact	
Innovation Impact	
Societal Impact	
Additional Insights	
References	70



Table of Figures

Figure 1- Share of G20 in World Trade (Heinrich Foundation 2022)2015	14
Figure 2-Impact of Globalization on the US economy (Peterson institute for International Economics)	15
Figure 3- Most patents globally filed by 5 countries (WEF and OECD)	
Figure 4- Summary of CHIPS Science Act of 2022 (from Today's Medical Developments 2022)	20
Figure 5- Countries by system of government	24
Figure 6- US and China trading partners (Jeff Blossom for Connectography)	24
Figure 7- Countries with most trade agreements (Statista 2021)	25
Figure 8- Minimizing critical impact to companies' supply chains (McKinsey & Finance Online 2020)	27
Figure 9- Increase in demand for critical minerals between 2020 and 2040. 42X means 42 time more in	
2040 than in 2020 (IEA, White & Case, JDSupra)	29
Figure 10- Countries producing the most Lithium (Statista 2021)	
Figure 11- Various forms of Carbon Credit (Ecosystem Marketplace)	33
Figure 12- Countries and their investments in renewable energy (Statista 2020)	34
Figure 13- Top 5 Supply Chain resilience actions (McKinsey & Finance Online 2020)	37
Figure 14- Impact of COVID-19 on supply chains (Sikich 2021)	38
Figure 15- Reshoring and the pandemic in the US (NIST 2022)	39
Figure 16- One minute on the internet (Statista 2021)	
Figure 17- Trust in news media amongst countries (Statista 2023)	44
Figure 18- Mention of "Reshoring" in corporate earnings calls (Statista 2022)	47
Figure 19- Global energy investments 2014-2022 by sector (BloomberNEF)Figure 19- Global energy investments	
Figure 20 Generations and politics (Generational Power Index Report)	
Figure 21- Generational attitudes about work (Statista 2022)	53
Figure 22- Technology adoption across manufacturers (Canadian Manufacturers & Exporters Association	
2023)	
Figure 23- Al impact on jobs (Statista 2023)	
Figure 24- Global migration average 2017-2021 (Statista 2022)	
Figure 25- Countries where educated migrants come from (Statista 2022 & OECD)	
Figure 26- Top battery manufacturers 2022-2027 (Visual Capitalist 2023)	
Figure 27- Top global risks in 2023 (World Economic Forum and Visual Capitalist 2023)	68



Preface

In a world awash with information, the ability to extract wisdom from complexity has never been more critical. Originally articulated by the visionary John Naisbitt as "megatrends," this concept has gained even greater urgency in our era of rapid, transformative, and interconnected shifts. We are thrilled to present this year's edition of our flagship publication, the Top 12 Geopolitical Megatrends Report—a powerful tool for leaders navigating the challenges and opportunities of a dynamic global landscape.

Megatrends are the massive forces reshaping our world, influencing every sector, every region, and every individual. When embraced strategically by private enterprises, public agencies, NGOs, and associations, these transformative trends become catalysts for foresight, adaptability, and long-term success.

The stakes are high. Leaders today must decode diverse and complex signals from across the globe to build resilient, forward-thinking strategies. Our interconnected world means that a political shift, technological breakthrough, or economic fluctuation in one country can ripple outward, reshaping opportunities and risks far beyond its borders. As you explore this report, you'll uncover how these forces are reshaping industries, communities, and entire nations.

Our Top 12 Geopolitical Megatrends represent enduring, transformative changes driving progress and prosperity. Each trend has been carefully selected to reflect the critical intersections of geography, economics, and political power. This year's analysis goes deeper into the implications of these trends, offering actionable insights and a top 10 list for each megatrend for businesses, governments, and non-profits alike.

We live in a hybrid world—a complex matrix of diverse political and economic systems, varying levels of development, and shifting paradigms of wealth creation. Businesses innovate with speed. Non-profits and NGOs nurture breakthroughs that transform communities. Governments create the scaffolding for large-scale progress through policy, regulation, and incentives. Together, these sectors must engage with megatrends to craft hybrid solutions for a hybrid world.

This report serves as your compass, pointing to the challenges and opportunities embedded within these global shifts. Whether you're a corporate strategist, a policy maker, or a non-profit leader, these megatrends offer a roadmap for minimizing risk and capitalizing on the possibilities of our time. Dive in, and discover how these 12 forces are shaping the future—your future—and how you can lead boldly in the face of transformation.

To your success,

John Pournoor
Dr. John Pournoor
CEO and Founder

Dr. John Pournoor CEO and Founder Government Analytica <u>LinkedIn - Megatrends - Newsletter</u> The future is already here, it's just not evenly distributed.

William Gibson



Introduction

We have been witnessing the transformation of the world throughout our lives. Each era has had its levers of transformation. Our modern era began with the Industrial Revolution. Revolutions, small and large, have been coming at our shores. For instance, the four recent technology eras have radically redefined the human experience: the first "The Industrial Revolution" (steam power), the second "The Great Leap Forward" (sciences and mass production), the third "The Age of Information, Communication and Technology", and now the emerging "Age of Artificial Intelligence".

We seek to detect the world's dominant and durable trends. Once

"Trends, like horses, are easier to ride in the direction they are going."

John Naisbitt, who coined the word "megatrend"

understood and tracked, future projection of these megatrends is leveraged to envision impact on societies, economies, political



systems, and the planetary ecosystem. When the trends move in the same direction, year after year, predictions are easier. When there are disruptions like the 2008 financial crisis or existential threats like the COVID-19 pandemic, or interlocking trade challenges of today, major resets occur, and robust predictions are harder.

At Government Analytica, we look at trends through our unique government-focused lens and perspective. Governments tend to be hyperactive around megatrends. The novelty of new trends motivates governments to regulate them, invest in them, create incentives to fuel them, or erect barriers to control them. Countries competes intensely against one another for dominance and superiority fueled by megatrends.

Companies, associations, non-profits, and non-governmental organizations (NGO), and even government agencies themselves need to understand these new durable trends and their consequences. Business strategists, planners and portfolio leaders must incorporate these trends and predict and plan for local, national, and global consequences. Advocacy

"Businesses now have a vested interest in helping to shape the environment. I mean environment in the larger sense of the word — not the physical environment, but the legal, political, economic, regulatory environment in which they operate."

Richard Haas, the President of Council on Foreign Relations²

organizations must integrate them into their proposals in order to articulate public value to policymakers. Even governments must heed the consequences of these trends as they impact public finances, or reshape urbanization, mobility, and healthcare.

Megatrends are often described in namesake reports in very broad terms. For instance, "The world is increasingly becoming more digital". While this is certainly a true long-view macro megatrend, it is too generic, as risks and opportunities present themselves at the micro level. Businesses are looking for how the incremental changes, derivatives from a megatrend, will affect their business this year and next. Therefore, megatrends need specificity. In this report we have chosen to zoom in and describe megatrends



in micro-view and then describe their impact using our Quintet of Public Value Impacts: Government, Economy, Environment, Innovation, and Society.

Key questions for organizations, public or private sector, to ask about their business are:

- A. How does this megatrend impact our portfolio?
- B. What risks do we have to prepare for?
- C. What opportunities will there be for us to capture?

Geopolitical Week Ahead Our weekly publication scans and reports on developments across a number of key megatrends. Subscribe free on LinkedIn (LINK).

PV Quintet: Government-Economy-Environment-Innovation-Society

Mixed signals can often mask megatrends that especially impact the economy and the business environment. Domestic megatrends may realign Government's internal national policies and investments. External megatrends may influence a country's international ambitions, in turn reshaping international policies and investments. In this report we will describe twelve Megatrends with the profound impact on business, economy, and markets. We will then detail domestic and international impacts for each in five areas: Government, Economy, Environment, Innovation, and Society.

Connecting Megatrends to Private & Public Sector Strategy

How do these trends apply to you? There are over two dozen tools commonly used by public and private sector strategic planners. Here we highlight a few of them. Please contact us for more detail or if you would like your team trained on the application of these essential tools.

Identification and Analysis of Megatrends:

- 1. Environmental Scanning: This involves continuously monitoring the external environment to identify emerging trends. Tools like PESTEL analysis (which examines Political, Economic, Social, Technological, Environmental, and Legal factors) can be particularly useful.
- 2. Reports and Publications: Utilizing reports from think tanks, research institutions, and consultancies (like McKinsey, Deloitte, or the World Economic Forum) can provide valuable insights into global trends. These reports often contain detailed analyses and forecasts.

Alignment with Business Objectives:

- 3. **SWOT Analysis:** This tool helps in understanding how megatrends can impact the Strengths, Weaknesses, Opportunities, and Threats faced by a business. It is crucial for aligning megatrends with the company's strategic objectives.
- 4. **CARVER Analysis:** This tool holds a mirror to an organization's portfolio, current and future projects, initiatives, proposals, and investment areas to create both risk maps and opportunity maps. It tries to identify a risk or opportunity in six specific ways: **C**riticality, **A**ccessibility, **R**ecoverability, **V**ulnerability, **E**ffect, **R**ecognizability (C.A.R.V.E.R.).
- 5. **Scenario Planning:** This involves developing multiple, plausible future scenarios based on different ways megatrends might evolve. It helps businesses prepare for a range of possible futures.

Risk Management and Business Continuity.

- 6. **Risk Assessment Tools:** These are used to evaluate the potential risks associated with megatrends and to develop strategies to mitigate them.
- 7. **Business Continuity Planning (BCP):** This ensures that the company has plans in place to maintain or quickly resume critical functions in the face of major disruptions caused by these trends.



Key Theme for 2025: Trade

Before we dive into the top 12 geopolitical megatrends it is important to reflect on the history of trade as it will be dominant theme of 2025.

The global trading system, as it exists today, is the product of nearly 70 years of painstaking development. Born out of the ashes of World War II, the framework initially prioritized economic recovery, market stability, and the prevention of protectionist spirals that had exacerbated the Great Depression. The General Agreement on Tariffs and Trade (GATT), established in 1947, laid the foundation for a new era of international cooperation. Over the decades, this framework evolved into the World Trade Organization (WTO), which aimed to provide a rules-based system for resolving disputes and facilitating trade liberalization.

For much of the 20th century, the United States stood as the linchpin of global trade. With the world's largest consumer market and a commitment to lower tariffs, America helped drive the economic globalization that defined the late 20th century. The creation of landmark agreements like NAFTA and China's entry into the WTO heralded an era of unprecedented interconnectedness. However, this expansion was not without its challenges.

By 2016, a significant shift was underway. Trade liberalization, once seen as a pathway to prosperity, became a contentious issue. Skepticism grew over its impact on jobs, wages, and national sovereignty. Both political parties opposed the Trans-Pacific Partnership (TPP), signaling a new phase of retrenchment. This period marked the beginning of a broader disillusionment with the global trading system, as countries grappled with rising inequalities, economic imbalances, and geopolitical tensions. This section explores the evolution of the global trading system which we will then explore as part of some of our megatrends.

Key Phases in the Evolution of the Global Trading System

The global trading system has evolved through distinct phases, each shaped by political, economic, and social forces. These transformations illustrate both its successes and persistent challenges.

Post-WWII Foundations (1945-1970s)

Emerging from the devastation of World War II, global leaders sought stability through interdependence and economic cooperation. The General Agreement on Tariffs and Trade (GATT) was established in 1947, focusing on reducing tariffs and fostering transparency. Early agreements reduced industrial tariffs significantly—from 40% in 1947 to less than 5% by 1993. The U.S. spearheaded this system, leveraging its dominant economy to support global recovery while maintaining a relatively inward-focused trade policy.

The Expansion of Trade Liberalization (1980s-1990s)

The 1980s and 1990s were a period of unprecedented trade liberalization. The GATT evolved into the World Trade Organization (WTO) in 1995 to address its predecessor's shortcomings, including weak dispute resolution and limited coverage of services and intellectual property. Under WTO rules, members committed to unified agreements, strengthening accountability. However, consensus-driven negotiations made addressing complex issues like agriculture and state subsidies challenging. During this time, the U.S. negotiated significant free trade agreements, including NAFTA. However, cracks

During this time, the U.S. negotiated significant free trade agreements, including NAFTA. However, cracks began to form as global power dynamics shifted. Countries like China benefited from WTO membership while exploiting systemic loopholes, such as maintaining developing nation status while pursuing aggressive industrial policies.



The Globalization Boom (2000–2015)

This era marked the zenith of global economic integration. China's WTO accession in 2001 catalyzed dramatic shifts in global trade. By offering massive subsidies, forcing technology transfers, and neglecting labor standards, China became a dominant manufacturing hub. The U.S., meanwhile, embraced a mixed approach, signing bilateral and plurilateral agreements while using WTO mechanisms to counteract perceived unfair practices.

Despite these efforts, globalization's benefits were unevenly distributed. The U.S. lost over 5.8 million manufacturing jobs between 2000 and 2010, fueling discontent with trade liberalization. Simultaneously, the WTO struggled to adapt to emerging technologies and geopolitical tensions.

Trade Disillusionment and Retrenchment (2016-Present)

The 2016 U.S. presidential campaign signaled a turning point. Both major candidates criticized the global trade framework, resulting in the U.S. withdrawing from the Trans-Pacific Partnership and renegotiating NAFTA into the USMCA. Bipartisan skepticism toward free trade persists, driven by concerns over economic inequality, job losses, and national security.

The WTO, once central to global trade, has become sidelined. Countries have therefore come to increasingly resort to unilateral actions, such as tariffs and export controls, to address trade imbalances and counter unfair trade practices. This fragmentation risks undermining smaller economies and slowing global economic growth.

Reforming the global trading system will require innovative strategies to find a way to balance national economic benefits and equitable global growth. Bilateral and regional agreements, such as enhancing USMCA, may serve as a testing ground for next-generation trade rules. However, these efforts must balance national sovereignty with collective action to restore confidence in international trade institutions.

Deficiencies in the Current Global Trading System

The global trading system faces significant challenges, many of which stem from its inability to adapt to evolving economic and geopolitical realities. These issues have eroded confidence in the system's effectiveness and underscored the need for reform.

Institutional Limitations

Institutions like the World Trade Organization (WTO) have struggled to keep pace with modern trade complexities. While originally designed to reduce tariffs and foster global economic interdependence, the WTO's framework has proven less effective in addressing issues like digital trade, services, and state-owned enterprises (SOEs). Its reliance on consensus-based decision-making often stalls progress on contentious topics, limiting its ability to respond to contemporary trade dynamics.

Decline of Multilateral Cooperation

Multilateral trade frameworks have seen reduced engagement as countries increasingly pursue unilateral or regional trade actions. The focus has shifted toward bilateral agreements and localized trade initiatives, partly due to concerns over the WTO's ability to enforce rules equitably. This trend risks fragmenting the global trade system, making collaborative solutions more difficult to achieve.

Persistent Economic Imbalances

Trade imbalances between surplus and deficit nations create economic and political pressures. For example, some countries benefit from consistent trade surpluses, while others face deficits that can lead to social and economic dissatisfaction. These imbalances strain relationships among trading partners and complicate efforts to achieve equitable outcomes.



Challenges from State-Led Economic Models

The integration of state-driven economies, such as China, into global trade has highlighted gaps in regulatory frameworks. Practices such as industrial subsidies, technology transfer requirements, and variations in labor and environmental standards have reshaped global competition. While these practices have enabled growth in some sectors, they also raise concerns about fairness and balance within the international trade system. WTO does not address state owned enterprises within its framework

Shifts in Global Supply Chains

As supply chains evolve, countries are seeking to diversify production and reduce reliance on single regions, often through "China-plus-one" strategies. While this approach enhances resilience, it can also disrupt efficiencies that have traditionally supported global trade. Managing these shifts effectively requires careful coordination among trading partners.

Intersections of Trade and Security

The growing importance of advanced technologies and critical industries has introduced national security considerations into trade policy. Export controls and other protective measures, while aimed at safeguarding strategic interests, can contribute to trade tensions and challenge the principles of open markets. Balancing these priorities is a key issue for the future of global trade.

The global trading system is at a crossroads. Addressing its current deficiencies requires updating governance structures, fostering cooperative solutions, and ensuring that trade policies align with the realities of a modern, interconnected economy. Collaborative efforts can help preserve the benefits of global trade while adapting to the challenges of a changing world.

Impact of Megatrends & What Is Next

The global trading system stands at a pivotal moment, shaped by decades of economic integration yet increasingly challenged by fragmentation and rising geopolitical tensions. The erosion of trust in multilateralism—exemplified by institutions like the WTO struggling to address modern challenges, like state-led economic practices—has highlighted structural weaknesses in the system. Compounding this, the rise of **economic nationalism** (Megatrend #1) and the urgent need to build **resilient supply chains** (Megatrend #10) are forcing leaders to rethink global trade strategies.

A transformative approach is essential. Multilateral institutions must reform to tackle issues such as forced labor, transnational subsidization, and export controls (Megatrend #2: Governments Invest in Competitive Sectors). Modernized agreements, such as the USMCA, can serve as blueprints for aligning policies on critical technologies and countering unfair trade practices. These efforts would revive the vision of trade as a driver of stability and shared prosperity while addressing today's economic competition and technological advancements.

At the same time, balancing **domestic priorities** (Megatrend #3: Foreign Policy Oscillates Between Ideology and Pragmatism) with global commitments is crucial. Policies like nearshoring and reshoring enhance resilience but must be carefully implemented to avoid excessive protectionism and maintain market openness. Effective trade policy will require leadership, alongside cooperation with like-minded allies, to create a framework that promotes fair competition, protects critical industries, and fosters global collaboration while respecting intellectual property and national security.



Top 12 Megatrends

We recognize the following top twelve megatrends as major factors shaping government policy, the economy, the environment, technology, and society. These megatrends naturally have great impact on business as well.



	12 Global Geopolitical Megatrend Impacting the Economy, Business, and Markets			
1	Globalization & Market Access	Weary of globalization, countries put a premium on access to their markets		
2	Industrial Policy	Governments will invest in national sectors with strong global competitive advantages		
3	Foreign Policy	Foreign policy will be bipolar, swinging between ideology and pragmatism		
4	Global Influence	Global influence is powered by the strength of a country's economy, its sought-after commodities, or its strategic geography		
5	Environmental Policy Industrial Policy	Utilitarian environmental policy will shape a growing portion of industrial and economic strategies		
6	Supply Chains	Nations invest in diversifying supply sources to build stronger and more resilient economies		
7	Public Policy	Government policies are influenced by the citizen's reaction to the information they consume		
8	Industrial Policy	Domestic and international industrial policies will remain influenced by political systems		
9	Domestic Policy	Changes in generational public value expectations will reshape domestic political landscape		
10	Labor	National demographic differences, labor shortages and rising costs accelerate innovation, invention, and adoption of new technologies		
11	Immigration	Political upheavals and economic need for talent will fuel waves of global migration		
12	Supply Chains	Production will migrate to geographies of lower cost and higher political stability		



Megatrend 1 - Weary Of Globalization, Countries Put a Premium on Access To Their Markets

In recent years, there has been a discernible shift in global economic dynamics, with many countries increasingly prioritizing access to their internal markets, indicating a weariness of unfettered globalization. This trend is fueled by a desire to bolster domestic industries, protect local jobs, and mitigate vulnerabilities exposed by over-reliance on global supply chains, as vividly demonstrated during the COVID-19 pandemic. Countries are enacting policies that favor local production and services, thus elevating the value of their internal markets. This shift represents a significant departure from the earlier ethos of globalization, which championed open borders and the free flow of goods, services, and capital. It reflects a growing sentiment among nations to secure economic sovereignty and resilience in an uncertain global landscape, potentially leading to more localized and regionalized economic structures. This recalibration towards internal market access underscores the complexities of global trade dynamics and the evolving priorities of nations in the 21st century.



Growing economies are always in need of foreign direct investment to accelerate their progress forward. These economies will be even more attractive if they are giving birth to a large middle class. However, over decades, as a country builds its infrastructure and workforce, native expertise grows, and greater self-reliance is achieved. Now the country can ask for a premium for access to its customers such as favorable trade arrangements, reciprocal access by its companies to other markets, local manufactured content, and other economic and even political requirements.

Top 10 Ways Countries Put a Premium on Access to Their Markets

Countries put a premium on access to their markets through a variety of strategies that prioritize domestic control, protect local industries, and negotiate favorable terms in global trade. Here are the top 10 ways they achieve this:

1. Implementing Protective Tariffs and Trade Barriers

Countries impose tariffs on imported goods to make them less competitive with local products.
 Trade barriers, such as quotas and import restrictions, further shield domestic industries from external competition.

2. Enforcing Local Content Requirements

 Policies mandate that a certain percentage of goods or services must be produced locally, encouraging domestic production, and reducing reliance on imports.

3. Subsidizing Domestic Industries

• Governments provide financial support, such as grants, tax breaks, or loans, to bolster domestic industries, making them more competitive in both local and international markets.

4. Negotiating Favorable Trade Agreements

 Countries seek trade deals that prioritize reciprocal market access, often demanding favorable terms for their industries while limiting access for foreign competitors.



5. Adopting Strategic Industrial Policies

 Investments are directed toward sectors where a country has or aims to develop a competitive advantage, such as technology, renewable energy, or pharmaceuticals.

6. Imposing Investment Restrictions

 Restrictions are placed on foreign ownership in critical industries or sectors deemed vital for national security or economic stability.

7. Encouraging Reshoring and Nearshoring

 Policies incentivize companies to bring production back to domestic or nearby markets, reducing reliance on distant or geopolitically unstable supply chains.

8. Strengthening Intellectual Property Protections

 Robust IP laws are enacted to ensure that local innovations are safeguarded, making domestic markets attractive for R&D and production activities.

9. Prioritizing Public Procurement Policies

 Governments design procurement policies that favor domestic suppliers, using public sector demand to stimulate local industries.

10. Promoting Economic Nationalism

• Campaigns and policies focus on fostering national pride and consumer preference for local products, encouraging reduced dependence on foreign goods.

These strategies reflect a shift toward economic sovereignty and resilience.

GENERAL BUSINESS RECOMMENDATION:

Businesses can gain significant advantages by closely monitoring a country's national policies, including domestic preferential measures, and its trade dynamics with global partners. Policies such as subsidies, local content requirements, and public procurement preferences create opportunities for businesses aligned with domestic priorities. At the same time, bilateral and multilateral trade arrangements



Figure 1- Share of G20 in World Trade (Heinrich Foundation 2022)

foster economic growth and pave the way for the development of advantageous trading hubs. These hubs, bolstered by a combination of domestic incentives and favorable international agreements, become highly attractive to investors and corporate planners seeking to capitalize on competitive advantages. Same interplay is at work when states compete with one another to attract businesses establish, invest or expand in that state.

Government Response

Governments worldwide are responding to the trend of prioritizing internal markets in varied ways. Some, like the United States, have adopted policies that encourage domestic production through incentives and tariffs on imports, as seen in the recent U.S.-China trade tensions. This approach aims to protect local industries and jobs, as highlighted in the United States-Mexico-Canada Agreement (USMCA), which includes provisions to boost North American automotive manufacturing. On the other hand, the European Union continues to advocate for open trade but has also shown signs of shifting towards more strategic autonomy, particularly in critical sectors like technology and pharmaceuticals, as evidenced by the European Commission's updated Industrial Strategy.



Business Recommendation: Companies should align their strategies with government policies and leverage incentives available in their operational regions. Collaborating through public-private partnerships can further enhance opportunities, particularly in sectors prioritized by local governments for development and investment.



Figure 2- Impact of Globalization on the US economy (Peterson institute for International Economics).

Economic Consequences

The economic consequences of this trend are multifaceted. On the one hand, it can lead to economic nationalism, potentially resulting in trade disputes and increased costs for consumers due to less competition and higher tariffs. An example is the U.S.-China trade tensions, which led to increased tariffs on billions of dollars' worth of goods, affecting global supply chains. Conversely, this trend can stimulate local economies by boosting domestic industries through reshoring, near shoring, and ally shoring. Japan's recent focus on revitalizing its local regions through "U-Turn" policies, encouraging businesses and individuals to move back from metropolitan to regional areas, is an example of positive economic impacts.

Business Recommendation: Businesses should diversify their supply chains and prioritize local, near- and ally-sourcing to reduce exposure to global trade tensions while leveraging incentives provided by domestic markets.

Environmental Impact

The environmental impact of this trend is complex. Localizing production can reduce the carbon footprint associated with long-distance transportation of goods, as seen in the European Union's "Farm to Fork" strategy, which aims to make food systems more sustainable and reduce the environmental impact of food production. However, it can also lead to increased resource use and pollution if local industries are not held to high environmental standards, as observed in countries like India, where rapid industrialization has led to significant environmental challenges.

Business Recommendation: Companies should strategically evaluate their investments in sustainable practices and technologies, balancing compliance with environmental regulations under varying policy landscapes with the urgent need for advancements in these areas. By inventing and developing cutting-edge sustainable technologies where there are unmet needs, businesses can address growing demand for eco-friendly solutions, positioning themselves as leaders in a critical and evolving market.

Impact on Innovation

This trend can both stimulate and hinder innovation. On the one hand, focusing on internal markets can drive innovation in local industries as companies strive to become more competitive. South Korea's heavy investment in research and development, particularly in sectors like electronics and automotive, has made it



a global innovation leader. On the other hand, reduced global collaboration and competition can stifle innovation, as cross-border partnerships and diverse market demands often spur novel solutions.

Business Recommendation: Businesses must strategically operate at the intersection of three competing forces: adapting to regional market needs, navigating complex export control restrictions, and maintaining robust global partnerships. Achieving this balance requires investing in local R&D to meet regional demands, ensuring compliance with trade regulations, and leveraging international collaborations to drive innovation and expand market reach.

Societal Impact

The societal impact of prioritizing internal markets is profound, particularly in terms of job creation and economic resilience. For instance, India's "Make in India" initiative aims to transform the country into a global manufacturing hub, creating millions of jobs and boosting national pride. Conversely, in countries like China and Germany, where a large portion of GDP depends on exports, policies often focus on maintaining global trade competitiveness, but any downturns in international markets can lead to significant job losses, especially in export-dependent industries. In contrast, the United States, where domestic consumption drives a substantial share of GDP, is less vulnerable to global export trade fluctuations. This focus on internal markets supports job creation in sectors aligned with domestic demand but can sometimes limit opportunities in globally competitive industries. Exporting nations naturally focus on

Business Recommendation: Businesses should actively engage in corporate social responsibility initiatives that address both job creation and job displacement, supporting local communities and promoting inclusive growth. By aligning with domestic priorities, companies can help ensure that the societal benefits of internal market-focused policies are widely distributed, mitigating the impact of job losses in export-dependent sectors while fostering stability and opportunity in growing industries.

Additional Insights

For those seeking to dive deeper into the subject, the following sources provide valuable insights:

- United States Trade Policy: The United States has adopted policies to encourage domestic
 production, using incentives and tariffs, particularly evident in the U.S.-China trade tensions and the
 United States-Mexico-Canada Agreement (USMCA). The USMCA includes provisions aimed at
 boosting North American automotive manufacturing.
 - Office of the United States Trade Representative
- 2. European Union's Industrial Strategy: The European Union, while advocating open trade, is moving towards strategic autonomy in critical sectors like technology and pharmaceuticals. This shift is reflected in the European Commission's updated Industrial Strategy.
 - European Commission
- 3. Economic Impact of U.S.-China Trade: The U.S.-China trade disputes, characterized by increased tariffs on billions of dollars' worth of goods, illustrates consequences of prioritizing internal markets...
 - The Impact of US-China Trade Tensions (imf.org)



- 4. **Japan's "U-Turn" Policies**: Japan is focusing on revitalizing local regions through policies encouraging businesses and individuals to move from metropolitan areas to regional areas. This approach aims to stimulate local economies and create jobs.
 - National Housing and Urban Policy Review of Mexico (oecd.org)
- 5. Environmental Impacts in the EU and India: The European Union's "Farm to Fork" strategy aims to make food systems more sustainable and reduce environmental impacts, showcasing how localizing production can lower carbon footprints. Conversely, India's rapid industrialization, without stringent environmental standards, has led to significant environmental challenges.
 - European Commission,
 - Catalyzing Clean Air in India (worldbank.org)

Megatrend 2 - Governments Will Invest in National Sectors with Strong Global Competitive Advantages

As the global economic landscape evolves, governments are increasingly focusing their investment strategies on national sectors where they hold or can develop a significant competitive advantage. This targeted approach is driven by the dual goals of maximizing economic returns and solidifying their position in the global market. By channeling funds into industries such as technology, renewable energy, advanced manufacturing, or pharmaceuticals, where they already have a foothold or possess unique resources or capabilities, governments aim to enhance productivity, spur innovation, and create highvalue employment opportunities. This strategy is particularly pertinent in a world where technological advancements and sustainability concerns are reshaping market demands. Investment in sectors with a competitive edge not only bolsters a nation's economic resilience but also contributes to a more diversified and robust global economy. Such a focused approach often involves collaboration between public and private sectors, leveraging each other's strengths to achieve shared economic objectives and maintain a competitive edge in an increasingly interconnected world.



A company or country's competitive advantage may for instance be expertise grown over time (e.g. in manufacturing, auto, aerospace, etc.), or it may be stemming from high-demand for the country's natural resources (e.g. minerals, metals, etc.), or it may have a large workforce and low cost of living to offer lower wages when labor-content of production is high. In the national and global competitive landscape, the offering of incentives as a means of attracting capital is popular. Increasingly, domestic enterprises must compete with other companies and countries for investor funds. Governments reduce market risks by



investing in the infrastructure required to make the domestic manufacturers a beneficiary so they can compete more favorably on the world stage.

Top 10 Ways Governments Invest in Sectors with Global Competitive Advantage

Here are the top 10 ways governments strategically focus on bolstering sectors where they have or can develop a significant edge:

1. Targeted Financial Incentives

 Governments provide subsidies, tax breaks, or grants to sectors with high growth potential, such as renewable energy, technology, or pharmaceuticals (e.g., South Korea's \$451 billion investment in semiconductors).

2. Public-Private Partnerships

• Governments collaborate with private firms to drive innovation and infrastructure development in competitive industries (e.g., Germany's automotive R&D partnerships or U.K.'s Catapult Centers).

3. Focused R&D Investments

 Governments channel funds into research and development to foster technological advancements and maintain leadership in key sectors (e.g., U.S. National Institute of Health funding for life sciences).

4. Trade Policy Support

• Governments negotiate favorable trade agreements to boost the export potential of competitive sectors, reducing tariffs and improving market access (e.g., Japan's trade deals supporting electronics and automotive industries).

5. Infrastructure Development

 Governments build and upgrade infrastructure tailored to specific industries, such as advanced manufacturing hubs, technology parks, or renewable energy zones (e.g., India's infrastructure for solar energy projects).

6. Skills Development Programs

• Governments implement education and training initiatives to create a workforce with specialized skills needed for competitive industries (e.g., Denmark's programs for wind energy technicians).

7. Export Promotion Strategies

• Governments establish export credit agencies and marketing campaigns to promote national products and services abroad (e.g., China's Belt and Road Initiative to boost trade).

8. Intellectual Property (IP) Protection

• Governments strengthen IP laws to encourage innovation and attract foreign investment in high-value industries (e.g., the European Union's robust patent protections for technology sectors).

9. Strategic Sectoral Investments

 Governments concentrate resources in industries critical for future economic dominance, such as artificial intelligence, biotechnology, or advanced manufacturing (e.g., the U.S. CHIPS Act for semiconductors).

10. National Branding and Soft Power

 Governments leverage national reputation and branding to enhance the global appeal of key industries, such as France's luxury goods or South Korea's entertainment and technology exports (e.g., K-pop and electronics).

GENERAL BUSINESS RECOMMENDATION: Stakeholders should explore opportunities to invest in countries with significant competitive advantages in specific market segments. Such investments enable businesses to embed themselves within the local economy, leveraging government support and gaining access to collaborations with leading domestic companies.



Government Response

Global patent activity remains concentrated in only five economies



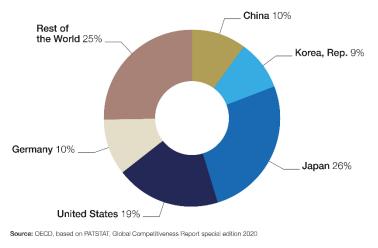


Figure 3- Most patents globally filed by 5 countries (WEF and OECD)

Governments worldwide are responding to the trend of investing in national economic sectors with high global competitive advantage in varied ways. Some, like Germany, have successfully focused on their automotive and engineering sectors, leveraging their historical expertise and reputation for quality. The automotive sector in Germany is the most research-intensive, with an investment of €28.253 billion in R&D in 2019, accounting for 37% of the country's total R&D expenditure. Others, like South Korea, have invested heavily in technology and electronics, capitalizing on their innovative capabilities. Samsung Electronics plans to invest \$230 billion in South Korea over the next 20 years, focusing on developing technology and electronics sectors. The South Korean government announced a collective investment of \$451 billion by companies in the semiconductor

industry, aiming to strengthen its position as a chip powerhouse. These strategic investments often lead to a positive cycle of growth, attracting additional investment and talent. However, there can be negative responses too, such as over-dependence on a single sector, leading to economic vulnerability if global demand shifts.

Business Recommendation: Businesses should tailor their strategies to align with government priorities in key sectors and seize opportunities in markets where regulatory barriers are reduced. For example, automotive companies in Germany or technology firms in South Korea can benefit from supportive policies and funding initiatives. Similarly, the CHIPS Act in the United States reflects a strategic effort to bolster domestic industries. Additionally, businesses should monitor markets that become more attractive as governments ease restrictions and regulations, opening new avenues for growth and collaboration.

Economic Consequences

The economic consequences of this trend are significant. Focused investment in competitive industry sectors can lead to substantial growth and job creation within those industries. For example, China's investment in renewable energy has not only made it a global leader in this sector but also created millions of jobs. In 2022, China invested \$546 billion in clean energy, including solar and wind energy, electric vehicles, and batteries, significantly surpassing U.S. investments in the sector. China's renewable energy generation reached 2.7 trillion kWh in 2022, accounting for 31.6% of the country's total electricity consumption, showing a notable increase from the previous year. On the other hand, in some countries, there can be negative impacts, such as neglect of other sectors, which might lead to a lack of diversification in the economy.

Business Recommendation: Companies are well served to diversify their investments to reduce risks from over-reliance on a single sector and actively pursue opportunities in emerging industries that



align with their corporate strategy. Leveraging sectors prioritized by government investments can enhance resilience and unlock growth potential.

Environmental Impact

Investing in sectors with competitive advantages can have varied environmental impacts. Positive impacts are evident when investments are directed towards renewable energy or sustainable technologies, as seen in Denmark's wind energy sector. Denmark has committed to a 20% ownership stake in four planned offshore wind farms, totaling at least 6 gigawatts (GW) of capacity. The country's dominance in wind energy is largely attributed to its government policies, which have been the primary driver of the industry's growth and development. Sometimes, if investments are concentrated in resource-intensive industries like mining, it could have a significant environmental impact. This impact naturally needs to be mitigated.

Business Recommendation: Businesses should prioritize investments in sustainable practices and climate technologies within competitive sectors to address the global need for innovative solutions

to environmental challenges. By reducing environmental impact and aligning with global sustainability trends, companies can drive market growth, foster innovation, and contribute to the advancement of critical climate technologies.

Impact on Innovation

This trend significantly boosts innovation, especially in sectors where a country holds a competitive advantage. The U.S.'s investment in technology and pharmaceuticals has spurred remarkable innovations in these fields. The U.S. leads in pharmaceutical innovation, spurred by effective life-science policies, significant federal investment in basic research (National Institute of Health Investments), and strong intellectual property protections. However, this can also create a competitive environment where smaller players struggle to keep up, potentially stifling innovation at a grassroots level.

Business Recommendation:

Businesses should invest in R&D partnerships with government R&D centers and government-funded academic institutions to drive innovation

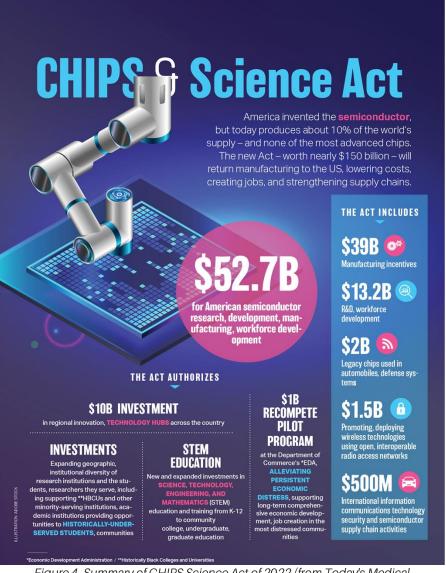


Figure 4- Summary of CHIPS Science Act of 2022 (from Today's Medical Developments 2022).



in sectors with national competitive advantages. Clear agreements on intellectual property ownership are required to ensure mutual benefits while having access to cutting edge solutions, unlocking funding, and leading in emerging industries.

Societal Impact

The societal impact of governments investing in sectors with a high global competitive advantage can lead to job creation in specialized industries, which frequently offer higher wages and skill development opportunities. For example, Denmark's investment in renewable energy has not only positioned it as a leader in wind power but also created numerous high-skilled jobs in the sector. These jobs contribute to higher living standards and economic stability for communities. Additionally, when a government invests in sectors like technology or pharmaceuticals, it can lead to innovations that directly benefit society, such as improved healthcare outcomes or enhanced digital services. As with other trends, there can also be negative impacts. Focusing heavily on certain industries may lead to neglect of others, potentially causing job losses in less prioritized sectors. Moreover, the concentration of investment in high-skill industries might exacerbate social inequalities, as those without relevant qualifications may find it harder to access these new job opportunities.

Business Recommendation: Businesses operating in sectors prioritized by government investments should actively support training and education programs to upskill the workforce and integrate new entrants. This effort helps address skill gaps and ensures broader access to opportunities in these growing industries, reducing potential social inequalities. This might involve funding education and reskilling initiatives or collaborating with social enterprises to drive economic stability in affected regions. Such strategies not only foster inclusive growth but also build stronger ties with local communities while aligning with national economic priorities.

Additional Insights

For those seeking to dive deeper into the subject, the following sources provide valuable insights:

- Germany's Automotive R&D Investment: Germany's automotive sector leads in research and development (R&D) investment, with €28.253 billion in 2019, representing 37% of the nation's total R&D spending. This focus exemplifies the country's strategy of leveraging historical expertise in automotive and engineering sectors.
 - Germany Trade & Invest: Automotive Industry in Germany
- 2. South Korea's Semiconductor Industry Investment: South Korea announced a significant collective investment of \$451 billion in the semiconductor industry, aiming to solidify its status as a leading chip producer. This is part of a broader strategic investment in technology and electronics, highlighted by Samsung Electronics' plan to invest \$230 billion in these sectors over 20 years.
 - South Korea to Invest \$451 Billion in Chip Industry
- 3. China's Renewable Energy Investment: In 2022, China invested \$546 billion in clean energy, including solar, wind, electric vehicles, and batteries. This investment has positioned China as a global leader in renewable energy and contributed to significant job creation, with renewable energy generation reaching 2.7 trillion kWh and accounting for 31.6% of the country's total electricity consumption.
 - Global and China's Renewable Energy Investment



- 4. Denmark's Wind Energy Sector. Denmark's government policies have been pivotal in the development of its wind energy sector, with the country taking a 20% ownership stake in four planned offshore wind farms, totaling at least 6 gigawatts (GW) of capacity. This investment reflects Denmark's commitment to sustainable technologies and its competitive advantage in the wind energy market.
 - Denmark's Wind Energy Investment
- 5. U.S. Pharmaceutical Innovation: The United States leads in pharmaceutical innovation, supported by robust life-science policies, substantial federal investment in basic research through the National Institute of Health, and strong intellectual property protections. This focus on innovation has positioned the U.S. at the forefront of pharmaceutical advancements.
 - <u>U.S. Leadership in Pharmaceutical Innovation</u>

Megatrend 3 - Foreign Policy Will Be Bipolar, Swinging Between Ideology and Pragmatism

In contemporary foreign policy, a notable trend is the oscillation between ideological commitments and pragmatic considerations. This bipolar nature of foreign policy is increasingly evident as nations navigate complex global challenges. On one hand, ideology often drives foreign policy, reflecting deeply held national values and beliefs. These ideological stances can influence decisions on alliances and international cooperation. On the other hand, pragmatism plays a crucial role, especially in matters of trade, security, and crisis management. Here, the focus shifts to practical outcomes, strategic interests, and tangible benefits, sometimes overriding ideological positions. This duality creates a dynamic landscape where foreign policy decisions are frequently a balance—or a tension—between idealistic aspirations and the hard realities of the geopolitical environment. Understanding this dual nature is essential for businesses and strategists to anticipate and interpret international actions and responses effectively.



Realities of trade, scarcity of resources, global supply chains, and access to markets all influence policy. The pendulum swings between policy based on unbending adherence to ideology, versus, policy based on pragmatic realities tied to the national economy and prosperity.

Top 10 Ways Ideology-Pragmatism Spectrum is Managed

Nations will strive to that narrow corridor balance their values and practical considerations, fostering flexibility and adaptability in an increasingly interconnected global landscape.



1. Balancing Trade Liberalization while Protecting Domestic Industries

 Nations pursue trade agreements to expand economic opportunities while balancing it with implementing protections to support domestic industries.

2. Promoting Worker Rights While Managing Strategic Relationships

• Countries advocate for worker and human rights **while balancing it with** maintaining critical economic and security partnerships with strategic nations.

3. Weighing Defense Commitments while Observing Non-Intervention Goals

 Governments scrutinize commitments to defend their national values abroad while balancing it with avoiding entanglements that may carry high strategic costs.

4. Investing in Climate Goals while Assuring Energy Security Needs Are Met

Nations scrutinize climate goals and investment in renewable energy while balancing it with
ensuring energy security through continued investment in traditional energy sources.

5. Using Sanctions Alongside Diplomatic Negotiations

 Governments use sanctions regimes to uphold norms while balancing it with engaging diplomatically to address shared global challenges.

6. Supporting National Principles While Engaging with Other Countries

 Nations promote their national values internationally while balancing it with cooperating with states critical for economic or strategic priorities.

7. Global Collaboration with Respect for National Interests

 Countries participate in international agreements and organizations while balancing it with preserving national sovereignty on key issues.

8. Soft Power Initiatives Versus Economic Realities

 Nations expand their global influence through cultural diplomacy while balancing it with making pragmatic economic decisions to support commercial diplomacy of national industries.

9. Supporting Allies While Managing Major International Relationships

 Governments support allies while balancing it with avoiding actions that could destabilize relationships with larger powers.

10. Encouraging Innovation While Protecting National Security

• Countries foster innovation through national and global collaboration while balancing it with implementing safeguards to protect sensitive technologies.

GENERAL BUSINESS RECOMMENDATION: Stakeholders will find it beneficial to thoroughly analyze each country and ascertain its position on the spectrum from ideology to pragmatism public policy spectrum. A long-term focus on pragmatism while adhering to national public values will likely encourage investment, expansion, and growth within a country.

Government Impact

The bipolar nature of foreign policy, oscillating between ideology and pragmatism, has significant implications for governments worldwide. Governments often face the challenge of balancing their ideological commitments with pragmatic needs. For instance, ideological differences amongst nations can lead to tensions. Conversely, economic, and strategic interests can drive nations to adopt more pragmatic approaches. This is evident in how countries manage relationships with major powers or in international trade agreements. For example, the U.S. and European Union must balance their foreign policy against the pragmatic need for economic engagement with a major global power.

Business Recommendations: Businesses should monitor governmental policies and international relations closely to understand potential shifts in foreign policy. This understanding can guide investment decisions and strategic partnerships. Companies must be prepared to adapt to changes



in diplomatic relations and trade policies that arise from these foreign policy dynamics. Diversifying markets and supply chains can mitigate risks associated with geopolitical shifts.

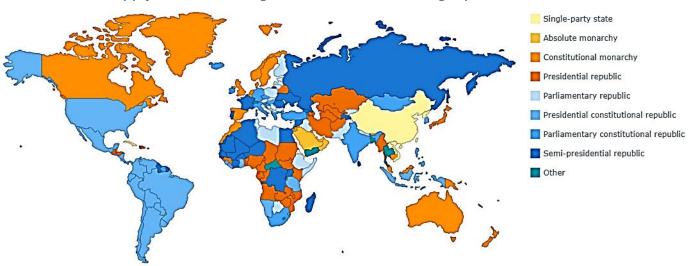


Figure 5- Countries by system of government.

Economic Impact

The bipolar approach to foreign policy impacts the global economy in several ways. When countries prioritize ideology, it can lead to trade disputes or support for specific economic systems, which can disrupt markets and supply chains. On the other hand, a pragmatic approach often leads to free trade agreements and economic partnerships, boosting international trade and investment. For example, the European Union's trade relations and economic considerations sometimes lead to temporary compromises on stances regarding environmental standards.

Business Recommendations: Companies, while remaining faithful to their core values, should

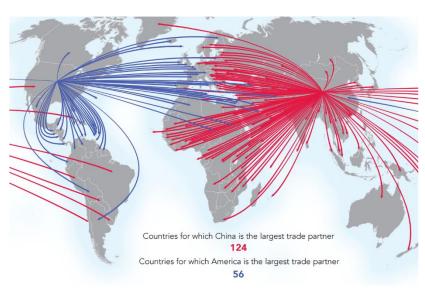


Figure 6- US and China trading partners (Jeff Blossom for Connectography)

develop flexible business strategies that can adapt to changing trade policies and economic alliances. Investing in market analysis and understanding the political climate of trade partners can help businesses navigate the complexities of the foreign policy environment.

Environmental Impact

In some countries, national policies may emphasize environmental protection and sustainable practices, leading to stricter regulations and international environmental agreements. In other countries, pragmatic foreign policies may prioritize economic growth and resource access, sometimes overlooking environmental concerns. Countries rich in natural resources, for instance, might

prioritize economic gains from mining over environmental protection, leading to policies that are less



stringent on environmental standards. Conversely, nations with strong ideological commitments to environmentalism may push for international climate agreements and invest in sustainable technologies.

Business Recommendations: Businesses in sectors affected by regulations should stay informed about international policies and agreements. Companies can also invest in practices and technologies to align with national policy initiatives and to mitigate risks associated with stricter regulations.

Innovation Impact

In the area of innovation, ideological commitments can lead to investments in specific sectors like renewable energy or advanced technologies that align with national values. Pragmatic foreign policies, on the other hand, often focus on technological advancements that promise immediate economic benefits or strategic advantages.

For example, the race for 5G technology dominance showcases how pragmatic considerations can spur innovation in the technology sector, with countries investing heavily. Another example is European nations' focus on green technologies that reflects an ideological commitment to environmental sustainability, driving innovation in renewable energy sectors.



Figure 7- Countries with most trade agreements (Statista 2021)

Business Recommendations: Companies should align their research and development efforts with the prevailing foreign policy orientation, be it ideological or pragmatic. This alignment can open opportunities for funding, partnerships, and new markets. Keeping an eye on emerging technologies and sectors favored by governments, if aligned with corporate priorities, can provide companies with a competitive edge.

Societal Impact

The bipolar approach to foreign policy affects society by influencing international relations, cultural exchanges, and global perceptions. Ideologically-driven policies can foster a sense of national identity and pride but may also lead to international isolation or conflict. Pragmatic foreign policies focusing on economic and strategic interests can lead to improved living standards through trade and investment but might overlook other values. For instance, investments through the U.S. Agency for International Development, multilateral development banks, European Union's EUAID, Australia's AusAID, and China's Belt and Road Initiative (BRI) illustrate how foreign policy aimed at economic expansion can have significant societal impacts in participating countries.

Business Recommendations: Businesses should be aware of how foreign policy affects societal attitudes and preferences. This awareness can guide marketing strategies and corporate social



responsibility initiatives. Engaging in corporate diplomacy and fostering good community relations can be beneficial in environments where foreign policy impacts societal perceptions and behaviors.

Additional Insights

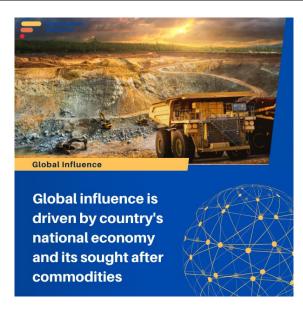
For those seeking to dive deeper into the subject, the following sources provide valuable insights:

- European Union's Foreign Policy: This article discusses the European Union's complex foreign
 policy approach highlighting the balance between ideological concerns and the pragmatic need for
 economic engagement. It illustrates the bipolar nature of foreign policy that governments must
 navigate.
 - European Union and China: A Fine Balancing Act
- 2. Global Trade and Foreign Policy:. This United Nations reference described the global trade from the UN lens with a mix of idealism and pragmatism.
 - United Nations Trade & Development Report 2022
- 3. **U.S.-China Trade Relationship:** This article examines the U.S.-China trade relationship, showcasing how economic pragmatism often overrides ideological conflicts. It is a prime example of how foreign policy impacts global economic interactions.
 - U.S.-China Economic Relationship
- 4. Race for 5G Technology Dominance: This piece analyzes the global race for 5G technology dominance. It highlights how pragmatic foreign policy considerations can spur innovation in technology sectors, reflecting the bipolar nature of foreign policy.
 - 5G Technology Race: US and China's Strategic Approaches
- 5. China's Belt and Road Initiative (BRI): This article provides an in-depth look at China's Belt and Road Initiative and its impact on society in participating countries. It serves as an example of how pragmatic foreign policy aimed at economic expansion can have broad societal impacts, including infrastructure development and economic growth.
 - China's Belt and Road Initiative



Megatrend 4 - Global Influence is Powered by The Strength of a Country's Economy, Its Sought-After Commodities, or Its Strategic Geography

Global influence is increasingly determined by the economic prowess of a nation or the global demand for its commodities. A strong economy often translates into significant political and diplomatic clout on the world stage. This influence manifests in various ways, such as the ability to shape international trade agreements, sway global financial systems, and exert soft power through cultural and technological exports. A strong national economy makes a country a magnet for investment and for external businesses to stream in and serve market needs. A strong economy emboldens domestic producers to enter international markets. A country's economic prominence will attract regional neighbors and global players to build alliances and ride the economic coat tails of the nation. Economic strength enables a country to project its ambitions to its neighbors and beyond, shaping bilateral and multilateral relationships.



Countries rich in sought-after commodities such as oil, rare earth elements, or key agricultural products hold yet another significant advantage in the global geopolitical arena. These natural resources are vital cogs in

the machinery of global industries and economies, making them powerful tools of influence for the nations that control them. This leverage is particularly evident in the market sectors of energy and technology, where oil and rare earth elements, respectively, are still indispensable. The strategic importance of these commodities allows producing countries to negotiate from a position of strength, thereby influencing international trade, diplomatic relations, and economic policies. Recent global events have highlighted this dynamic. Shifts in energy markets have dramatically impacted international politics and economies, while disruptions in critical commodities have led to shortages. These developments underscore whomever controls key natural resources often shaping global dynamics, international relations, and policy decisions.

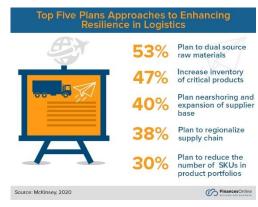


Figure 8- Minimizing critical impact to companies' supply chains (McKinsey & Finance Online 2020)

Top 10 Ways Countries Project Their Global Influence

Countries enhance their global influence through the strength of their economies and the strategic management of sought-after commodities by leveraging their assets and fostering international collaboration. Here are the top 10 approaches nations use:

1. Expanding Export Leadership

- Economically strong nations grow their global presence by excelling in key export sectors, such
 as Germany's prominence in automotive manufacturing or South Korea's leadership in
 electronics.
- 2. Managing Essential Resources



 Countries with valuable resources, such as Saudi Arabia with oil or China with rare earth elements, play a pivotal role in ensuring stable supply chains and fostering economic partnerships.

3. Shaping Trade Agreements

 Nations use their economic strength to negotiate trade agreements, such as the U.S.-Mexico-Canada Agreement, fostering mutually beneficial economic relationships and setting standards.

4. Influencing Global Financial Systems

• Economies like the United States leverage their financial systems and the global use of their currencies to contribute to stability and promote transparent international trade practices.

5. Supporting Global Infrastructure Development

• Programs like China's Belt and Road Initiative demonstrate how investments in infrastructure can strengthen international ties and support shared economic goals.

6. Providing Development Aid and Loans

 Countries such as Japan and the United States use development aid and loans to promote sustainable growth and build cooperative relationships with partner nations.

7. Advancing Innovation and Technology

• Leadership in sectors like artificial intelligence, renewable energy, and pharmaceuticals allows nations such as the U.S. and Japan to share technological advancements.

8. Fostering Resource-Based Alliances

 Resource-rich countries participate in alliances like OPEC or collaborate with other nations on critical resources to ensure stability and mutual benefits in global markets.

9. Sharing Cultural and Economic Strengths

 Nations build global connections through cultural exports, such as Hollywood, Bollywood, and South Korea's entertainment industry or Italy and France's fashion and luxury goods, enhancing shared cultural interests resulting in economic opportunities.

10. Engaging Emerging Markets

 Economically strong nations invest in developing markets, offering technology, expertise, and infrastructure to support growth and create collaborative opportunities.

GENERAL BUSINESS RECOMMENDATION: To excel in the global market, businesses should align selectively and strategically with countries that possess economic strength and key resources. Building mutually beneficial partnerships with governments and local industries in these regions allows companies to access critical markets and technologies while contributing to national economic goals. Developing resilient supply chains in resource-rich or innovation-driven sectors enhances competitiveness and ensures sustainability. Additionally, engaging in trade agreements, infrastructure initiatives, and emerging markets fosters long-term stability, creating shared value and strengthening global ties.

Government Impact

The trend of global influence being driven by a country's economic strength or possession of sought-after commodities significantly affects governmental actions worldwide. Governments in economically strong countries often leverage their financial prowess to negotiate favorable terms in international trade agreements, influence global financial systems, and extend their soft power through cultural and technological exports. For example, the United States, with its robust economy, has long been able to shape global trade policies and establish international norms. On the other hand, countries rich in commodities like oil and rare earth elements use these resources to exert considerable geopolitical influence. These dynamics prompt governments to focus on strengthening their economies and securing access to vital commodities, leading to increased competition and strategic alliances.



Business Recommendations: Businesses should closely monitor the economic policies and geopolitical stances of influential nations, adjusting their strategies accordingly. Investing in countries with strong economies or valuable commodities can offer stability and growth opportunities. Additionally, forming strategic partnerships with local businesses and partners in these regions can provide a competitive edge.

Economic Impact

The economic consequences of a country's global influence driven by economic strength or commodities are multifaceted. A strong national economy not only attracts foreign investments but also encourages domestic businesses to expand internationally, fostering global trade and economic growth. For instance, China's economic ascent has led to increased foreign direct investment in the country and a significant expansion of Chinese businesses abroad. Conversely, countries with control over critical commodities like oil or rare earth elements can impact global markets significantly. Control over key resources can lead to economic vulnerabilities for dependent countries and global market fluctuations.

Business Recommendations: Businesses should diversify their markets and supply sources to mitigate risks associated with economic and commodity-based global influences. Investing in alternative sources and technologies can reduce dependence on specific commodities, while expanding into new or emerging markets can offset potential instabilities in traditional markets.

Environmental Impact

The environmental impact of this trend is significant, especially in countries rich in natural resources. The extraction of commodities like oil and rare earth elements often lead to environmental degradation, pollution, and biodiversity loss. This trend underscores the need for sustainable resource management and environmental protection measures in countries with valuable natural resources. Many countries have begun implementing strategies to protect their environment and resources.

Business Recommendations: Companies should invest in sustainable and environmentally friendly technologies and practices, especially when operating in resource-rich countries. This approach not only mitigates environmental impact but also aligns with increasing local and global demand for sustainable practices, consequently enhancing the company's brand reputation and market position.

Innovation Impact

Countries with strong economies or control over sought-after commodities often lead in innovation, primarily through investments in research and development (R&D) and technology. For instance, the United States, with its strong economy, has been a global leader in technological innovation, significantly influencing global tech trends. Similarly,

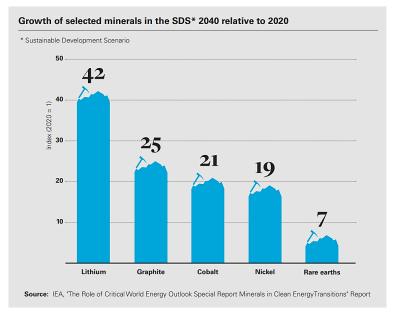


Figure 9- Increase in demand for critical minerals between 2020 and 2040. 42X means 42 time more in 2040 than in 2020 (IEA, White & Case, JDSupra)

countries like China, which control significant rare earth element supplies, have the leverage to invest



heavily in technology sectors that rely on these materials, like renewable energy and electronics. This trend can spur innovation globally, as countries compete to maintain or enhance their economic and commodity-based influence.

Business Recommendations: Businesses should focus on innovation and R&D, particularly in sectors relevant to the economies or commodities of influential countries. Collaborating with universities and research institutions in these countries can provide access to cutting-edge technologies and foster innovation.

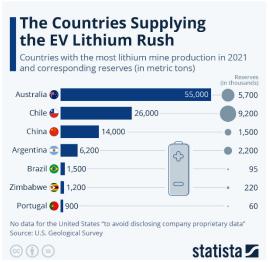


Figure 10- Countries producing the most Lithium (Statista 2021)

Societal Impact

The societal impact of a country's global influence based on economic strength or commodities is profound. Economically strong countries often experience improved living standards, greater job opportunities, and enhanced social welfare systems. For example, the economic growth of Singapore has significantly improved the quality of life for its citizens. However, in countries where influence is based on commodities, societal impacts can be mixed. While there can be economic benefits, such as increased national revenue and job creation, there are often issues related to income inequality, environmental degradation, and political instability.

Business Recommendations: Businesses operating in these influential countries should engage in corporate social responsibility (CSR) initiatives that support sustainable development and social welfare. Investing in community development projects and environmentally friendly practices

can improve societal outcomes and enhance the company's reputation.

Additional Insights

For those seeking to dive deeper into the subject, the following sources provide valuable insights:

- United States' Global Trade Influence: The United States uses its strong economy to shape global trade policies and establish international norms, demonstrating the power of economic strength in global influence. This is a clear example of how economic prowess can be leveraged in international relations and trade agreements.
 - How the US Economy Influences the World
- Saudi Arabia's Oil Diplomacy. Saudi Arabia's control over vast oil reserves allows it to significantly
 influence global oil prices and negotiate trade and diplomatic relations. This highlights the
 geopolitical influence that countries with key commodities, like oil, can exert on a global scale.
 - Saudi Arabia Vision 2030
- China's Economic Ascent and Global Impact: China's growing economy has led to an increase in
 foreign direct investment and the expansion of Chinese businesses abroad. This case exemplifies
 how a strong national economy can foster global trade and economic growth, while also attracting
 international investment.



- China's Economic Rise: History, Trends, Challenges, and Implications for the United States
- Environmental Challenges in Resource-Rich Countries: The extraction of resources like oil and rare earth elements cause environmental degradation and health hazards. Countries are adopting importance of sustainable resource management and environmental protection in these areas.
 - Sustainability in Denim: A Step toward Sustainable Production and Consumption of Denim
- Societal Impacts in Economically Strong and Commodity-Based Countries: Countries with strong
 economies often enjoy improved living standards and social welfare, while those dependent on
 commodities face challenges like income inequality and societal tensions in their journey to
 developed nation status.
 - All on Board Making Inclusive Growth Happen

Megatrend 5 - Utilitarian Environmental Policy Will Shape a Growing Portion of Industrial and Economic Strategies

Environmental policy is becoming a major driving force in shaping industrial policy and the broader economy. As global awareness of environmental issues such as climate change, pollution, and resource depletion rise, governments and international organizations are increasingly prioritizing sustainable practices. This shift is likely to lead to the introduction of more stringent regulations aimed at reducing carbon footprints, promoting renewable energy, and enforcing sustainable resource management. How ever there is a growing recognition that implementation has to be cost effective, not negatively effect national security, and minimize the tax burden on citizens or debt financing borne by them. Driven by consumer demand industries will be compelled to adapt, leading to a surge in green technologies and eco-friendly business models. This evolution in environmental policy will not only redefine existing industries but also stimulate the growth of new sectors, ultimately influencing the trajectory of the global economy towards more sustainable and environmentally conscious practices.



The integration of environmental considerations into economic planning signals a transformative period, where environmental stewardship becomes integral to economic success and societal well-being. As countries tighten their regulatory frameworks around better environmental policy, and as more consumers demand it, more industry partners will cost-effectively invest in the ability to meet these expectations. Focus on environmental solutions will take a greater share of the economic resources of the country. No doubt innovations will create new opportunities for faster, more effective, and less costly technologies to come



forth. The higher the reach of the environmental goals, the higher the likelihood that a larger share of the economy will be engaged to invent solutions to meet those goals.

Top 10 Ways Industrial & Economic Strategies Mesh with Environmental Policies

Here are the top 10 ways environmental policy influences industrial and economic strategies, with the understanding that different governments may prioritize these initiatives to varying degrees:

1. Carbon Pricing Mechanisms

• Some governments may advance policies like carbon taxes or cap-and-trade systems to reduce emissions, while others may opt for alternative approaches that emphasize economic flexibility.

2. Renewable Energy Initiatives

Support for solar, wind, and other renewable energy sources can vary, with some governments
emphasizing their expansion and others may promote an investment mix across a broader range
of energy production solutions.

3. Circular Economy Models

 Governments may promote waste reduction and resource-efficient practices to varying extents, depending on their broader economic and environmental goals.

4. Sustainable Transportation

• Initiatives such as electric vehicles and green mass transit may receive support under certain governments, while others may refocus on a mix of energy and transportation strategies.

5. Green Infrastructure Projects

 Investment in green infrastructure, such as energy-efficient buildings, may be prioritized by some governments while embraced more selectively by other governments.

6. Clean Technology R&D

 The level of public funding and incentives for green technology, climate technology, and environmental technologies often reflect each government's emphasis and interpretation of its needs.

7. Environmental Standards and Compliance

• Policies regulating emissions and waste are adjusted depending on a government's perspective on balancing environmental goals with industrial competitiveness.

8. Sustainable Agriculture

• Approaches to agriculture may vary, with some governments emphasizing practices like organic farming and reduced pesticide use, while others focus on maximizing productivity.

9. Green Jobs and Workforce Reskilling

Investments in training for green industries can fluctuate, with some governments fostering
workforce development in these areas while others emphasize different sectors. In fact not
addressing this issue, can become a public policy wedge against sustainable goals.

10. Environmental Alignment in Trade Policies

• The inclusion of environmental considerations in trade agreements may be a focus for some administrations, while others might prioritize flexibility in trade to support economic goals.

GENERAL BUSINESS RECOMMENDATION: Stakeholders stand to benefit significantly by aligning with these emerging government regulatory frameworks and their associated incentives. The pursuit of industry solutions aimed at achieving environmental goals presents a potent avenue for growth. Innovations designed to comply with these new regulations often attract enthusiastic early adopters and pioneering users, presenting a valuable opportunity for market entry. This scenario underscores a growing market trend where compliance with environmental standards is not just a regulatory requirement but also a strategic business advantage, opening doors for innovative solutions and new market players.



Government Impact

The rising emphasis on environmental policy is reshaping government actions globally. Governments are increasingly integrating environmental considerations into their legislative and regulatory frameworks. For instance, the European Union's Green Deal aims to make Europe climate neutral by 2050, a commitment that influences a wide range of policy areas from energy to transportation. Similarly, China's 14th Five-Year Plan includes significant investments in green energy and aims to peak carbon emissions before 2030. These policies represent a fundamental shift in how governments view the relationship between environmental stewardship and economic development. By placing environmental considerations at the heart of industrial policy, governments are

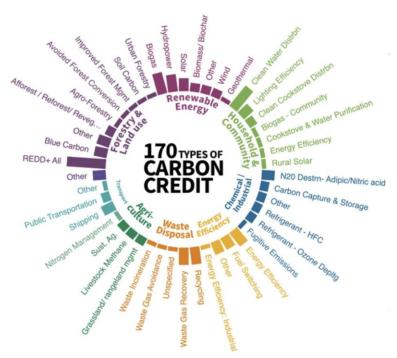


Figure 11- Various forms of Carbon Credit (Ecosystem Marketplace)

not only addressing ecological concerns but also steering their economies towards more sustainable and innovative pathways.

Business Recommendation: Businesses should stay informed about evolving environmental regulations in their respective sectors and regions, preparing to adapt their operations accordingly. Companies should explore government incentives related to environmental compliance, such as tax breaks or grants for sustainable practices, to offset the costs of transitioning to greener operations.

Economic Impact

The integration of environmental policy into industrial and economic frameworks is significantly altering the economic landscape. This shift is leading to a reallocation of investments towards sustainable and green technologies. For example, the renewable energy sector has seen substantial growth, with investments surpassing \$300 billion globally in recent years. Additionally, the push for sustainability is fostering the emergence of new industries, such as electric vehicle manufacturing, which is projected to grow rapidly in response to environmental policies. However, this transition also poses challenges, particularly for traditional industries reliant on fossil fuels, which may face declining demand and increased regulatory pressures. Overall, the trend towards environmental policy-driven economies is catalyzing a fundamental restructuring of global economic priorities, favoring sustainability and innovation.

Business Recommendation: Businesses should consider investing in sustainable technologies and practices, positioning themselves as frontrunners in providing innovative innovations in the emerging green economy. Companies, especially those in traditional industries, should explore diversifying their business models to include environmentally friendly portfolios, mitigating risks associated with environmental policy transitions.

Environmental Impact



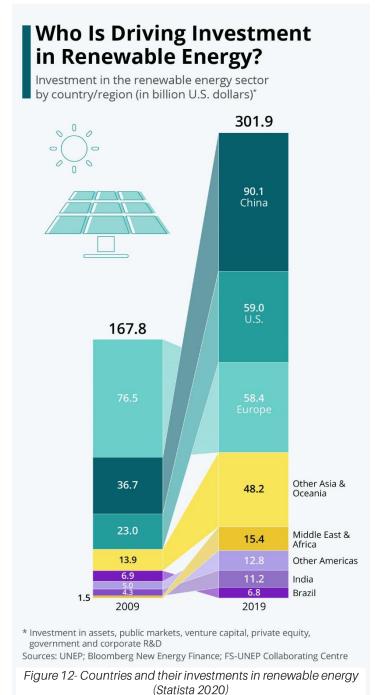
The increasing influence of environmental policy on industrial practices is having a profound impact on the environment. These policies aim to reduce carbon emissions, limit pollution, and promote sustainable resource use, thereby addressing key environmental challenges such as climate change and biodiversity loss. For example, the implementation of carbon pricing mechanisms in various countries is effectively

reducing greenhouse gas emissions by making it more costly to emit carbon dioxide. Moreover, regulations promoting renewable energy are decreasing reliance on fossil fuels, leading to improvements in air quality and reductions in carbon footprints. This shift towards environmentally conscious policies is not only beneficial for the planet but also essential for ensuring a sustainable future.

Business Recommendation: Companies should actively implement practical sustainable practices in their operations, such as reducing waste, conserving resources, and decreasing emissions, based on their environmental objectives. Businesses can capitalize on the growing demand by providing eco-friendly raw materials, semi-finished goods, finished products, as well as services, tapping into a premium market where consumers value sustainability.

Innovation Impact

The growing emphasis on environmental policy is driving innovation across various sectors. Companies are incentivized to develop new technologies and solutions that comply with stricter environmental regulations. For instance, advancements in battery technology are crucial for the expansion of the electric vehicle market, while innovations in renewable energy technologies like solar and wind power are transforming the energy sector. These developments are not only environmentally beneficial but also economically advantageous, as they often lead to cost savings and increased efficiency in the long term. The push for environmental compliance is fostering a culture of innovation, where solving environmental challenges becomes a catalyst for technological advancement and economic growth.



Business Recommendation: Businesses should allocate resources to research and development, focusing on creating innovative solutions that to help businesses meet environmental standards.



Collaborating with other industries and research institutions can accelerate the development of groundbreaking technologies and environmentally friendly practices and become a source of growth.

Societal Impact

The trend towards prioritizing environmental policy is having significant social implications. As societies become more aware of environmental issues, there is a growing demand for sustainable practices and products. This shift is altering consumer behavior, with a preference for eco-friendly and sustainable options becoming increasingly prevalent. Additionally, the move towards a greener economy is creating new job opportunities in sustainable industries, contributing to a shift in the labor market. However, this transition also presents challenges, such as the need for retraining workers from traditional industries to equip them for new roles in the green economy. Overall, the increasing focus on environmental policy is shaping societal values and expectations, leading to a more environmentally conscious and sustainable way of life.

Business Recommendation: Businesses should invest in educating consumers about the environmental impact of their products and services, fostering a market for sustainable options. Companies transitioning to greener practices should support their workforce through retraining and reskilling programs, ensuring a smooth adaptation to the changing economic landscape.

Additional Insights

For those seeking to dive deeper into the subject, the following sources provide valuable insights:

- 1. "The European Green Deal" by the European Commission: This official document outlines the European Union's comprehensive plan to make its economy sustainable by turning climate and environmental challenges into opportunities across all policy areas. It is an essential read for understanding how a major economic bloc is integrating environmental policy into its economic and industrial framework. Available at:
 - European Commission European Green Deal.
- 2. "China's 14th five-year plan Spotlighting climate and environment" by United Nations This report offers an analysis of China's 14th Five-Year Plan, emphasizing its environmental aspects and implications for climate change policy. It is crucial for understanding how the world's largest emitter of greenhouse gases is aligning its industrial and economic strategies with environmental goals.
 - UN China's 14th Five-Year Plan.
- 3. "Global Trends in Renewable Energy Investment" by the Frankfurt School-UNEP Collaborating Centre: This annual report provides detailed data and analysis on global investments in renewable energy. It is a valuable resource for understanding the economic impact of the shift towards sustainable energy, a key aspect of environmental policy.
 - FS-UNEP Centre Global Trends in Renewable Energy Investment.
- 4. "Why Sustainability Is Now the Key Driver of Innovation" by the Harvard Business Review (HBR): This article discusses how environmental regulations can spur innovation in various industries. It offers insights into how businesses can turn environmental compliance into a competitive advantage.
 - Harvard Business Review Environmental Regulations and Innovation.



- 5. "Green Jobs: Towards Decent Work in a Sustainable, Low-Carbon World": This report examines how the transition to a green economy is creating new job opportunities and the need for skills development. It is an excellent source for understanding the societal impacts of environmental policies on the labor market.
 - International Labor Organization Green Jobs

Megatrend 6 - Nations Invest in Diversifying Supply Sources to Build Stronger, More Resilient Economies

Governments are increasingly focusing on diversifying supply sources as a strategy to build a more resilient economy. This approach includes investments in nearshoring, ally-shoring, and onshoring initiatives. Nearshoring involves relocating production or sourcing materials from countries geographically closer to the home market. Ally-shoring refers to the practice of shifting supply chains to countries that are not only geographically closer but also politically aligned or strategic partners. Onshoring, or reshoring, is the process of bringing production processes back to a country's own shores. By diversifying supply sources through these methods, governments aim to reduce dependence on distant or potentially unstable regions, thereby mitigating risks like supply chain disruptions. This strategic diversification ensures a more stable and secure supply of goods, which is crucial for maintaining economic stability and growth in an increasingly interconnected and uncertain global landscape.



The COVID-19 Pandemic taught governments that our just-in-time production and just-in-time consumption global economy is fragile. Hundreds of thousands of sources of supply are spread around the world. In this reality, the flow of goods and services was disrupted significantly by COVID-19. Frankly, most governments did not understand how complex the modern supply chains of their economies had become as supply chain is not a government expertise. Manufacturing is dependent on availability of parts or ingredients, at times, from only a few sources of supply in far flung corners of the world. Supply chains are only as good as their weakest link. Consequently, countries are investing in addressing the supply chain vulnerabilities of their industrial base to make them more resilient.

Top 10 Ways Nations Build Resilient Supply Chains

Here are the top 10 ways nations invest in diversifying supply sources to strengthen and build more resilient economies:

1. Encouraging Nearshoring and Onshoring





Figure 13- Top 5 Supply Chain resilience actions (McKinsey & Finance Online 2020)

• Nations incentivize companies to relocate production closer to home or within their borders, reducing dependency on distant supply chains (e.g., U.S. CHIPS Act for domestic semiconductor production).

2. Promoting Ally-Shoring

• Countries prioritize sourcing from politically stable and allied nations to ensure reliability and minimize geopolitical risks (e.g., Japan's partnerships for rare earth elements).

3. Investing in Critical Infrastructure

• Governments build and upgrade infrastructure such as ports, railways, and storage facilities to support diversified supply chains and improve logistics.

4. Providing Financial Incentives for Diversification

 Tax breaks, grants, and subsidies encourage businesses to establish operations in multiple regions, spreading supply chain risks.

5. Expanding Strategic Stockpiles

 Nations create reserves of critical materials and products, such as medical supplies and energy resources, to buffer against future disruptions.

6. Supporting Innovation in Manufacturing and Logistics

 Investments in advanced manufacturing technologies, like robotics and 3D printing, and supply chain management tools help reduce reliance on single-source suppliers.

7. Strengthening Trade Agreements

• Bilateral and multilateral trade deals diversify sourcing options and open access to alternative suppliers and markets (e.g., the EU-Japan Economic Partnership Agreement).

8. Developing Domestic Industries in Strategic Sectors

• Countries focus on building self-reliance by investing in sectors critical to national security and economic stability, such as energy, technology, and pharmaceuticals.

9. Diversifying Energy Sources

 Investments in renewable energy, nuclear power, and alternative fuel sources reduce dependence on specific regions for energy needs.

10. Encouraging Public-Private Partnerships

• Governments collaborate with private enterprises to identify vulnerabilities, invest in resilient supply chains, and ensure steady access to essential goods.

These strategies enable nations to build more resilient economies by reducing vulnerabilities, ensuring reliable access to resources, and adapting to a dynamic global landscape.

GENERAL BUSINESS RECOMMENDATION: Businesses should closely monitor the growing emphasis on supply chain diversification as governments adopt policies to enhance economic resilience. This includes reducing tariffs and trade barriers for supplies from trusted trade partners and allied nations, creating new opportunities for reliable sourcing. Additionally, businesses should remain vigilant for government incentives designed to encourage reshoring and nearshoring, such as tax breaks, grants, or infrastructure investments, which aim to strengthen domestic production and reduce dependence on global supply chains. Aligning with these initiatives can position businesses to benefit from emerging supply chain strategies.



Government Impact

Governments around the world are actively responding to the trend of diversifying sources of supply. For instance, the European Union has been working on reducing its dependency on Asian manufacturing by encouraging near-shoring and onshoring. This includes substantial investments in Eastern Europe and incentives for companies to relocate their manufacturing bases within the EU. Similarly, the United States has introduced policies like the CHIPS & Science Act, which aims to revitalize the domestic semiconductor industry, part of the critical national supply chain. These initiatives are part of a larger strategy to safeguard against future disruptions by creating more localized and politically secure supply chains. Governments are realizing the importance of having a robust and diversified supply system that can withstand global shocks and are thus investing in policies and financing the infrastructure to support this shift.

Business Recommendation: Businesses should actively seek opportunities to align with government initiatives in supply chain diversification. This can involve applying for grants and subsidies provided for reshoring or near-shoring activities. Additionally, companies should consider partnering with local suppliers or establishing new operations in regions that are politically stable and geographically closer to their primary markets. This alignment not only provides financial benefits but also positions businesses favorably in the eyes of government and consumers, who are increasingly aware of these issues.

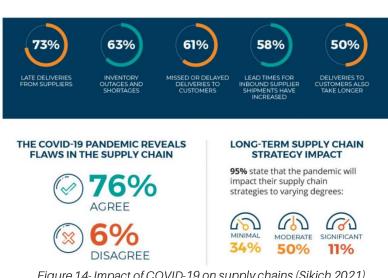


Figure 14- Impact of COVID-19 on supply chains (Sikich 2021)

Economic Impact

The economic consequences of governments investing to diversify sources of supply are multifaceted. On one hand, it leads to increased economic resilience and stability. For example, during the pandemic, countries heavily reliant on single sources for essential goods, like medical supplies and electronics, faced severe challenges. Diversifying sources mitigate such risks. On the other hand, this trend can lead to short-term economic strain due to the costs associated with shifting supply chains, such as building new facilities or training local workforces. However, in the long term, it promises more sustainable economic growth. Countries

like Japan and South Korea, which have long invested in diversifying their supply sources, have shown more economic resilience during global disruptions compared to those with more concentrated supply chains.

Business Recommendation: Businesses should conduct a thorough cost-benefit analysis before restructuring their supply chains. They should consider long-term benefits like reduced transportation costs and lower risks of disruption against the initial investment required for such transitions. Engaging in strategic partnerships with local governments and suppliers can also offset some of the initial costs and facilitate smoother transitions. Moreover, businesses can integrate new digital tools as part of this makeover to enhance supply chain visibility and flexibility, making it easier to track these changes.

Environmental Impact



The environmental impact of diversifying supply sources is a mixed bag. On one hand, nearshoring and onshoring can significantly reduce the carbon footprint associated with longdistance transportation of goods. For instance, bringing production closer to consumer markets in Europe and North America can lower emissions from shipping goods across the globe. However, this trend also raises concerns about increased environmental pressures in areas where production is being relocated or intensified. If not managed responsibly, it could lead to overexploitation of local resources and environmental degradation. The challenge lies in balancing the need for supply chain resilience with sustainable environmental practices.

Business Recommendation:

Businesses should adopt sustainable practices as they diversify their supply chains. This includes investing in green technologies and renewable energy sources for manufacturing processes. Additionally, companies can

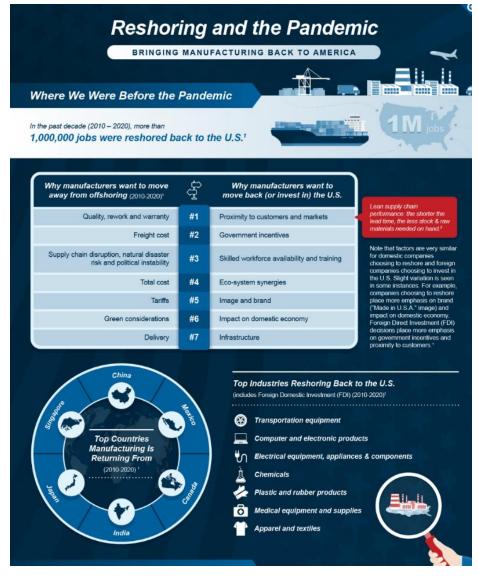


Figure 15- Reshoring and the pandemic in the US(NIST 2022)

collaborate with local governments and environmental organizations to ensure that their operations comply with environmental regulations and contribute positively to the local ecology. By prioritizing sustainability, businesses not only reduce their environmental impact but also enhance their brand image and appeal to increasingly environmentally conscious consumers.

Innovation Impact

The push for diversifying supply sources has a significant impact on innovation. By fostering a more localized and diversified supply chain, governments are inadvertently creating environments ripe for innovation. For example, the U.S. government's focus on reshoring essential industries like semiconductor manufacturing is not just about supply chain security; it is also about stimulating technological innovation within the country. Similarly, the European Union's emphasis on digital and green technologies in its industrial strategy aims to bolster innovation in these sectors. This trend encourages businesses to invest in R&D and adopt new technologies to stay competitive in a changing supply chain landscape.



Business Recommendation: Businesses should leverage this trend by investing in R&D and embracing technological advancements. They can explore new materials, manufacturing processes, and digital tools to enhance efficiency and reduce costs. Collaborations with universities and research institutions can also be fruitful in developing innovative solutions. Furthermore, both private and public sector should stay abreast of government policies and incentives related to innovation and supply chain diversification to capitalize on potential opportunities.

Societal Impact

The societal impact of governments investing in diversified supply sources is largely positive. This trend can lead to job creation and economic development in regions where new production facilities are established. For instance, onshoring initiatives in the U.S. and Europe are expected to create numerous jobs in manufacturing and related sectors. Moreover, this trend can enhance national and global security by reducing reliance on potentially unstable regions for essential goods. However, there is also a potential for societal disruption, especially in regions that lose their status as primary manufacturing hubs, leading to job losses and economic shifts.

Business Recommendation: Businesses should be proactive in engaging with local communities where they establish new operations. This includes creating job opportunities, offering training and skill development programs, and actively participating in community development initiatives. Furthermore, companies should also consider the societal impact of moving operations away from existing locations and explore ways to mitigate negative consequences, such as retraining programs or by finding alternative uses for their facilities in these regions. By doing so, businesses can moderate social impact, build goodwill, and foster a positive corporate image.

Additional Insights

For those seeking to dive deeper into the subject the following sources provide valuable insights:

- European Union's Response to Supply Chain Vulnerability: The European Union has been actively
 working to reduce its dependence on non-European manufacturing since the COVID-19 pandemic.
 This strategy includes significant investments in Eastern Europe and incentives for businesses to
 relocate their manufacturing bases within the EU. The aim is to create more secure and localized
 supply chains.
 - European Union's Resilience of global supply chains Challenges and solutions
- 2. **The United States CHIPS Act**: The CHIPS Act in the United States is a policy aimed at revitalizing the domestic semiconductor industry. This act is part of a broader strategy to strengthen the supply chain and ensure resilience against future disruptions by fostering local production.
 - The United States CHIPS Act and Its Impact on Supply Chains
- 3. Economic Resilience Through Diversified Supply Sources: Diversifying supply sources enhances economic resilience and stability, as seen during the COVID-19 pandemic. Countries like Japan and South Korea, with diversified supply sources, demonstrated greater economic resilience. However, this approach can initially strain economies due to the costs of changing supply chains.
 - Economic Consequences of Diversifying Supply Sources
- 4. Environmental Implications of Supply Chain Diversification: The environmental impact of diversifying supply sources includes both benefits and challenges. While onshoring and nearshoring can reduce transportation-related emissions, they can also intensify environmental

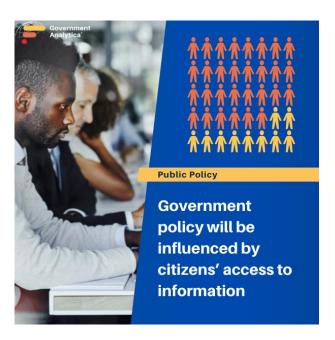


pressures in new production areas. Sustainable practices are vital to balance supply chain resilience with environmental responsibility.

- Global Trade Needs More Supply Diversity, Not Less
- 5. Innovation Driven by Diversified Supply Chains: Governments' push for diversified supply chains fosters innovation, especially in sectors like semiconductor manufacturing in the U.S. and digital and green technologies in the EU. This trend encourages companies to invest in research and development and adopt new technologies.
 - Innovation Impact of Diversified Supply Chains

Megatrend 7 - Government Policies are Influenced by The Citizen's Reaction to The Information They Consume

Government policy is significantly shaped by the level of access citizens have to information. In a society, where individuals can access a variety of data sources and viewpoints, the resulting public discourse tends to be more nuanced and reflective of diverse perspectives. This environment enables citizens to make informed decisions and hold their representatives accountable, thereby influencing the formulation and implementation of government policies in a way that aligns with the populace's needs and aspirations. On the contrary, the prevalence of misinformation can severely distort this process. When algorithms create echo chambers other types of distortions are created. How we consume information and what we consume will influence what we ask of government. Thus, the integrity and effectiveness of government policymaking are deeply intertwined with the quality and cross section of information accessible to the public.



Governments are highly influenced by what their citizens read or listen to and how that narrative shapes their opinions and outlook. With the proliferation of online platforms, both information and misinformation can spread. Governments will be vulnerable to what the nation reads, sees, and hears where they must respond in ways that demonstrates they are good stewards of the national trust.

Top 10 Trends Shaping Government Influence of Citizens Information Consumption

Here are the top 10 trends shaping how governments are influenced by the way citizens consume and are influenced by information:

- 1. Growth of Social Media as a Primary News Source
 - Social media platforms are now the primary way many citizens consume information, prompting governments to monitor trends and address real-time public sentiment.



2. Increasing Role of Algorithms in Shaping Public Opinion

Algorithms curate content for individuals, influencing what information they see and how they
perceive issues, often creating echo chambers that shape public discourse and policymaking.

3. Rise of Misinformation and Disinformation

 The spread of false or manipulated information impacts public understanding and can skew policy priorities based on misinformed demands.

4. Proliferation of Independent and Citizen Journalism

 The rise of non-traditional media sources and citizen journalism provides diverse viewpoints, making governments more attuned to grassroots issues and alternate narratives.

5. Greater Public Demand for Transparency and Accountability

 Citizens increasingly expect governments to provide clear, verifiable information, influencing policy decisions and communication strategies.

6. Real-Time Feedback Through Digital Platforms

• Digital tools, such as social media polls and government feedback platforms, provide governments with real-time insights into public opinion and areas of concern.

7. Increasing Influence of Visual Media and Infographics

 Short videos, infographics, and visually engaging content dominate how citizens consume information, requiring governments to adapt their communication styles.

8. Growing Importance of Fact-Checking and Media Literacy

• Public and private initiatives to improve fact-checking and media literacy are shaping the electorate's opinions, influencing how governments present policies.

9. Polarization of Public Discourse

 Media consumption sources and patterns contribute to polarized viewpoints, requiring governments to navigate competing narratives when crafting policies.

10. Influence of Data Analytics on Policy Communication

 Governments use advanced polling, sentiment assessment and analytics to understand citizen behavior and preferences, tailoring their messaging and policies to align with public needs and expectations. Though traditional outreach methods seem deficient in proper sampling.

GENERAL BUSINESS RECOMMENDATION: Stakeholders can gain significant advantages by understanding the evolving relationship between governments and their citizens, particularly how information consumption shapes public sentiment and policy decisions. When there is a constructive and transparent dialogue between government institutions and the public, it fosters a more stable and predictable environment, reducing business risks. By monitoring these dynamics, businesses can anticipate policy shifts, align strategies with societal expectations, and strengthen their positioning in a rapidly changing landscape. Proactively engaging with governments and supporting initiatives that promote informed public discourse further enhances stability and long-term opportunities.

Government Impact

The trend of citizens' access to information significantly influences government policies worldwide. In forms of governance where information access is broad, governments often find themselves more accountable to an informed electorate. For instance, in countries like Sweden and Canada, the wide availability of information has led to policies that are more reflective of public opinion and needs. These countries are susceptible to misinformation. On the flip side, in nations with forms of governance where information is more controlled, public opinion is less of an influence, though public perception still matters.

Business Recommendation: Businesses should closely monitor the information landscape in the regions they operate. In some regions engaging in transparent communication with the public can



build trust and positively influence government policies. In other regions, businesses might need to navigate complex political landscapes and adapt their strategies respectful of governmental regulations. Political and cultural literacy remains the cornerstone of good communications.

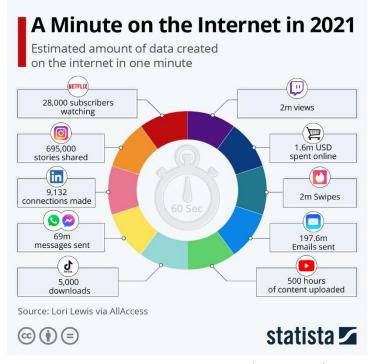


Figure 16- One minute on the internet (Statista 2021)

Economic Impact

The level of citizens' access to information has direct and indirect economic consequences. In countries with robust information access, economies often benefit from increased innovation, as a well-informed populace is more likely to engage in entrepreneurial activities and make informed decisions in the market. For example, in economies like the United States and the United Kingdom, the free flow of information has been a catalyst for the growth of tech industries and startups. However, in other countries economic development can be hampered due to a lack of exposure to global trends and innovation. Moreover, misinformation can lead to poor investment decisions and market instability, as seen in cases of stock market manipulation through false reports. Thus, the economic health of a nation is intricately linked to how well its citizens are informed.

Business Recommendation: Companies should invest in robust information verification systems to ensure they make decisions based on accurate data.

Additionally, businesses in well-informed societies should capitalize on the opportunity to innovate and expand by leveraging the diverse perspectives and ideas present in such environments.

Environmental Impact

In societies where access to environmental data and research is readily available, there is often a greater awareness and understanding of environmental issues, leading to public pressure on governments and corporations to adopt sustainable practices. For instance, in countries like Germany and Denmark, high levels of information access have contributed to strong environmental movements and progressive policies on renewable energy and conservation.

Business Recommendation: Businesses should embrace transparency in their environmental practices and actively engage in disseminating accurate environmental information. This can build public trust and pave the way for sustainable business practices that align with both public expectations and environmental needs.

Innovation Impact

Access to information plays a critical role in driving innovation within a country. In societies where information is accessible, there is typically a higher rate of innovation due to the unrestricted exchange of ideas and knowledge. For instance, Silicon Valley in the United States epitomizes how free information flow can foster an environment ripe for technological breakthroughs and entrepreneurship.





Figure 17- Trust in news media amongst countries (Statista 2023)

Business Recommendation: Companies should foster environments that encourage the free exchange of ideas and provide access to diverse information sources within corporate norms they establish. Investing in knowledge-sharing platforms and collaborative research initiatives can drive innovation and keep businesses competitive in a global market. Multinational companies should implement controls to the sharing of information and apply export control regulations.

Societal Impact

The societal impact of citizens' access to information is profound and multifaceted. In societies with high levels of information accessibility, there is often greater civic engagement, as people can participate more effectively in societal discourse. This is evident in countries like Finland and the Netherlands, where high press and internet access correlate with strong civic participation. The disparity in information access can also exacerbate social inequalities, as marginalized groups may have less access to information, further entrenching existing disparities.

Business Recommendation: Companies should increase their cultural and political literacy to find meaningful ways to engage in and support initiatives that promote information literacy and access.

Additional Insights

For those seeking to dive deeper into the subject the following sources provide valuable insights:

- 1. **Information Access and Government Accountability** This article discusses how access to information in democratic societies like Sweden and Canada leads to governments that are accountable and responsive to public opinion.
 - United Nations on Information Access
- 2. Economic Growth and Information Access This study explores the correlation between information access and economic development.



- Information Access and Economic Development
- 3. Environmental Policies Influenced by Information Accessibility This research paper examines the impact of information accessibility on environmental policies. It cites examples of Germany and Denmark, where high information access leads to progressive environmental policies, in contrast to countries with limited information where environmental issues are often neglected.
 - Information and Environmental Policy: Germany & Denmark
- 4. Innovation in the Age of Information Freedom An analysis of how free information flow contributes to innovation, using Silicon Valley as a prime example. The article contrasts this with regions where stringent information controls stifle innovation, emphasizing the importance of information accessibility for technological and creative advancement.
 - Information Accessibility and its Impact on Innovation
- 5. Societal Cohesion and Information Access Societies with high information accessibility, like Finland and the Netherlands, exhibit greater civic engagement and social cohesion. It contrasts this with societies where information is restricted, leading to social divides and decreased civic engagement.
 - The Societal Impact of Information Accessibility

Megatrend 8 - Domestic and International Industrial Policies Remain Influenced by Political Systems

Domestic and international industrial policy are deeply intertwined with political ideologies, reflecting a complex interplay between economic goals and political values. Domestically, governments often shape industrial policies to align with their ideological stances, whether it leans towards market liberalism, protectionism, or state interventionism. These policies can encompass a wide range of activities, from subsidies and tariffs to regulations and public investments, each reflecting a distinct political and economic philosophy. Internationally, the situation becomes even more intricate. Countries with differing ideologies often find themselves in a tug-of-war over global trade norms, intellectual property rights, and environmental standards. This dynamic is further complicated by multinational corporations and international institutions. which can both influence and be influenced by these competing ideologies. The resultant policies not only shape the economic landscape but also have significant social and environmental impacts, underscoring the





profound influence of political ideology on both domestic and international industrial landscapes.

Within the bounds of international law, the United Nations Charter comes closest to a commonly accepted global framework. Below the UN Charter, sits a mix of political ideologies and systems that are the heritage of unique historical experiences of each nation. Governments' domestic actions and international ambitions all pass through this historical, ideological, and political lens. When these ideologies clash among nations, the consequence is often gridlock and tension. This does not simply impact the international relations of the countries, it also impacts economic ties, market access, and even travel and migration.

Top 10 ways Domestic & International Industrial Policy Are Shaped by Political Systems

Here are the top 10 ways domestic and international industrial policy are shaped by political ideologies, reflecting the diverse goals and values of governments and societies:

1. Balancing Market-Driven Approaches with Government Involvement

 Industrial policies reflect varying preferences for free-market solutions versus strategic government intervention, influencing subsidies, regulations, state-owned enterprises and public investments.

2. Shaping Trade Policies Through Different Economic Philosophies

 Policies range from supporting open trade to implementing strategic use of such measures like tariffs to protect domestic industries or achieve foreign policy goals, depending on the government's priorities.

3. Prioritizing Strategic Sectors Based on National Goals

 Governments focus on industries like technology, energy, or infrastructure to meet national priorities, which are often informed by their unique historical and economic contexts.

4. Integrating Environmental Considerations into Industrial Strategies

 Some industrial policies emphasize sustainability and renewable energy, while others weigh environmental goals along with broader economic objectives.

5. Engagement in Global Governance Frameworks

 Nations work together in international forums to address trade norms, intellectual property, and environmental standards, reflecting a variety of perspectives and approaches. They seek a balance between national sovereignty and collective action in the outcomes they seek.

6. Balancing National Autonomy and Global Partnerships

 Policymakers seek to strengthen domestic industries while maintaining cooperative relationships with international partners, adapting to a dynamic global economy.

7. Using Industrial Policy to Strengthen International Influence

• Countries align industrial strategies with broader goals to build partnerships and enhance their global standing in areas like trade, technology, and sustainability.

8. Engaging Multinational Corporations

 Policies toward multinational companies reflect efforts to encourage investment, innovation, and compliance with local priorities such as domestic manufacturing and fair labor practices.

9. Reflecting Historical and Cultural Influences

 Industrial policies are shaped by each nation's historical experiences and cultural values, leading to diverse approaches that reflect their unique outlook.

10. Reconciling Diverse Perspectives in Global Forums

• International institutions provide platforms for nations to collaborate on shared challenges, such as sustainable development and equitable trade, while navigating differing priorities. However,



with rapidly evolving market dynamics, older trade institutions may fall behind in keeping up with new uncharted challenges that emerge.

This approach highlights how industrial policies are shaped by a balance of domestic priorities, international collaboration, and historical context, emphasizing the diversity of strategies used to meet economic and societal goals.

GENERAL BUSINESS RECOMMENDATION: Stakeholders should consider the unique opportunities and risks that stem from ideological differences between their home country and the country they plan to invest in. While remaining faithful to their business vision and mission, integrating these realities in their strategy can greatly benefit the health and success of their business.

Government Impact

The influence of political ideologies on domestic and international industrial policy significantly affects government actions worldwide. In countries with market liberal ideologies, such as the United States, government policies often favor deregulation and private sector-led growth. For instance, the U.S. government's approach to the technology sector, largely hands-off, has fostered a highly competitive and innovative industry. In contrast, countries with protectionist or state interventionist ideologies implement policies emphasizing state-led strategy for domestic industry. This approach is evident in China's "Made in China 2025" initiative, which aims to make China dominant in global high-tech industries through significant state support and intervention. Today, the U.S. with the CHIPS & Science Act is also offering state support and intervention for its prized industries. The clashing of ideologies at times leads to trade barriers and economic tensions, which can have a ripple effect on global markets.

Business Recommendation:

Businesses should carefully analyze the industrial policies of a country before entering its market. For instance, companies entering a market with a state interventionist policy may need to navigate more regulations and form joint ventures with local entities. To mitigate the risks of political and ideological fluctuations, businesses should diversify their market presence. This strategy reduces dependency on any single market that might be affected by sudden policy changes due to ideological shifts.

Economic Impact

The impact of political ideologies on industrial policy significantly influences economic outcomes. In liberal economies, where free market principles are predominant, there's often a surge in entrepreneurship and foreign investment, as seen in the Silicon Valley boom in the United States. Conversely, in economies

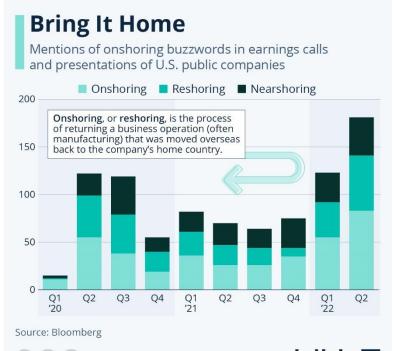


Figure 18- Mention of "Reshoring" in corporate earnings calls (Statista 2022).



with a strong state interventionist approach, like in some Scandinavian countries, the focus on social welfare and equitable distribution of resources can lead to high levels of social security but may also result in higher taxes and business costs. On the international front, when countries with different ideologies interact, it can lead to trade disputes, impacting global economic stability. For example, the U.S.-China trade disputes, rooted in ideological differences over trade and economic policies, disrupted global supply chains and affected international trade volumes.

Business Recommendation: Businesses should conduct thorough risk assessments when dealing with international markets, especially those prone to ideological conflicts. This includes understanding potential trade barriers and economic sanctions that could impact operations. Companies should develop flexible supply chain strategies to quickly adapt to changes in international trade policies influenced by political ideologies. This could involve diversifying suppliers or considering local production options.

Environmental Impact

Political ideologies significantly influence environmental policies and their implementation. Countries with a strong emphasis on environmental protection, like many in the European Union, often implement stringent environmental regulations, impacting industries by necessitating cleaner technologies and sustainable practices. In contrast, countries prioritizing economic growth over environmental concerns may have lax environmental policies, potentially leading to higher pollution levels and environmental degradation. This divergence in ideologies can cause international tension, especially in global environmental agreements like the Paris Agreement, where commitments and expectations vary widely among countries.

\$ billion 1,200 Sustainable materials 1,000 Electrified heat Electrified transport Hydrogen CCS Energy storage Nuclear Renewable energy

Global energy transition investment by sector

Figure 19- Global energy investments 2014-2022 by sector (BloomberNEF)

2004 2005 2006 2007 2007 2010 2011 2014 2014 2016 2016 2016 2016 2016 2016 2016 2017 2018

Business Recommendation: Regardless of the local regulatory environment, adopting costeffective sustainable and environmentally friendly practices can be beneficial. This not only prepares businesses for potential future regulations but also appeals to a growing segment of environmentally conscious consumers. Businesses can engage in advocacy for stronger environmental policies, especially in regions with lax standards. This can help create a level playing field and encourage industry-wide adoption of sustainable practices.

Innovation Impact

Political ideologies play a crucial role in shaping a country's approach to innovation. In countries with a free-market ideology, like the United States, there is often significant private sector investment in innovation, leading to rapid technological advancements and a competitive global standing in sectors like IT and biotechnology. However, in countries with a more protectionist or state-driven ideology, innovation can be focused on strategic sectors identified by the government, such as China's focus on artificial intelligence



and renewable energy. This can lead to significant advancements in these targeted areas but may also limit the scope of innovation to government-prioritized sectors. The diversity in ideological approaches to innovation often results in a varied global innovation landscape, with different countries leading in different technological fields.

Business Recommendation: Businesses should be cognizant of the prevailing industrial policies of the countries they operate in. This can involve leveraging government research grants or forming private sector partnerships. To stay competitive, businesses should invest in R&D, adapting to the innovation landscape of each market. This might involve collaborating with local universities and research institutions, especially in countries where the government heavily supports academic research.

Societal Impact

The societal impact of political ideologies on industrial policy is profound. In countries where market liberalism prevails, there tends to be a greater emphasis on individual entrepreneurship and competition, potentially leading to significant wealth generation but also to increased income inequality. For example, the United States, known for its capitalist approach, has some of the world's richest entrepreneurs but also faces significant income and wealth disparities. In contrast, countries with a more socialist or interventionist approach, like some Scandinavian countries, focus on social welfare and equitable distribution of resources, often resulting in lower income inequality but potentially less economic dynamism. These ideological differences affect not just the economic opportunities available to citizens but also the social fabric of nations, influencing everything from social mobility to public health and education systems.

Business Recommendation: Businesses should engage in Corporate Social Responsibility initiatives that align with the societal needs of the countries they operate in. This could mean focusing on education and skill development or supporting environmental and social programs. Adopting inclusive business models that cater to a broader segment of society can be beneficial. This includes creating affordable products and services and ensuring diverse and equitable employment practices, thus contributing positively to societal fabric.

Additional Insights

For those seeking to dive deeper into the subject the following sources provide valuable insights:

- "Market Liberalism and Deregulation in the United States": This citation discusses the impact of
 market liberal ideologies on U.S. government policies, focusing on how they favor deregulation and
 private sector-led growth. It highlights the U.S. government's hands-off approach to the technology
 sector, contributing to a competitive and innovative industry.
 - Market Liberalism and Deregulation in the United States
- 2. **"Made in China 2025"**: This source explores China's "Made in China 2025" initiative. It underscores China's aim to dominate global high-tech industries with substantial state support and intervention.
 - Made in China 2025 Chinese Industrial Policy
- 3. "Entrepreneurship and Foreign Investment in Liberal Economies": This citation examines the surge in entrepreneurship and foreign investment in liberal economies, using the Silicon Valley boom in the United States as a case study. It illustrates the economic outcomes of free market principles in stimulating innovation and attracting global investments.
 - Silicon Valley Revisited



- 4. "Environmental Regulation in the European Union": This source analyzes how countries with a strong emphasis on environmental protection, like those in the European Union, implement stringent environmental regulations. It discusses the impact of these regulations on industries, necessitating the adoption of cleaner technologies and sustainable practices.
 - Environmental Regulation in the European Union
- 5. "Innovation and Political Ideology: A Global Perspective": This citation delves into how political ideologies shape a country's approach to innovation. It contrasts the private sector-led innovation in free-market countries like the U.S. with the state-driven innovation focus in countries like China, highlighting the varied global innovation landscape.
 - The Comparative Political Economy of Growth Models

Megatrend 9 - Changes In Generational Expectations Will Reshape The Political Landscape

The evolving expectations of public values across generations are poised to significantly reshape the domestic political landscape. As younger generations, informed by global connectivity and increased awareness of social and environmental issues, ascend into more active civic roles, their priorities and perspectives are markedly different from those of their predecessors. This shift is leading to a re-evaluation of policies and political ideologies, particularly regarding climate change, social justice, and economic equity. The emerging generational divide is not just a matter of differing opinions, but a fundamental change in the way value is perceived in relation to governance and societal well-being. This generational shift is likely to manifest in more progressive policies, a reimagining of the social contract, and potentially, transformative changes in political structures and processes. As these new values become increasingly influential, they challenge traditional political paradigms, prompting a reconfiguration of political alliances and policy priorities that could redefine the political landscape for years to come.



We have become adept at profiling generational differences. While the West went through its baby boom right after World War II, South America, Asia, and Africa had their baby boom in the past 20-30 years. In the West the baby boomers will pass the mantel of politics and policy to Gen X, Millennials, and ultimately Gen Z's. Similarly, each generation in other countries have unique aspirations and expectations that will shape



what they expect from their government. Young constituents of today are policymakers of tomorrow and will bring their worldview to shape national and industrial policy.

Top 10 Ways Generational Expectations Will Influence Policy

Here are the top 10 ways changes in generational public value expectations will reshape the political landscape. We contrast the younger generations expectations and aspirations:

1. Increased Focus on Climate Action

 Younger generations prioritize sustainability and demand stronger policies to address climate change, influencing governments to adopt environmental regulations and green energy initiatives.

2. Shift Toward Social Equity Policies

• Generations with heightened awareness of social justice issues push for policies that promote inclusivity, diversity, and equity, reshaping legal frameworks and public institutions.

3. Redefinition of Economic Priorities

 Younger generation's aspirations for addressing economic fairness drive expectations of policies aimed at areas like greater job opportunity, access to education, and affordable housing.

4. Emphasis on Technological Governance

 Tech-savvy younger generations expect policies that regulate emerging technologies, ensuring data privacy, ethical AI use, and equitable access to digital tools.

5. Expansion of Global Collaboration

• Globally connected generations expect international cooperation on issues like climate change and public health influencing foreign and domestic policy alignment.

6. Demand for Greater Political Transparency

• Younger citizens value accountability and expect increasing public trust in political institutions.

7. Reimagining the Social Contract

• Generational expectations for government responsibility in providing social safety nets lead to reforms in areas like universal basic income, public healthcare, and retirement systems.

8. Reshaping Voting Patterns and Political Alliances

 As younger generations become a dominant voting bloc, traditional political alignments may shift, encouraging the rise of new coalitions and ideologies that better reflect their values.

9. Increased Advocacy for Civil Liberties

 Younger demographics prioritize individual freedoms, advocating for policies that protect for instance privacy and gender equality.

10. Transformation of Political Participation

 Digital natives bring new methods of political engagement, leveraging social media, podcasts, and online platforms to influence policy, organize movements, and inform and be informed.

These trends highlight how generational value shifts drive political evolution, prompting transformative changes in governance, policy priorities, and societal structures.

GENERAL BUSINESS RECOMMENDATION: Businesses should anticipate and adapt to the shifting priorities of younger generations as they ascend into roles of greater political and economic influence. These generations, shaped by global connectivity and heightened awareness of social and environmental issues, are driving changes in policies around climate action, social equity, and economic fairness. Companies that align their strategies with these evolving values—such as prioritizing sustainability, diversity, and ethical governance—will position themselves to thrive in this transformative landscape. By understanding generational aspirations across different regions,



businesses can foster meaningful engagement and remain agile in responding to changes in both national and global policy environments.

Government Impact

The shift in generational public value expectations is prompting varied responses from governments worldwide. In countries with younger populations, like many in Africa and Asia, governments are gradually aligning policies with the aspirations of these emerging generations. For instance, in several African nations, there's an increasing focus on digital infrastructure and education reform, addressing the younger generation's demand for technological advancement and improved career opportunities. In contrast, in Western countries where Baby Boomers and Gen X have been predominant, the transition to policies favored by Millennials and Gen Z is more gradual.

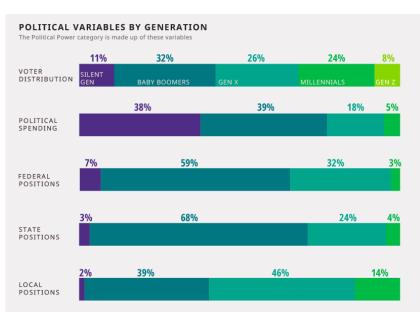


Figure 20 Generations and politics (Generational Power Index Report)

These younger generations prioritize issues like climate change, social justice, and economic equity, leading to a slow but evident shift in policy-making. Governments are thus faced with the challenge of balancing traditional political paradigms with these evolving expectations, which can sometimes lead to political unrest or a significant change in political leadership, as seen in recent elections around the globe.

Business Recommendation: Businesses must stay informed about emerging generational trends and adjust their strategies accordingly. First, they should be in synch with the values and priorities of the younger generation, their future customer, such as sustainability and technological innovation. Secondly, businesses should engage in proactive dialogue with policymakers and the community. By understanding and contributing to policy discussions, businesses can influence and adapt to changes in the political landscape, ensuring their long-term resilience and relevance.

Economic Impact

The change in generational public value expectations is significantly influencing economic dynamics. As younger generations ascend into economic decision-making roles, their priorities are shaping investment patterns and consumer behaviors. For example, there is an increased demand for sustainable and ethically produced goods, evidenced by the rise of green industries and socially responsible investment funds. This shift is not only a trend in Western economies but also in emerging markets, where younger populations are advocating for economic policies that promote equitable growth and environmental sustainability. However, this transition also poses challenges. Traditional industries that do not align with these new values may face economic downturns, as seen in the declining fortunes of fossil fuel-based energy companies. On the other hand, sectors like renewable energy, technology, and social entrepreneurship are experiencing a surge in investments and growth, driven by this generational shift.

Business Recommendation: To leverage these generational economic shifts, businesses should be in synch with priority areas. This involves not just environmentally friendly practices but also ethical



labor policies and community engagement. Such measures can enhance brand reputation and appeal to the value-driven consumer base of younger generations. Secondly, businesses should innovate in products and services that align with emerging economic trends increasingly influenced by younger generational values.

Environmental Impact

The generational shift in public value expectations is having a profound impact on environmental policies and practices. Younger generations, more aware and concerned about environmental issues, are advocating for stronger measures against climate change and environmental degradation. This is evident in the increasing support for green policies, such as the European Union's Green Deal, which aims to make Europe the first climate-neutral

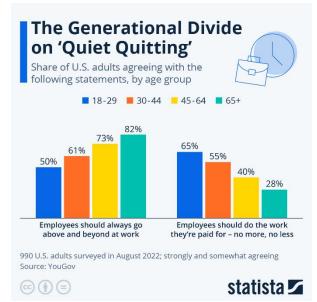


Figure 21- Generational attitudes about work (Statista 2022).

continent. These policies are not only shaping government action but are also influencing corporate behavior, with more companies adopting ESG (Environmental-Sustainability-Governance) practices to align with these new expectations. However, this shift also brings challenges, such as the need for significant investments in green infrastructure and the potential economic impact on industries reliant on traditional energy sources.

Business Recommendation: Businesses should prioritize cost-effective sustainability in their operations and business models. This can be achieved through investing in renewable energy, adopting sustainable supply chains, and innovating eco-friendly products and services. Such practices not only reduce environmental impact but also meet the expectations of a growing segment of environmentally conscious consumers. Additionally, businesses should engage in policy advocacy and collaboration with governments and NGOs. By being part of the conversation on environmental policies, businesses can influence and adapt to new regulations, positioning themselves as leaders in the transition to a more sustainable economy.

Innovation Impact

The generational change in public value expectations is a catalyst for innovation. Younger generations, often more technologically adept and open to new ideas, are driving demand for innovative solutions to societal challenges. This is visible in the growing emphasis on tech startups and social enterprises that address issues like climate change, healthcare, and social inequality. In countries with younger populations, there is a surge in digital innovation, as seen in Africa's burgeoning tech scene. However, this demand for innovation also challenges traditional businesses and industries, which must adapt to stay relevant. The pace of technological advancement and the shift in consumer preferences towards innovative products and services are forcing companies to rethink their innovation strategies.

Business Recommendation: To capitalize on this trend, businesses should invest in technology and innovation that align with the priorities of younger generations. This includes digital transformation, the development of sustainable technologies, and the creation of products and services that address social and environmental issues. Furthermore, businesses should foster a culture of innovation within their



organizations. Encouraging creativity, adopting agile methodologies, and collaborating with startups and academic institutions can help businesses stay ahead in a rapidly evolving innovation landscape.

Societal Impact

The evolving generational public value expectations are significantly impacting societal dynamics. Younger generations, globally connected and socially conscious, are advocating for more inclusive and equitable societies. This is manifesting in increased support for policies that promote social justice, gender equality, and diversity. In many societies, this has led to a re-examination of traditional norms and practices, sometimes resulting in social movements and changes in societal attitudes. However, this generational shift also brings challenges, such as the potential for social unrest and the polarization of views between different age groups. The differing priorities and perspectives between generations can lead to tension, necessitating dialogue and compromise to maintain social cohesion.

Business Recommendation: Businesses should adopt inclusive and equitable practices to align with generational shifts. By understanding the societal impact of their operations and listening to diverse voices within the community, businesses can contribute positively to social cohesion and build a strong, loyal customer base.

Additional Insights

For those seeking to dive deeper into the subject the following sources provide valuable insights:

1. Impact of Generational Shifts on Policy Making

This study explores how changing generational priorities influence government policies. It particularly focuses on the transition from Baby Boomer and Gen X priorities to those of Millennials and Gen Z, such as climate change and social justice, and how governments are responding to these shifts.

The Generational Shift in Policy Making

2. Role of Businesses in Adapting to Political and Social Changes

This article discusses the strategies businesses should adopt to remain relevant in a rapidly changing political and social landscape. It emphasizes the importance of aligning with younger generations' values, like sustainability and technological innovation, and engaging in proactive policy dialogue.

Adapting Business Strategies in Changing Times

3. Economic Impact of Generational Shift in Public Values

This research paper examines how the changing priorities of younger generations are influencing global economic dynamics. It highlights the rise of sustainable and ethical consumption, the decline of traditional industries, and the growth of sectors like renewable energy and technology.

 How do different generations in the US spend their income? | World Economic Forum (weforum.org)

4. Environmental Policies Influenced by Younger Generations

This report details the impact of younger generations on environmental policies and corporate practices. It covers initiatives like the European Union's Green Deal and the increasing corporate shift towards sustainability in response to the demands of environmentally conscious consumers.

Young Generations and Environmental Policy



5. Innovation Driven by Generational Change

This article explores how the demands and characteristics of younger generations are catalyzing innovation in various sectors. It discusses the rise of tech startups and social enterprises addressing issues like climate change and social inequality, and the challenge this poses to traditional businesses.

• Making the European Green Deal Work for People: The Role of Human Development in the Green Transition (worldbank.org)

Megatrend 10 - National Demographic Differences, Labor Shortages and Rising Costs Accelerate Innovation, Invention, and Adoption of New Technologies.

Economic growth, and its fluctuations, play a pivotal role in shaping technology adoption, retraining of existing labor pools, and immigration policies for educated talent worldwide. As economies expand, the demand for skilled labor often outpaces supply, leading to labor shortages in key industries. This scenario typically results in increased labor costs, as businesses compete for a limited pool of qualified workers. In response, companies are increasingly turning to new technologies, particularly automation and artificial intelligence, to maintain productivity and manage rising expenses. These technologies offer the dual benefit of reducing dependency on scarce human labor and enhancing efficiency. Retraining of existing workers is a consequence of adoption of such technologies. Simultaneously, governments are reevaluating their labor admission policies, often liberalizing them to attract foreign talent. This approach helps in filling skill gaps and sustaining economic momentum.



These policy shifts, influenced by the state of the economy, not only impact the global movement of people but also reflect the changing economic needs and social attitudes of a country towards immigration. As such, the interplay between economic health and immigration policy is a tense and polarizing aspect of both domestic and international policy-making.

Top 10 Trends driven by Demographics, Labor Shortages and Rising Costs

Here are the top 10 ways national demographic differences, labor shortages, and rising costs accelerate innovation, invention, and adoption of new technologies:

1. Accelerated Adoption of Automation and AI

- Companies increasingly invest in automation and artificial intelligence to offset rising labor costs and mitigate the impact of worker shortages.
- 2. Expansion of Remote and Digital Work Solutions



 Technologies enabling remote work and digital collaboration become critical as businesses adapt to labor shortages and shifting workforce demographics.

3. Growth in Reskilling and Upskilling Initiatives

• Organizations and governments prioritize training programs to equip the existing workforce with the skills needed to work alongside advanced technologies.

4. Increased Investment in Robotics and IoT

• Labor-intensive industries adopt robotics and Internet of Things (IoT) technologies to boost productivity and reduce reliance on human labor.

5. Development of Smart Manufacturing Systems

• Innovations such as additive manufacturing (3D printing) and smart factories gain traction to reduce labor intensity and optimize production processes.

6. Liberalization of Immigration Policies for Skilled Talent

 Governments adjust immigration policies to attract educated professionals, addressing skill gaps and supporting technology-driven industries.

7. Creation of Incentives for Tech Startups

 Policymakers introduce tax breaks, grants, and funding opportunities for startups focused on technological innovation to counteract demographic and labor challenges.

8. Adoption of Al-Driven Decision-Making Tools

 Businesses implement AI tools for recruitment, resource allocation, and operational planning to optimize productivity amid rising labor costs.

9. Expansion of Global Talent Pools

 Companies and governments collaborate to source talent globally, leveraging technology to integrate diverse expertise into local markets.

10. Focus on Inclusive Workforce Development

 Policies and technologies emphasize including underutilized demographics in the workforce, such as older workers and underserved populations, to meet labor demands.

These trends demonstrate how demographic challenges and labor dynamics drive technological advancements, reshaping industries and workforce policies worldwide.

GENERAL BUSINESS RECOMMENDATION: To address labor shortages and rising costs linked to economic growth, businesses should accelerate the adoption of advanced technologies like automation, AI, and robotics, not only to boost productivity but also to future-proof operations against workforce challenges. Equally important is investing in comprehensive workforce retraining programs to equip employees with the skills needed to thrive alongside emerging technologies, fostering both retention and innovation. For their part, governments and policymakers should play a proactive role by funding large-scale reskilling initiatives, particularly for industries most impacted by technological change. Additionally, revising and liberalizing labor admission policies to attract skilled foreign talent can provide immediate relief to labor shortages, ensuring industries remain competitive and economic growth is sustained. This dual approach—harnessing technology while investing in human capital—positions both businesses and economies to adapt effectively to evolving workforce dynamics.

Government Impact

The trend of adopting new technologies and revising admission policies in response to labor shortages and cost increases due to economic growth has significant implications for governments worldwide. On one hand, governments in countries experiencing rapid economic growth, such as India, have shown a tendency to liberalize their immigration policies to attract skilled foreign workers. For example, India has made strides in reforming its visa policies to attract highly skilled professionals in sectors like IT and healthcare, which are critical to its economic growth. On the other hand, there's a contrasting approach in



countries like Japan, where the government is investing heavily in automation and robotics to mitigate its chronic labor shortage, attributable to an aging population and low birth rates. This dual approach illustrates the varied governmental responses to the same economic challenge, balancing the need for foreign talent with the potential of new technologies.

Business Recommendation: Businesses should actively engage in policy advocacy, encouraging governments to create favorable immigration policies for skilled labor, which can alleviate immediate labor shortages. Companies must also invest in partnerships with educational institutions and governmental bodies to support and shape retraining programs, ensuring that the existing workforce can adapt to new technologies and evolving job requirements.

Economic Impact

The economic impact of labor shortages and the subsequent adoption of new technologies is multifaceted. In economies like the United States, where labor shortages in sectors such as technology and healthcare are acute, there's a significant push towards automation and AI. This shift not only helps in mitigating immediate labor challenges but also drives economic efficiency and productivity in the long run. However, this transition can have shortterm economic costs, such as the expenses associated with implementing new technologies and retraining workers. For instance, Amazon's investment in robotics

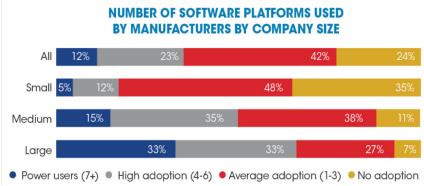


Figure 22- Technology adoption across manufacturers (Canadian Manufacturers & Exporters Association 2023).

and AI for warehouse operations not only addresses labor shortages but also improves efficiency, although it requires significant upfront investment. Conversely, countries that fail to adapt to these changes risk falling behind in global competitiveness, as labor shortages can lead to decreased productivity and economic stagnation.

Business Recommendation: Businesses should prioritize strategic investments in technology to streamline operations and offset labor shortages, ensuring long-term economic sustainability and competitiveness. Companies must also focus on workforce development programs, partnering with educational institutions and professional training organizations to retrain employees, thus safeguarding their employability and the company's operational efficiency.

Environmental Impact

The environmental impact of adopting new technologies in response to labor shortages is a complex interplay of positive and negative effects. On the positive side, the implementation of automation and AI can lead to more efficient use of resources and reduction in waste, thus benefiting the environment. For instance, precision agriculture, which uses AI and robotics, can optimize resource use and reduce environmental impact in farming. However, there's also a negative aspect, as the production and operation of these technologies often require significant energy, potentially increasing demand. The manufacturing and disposal of high-tech equipment can also contribute to environmental degradation if not managed responsibly. This dichotomy highlights the need for a balanced approach that leverages the benefits of technology while mitigating its environmental downsides.



Business Recommendation: Businesses should invest in green technologies and practices, ensuring that the adoption of new technologies is environmentally sustainable as automation and AI demand more energy production. Companies must also adopt a lifecycle approach to technology management, emphasizing responsible production, operation, and disposal practices to minimize environmental impact.

Innovation Impact

The adoption of new technologies in response to labor shortages and economic growth is a significant driver of innovation. As companies face labor constraints, they are incentivized to develop and implement innovative solutions, such as automation and AI, to maintain productivity and competitiveness. This necessity has spurred significant advancements in fields like robotics, AI, and machine learning. For example, in the manufacturing sector, the introduction of advanced robotics has not only addressed labor shortages but also led to the development of new manufacturing techniques and processes. However, there's also a risk that over-reliance on technology can stifle humancentered innovation, especially in sectors where human skills and creativity are irreplaceable. Balancing technological

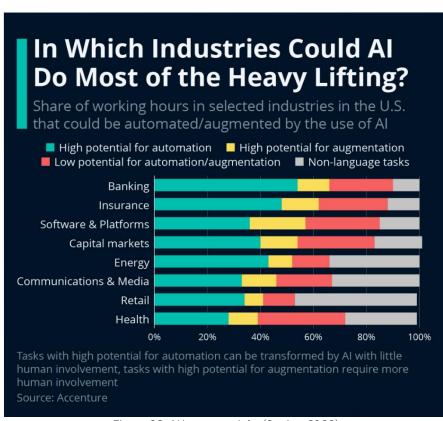


Figure 23- Al impact on jobs (Statista 2023).

innovation with human ingenuity is crucial for sustainable economic growth.

Business Recommendation: Companies should foster a culture of continuous innovation, investing in R&D to develop new technologies that address labor shortages while also enhancing overall productivity and efficiency. Businesses need to maintain a balanced focus on human and technological development, ensuring that technological advancements do not overshadow the importance of human skills and creativity.

Societal Impact

The societal impact of labor shortages and the shift towards new technologies and revised admission policies is profound. On one hand, the adoption of technologies like AI and automation can lead to job displacement, raising concerns about employment security and income inequality. This is particularly evident in sectors where routine tasks are easily automated. On the other hand, liberalized admission policies for skilled labor can lead to increased cultural diversity and knowledge exchange, enriching the societal fabric. For instance, countries like Canada, known for their open immigration policies, benefit from a



diverse workforce that contributes to cultural richness and economic dynamism. However, this can also lead to societal tensions, as local populations may perceive foreign workers as competition for jobs. Balancing the benefits of technology and immigration with their societal implications is a critical challenge for policymakers.

Business Recommendation: Businesses, academia, and government should implement comprehensive retraining and upskilling programs for the workforce to mitigate the societal impact of job displacement due to technology adoption. Companies can also play a role by promoting inclusive practices and highlighting the benefits of cultural diversity and knowledge exchange in the workplace.

Additional Insights

For those seeking to dive deeper into the subject the following sources provide valuable insights:

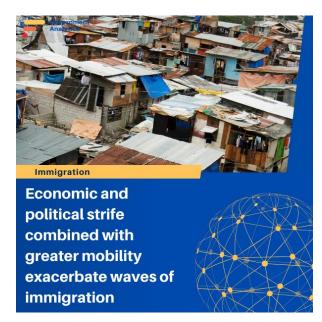
- 1. India's Workforce Strategy: India's efforts to attract skilled foreign workers, particularly in IT and healthcare, are a response to rapid economic growth and labor shortages. The government has reformed its visa policies to facilitate the influx of high-skilled professionals, crucial for the country's burgeoning economy.
 - Govt approves new visa to attract foreigners, boost trade (business-standard.com)
- 2. Japan's Pivot to Robotics: Japan's investment in automation and robotics is a strategic response to its aging population and low birth rates, leading to labor shortages. This approach contrasts with the liberalization of immigration policies in other countries, as Japan focuses on technological solutions to address workforce challenges.
 - Managing Japan's Shrinking Labor Force With Al and Robots
- 3. Shift to Artificial Intelligence (AI) in the U.S.: The United States is witnessing a significant shift towards automation and AI in sectors like technology and healthcare, driven by acute labor shortages. This transition, exemplified by Amazon's investment in robotics for warehouse operations, aims to enhance efficiency and productivity, despite requiring substantial initial investments.
 - Generative AI and the future of work in America | McKinsey
- 4. Robotics and AI in Precision Agriculture: Precision agriculture, utilizing AI and robotics, exemplifies the environmental benefits of new technologies, optimizing resource use and reducing waste. However, the energy requirements for producing and operating these technologies, along with their manufacturing and disposal, pose environmental challenges.
 - Frontiers | Mobile robotics in smart farming: current trends and applications (frontiersin.org)
- 5. Canada's Immigration Policies: Canada's open immigration policies contribute to a diverse workforce, fostering cultural richness and economic dynamism. While this approach can lead to societal tensions due to perceived job competition, it also enriches the societal fabric through increased cultural diversity and knowledge exchange.
 - Canada's Immigration Policies May Boost Its Labor Market, Economy Bloomberg



Megatrend 11 - Political Upheavals and Economic Need For Talent Fuel Unprecedented Waves Of Global Migration

Economic and political turmoil, along with the increasing ease of global mobility, are significant factors contributing to the intensification of immigration waves. Economic strife, characterized by job shortages, inflation, and limited opportunities for advancement, propels individuals to seek better prospects in more stable economies.

Political instability, marked by government upheaval and conflict, further fuels the desire for safer, more secure environments. Movement of people from Central America to the U.S. and Africans towards Europe demonstrates this reality. The facilitation of global travel and the interconnectedness of nations through advancements in technology and transportation also play a pivotal role. This combination of economic despair, political unrest, and improved mobility leads to a surge in the movement of people across borders, as they pursue hopes of a more prosperous and secure life elsewhere.



Today one can circumnavigate the globe much more quickly than ever before. Movement of people is far easier than decades past. When economic hardship or political strife reach high points, people are on the march in search of a better life and better opportunities. Immigrants and refugees spill over into other countries. The capacity of various countries to receive such waves vary and for some it is politically and economically destabilizing.

Top 10 Impacts of Waves of Global Migration

Here are the top 10 geopolitical risks businesses should monitor based on the megatrend political upheavals and the economic need for talent fuel unprecedented waves of global migration:

1. Pressures on Local Infrastructure

 Migration influxes can place strain on housing, healthcare, and transportation systems in host regions, potentially impacting business operations and workforce availability.

2. Shifting Public Sentiment and Policy

• Changes in public attitudes and government policies regarding migration may create regulatory uncertainty and affect workforce mobility or market dynamics.

3. Evolving Community Dynamics

 Rapid demographic changes may influence social cohesion, presenting challenges for businesses in maintaining inclusive and stable workplaces.

4. Labor Market Shifts

• Migration can create both opportunities and challenges in local labor markets, including wage adjustments, skills mismatches, and shifting workforce dynamics.

5. Talent Gaps in Source Regions

• Migration of skilled workers may impact business operations in source countries, particularly where local talent plays a critical role in supply chains or service delivery.



6. Regional and Cross-Border Policy Alignment

 Differences in migration policies between countries can influence trade, workforce planning, and cross-border partnerships.

7. Enhanced Border and Security Measures

 Stricter regulations or border protocols could affect the movement of goods and people, requiring businesses to adapt their logistics and compliance strategies.

8. Global Coordination on Migration Challenges

• Variability in how migration is managed internationally may lead to uneven policy implementation, impacting business planning across regions.

9. Increased Focus on Social Responsibility

 Businesses operating in regions affected by migration trends may face growing expectations to support community integration and address local challenges.

10. Long-Term Workforce Planning

• Migration trends require businesses to plan for evolving workforce needs, including strategies to attract and retain diverse talent in a competitive labor market.

GENERAL BUSINESS RECOMMENDATION: Stakeholders should thoughtfully analyze the tendency towards migration and the closeness of their investment geographies to regions of instability, where migrants and refugees might originate, particularly during times of economic and political transformation. Understanding these elements is crucial in assessing geopolitical risk and developing matching business strategies.

Government Impact

The trend of increased immigration due to economic and political strife has elicited varied responses from governments worldwide. In some regions, governments have adopted more stringent immigration policies and border controls in an attempt to manage the influx of migrants and refugees. For instance, the European Union has seen a tightening of border controls in response to the migration crisis sparked by conflicts in the Middle East and Africa. On the other hand, countries like Canada have taken a more open approach, setting higher immigration targets to address labor shortages and promote economic growth. Canada's plan to welcome over 1.2 million immigrants between 2021 and 2023 serves as an example of this approach. These divergent responses highlight the complex interplay between national security concerns, economic needs, and humanitarian obligations in shaping government policies on immigration.

Business Recommendation: Businesses should closely monitor immigration policies and trends in their operating regions, as these can significantly impact labor markets and consumer demographics. Companies should also develop flexible workforce strategies that can adapt to changing immigration patterns. This could include investing in local talent development programs in regions with strict immigration controls or leveraging the diverse skills of immigrants in areas with more open policies.

Economic Impact

The economic consequences of increased immigration due to economic and political strife are multifaceted. On the positive side, immigrants often contribute to the labor force, filling gaps in both skilled and unskilled labor markets. For example, in the United States, immigrants have been instrumental in sectors like technology, healthcare, and agriculture. However, sudden and large-scale immigration can also strain public resources and infrastructure, particularly in countries that are not economically equipped to handle a sudden influx. This can lead to increased competition for jobs, housing, and social services, potentially fueling economic and social tensions. The economic impact is thus a balance between the



beneficial effects of supplementing the labor force and the challenges of integrating a large number of new residents.

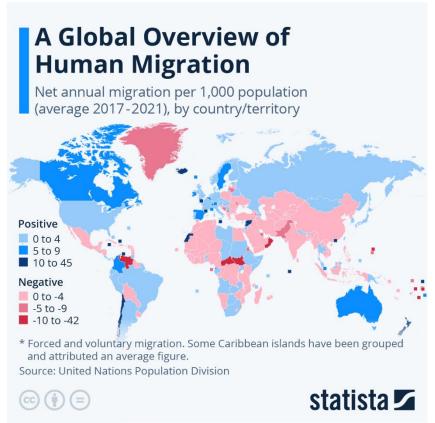


Figure 24- Global migration average 2017-2021 (Statista 2022)

Business Recommendation:

Companies can invest in workforce development programs in concert with government that focus on integrating immigrants, thereby leveraging their unique skills and perspectives to drive innovation and productivity. This approach not only supports business growth but also helps government in the economic integration of immigrants, contributing to overall societal stability.

Environmental Impact

The environmental impact of increased immigration is a less direct but still significant consideration. Large-scale movements of people can lead to increased urbanization as immigrants often settle in cities. This urbanization can exacerbate environmental challenges like pollution, waste management, and strain on water resources. For instance, rapid urbanization in cities like Delhi and

Beijing, partly fueled by internal migration, has contributed to significant air and water pollution. On the other hand, immigrants can also bring new practices and innovations that contribute to environmental sustainability, particularly in sectors like agriculture and energy, where their diverse experiences can lead to more efficient and sustainable practices.

Business Recommendation: Businesses should consider the environmental implications of increased urbanization and migration in their sustainability strategies. This includes investing in green infrastructure and technologies that mitigate the environmental impact of urban population growth. Additionally, companies can collaborate with immigrant entrepreneurs and innovators who may bring new sustainable practices and technologies from their countries of origin, thereby enhancing environmental sustainability efforts.

Innovation Impact

Increased immigration, especially by the educated class, driven by economic and political strife, can have a profound impact on innovation. Immigrants often bring diverse perspectives, skills, and experiences that can spark creativity and drive technological advancements. For example, in Silicon Valley, a significant proportion of tech startups have been founded or co-founded by immigrants, highlighting their contribution to innovation. However, the transition and integration challenges faced by immigrants can also hinder their potential to contribute to innovation if not adequately addressed. The ability of a country to



harness the innovative potential of immigrants is dependent on its integration policies, education system, and the inclusivity of its economic and social environment.

Business Recommendation: To leverage the innovative potential of immigrants, businesses should foster inclusive work environments that value diversity and encourage the sharing of different perspectives. This can involve diversity training, mentorship programs, and policies that support the integration of immigrants into the workforce. Additionally, businesses can invest in partnerships with educational institutions and community organizations to support the development and integration of immigrant talent, thereby enhancing the overall innovation ecosystem.

Societal Impact

The impact of increased immigration on society is multifaceted, encompassing cultural, social, and demographic changes. Immigrants enrich the cultural fabric of a society by introducing new languages, traditions, and perspectives, as seen in the multicultural societies of countries like Australia and the United States. However, large-scale immigration

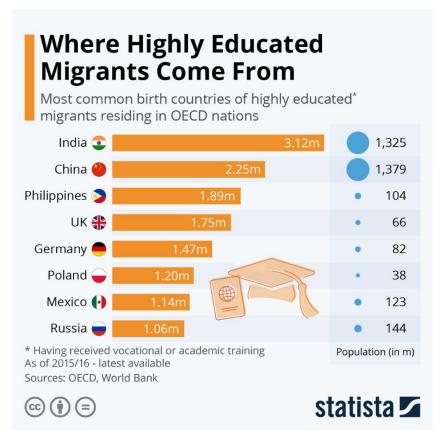


Figure 25- Countries where educated migrants come from (Statista 2022 & OECD)

can also lead to social tensions, particularly if there is a perception of competition for jobs and resources or if there are significant cultural differences. These tensions can be exacerbated by inadequate integration policies or economic challenges in the host country. The societal impact of immigration is thus shaped by the extent to which immigrants are integrated into the host society and the societal attitudes towards immigration.

Business Recommendation: Businesses can play a role in promoting social integration and reducing tensions by fostering inclusive workplaces and supporting community initiatives that bring together immigrant and native populations. This can include cultural exchange programs, language training, and community outreach efforts. Additionally, businesses should be aware of and responsive to the changing demographics and consumer preferences in immigrant-rich societies, tailoring their products, services, and marketing strategies to appeal to a diverse customer base. This not only helps in building a positive brand image but also contributes to social cohesion and understanding.

Additional Insights

For those seeking to dive deeper into the subject the following sources provide valuable insights:

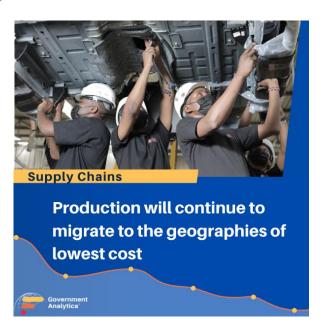


- 1. European Union's Response to Migration Crisis: The European Union's tightening of border controls in response to the migration crisis, triggered by conflicts in the Middle East and Africa, exemplifies a stringent approach to immigration. This response illustrates the challenges faced by regions experiencing significant influxes of migrants and refugees, balancing national security concerns and humanitarian obligations.
 - New rules governing migration crisis and force majeure situations Consilium (europa.eu)
- 2. Canada's Immigration Strategy. Canada's approach to immigration, particularly its plan to welcome over 1.2 million immigrants between 2021 and 2023, highlights a more open immigration policy. This strategy is aimed at addressing labor shortages and promoting economic growth, showcasing a contrasting approach to immigration compared to more restrictive policies.
 - The Daily Immigrants make up the largest share of the population in over 150 years and continue to shape who we are as Canadians (statcan.gc.ca)
- 3. Economic Impact of Immigration in the United States: In the United States, immigrants play a crucial role in various sectors, including technology, healthcare, and agriculture. This positive contribution to the labor market is juxtaposed against the challenges of integrating a large number of new residents, which can strain public resources and infrastructure.
 - Immigration Facts: The Positive Economic Impact Of Immigration (fwd.us)
- 4. Environmental Challenges of Urbanization Due to Immigration: The case of rapid urbanization in cities like Delhi and Beijing, partly driven by internal migration, underscores the environmental challenges associated with increased immigration. This includes issues like pollution, waste management, and water resource strain, emphasizing the environmental implications of large-scale human movements.
 - United Nations Environment Programme
- 5. **Immigration's Role in Innovation**: The significant contribution of immigrants to innovation, particularly in tech sectors as seen in Silicon Valley, underscores the potential of diverse perspectives and skills brought by immigrants. This potential is contingent on effective integration policies and an inclusive economic environment.
 - Effects of Immigration on Entrepreneurship and Innovation



Megatrend 12 - Production Will Continue To Migrate To The Geographies Of Lower Cost And Higher Geopolitical Stability

The ongoing trend in global production dynamics is increasingly characterized by a strategic shift towards regions that offer a blend of cost-effectiveness and political stability. This migration is not merely a matter of seeking lower labor costs, but also involves a complex calculus that includes the stability and predictability of local governance, the regulatory environment, and the risk of geopolitical upheavals. Companies are constantly assessing these factors, seeking to balance the lure of reduced operational expenses with the assurance of a stable business environment. This trend underscores the interconnected nature of global economics, where the decision of a single multinational corporation to relocate its production can have far-reaching effects on both the originating and the receiving regions. The resulting shift often leads to significant economic and social transformations, influencing job markets, local economies, and even global supply chains.



Over the past few decades, the movement of production operations from country to country has become more intense. If production requires high labor-content, low labor-cost countries become destinations for factories. These countries become more urbanized as they attract factories and workers to their cities. In these cities, cost of living increases. Salaries must increase to keep pace. And over a few decades, these countries move from low cost to medium and ultimately high-cost environments. In the middle of 20th century, Japan was the low-cost producer, quality improved over many years, and it became a high production-cost affluent country. Production shifted to China. China's costs will inevitably go higher, and it will ultimately become a high-cost affluent country. Other destinations are becoming more viable like Vietnam. These countries will move in the same trajectory. Lower production cost countries enable high-income countries to buy goods at a cheaper price than would otherwise be possible if produced in their domestic markets. This keeps price inflation down for their citizens while the producer countries grow their middle class with exports. Production will always seek destinations that minimize cost, so the producers can offer their product at competitive prices to the market. Now political stability and predictability is a new criterion to include in assessments.

Top 10 List Production Migration will Seek Low Cost and High Political Stability

Here are the top 10 ways production will continue to migrate to geographies that offer both low costs and high geopolitical stability:

- 1. Targeting Emerging Markets with Stability
 - Companies prioritize countries like Vietnam, Malaysia, and Mexico that offer both competitive labor costs and stable political environments.
- 2. Balancing Costs in Established Production Hubs
 - As costs rise in traditional hubs like China, businesses increasingly assess geopolitical risks alongside cost efficiency when considering alternative destinations.
- 3. Focusing on Regions with Strong Governance



• Nations with predictable and transparent governance, such as Poland or Thailand, attract production due to their ability to provide a stable operating environment.

4. Strategic Use of Regional Trade Agreements

• Countries participating in trade pacts like the CPTPP or USMCA that combine tariff advantages with stable geopolitical conditions are increasingly favored.

5. Leveraging Nearshoring for Stability

• Companies adopt nearshoring strategies, relocating production closer to end markets (e.g., U.S. companies shifting to Mexico) to balance cost savings with reduced geopolitical risk.

6. Diversifying Supply Chains Across Multiple Stable Locations

• Businesses distribute production across multiple low-cost and geopolitically stable regions to mitigate risks associated with relying on a single country.

7. Aligning with Political and Economic Predictability

• Countries with a track record of political predictability and consistent economic policies, such as India and Indonesia, emerge as key manufacturing destinations.

8. Investing in Stable, Emerging Economies

 Companies explore newer destinations like Bangladesh or Ethiopia, provided they demonstrate not just cost advantages but also improving political and social stability.

9. Prioritizing Locations with Infrastructure Investment

 Governments that actively invest in infrastructure and maintain political stability, such as Malaysia or Vietnam, gain a competitive edge in attracting global production.

10. Integrating Stability Metrics into Site Selection

 Businesses increasingly incorporate geopolitical stability indices alongside labor cost metrics to identify optimal locations, ensuring resilience in volatile global markets.

This dual focus on cost efficiency and geopolitical stability drives strategic decision-making in production relocation, shaping resilient global supply chains while maintaining competitiveness.

GENERAL BUSINESS RECOMMENDATION: Stakeholders stand to gain significant insights by carefully examining the rise in production costs. This analysis is vital as they evaluate the long-term sustainability and effectiveness of their investments. Understanding these factors is essential for maximizing their return on investment and making informed decisions for future ventures.

Government Impact

The trend of shifting production to low-cost and geopolitically stable geographies has elicited diverse responses from governments worldwide. On one hand, governments in emerging economies, such as Vietnam, have embraced this trend, implementing policies to attract foreign direct investment (FDI). For instance, Vietnam has significantly improved its business environment, leading to a surge in manufacturing investments from companies diversifying their production. Conversely, countries losing manufacturing bases, like the United States, have seen governmental attempts to reverse this trend through policies aimed at bringing back manufacturing jobs. The U.S. government, for example, has initiated various trade policies and tax incentives to encourage domestic production, demonstrating a proactive stance against offshoring.



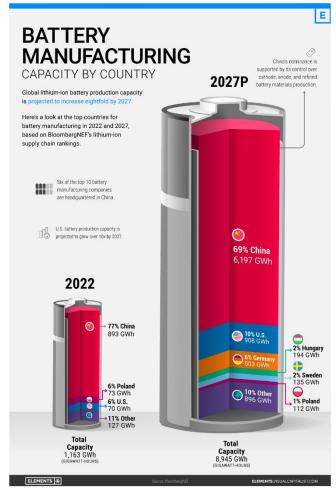


Figure 26- Top battery manufacturers 2022-2027 (Visual Capitalist 2023)

Business Recommendation: Businesses should engage in active dialogue with local governments in emerging markets to understand and influence policy developments. This could include advocating for favorable tax regimes or regulatory environments that support production activities. Companies should also consider investing in domestic production capabilities, even in higher-cost countries, to diversify risks. This approach could involve leveraging advanced manufacturing technologies to offset higher labor costs and align with government incentives promoting domestic production.

Economic Impact

The migration of production to regions of lower cost and higher stability significantly impacts the global economy. Economically, this trend contributes to the development of emerging economies by creating jobs and fostering industrial growth. For example, countries like Bangladesh have seen significant economic uplift through their burgeoning garment industry, which has attracted international companies due to low labor costs. However, this trend can also lead to deindustrialization in higher-cost countries. The United States and parts of Western Europe, for instance, have experienced job losses in manufacturing sectors as companies move production overseas. This shift can lead to economic disruptions, including reduced domestic employment opportunities and changes in trade balances.

Business Recommendation: Businesses should explore partnerships or joint ventures in emerging markets to tap into local expertise and resources, which can lead to cost savings and access to new markets. Companies, in concert with academia and government, should also invest in upskilling and retraining programs in their home countries to mitigate the impact of job losses in traditional manufacturing sectors, thereby fostering a more versatile and adaptable workforce.

Environmental Impact

The relocation of production to low-cost, stable geographies can have mixed effects on the environment. Developing countries, eager to attract foreign investment, might compromise on environmental regulations, leading to increased pollution and resource depletion. For example, rapid industrialization in a number of countries has contributed to significant environmental challenges, including air and water pollution. Ironically, today's advanced economies were faced with equivalent pollution challenges for similar reasons a century ago. At that time, these economies were in a parallel stage of development to today's emerging economies. This trend can also lead to environmental benefits in countries where production is departing. For instance, the reduction of heavy industry in Western Europe has contributed to lower local emissions and a shift towards cleaner, service-based economies.



Business Recommendation: Companies should adopt and promote sustainable production practices in emerging markets, which can include investing in clean technology and adhering to international environmental standards. Businesses should engage in collaborative efforts with local governments and international organizations to support environmental protection initiatives in regions where they operate, fostering a balance between economic growth and environmental stewardship.

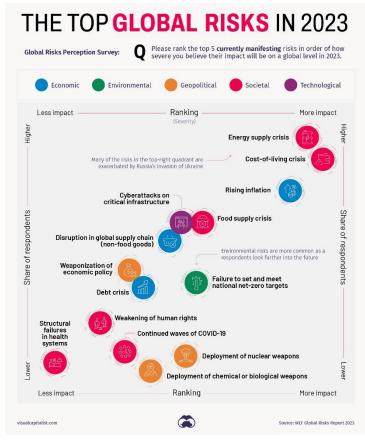


Figure 27- Top global risks in 2023 (World Economic Forum and Visual Capitalist 2023)

Innovation Impact

The migration of production to low-cost, geopolitically stable areas can influence innovation in both the originating and receiving countries. Countries losing production bases may experience a shift towards higher value-added activities, such as R&D and design. For instance, many Western companies have transformed their domestic operations to focus more on innovation and less on mass production. On the other hand, receiving countries benefit from technology transfer and skills development. As seen in China, the influx of foreign manufacturing has led to significant improvements in local technological capabilities and innovation infrastructure.

Business Recommendation: Companies should focus on building R&D centers in their home countries to maintain a competitive edge in innovation while leveraging lower production costs abroad. Businesses should also collaborate with academic institutions and local companies in emerging markets to foster an ecosystem of innovation and skills development, thereby enhancing the overall value chain.

Societal Impact

The shift in production dynamics profoundly impacts society at large. In countries attracting manufacturing, such as Vietnam and Bangladesh, there is often a significant improvement in living standards, with new job opportunities and economic growth. However, this can also lead to urban overpopulation, increased cost of living, and potential labor rights issues. In contrast, countries experiencing manufacturing outflows, like the United States, may face social challenges, including job losses and the erosion of manufacturing communities. This can lead to broader socio-economic issues, such as increased income inequality and reduced social mobility.

Business Recommendation: Companies should invest in community development programs in regions where they establish production facilities, focusing on improving local infrastructure, education, and healthcare. Businesses should mitigate the negative impact of manufacturing job losses, in concert with academia and government, to retrain the affected workforce.



Additional Insights

For those seeking to dive deeper into the subject the following sources provide valuable insights:

- Vietnam's Attraction of Foreign Direct Investment: Vietnam has significantly improved its business environment, which has led to a surge in manufacturing investments from companies diversifying. This aligns with the broader trend of production shifting to low-cost, geopolitically stable geographies.
 - FDI attraction situation in Vietnam and Vietnam's overseas investment in the first nine months of 2023
- 2. U.S. Policies to Encourage Domestic Production: The United States has implemented various trade policies and tax incentives to encourage domestic production and counter the offshoring trend. These measures aim to bring back manufacturing jobs lost to other countries.
 - The Buy American Act and Other Federal Procurement Domestic Content Restrictions
- 3. Economic Impact of Production Migration: The migration of production to low-cost regions contributes to the development of emerging economies by creating jobs and industrial growth, as seen in Bangladesh's garment industry. However, it can lead to deindustrialization and economic disruptions in higher-cost countries like the United States and parts of Western Europe.
 - Truth and consequences of offshoring | Economic Policy Institute (epi.org)
- 4. Environmental Consequences of Production Relocation: The relocation of production to developing countries can lead to environmental challenges due to compromised regulations, as seen in China and India. Conversely, it can benefit the environment in countries where production is decreasing, like in Western Europe.
 - Can Industrial Relocation Reduce Air Pollution? (frontiersin.org)
- 5. **Innovation and Production Migration**: The migration of production can influence innovation in both the originating and receiving countries. Countries like the U.S. are shifting towards higher value-added activities, while receiving countries, benefit from technology transfer and skills development.
 - Does Offshoring Production Reduce Innovation | NBER



References

- 1. Federigan L. Megatrends impacting the way we live. The Manila Times. Published July 30, 2022. Accessed September 6, 2022. https://www.manilatimes.net/2022/07/30/business/green-industries/megatrends-impacting-the-way-we-live/1852720
- 2. When global megatrends run amok. Arthur D. Little. Accessed September 6, 2022. https://www.adlittle.com/en/insights/viewpoints/when-global-megatrends-run-amok

Otherwise references are cited in the report or within the graphics and figures.



Appendix: Top 12 Megatrends - "States" Edition

Trends often must be detected amongst a myriad of incoming mixed signals. Megatrends especially impact the economy and the business environment. Domestic megatrends may realign Government's internal national policies and investments. External megatrends may influence a country's international ambitions, in turn reshaping international policies and investments. The following top twelve megatrends are major influencing factors shaping state government policy, economy, environment, technology, and society. You can download a complementary copy of the Megatrends Report at our website.

12 Global Geopolitical Megatrend – State Edition Impacting the Economy, Business, and Markets		
1	Globalization & Market Access	Weary of dominance by more affluent domestic regions, states put a premium on access to their markets.
2	Industrial Policy	States will invest in statewide sectors with strong national and international competitive advantages.
3	Foreign Policy	States external relations will be bipolar, swinging between ideology and pragmatism
4	Global Influence	Global influence is powered by the strength of a state's economy, its sought-after commodities, or its strategic geography
5	Environmental Policy Industrial Policy	Utilitarian environmental policy will shape a growing portion of state's industrial and economic strategies
6	Supply Chains	States invest in diversifying supply sources to build stronger and more resilient economies
7	Public Policy	State policies are influenced by the citizen's reaction to the information they consume
8	Industrial Policy	State industrial policies will remain influenced by political systems
9	Domestic Policy	Changes in generational public value expectations will reshape state's political landscape
10	Labor	States demographic differences, labor shortages and rising costs accelerate innovation, invention, and adoption of new technologies
11	Immigration	Political upheavals and economic need for talent will fuel waves of migration within the country
12	Supply Chains	Production will migrate to states with lower cost and higher political stability



Appendix: Top 12 Megatrends - "Cities" Edition

Trends often must be detected amongst a myriad of incoming mixed signals. Megatrends especially impact the economy and the business environment. Domestic megatrends may realign Government's internal national policies and investments. External megatrends may influence a country's international ambitions, in turn reshaping international policies and investments. The following top twelve megatrends are major influencing factors shaping city government policy, economy, environment, technology, and society. You can download a complementary copy of the full Megatrends Report at our website.

12 Global Geopolitical Megatrend – City Edition Impacting the Economy, Business, and Markets		
1	Globalization & Market Access	Weary of dominance by more affluent regions, cities put a premium on access to their markets.
2	Industrial Policy	Cities will invest in sectors with strong national and international competitive advantages.
3	Foreign Policy	Cities external relations will be bipolar, swinging between ideology and pragmatism
4	Global Influence	Global influence is powered by the strength of a city's economy, its sought- after commodities, or its strategic geography
5	Environmental Policy Industrial Policy	Utilitarian environmental policy will shape a growing portion of city's industrial and economic strategies
6	Supply Chains	Cities invest in diversifying supply sources to build stronger and more resilient urban economies
7	Public Policy	City policies are influenced by the citizen's reaction to the information they consume
8	Industrial Policy	City industrial policies will remain influenced by political systems
9	Domestic Policy	Changes in generational public value expectations will reshape city's political landscape
10	Labor	City's demographic differences, labor shortages and rising costs accelerate innovation, invention, and adoption of new technologies
11	Immigration	Political upheavals and economic need for talent will fuel waves of migration to or from the city
12	Supply Chains	Production will migrate to cities with lower cost and higher political stability





Dr. John Pournoor is the CEO and founder of Government Analytica.

Government Analytica serves a diverse clientele including companies, associations, non-profits, NGOs, philanthropies, and in-house or external legal functions and advocacy organizations.

Our expertise spans an array of sectors such as healthcare, infrastructure, urbanization, mobility, technology, safety, and security. We enthusiastically engage in projects that drive civic and societal policy transformations.

At Government Analytica, we enhance our clients' strategy towards policymaker engagement by amplifying our client proposals' compelling public value. We harness analytics for strategic insight, to improve government engagements, to enrich proposals, and shine light on policy outcomes.

We are continuously mining government data from an extensive range of public domain sources. We meticulously analyze and categorize this data by geography and industry, applying our advanced analytical tools and techniques. Complemented by our data and analytics, we provide policy assessment, industry assessments, market assessments, regulatory insights, advocacy campaign playbooks, as well as white papers and policy proposals.

With over three decades of experience in Government work, our team has successfully completed thousands of projects across the US at municipal, county, state and federal levels, and in Europe, the Middle East, Africa, Asia, and Latin America. John has a combination of experience, expertise, and a fervent passion to empower changemakers.

John is a Policy Fellow of the Humphrey School of Public Affairs at University of Minnesota. He serves on the board of Evergreen-Energy. He has been appointed by U.S. Secretary of Commerce to the Minnesota District Export Council. He also represents midwestern U.S. States on the National Association of District Export Councils. John earned his degrees in engineering (BS, MS/PhD) from the University of California, Berkeley, University of Washington, Seattle, and MBA from the University of St. Thomas in Minnesota. John has worked for Intel, Chevron, Boeing, Dupont, before joining 3M.

He helped build the international government affairs function of 3M in over 30 countries with new processes, tools, and analytics approaches. He has applied his novel policy analytics tools to practical applications in Government Affairs, Public Affairs, Public Policy, and Government Relations, contributing to advancing each field over his 35-year career.

John is a tireless advocate for non-profits and multilateral organizations and volunteers for community-based non-profits. He lives with his wife, Erin, in Minneapolis where they enjoy film, music, and theater. He is an avid cook. His travels and his weakness for good food and good company has blessed him with many lasting friendships around the world.

Transforming Data into Knowledge

Elevating Knowledge into Wisdom

In Pursuit of Public Value and Greater Good

