

The Future of Global and Regional Supply Chains

Pathways For Trade: The North American Logistics & Manufacturing Symposium

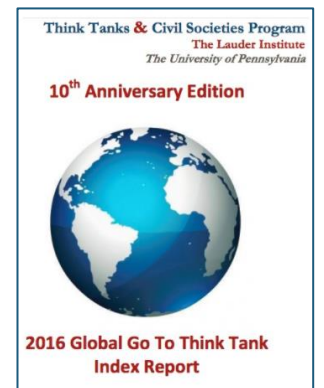
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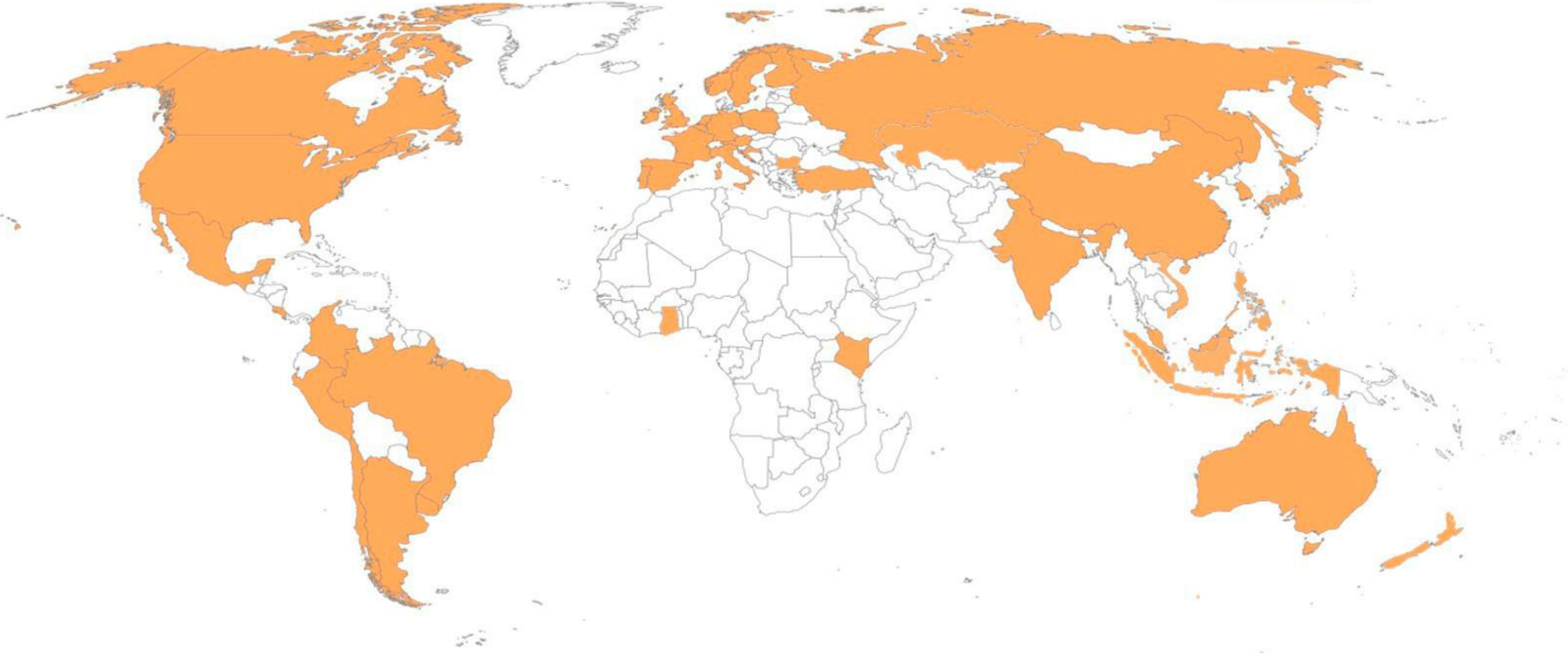
About ITIF

- 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
 - Life sciences, agricultural biotech, and energy



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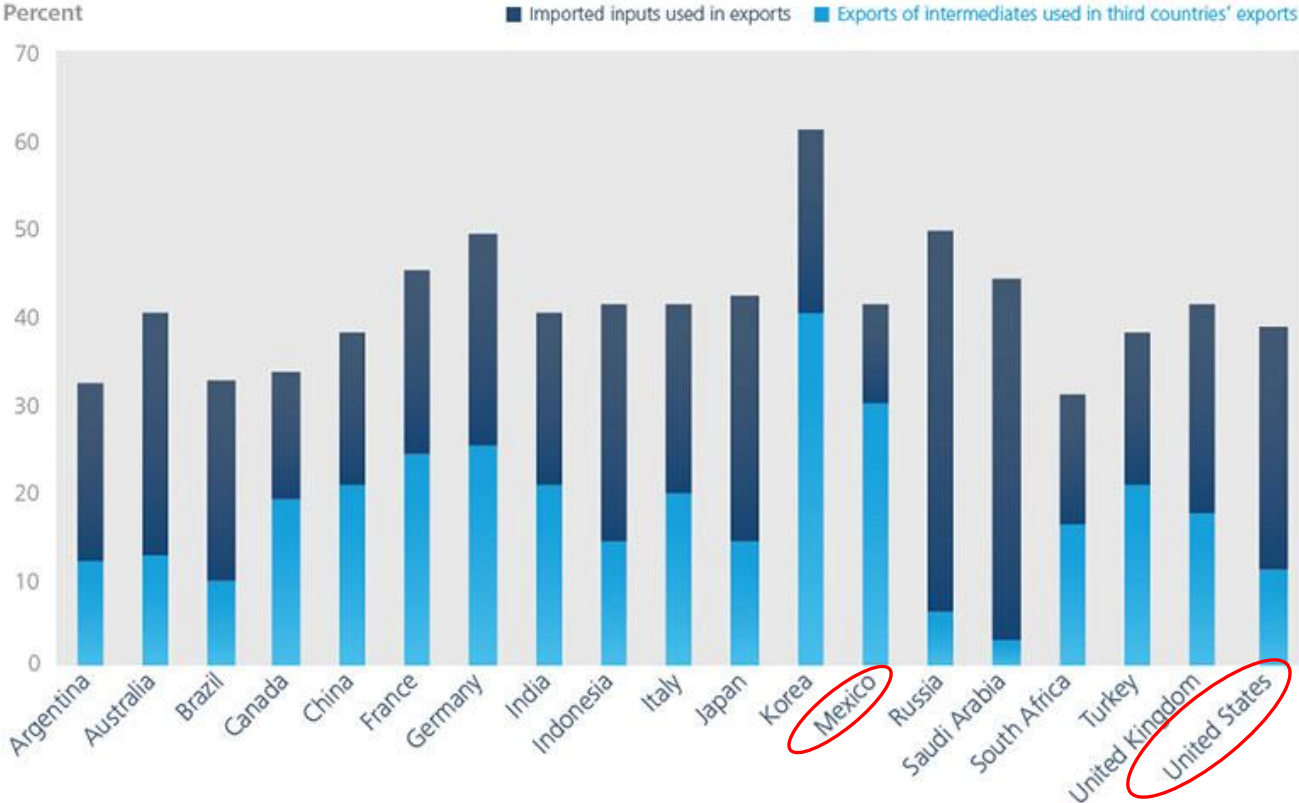
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Global Value Chains (GVCs)

- Traditional Trade: Simple, final products traded between a closely connected producer and seller.
- Modern Trade: System of specialization where different stages of production are located across firms in different countries.
- Emergence of GVCs driven by:
 - Decreasing transportation costs and increasing adoption of ICTs.
 - Rising productivity and incomes around the world driving increased demand for an ever-growing variety of goods and services.

U.S. and Mexico - GVC Participation

Figure 4. GVC participation, selected countries, 2009



Source: OECD (2013). The index is calculated as a percentage of gross exports and has two components: the import content of exports and the exports of intermediate inputs (goods and services) used in third countries' exports.

Graphic: Deloitte University Press | DUPress.com

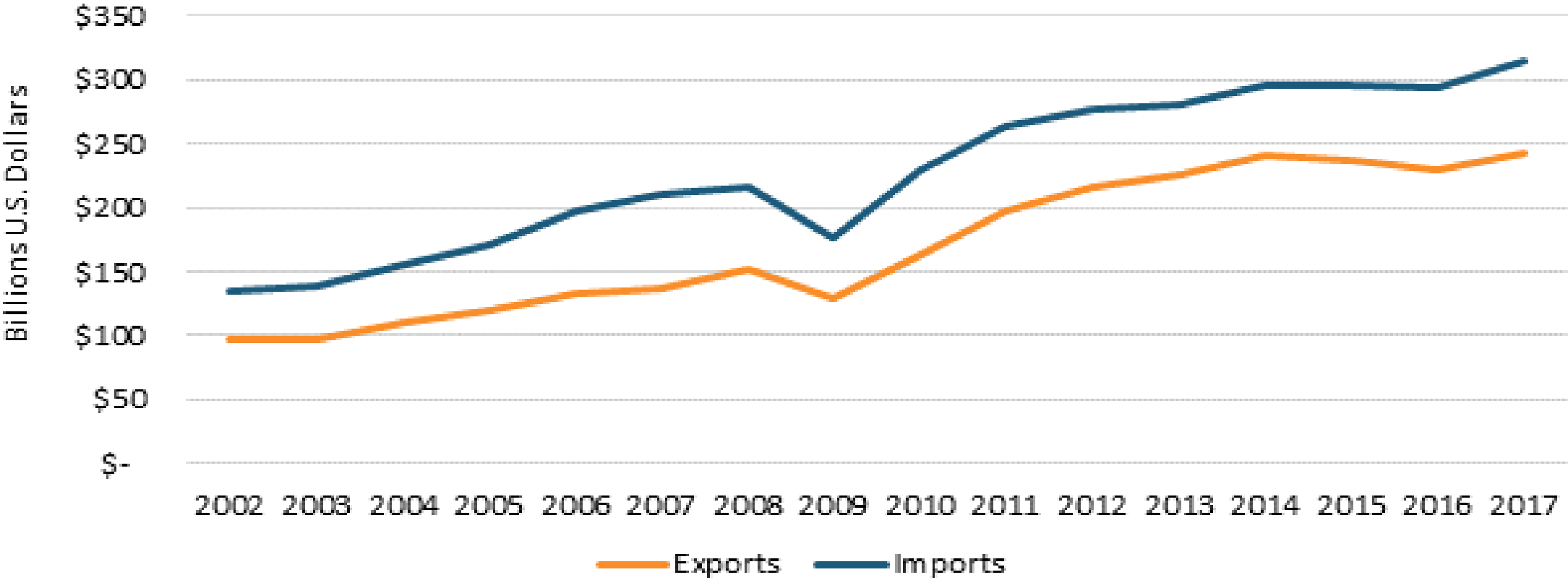
The Growth of Trade in Intermediate Goods/Services

- “Value-added” in modern trade lies in intermediate goods/services coming together in a final product.
 - From 2004 to 2014: Trade in intermediate goods increased from one-quarter to two-fifths of global trade.
- Difficult to measure and analyze: Dearth of data on GVCs.

Upcoming ITIF Trade Linkages Report

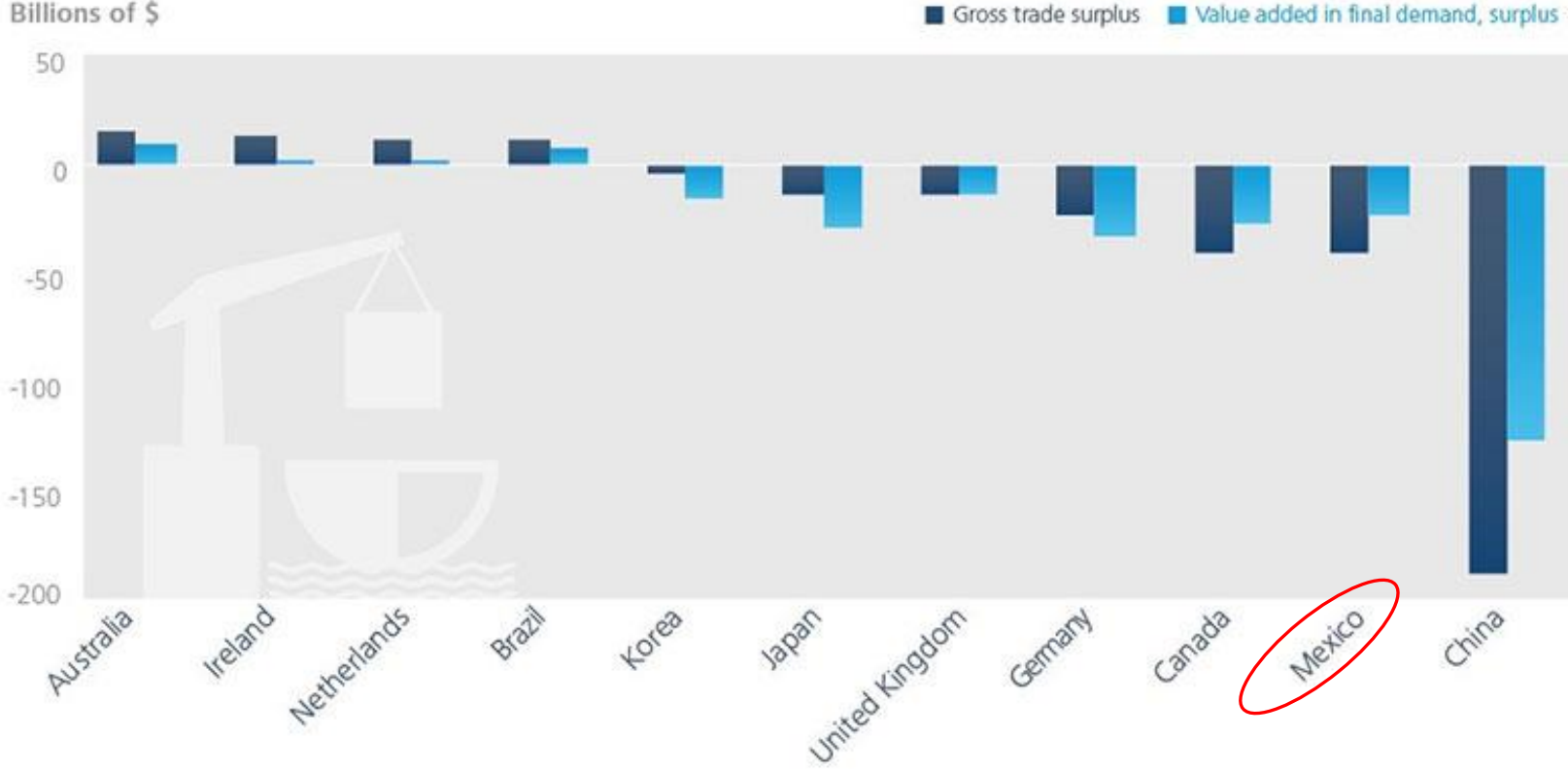
- Report looks into the changing nature of value-added trade between the United States and Mexico.
 - Focuses on key tech sectors: ICT manufacturing and automobiles.
 - Covers: The United States, Mexico, Taiwan, and South Korea.
- Goal: Provide an updated assessment of bilateral trade linkages and competitive positions of the two economies.

U.S.-Mexico Trade: Rising Together



U.S. Trade Balances in Value-Added Terms

Figure 3. Bilateral trade balances, 2009



Source: OECD-WTO TIVA dataset, May 2013 release.

Graphic: Deloitte University Press | DUPress.com

U.S. Trade Adjusted by Value-Added 2002/2014

(Millions)		Inter-Industry (Gross)			Inter-Industry (VA-adjusted)			Intra-Industry (VA)		
Country	Year	Exports	Imports	Balance	Exports	Imports	Balance	Exports	Imports	Balance
Taiwan	2014	\$24,088	\$40,584	-\$16,496	\$16,415	\$34,050	-\$17,635	\$5,304	\$4,951	\$352
Mexico	2014	\$193,345	\$293,916	-\$100,571	\$178,587	\$267,366	-\$88,778	\$42,200	\$29,078	\$13,123
Korea	2014	\$42,138	\$68,679	-\$26,541	\$43,887	\$78,341	-\$34,454	\$7,867	\$9,300	-\$1,434
Taiwan	2002	\$16,774	\$32,002	-\$14,481	\$13,331	\$28,601	-\$15,270	\$4,885	\$3,440	\$1,445
Mexico	2002	\$86,015	\$133,969	-\$67,283	\$88,999	\$132,158	-\$43,158	\$23,113	\$12,926	\$10,186
Korea	2002	\$21,131	\$35,276	-\$17,048	\$22,922	\$37,098	-\$14,176	\$5,802	\$3,456	\$2,346

U.S. Trade in Intermediate Products

	World		South Korea		Mexico		Taiwan	
	2002	2017	2002	2017	2002	2017	2002	2017
Exports								
Capital Goods	26%	21%	32%	28%	15%	14%	33%	28%
Intermediate Goods	65%	68%	63%	66%	76%	81%	63%	67%
Consumption Goods	9%	11%	5%	6%	9%	5%	4%	5%
Imports								
Capital Goods	21%	26%	28%	28%	28%	39%	39%	29%
Intermediate Goods	55%	50%	48%	62%	57%	49%	41%	55%
Consumption Goods	24%	24%	24%	10%	15%	12%	20%	16%

U.S. Trade with Mexico, Adjusted by Value Added, 2014

Mexico (2014)	Inter-Industry (Gross)			Inter-Industry (VA)			Intra-Industry (VA)		
Industry	Exports	Imports	Balance	Exports	Imports	Balance	Exports	Imports	Balance
TOTAL	\$193,345	\$293,916	-\$100,571	\$178,587	\$267,366	-\$88,778	\$42,200	\$29,078	\$13,123
Chemicals	\$22,208	\$5,499	\$16,709	\$23,099	\$7,019	\$16,080	\$6,113	\$1,559	\$4,554
Pharmaceuticals	\$1,628	\$327	\$1,301	\$1,646	\$277	\$1,369	\$70	\$5	\$65
Computers and Electronics	\$14,504	\$51,281	-\$36,777	\$16,867	\$44,530	-\$27,662	\$8,858	\$1,995	\$6,863
Machinery	\$18,231	\$17,217	\$1,014	\$17,306	\$18,931	-\$1,625	\$1,151	\$2,132	-\$981
Automobiles	\$21,697	\$86,986	-\$65,289	\$18,739	\$56,295	-\$37,556	\$10,126	\$12,514	-\$2,389
Other Transportation (including Aerospace)	\$4,218	\$2,700	\$1,518	\$3,367	\$5,364	-\$1,998	\$812	\$1,931	-\$1,119

Domestic VA as Share of Gross Exports/Imports

- Automobiles – U.S. exports has the smallest share of U.S.-generated content in its exports across all tech industries – due to Canada and Mexico
 - U.S. value-added input as share of automobile exports – decreased from 76% to 65% between 2002 and 2011.
 - Meanwhile: U.S. value-added as share of ICT exports increased from 80% to 87% between 2002 and 2011.
- Provides a contrast in ICT and automobile GVCs.

GVCs, Trade Policy, and the Need for Regional/Global Perspective

- NAFTA 2.0 can help the region support the value chains required for the production of next-generation technologies.
- Regional perspective: “nearshoring” - Jobs moved from Asia or elsewhere to Mexico provide significant value to the United States
 - 40 percent of the inputs to finished manufactured goods in Mexico come from the United States.
 - By contrast, for China, that figure is a mere 4 percent.

The Need for Technology/Innovation Focus

- NAFTA does need an upgrade to address data flows, intellectual property, e-commerce, services markets, and trade facilitation.
- 21st-century trade is increasingly digital and knowledge intensive
 - Already, 22% of global economic output can be attributed directly to digital commerce.
 - E-commerce platforms such as Amazon and Alibaba were virtually nonexistent 20 years ago, but they now facilitate approximately 12 percent of global trade in physical goods.

The Alternative (Not Good)

- Everyone misses out on the opportunities to gain more from changing GVCs.
- Significant impact of U.S. withdrawal from NAFTA



Thank You!

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