Digital Trade Growth, Rule-Making, and Supply Chain Resiliency: U.S. and Global Perspectives

2020 WTO & RTA International Conference

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Taipei, Taiwan October 26, 2020





About ITIF

- The world's leading science and technology policy think tank.
- Supports policies driving global, innovation-based economic growth.

Focuses on a host of issues at the intersection of technology

innovation and public policy across several sectors:

- Innovation and competitiveness
- IT and data
- Telecommunications
- Trade and globalization
- Manufacturing, life sciences, agricultural biotech, and energy





Today's Presentation

Digitalization Driving Global and Pacific Economic Growth

2 Advancing Global Digital Trade Rule-Making

Enhancing Supply Chain Resiliency

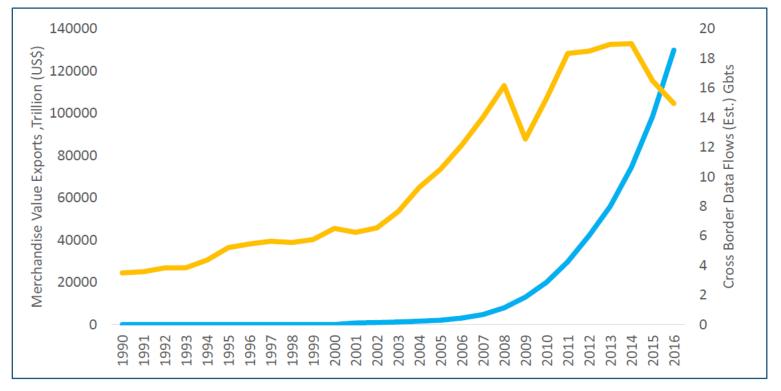
Increasingly Digitalized Global Economy

- Digital economy now accounts for 25% of global GDP.
- 75% of the value added by data flows over the Internet accrues to traditional industries.
- "Half of all value created in the global economy over the next decade will be created digitally." – Tekes

Sources: Accenture, "Digital Disruption: The Growth Multiplier"; McKinsey Global Institute, "Digital Globalization: The New Era of Global Flows"; IDC, "IDC FutureScape: Latin America IT Industry 2019 Predictions"

Increased Cross-Border Data Flows Driving Global GDP Growth

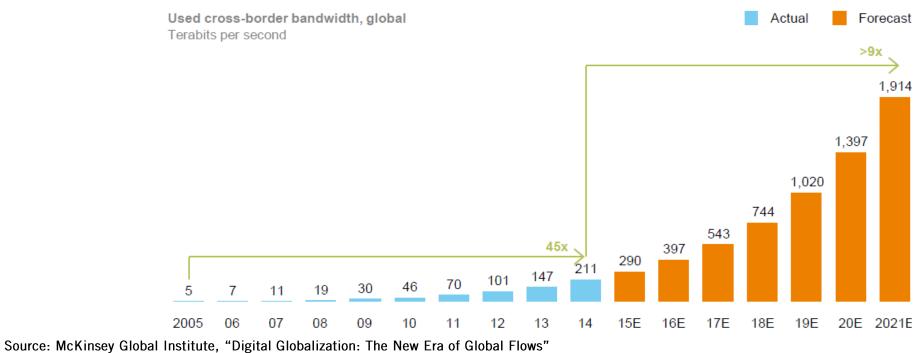
 The value of international data flows surpassed the value of global merchandise trade for the first time in 2015.



Sources: Victor Mulas, The World Bank "Value in Global Economy Moves to Digital Business"; McKinsey Global Institute, "Digital Globalization: The New Era of Global Flows"

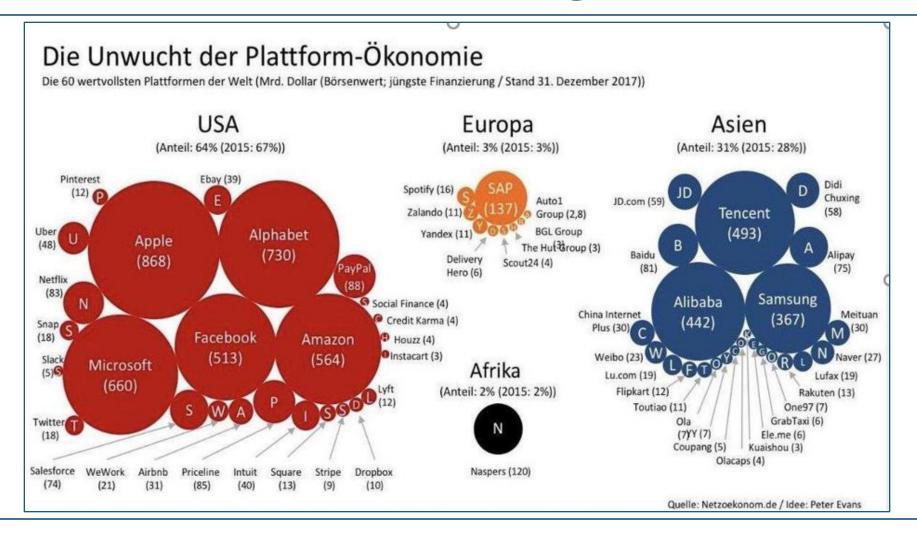
Increased Cross-Border Data Flows Driving Global GDP Growth

- From 2005-2015, cross-border data flows grew 45x; 9x more to 2021.
- Asia accounts for 16% of global data flows; in 2017, Asia's cross-border data flows were 97 times greater than their value a decade earlier.



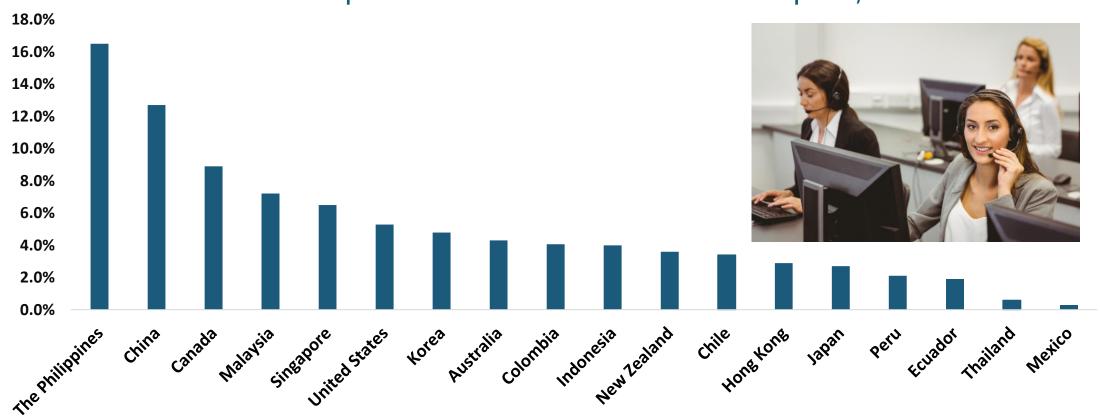
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Asia and America Dominate the Digital Platform Economy



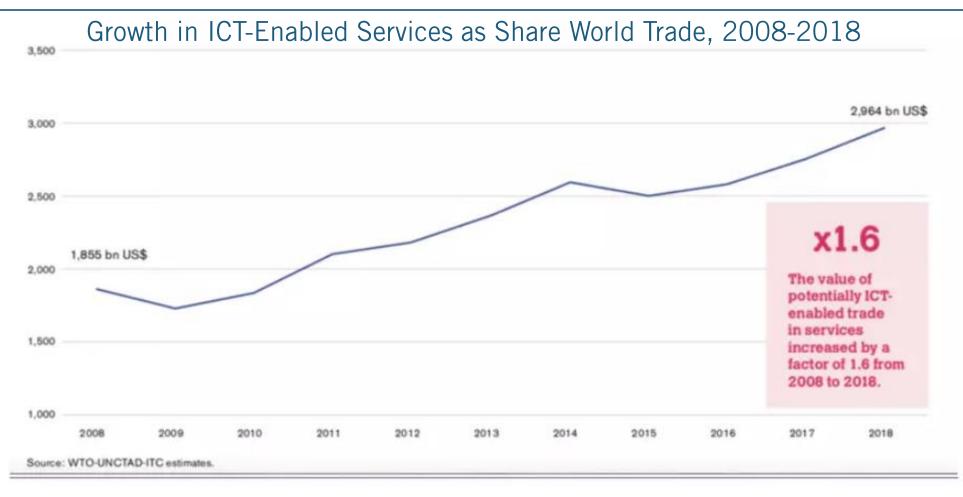
ICT Services Exports a Key Driver of Pacific Trade

ICT Services Exports as a Share of Total Services Exports, 2017



Source: World Bank, "ICT Services Exports as a Share of Total Services Exports"

ICT-Enabled Services' Share of Global Trade Growing



Source: "2019 WTO Statistical Review"

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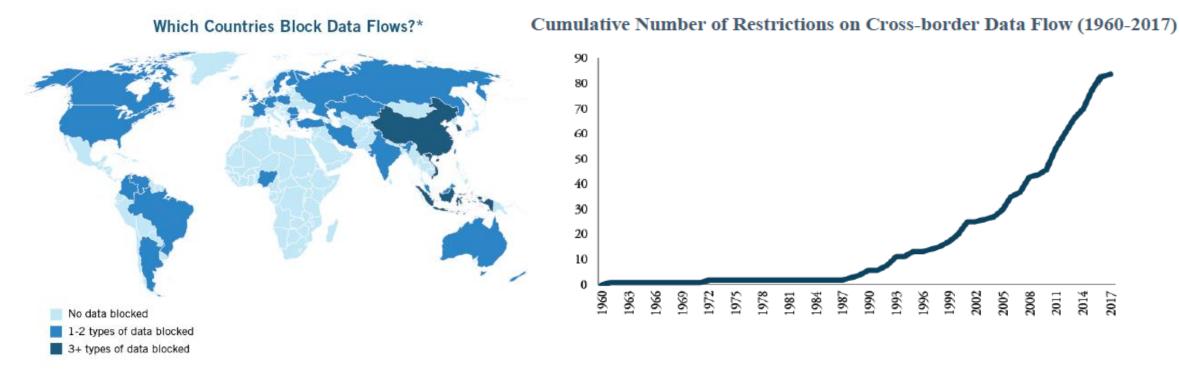
Enhancing Supply Chain Resiliency

Digital Trade Policy Recommendations

- ✓ Pursue new rules to protect global data flows and digital trade.
- ✓ Maintain the WTO E-commerce Customs Duty Moratorium
- ✓ Join the Information Technology Agreement (ITA).
- ✓ Use pandemic to promote adoption of digital technologies.

Eschew Data Localization Requirements

Eschew digitalization barriers to trade, including local data storage and local ICT facilities provisioning requirements.



Sources: Nigel Cory, ITIF, "Cross-Border Data Flows: Where Are the Barriers, and What Do They Cost?" M.F. Ferracane, ECIPE, "Restrictions on Cross-Border Data Flows: A Taxonomy"

Importance of Data Flows in Combatting COVID-19

- Viruses cross borders seamlessly; so too must needed epidemiological and health data (with privacy protections).
- Yet China requires that genomic data must be "stored and processed locally by Chinese firms."
- Policymakers should develop a "global digital health framework" that promotes data interoperability and assists developing nations with skills and ICT infrastructure.

Sources: ITIF and Geneva Network, "Building a Global Framework for Digital Health Services in the Era of COVID-19"; GTIPA, "A Joint Declaration on the Importance of Collaboration, Open Trade, and Innovation in Tackling COVID-19"

Building a Global Framework for Digital Health Services in the Era of COVID-19

NIGEL CORY AND PHILIP STEVENS | MAY 2020

Health data and digital technologies will be essential for improving global health outcomes beyond the COVID-19 pandemic. Low- and middle-income nations, with fledgling digital health strategies and many barriers to overcome, stand to benefit the most.

KEY TAKEAWAYS

- Information and communications technologies can improve the quality and delivery of health care services around the world—particularly in low- and middle-income countries that face staffing and other physical resource constraints.
- ICT-driven "digital health" products and services leverage technologies such as electronic health records, mobile computing, AI, big data, and genomics to deliver more personalized and coordinated care, and better, faster treatments at lower cost.
- Many digital health products are already proven, available, and adaptable to all countries, yet a global framwork that marshals resources, expertise, and strategies to realize the true potential of digital health is only at a nascent stage.
- Policymakers are struggling to adapt technology to their domestic health systems, while international bodies are only just starting to develop the principles, practices, and tools to help late adaptors and developing nations catch up.
- Domestic technology standards and data protections risk fragmenting away from global interoperability, preventing health companies and researchers from leveraging health data and technologies to provide new and better services internationally.
- A global digital health framework requires low- and middle-income countries to work with international partners on key foundations: national strategies, skills, ICT infrastructure, and governance that balances innovation and data protection.

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Pursue New Avenues to Protect Data Flows

- Pursue international instruments and cooperation addressing the underlying concerns raised by cross-border data flows:
 - Expand adoption of APEC CBPR approach;
 - Update Mutual Legal Assistance Treaties (MLATs) to improve law enforcement access to data;
 - Include prohibitions on data localization barriers in trade agreements.

Maintain the WTO E-Commerce Customs Duty Moratorium

- WTO E-commerce customs duty moratorium has played pivotal role in enabling global digital trade.
- E-commerce sales reached \$25.7 trillion in 2018.
- Eliminating the moratorium would result in annual global GDP losses of \$10.6 billion.



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THE IMPORTANCE OF E-COMMERCE,
DIGITAL TRADE, AND MAINTAINING THE WTO
E-COMMERCE CUSTOMS DUTY MORATORIUM

OCTOBER 2020



Source: GTIPA, "The Importance of E-Commerce, Digital Trade, and Maintaining the WTO E-Commerce Customs Duty Moratorium"

Join the Information Technology Agreement (ITA)



Source: ITIF, "Assessing the Benefits of Full ITA Participation for Indonesia, Laos, Sri Lanka, and Vietnam"

Digital Policy for Physical Distancing in Pandemic Crisis

- Policymakers must sweep away regulations that limit remote, automated digital functions across a wide array of industries.
- Support foundational technology platforms: 5G, universal broadband, electronic IDs, EHRs, AI, mobile payments, etc.
- Drive digital transformation for remote activity in key sectors: education, government, healthcare, manufacturing, and transportation.

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Digital Policy for Physical Distancing: 28 Stimulus Proposals That Will Pay Long-Term Dividends

ROBERT D. ATKINSON, DOUG BRAKE, DANIEL CASTRO AND STEPHEN EZELL 1 APRIL 2020

The COVID-19 pandemic has revealed gaps in society's digital readiness for social distancing, If policymakers seize the opportunity to address these gaps, they can make it easier to manage the next pandemic while providing significant long-term social and economic benefits.

KEY TAKEAWAY

- The continuing progress of digital technology makes social distancing mandates more feasible and less costly. But there are still major gaps that policymakers should address to make the process even easier.
- To maximize society's digital readiness, policymakers need to sweep away the regulatory underbrush that limits remote and automated digital functions in a wide array of industries. from health and retail to education and transportation.
- Governments should support the development of foundational digital platforms, including universal broadband, 5G, digital IDs, electronic health records, big data systems, and mobile payments.
- Governments should increase funding to spur development and adoption of key technologies to enable more efficient and flexible production, including robotics, autonomous vehicles, 3D printing, Al, blockchain, IOT, and facial recognition.
- Governments should support digital transformation for remote activity in key sectors, including education, government, healthcare, transportation, retail, and manufacturing.
- Congress and the administration should ensure a fourth stimulus package includes a major push to increase digital resiliency to better prepare for future pandemics.

INFORMATION TECHNOLOGY & INNOVATION FOUNDATION | APRIL 202

Source: ITIF, "Digital Policy for Physical Distancing: 28 Stimulus Policy Proposals That Will Pay Long-Term Dividends" https://itif.org/sites/default/files/2020-digital-policy-physical-distancing-proposals.pdf

Remove Barriers to Digital Transformation

- New York legislators proposed banning self-driving cars for 50 years.
- San Francisco banned sidewalk delivery robots in 2017.
- Push back against resistance to self-service options like grocery selfcheckouts, cashless stores, etc.



Source: ITIF, "Digital Policy for Physical Distancing: 28 Stimulus Policy Proposals That Will Pay Long-Term Dividends"

Digitalization an Essential Aspect of COVID-19 Recovery

Korean New Deal

Digital New Deal

- Stronger integration of data, network, AI (DNA)
- 2. Digitalization of education infrastructure
- 3. Fostering the "Untact" industry
- Digitalization of social overhead capital

Green New Deal

- 5. Green transition of infrastructures
- 6. Low-carbon and decentralized energy
- 7. Innovation in the green industry



GTIPA PERSPECTIVES:

COVID-19 IMPACTS ON PUBLIC HEALTH AND THE ECONOMY OF GTIPA MEMBER NATIONS

OCTOBER 2020



Stronger Safety Net

Employment and social safety net and investment in human resources

Source: GTIPA, "COVID-19 Impacts on Public Health and Economy of GTIPA Member Nations," https://www.gtipa.org/publications/2020/10/26/gtipa-perspectives-covid-19-impacts-public-health-and-economy-gtipa-member

Today's Presentation

Digitalization Driving Global and Pacific Economic Growth

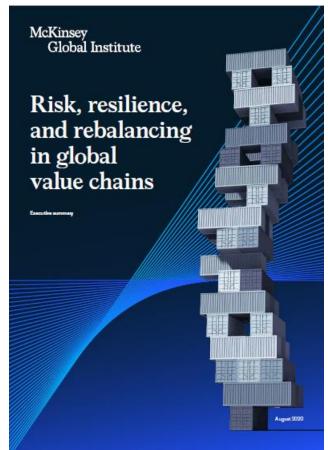
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Enhancing Supply Chain Resiliency Post-Pandemic

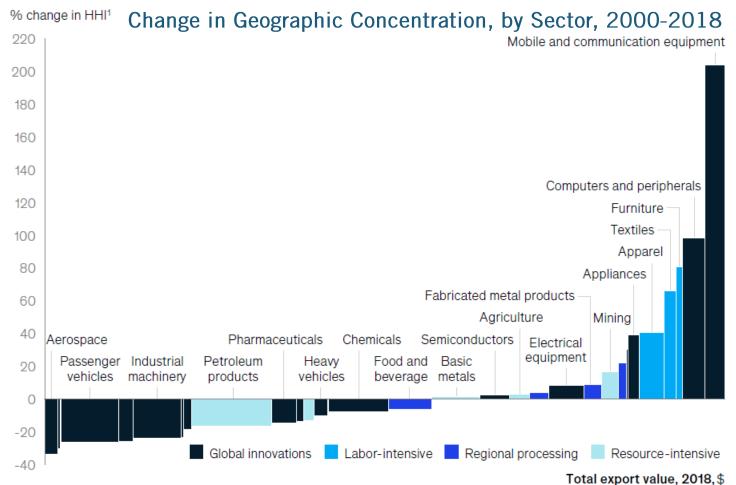
- Supply chain shocks becoming more frequent, costly.
- One-quarter of the pandemic-induced drop in global GDP this year was transmitted along supply chains.





Sources: McKinsey Global Institute, "Risk, resilience, and rebalancing global supply chains"; Bonadio et al., "Global Supply Chains in the Pandemic"

Global Production Becoming Increasingly Concentrated



Source: McKinsey Global Institute, "Risk, resilience, and rebalancing global supply chains"

How to Enhance Supply Chain Resiliency

How Companies Are Bolstering Supply Chain Resilience

Dual sourcing of raw materials

Increase inventory of critical products

Nearshoring and expanding supplier base

Regionalizing supply chain

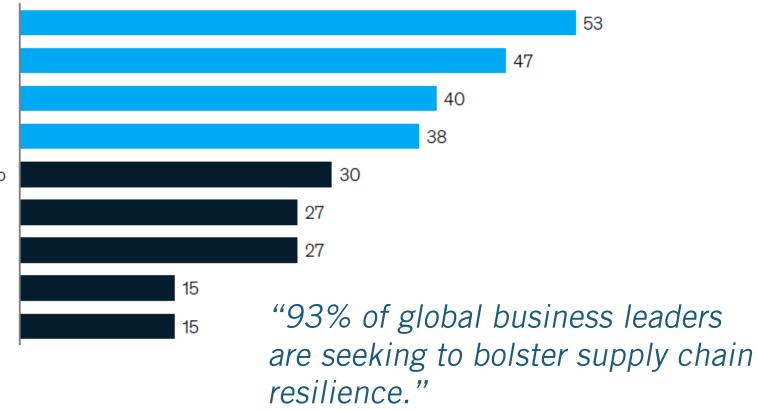
Reducing number of SKUs in product portfolio

Higher inventory along supply chain

Backup production sites

Nearshoring of own production

Increase number of distribution centers



Source: McKinsey Global Institute, "Risk, resilience, and rebalancing global supply chains"

Countries Initiatives' to Promote Reshoring



The "Action Plan for Welcoming Overseas Taiwanese Businesses to Return to Invest in Taiwan" has repatriated \$21 billion and 150 manufacturers.



Japan investing \$2.3 billion in a reshoring fund to entice Japanese firms to move production from China; labor-saving investments & relocation expenses.



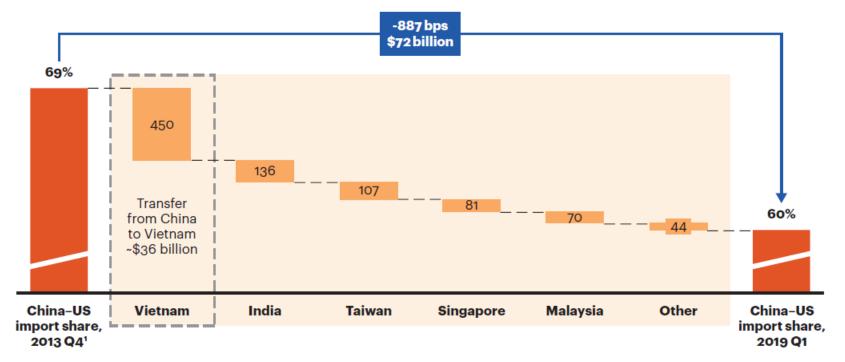
"Project Defend" seeks to reduce British reliance on Chinese production of critical products such as pharmaceuticals, PPEs, and advanced technologies.



Trump administration has considered a \$25 billion reshoring fund; Phlow's SAPIR; CHIPS Act; Biden's \$700 billion "Buy American" plan.

Prospects of Shifts in Global Supply Chains

■ 16-26% of global goods exports (\$2.9-\$4.6 trillion) could conceivably move to new countries over next five years.



US Trade Policy and Reshoring: The Real Impact of America's New Trade Policies The US has made significant changes to its trade policy with the specific intent of bringing manufacturing home. So why haven't these policies resulted in an uptick in reshoring?



Sources: AT Kearney, "U.S. Trade Policy and Reshoring"; McKinsey Global Institute, "Risk, resilience, and rebalancing global supply chains"

Summary Policy Recommendations

- 1. U.S. should join the CPTPP, bringing in Korea and Taiwan.
- 2. U.S. should pursue a U.S.-Taiwan Free Trade Agreement.
- 3. U.S. should coordinate with peers on exports controls.
- 4. Develop a "Trusted Supply Chain Partner Network."
- 5. Follow the Global Trade and Innovation Policy Alliance.



Global Trade Interdependence: U.S. Trade Linkages with Korea, Mexico, and Taiwan

BY STEPHEN J. EZELL AND CALEB FOOTE | JUNE 2019

Koraa, Mexico, and Taiwan represent vital trade partners for the United States, not only as destinations for U.S. exports, but more importantly as key partners whose firms supply critical intermediate goods on which the health of America's advancedtechnology industries depend. The global economy has become increasingly interlinked, as nations—and enterprises therein-specialize in productive activities wherein they enjoy the greatest levels of comparative advantage. This phenomenon has become especially pronounced in the globalization of value chains for sectors such as information and communications technologies (ICT), electronics, aerospace, and automotive, with Asia becoming a central player in many of these supply chains, especially for ICT products. This internationalization of supply chains means that the success of original equipment manufacturers (OEMs) depends greatly on the health and vitality of suppliers in other nations and the ability to pursue trade, ideally on mostly unimpeded terms, with them. This report examines trade linkages between the United States and three key partner nations-Mexico, Korea, and Taiwan-analyzing the extent of inter- and intraindustry trade across six key sectors: automobiles, chemicals, computers and electronics, machinery, other transportation equipment (including aerospace), and pharmaceuticals. The report demonstrates both that U.S. industries in these sectors depend greatly on trade with suppliers in study partner nations and that these nations are key importers of U.S. goods in these industries.

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Source: ITIF, "Global Trade Interdependence: U.S. Trade Linkages With Korea, Mexico, and Taiwan"



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https://hopin.to/events/2020-global-trade-and-innovation-policy-alliance-virtual-summit



2020 Global Trade and Innovation Policy Alliance Virtual Summit



The Global Trade and Innovation Policy Alliance (GTIPA) represents a network of over 40 leading global think tanks dedicated to advancing a positive view of trade, globalization, and innovation for the benefit of the world's citizens. Our GTIPA Annual Summits bring together Alliance members with world-leading experts to explore creative solutions to difficult economic, trade, and innovation challenges facing the international community. This year's Virtual summit will feature distinguished keynoters alongside panels addressing: the future of trade and globalization; lessons for policymakers on managing COVID-19 economic and public health impacts drawn from a series of original country-level case studies; and getting global trade rules right to facilitate digital trade and cross-border data flows.

Schedule

Description

Speakers

Thank You!

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