



JA Del Río

**“NEARSHORING IN MEXICO:
CHALLENGES AND OPPORTUNITIES.”**

June 2022

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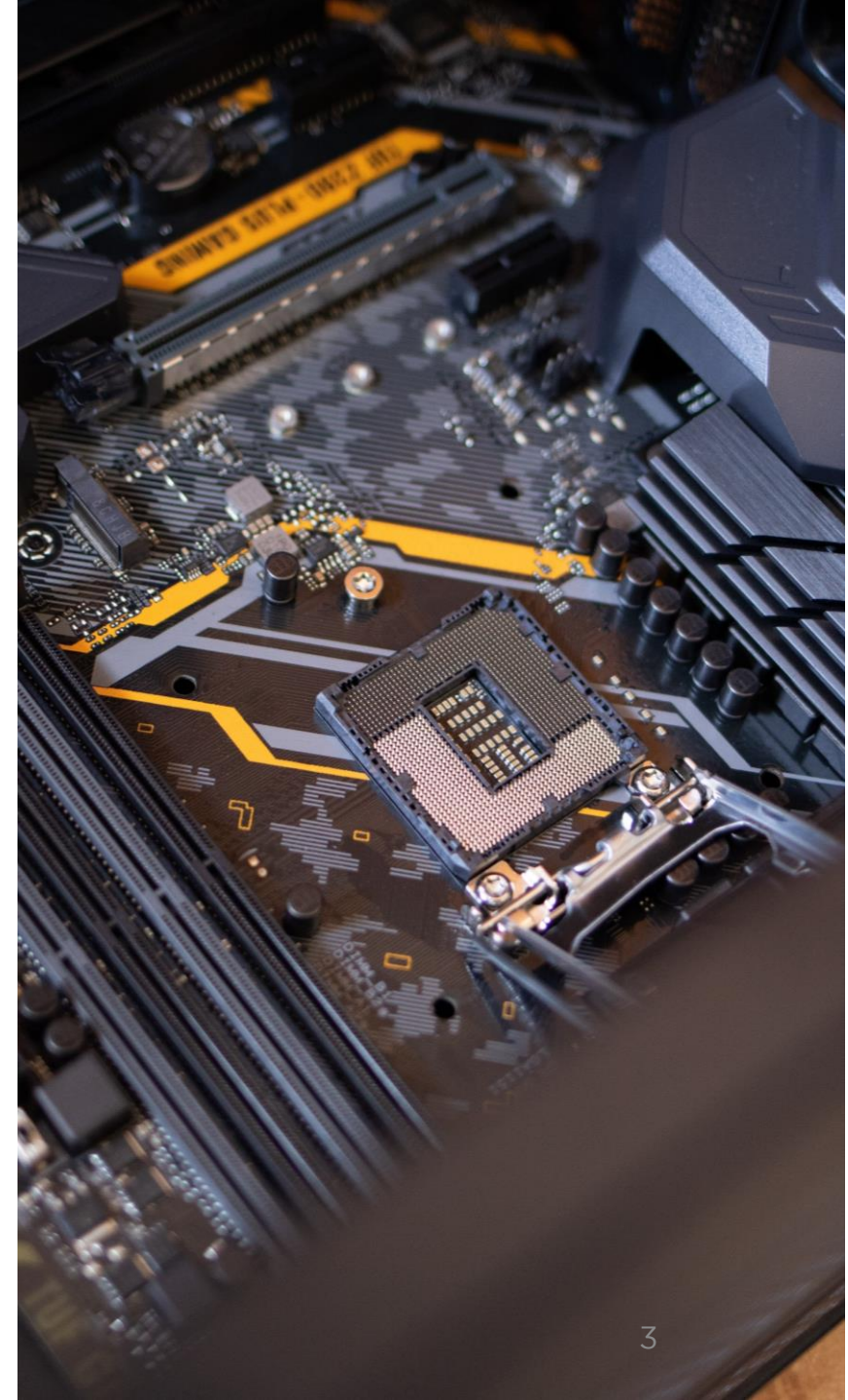
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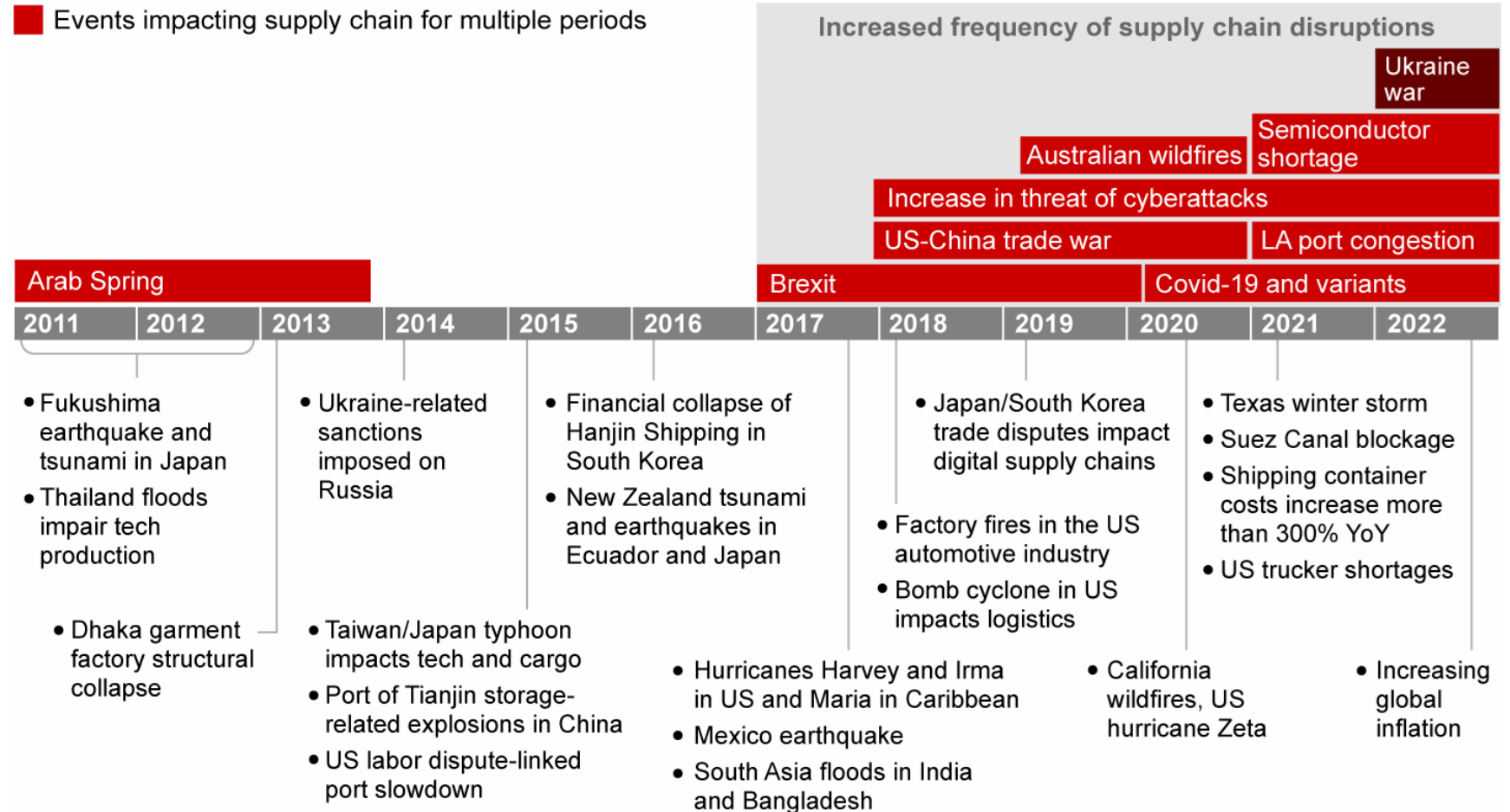
Recent years have highlighted the **fragility of supply chains**. The constraints of the business operation model have been intensified by **global events** such as the pandemic, trade tensions, and wars. **Nearshoring** has emerged as the most interesting solution due the advantages of **moving operations** to or **sourcing** from nearby countries. In the case of U.S. businesses, nearshoring most often means sourcing from or manufacturing in Mexico.

Long **before the pandemic**, businesses have already considered the advantages of relocating. **China's rising wages** and **trade tariffs** contributed to start adopting nearshoring strategies. The pandemic remarked the need and benefits of moving manufacturing operations closer to the consumer: from **mitigating risk** to **better landed costs**.



1. Supply Chain Disruption and Trading Challenges

- USA-CHINA Trade War
- Lockdowns/Slowdowns due COVID-19 pandemic
- Ukraine War
- Oil Prices



Supply Chain Disruption and Trading Challenges



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Global Supply Chain Pressure Index

Latest Update May 2022

Enter a date range to see monthly estimates or use the slider below to view a specific date range.

Standard deviations from average value

From To

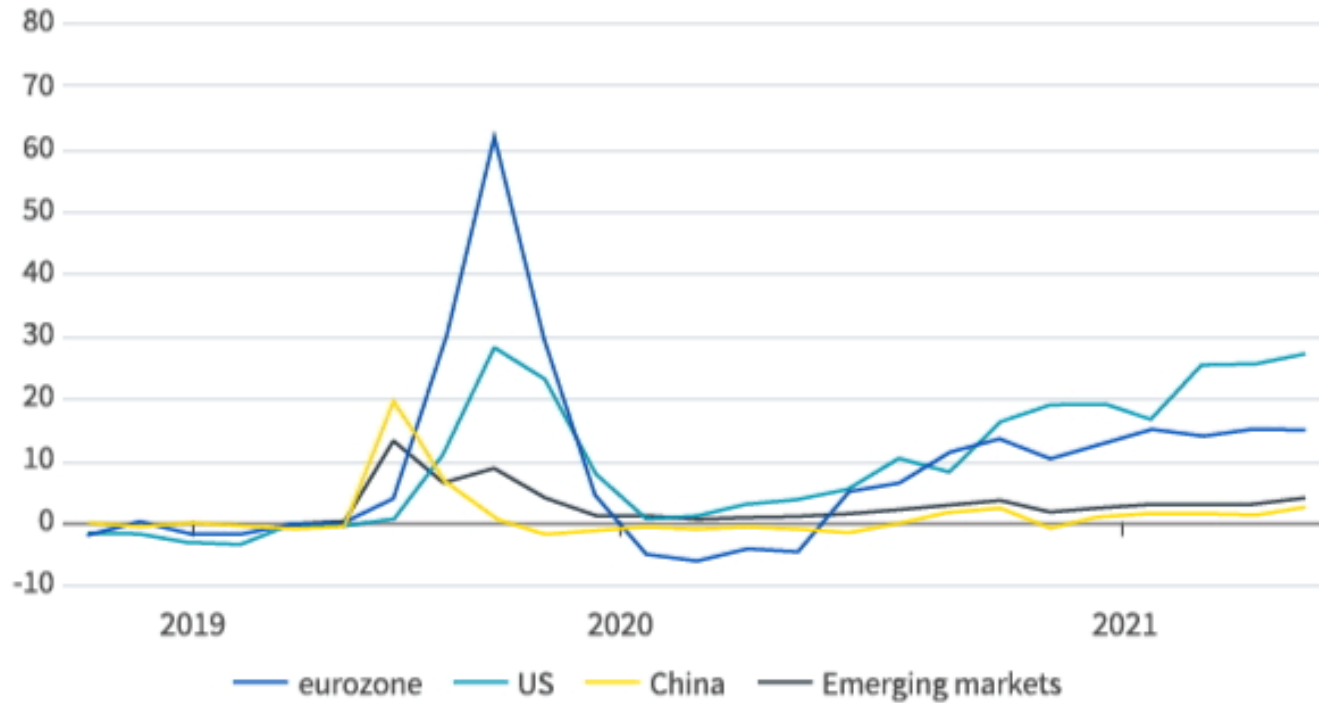


— FEDERAL RESERVE BANK OF NEW YORK LIBERTY STREET ECONOMICS, May 2022

Supply chain disruption by region



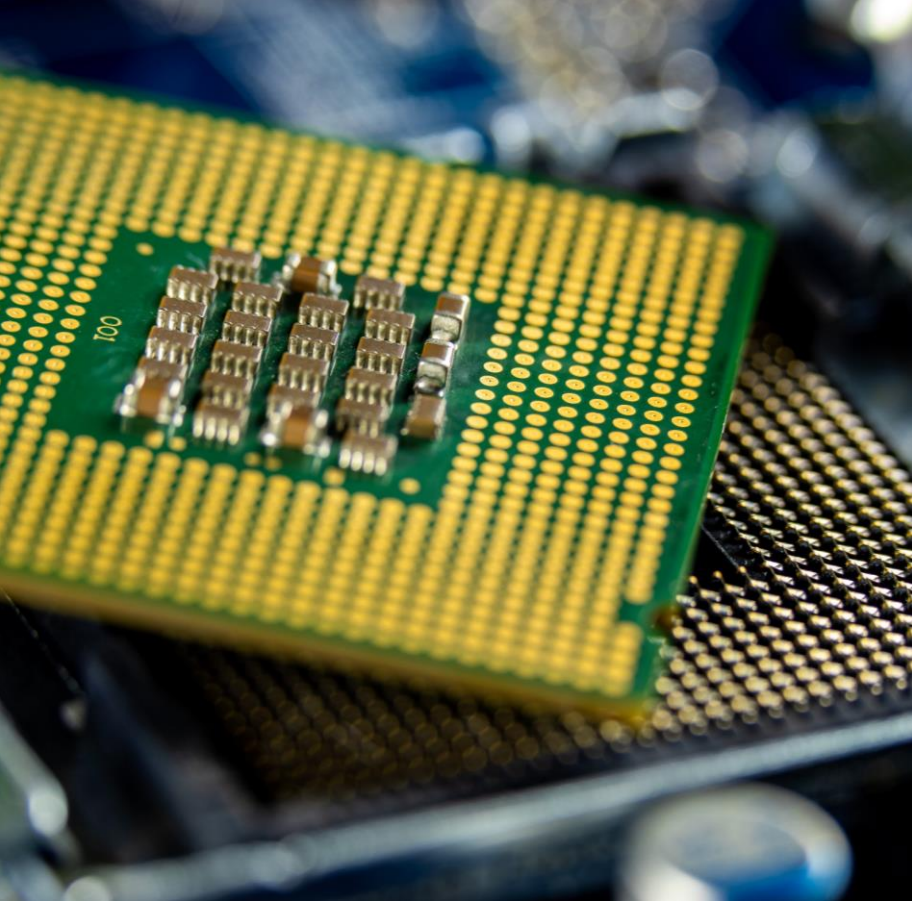
1. Supply Chain Disruption and Trading Challenges



– STATISTA, Oct 13th 2021

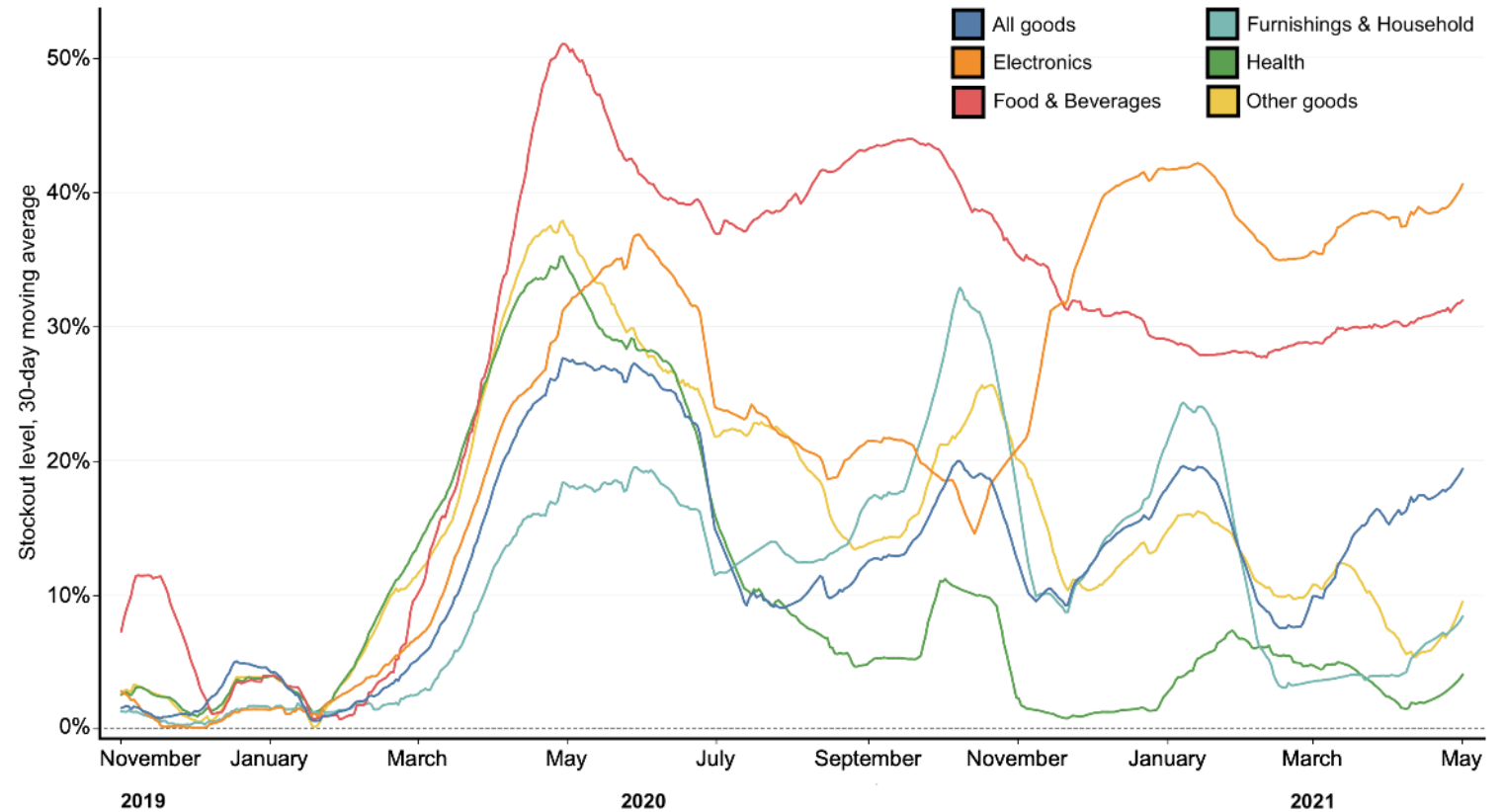


Supply Chain Disruption and Trading Challenges



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1. Stockouts in US by Sector

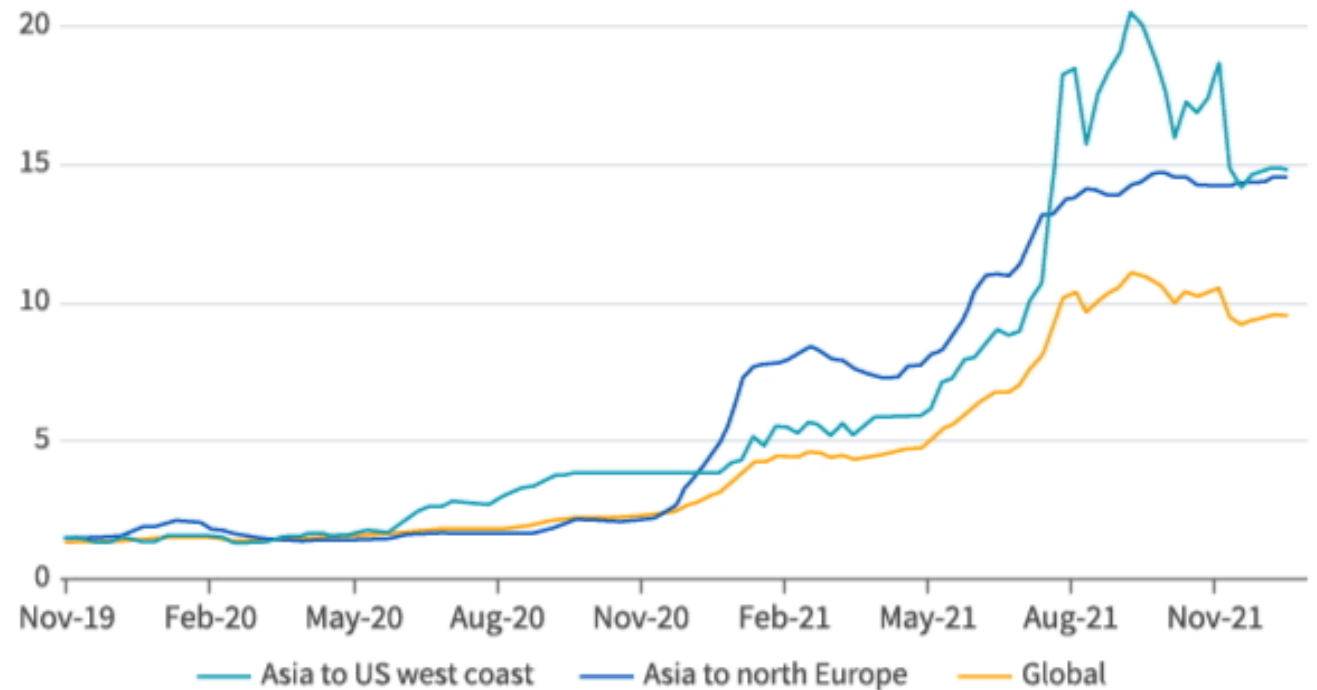


Note: Initial stockout levels vary greatly by sector. To facilitate comparisons, the chart plots the change relative to pre-pandemic levels by subtracting the average level of stockouts during January 2020 for each sector.

– ALBERTO CAVALLO AND OLEKSIY KRYVTSOV via ECONOFACT.ORG, Oct 7th 2021

1. Supply Chain Disruption and Trading Challenges

Freight shipping rates per 40-foot container





1. Supply Chain Disruption and Trading Challenges

Oil prices fluctuations

YEAR	AVERAGE	LOW	HIGH	EVENT
2017	\$48.98	\$44.03	\$57.44	OPEC cut oil supply
2018	\$61.34	\$42.80	\$67.79	
2019	\$57.95	\$49.71	\$65.42	
2020	\$37.22	\$16.74	\$53.87	COVID Pandemic
2021	\$65.85	\$49.52	\$77.15	
2022* (Q1)	\$94.68	\$77.46	\$106.00	Ukraine war

– U.S. ENERGY INFORMATION ADMINISTRATION Q1-2022.



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1. Supply Chain Disruption and Trading Challenges

US inflation

8.6%

May 2022

Inflation Keeps Climbing on 40-Year High

Year-over-year change in the Consumer Price Index for All Urban Consumers in the U.S.*



* not seasonally adjusted

** average annual increase of the CPI-U over the previous three years

Source: Bureau of Labor Statistics



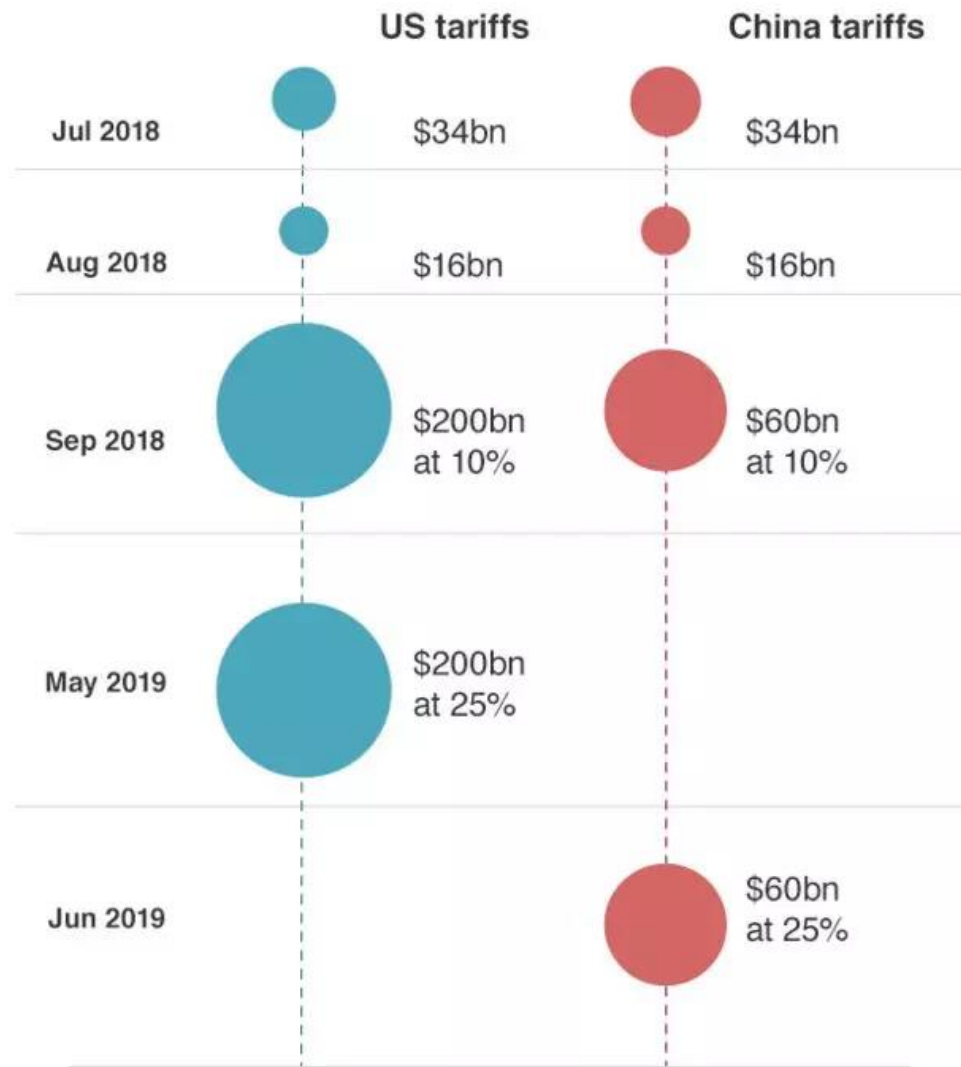
statista



2. USA-China Trade Tensions

The China-US relationship has not recovered even after the Biden Administration took over the White House. Despite hopes to the contrary, President Biden did not lift tariffs on Chinese goods imposed under the Trump administration. In addition, rising tensions as a result of the Russia-Ukraine conflict raises concerns that China could inadvertently be hit with sanctions as it continues to engage with Russia.

How the US-China trade war has escalated



September 2019 – December 2019

The US and China have threatened to impose new tariffs and increase existing ones.

– BBC RESEARCH, January 16th 2020



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2. USA-China Trade Tensions

The U.S. has imposed tariffs on around US\$300 billion worth of Chinese goods for import. These tariffs cover 66.4 percent of US imports from China.

It's important to point out that the U.S. has indicated it may lift tariffs on some Chinese goods soon to control inflation.



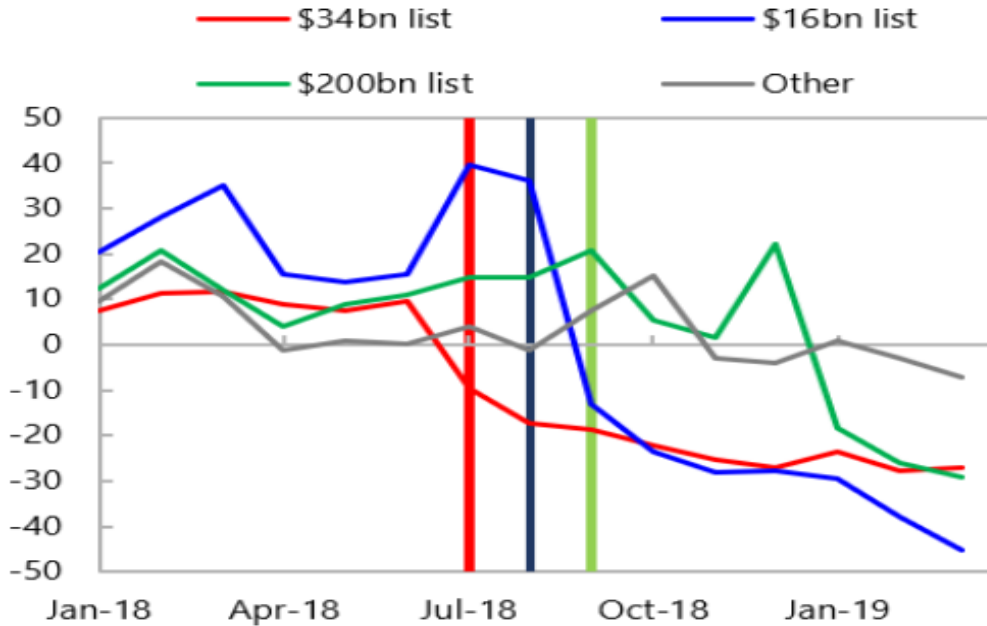
2. USA-China Trade Tensions

US imports from China

Large drop

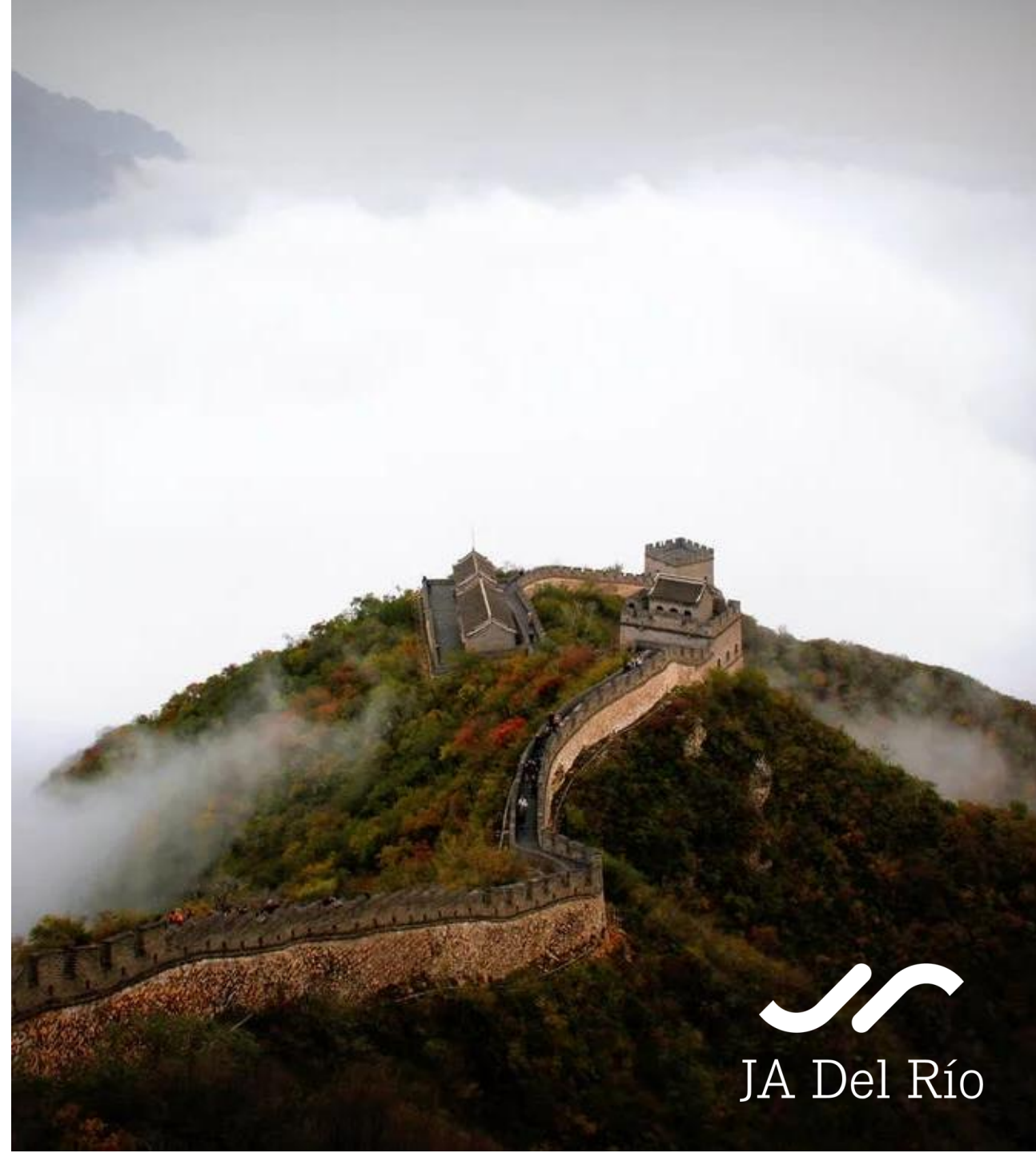
US imports from China have fallen significantly in all three groups of goods after tariffs were imposed.

(value of imports, year-on-year percent change)



Sources: US Department of Commerce; and IMF staff calculations.

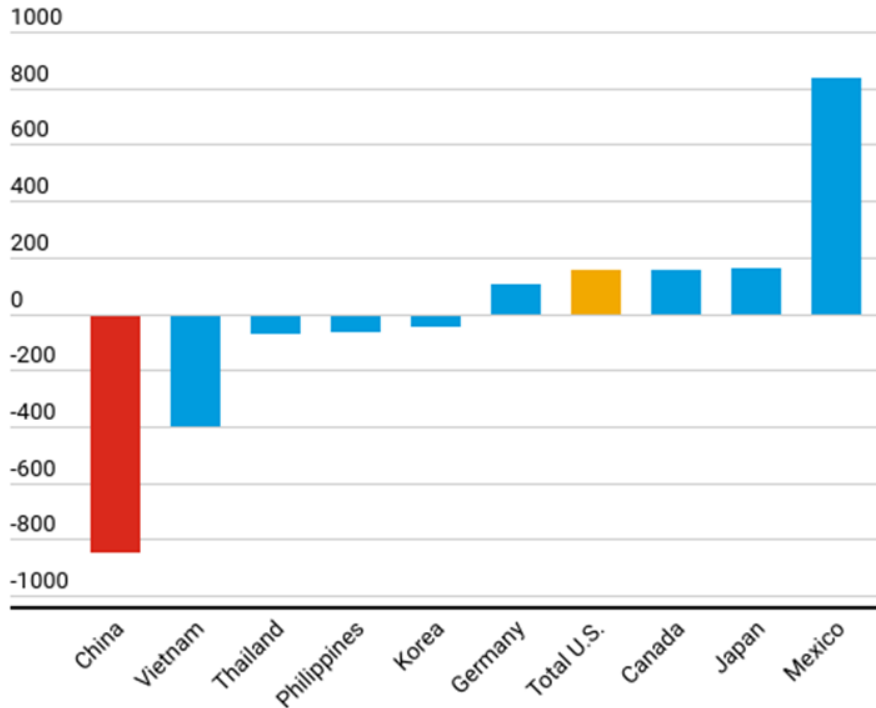
Note: Tariff-effective dates: July 6, 2018, 25% on initial \$34 billion list; Aug 23, 2018, 25% on \$16 billion list; Sept. 24, 2018, 10% on \$200 billion list, rising to 25% on May 10, 2019.



Impact on producers

The effects of tariffs on producers is more mixed, with some winners (such as US and Chinese producers of goods competing in their domestic markets with imports affected by the tariffs) and many losers (such as US and Chinese producers of goods affected by the tariffs).

(millions of US dollars, change in Sep-Nov 2018 imports relative to Sep-Nov 2017, \$16 billion list)



Sources: US Department of Commerce; and IMF staff calculations.

2. USA-China Trade Tensions

Mexico has been benefited from it.

- US imports from Mexico increased significantly among some goods on which the US imposed tariffs.
- Meanwhile, high-tech industries like IT and electronics are likely to move out of China amid the heightened hurdles between China and the US.



3. Manufacturing Trends & Motives

Where is production moving?

Strategy	Sectors	Preferred Location
Pursue absolute lowest cost.	<ul style="list-style-type: none">• Apparel, most footwear	<ul style="list-style-type: none">• China, but Vietnam and Bangladesh are up & coming
Low/Mid cost but closer to demand.	<ul style="list-style-type: none">• Electronics, ICT, Aerospace & Auto parts	<ul style="list-style-type: none">• Mexico
Fast responsive supply chain for low volume-high margin.	<ul style="list-style-type: none">• High end consumer goods	<ul style="list-style-type: none">• Slowly returning to United States
Bound by huge installed supplier base.	<ul style="list-style-type: none">• Largest volume mix consumer electronics	<ul style="list-style-type: none">• China

Big winners from China changes: Mexico, Vietnam, US & Bangladesh.

4. Why invest in Mexico?

The Opportunities



- **Population.** Is the 10th most populated worldwide with an international 127 million people. The **median age in Mexico is 29.3 years**, one of the youngest nations in the world.
- **Talent.** México is among the world's largest producers of Engineers (Top 10) and students enrolled in **engineering programs**. Every year over 130,000 engineers graduate in Mexico.
- **LATAM challenger.** Mexico is the second-largest economy after Brazil and **exports more than the rest of LATAM combined**.
- **Economic Complexity Index 2020.** Mexico ranks 26th worldwide, and 1st in LATAM.
- **International Trade.** Mexico is now the US' largest trading partner with annual commerce exceeding \$614.5 billion. Mexico has replaced China as a source of supplies for many American companies.
- **Trade agreements.** Numerous agreements which makes Mexico trustworthy and tariff free with over 44 countries. USMCA, OECD, G20, Pacific Alliance, FTA EU-MX, EFTA, CPTPP, and among others.

- **Strong manufacturing industry.** Profitable sectors include Aerospace, Automotive, Medical Devices, Electronics, Food products, Appliances & Furniture, Clothing & Textiles, and Consumer Goods
- **ICT Industry potential.** Mexico's ICT industry is growing at an annualized rate of 12% and is now the third-largest exporter of IT services. ICT sector attracted most investments in 2021, with Chinese giant Huawei announcing it would open a US\$4.5bn cloud data center in the country.
- **FDI Incentives.** INMEX Program & Taxes programs.
- **Attractiveness for FDI.** Amid pandemic, Mexico ranked 10th worldwide in 2020. Mexico's FDI during first 2022 quarter was US\$19.427bn.
- **Origin of Total FDI** US 39.1%, Spain 10.8%, Canada 7.1%, & France, Argentina, UK, among others.
- **FDI for new investments (Q1-2022).**

US\$8.79bn

4. Why invest in Mexico?

The Opportunities



4. Why invest in Mexico?

The Opportunities



COST COMPETITIVENESS

Labor Force and Talent. Mexican workforce & professionals have proven to be as equally proficient and competitive as their North American counterparts, with the main advantage that they are a fraction of the cost, and in some cases up to 50% less.

Freight and Shipping Costs. Location is key. For any company that targets its products to North America is extremely advantageous to move production to Mexico.

Tariffs. None in North America and insignificant when compared to Asia.

Total Landed Cost. Optimize logistics, evaluate closer potential suppliers & minimize transportation expenses by nearshoring in Mexico. Control the value of your goods and maximize sales prices for a best margin and profit.

Time zone advantage & proximity. Improved real-time communication and collaboration are key to project success. Mexico strategic position & excellent connectivity have elevated it to the top choice in North America for foreign corporations seeking to expand operations with competitive prices.



4. Why Invest in Mexico?

SOME HAVE COME TO MEXICO OR EXPANDED ALREADY 2020-2022



5. Challenges in Mexico



- **Regional Differences.** Mexico is five countries within one. Northeast, Northwest, Southeast, West and Central Mexico: culture, governments, infrastructure, clusters, productivity, education, costs, security & society.
- **Mexican government policies.** Mexico's President Andrés Manuel López Obrador is shifting industrial policy now focused on the domestic market and has launched a broad effort to restore the dominant position of former government monopolies in both oil and gas, and electricity. The lack of a federal investment promotion agency (formerly Promexico), has left investors unattended and without information.
- **National austerity measures.** Mexico has increasingly drawn in upon itself with his own version of austerity affecting tax, foreign trade and other government services and processes.
- **Governance:** There is a Federal and State Governments disconnect. Politization of Federal support and regional bias. Productivity should be the No.1 criteria for location.
- **Drug Cartels.** Don't always affect businesses directly, but they can lead to regional instability. Location and protocols are vital.

- **Electricity Supply.** Connecting to the power grid can take as long as 112 days and its complex. Rolling blackouts in some parts of the country could happen again.
- **Mexico water crisis.** Some regions in Mexico have lakes and rivers drying up due to drought and waste.
- **Infrastructure:** Highways, trains and ports, industrial parks, electricity, natural gas, water. Planning and Location are of the essence.
- **Rule of Law:** Enforceability of contracts and investment commitments. Land transfer and ownership issues are common. Corruption in some sectors.
- **Lengthy employment disputes.** Employee or contract disputes can take 350 days on average.
- **Complex business taxes and compliance.** Managing and calculating company taxes can be time consuming and compliance hurdles and obstacles are increasing..
- **Talent & Labor Shortages:** Variable labor conditions and labor pool shortages by region and specialty. No federal policy for talent development. Case-by-case custom made state and city programs.

5. Challenges in Mexico





6. JA Del Rio's Direct Investment Advisory Services (DIA) ADDED VALUE

30 years

of FDI **experience** and over **400 projects** successfully landed in **18 states** in Mexico, our **multidisciplinary high-performance team** has the right suit of **services, work ethics & network**, to guide & advise foreign companies & investors wishing to set up operations in Mexico.

Planning and Design

We join our clients project from **planning and design**, to the **project landing** and production start. We are **agnostic** and **take NO fees or commissions** other than our client's.

Methodology

Strategic planning, pivotal information, professional assessments, relevant networking & ground execution for a **productive, competitive, and long-term** direct investment project in Mexico.

Best Location

We support in determining **the best location**, considering not only the project and operations top level information, but the **political and productive context** surrounding the future planned investment.



6.1 DIA's First Approach: Data and Information

A. Mexico Overview

- National features
- Infrastructure
 - Road Network
 - Railways
 - Seaports
- Industrial Policies
- Security
- Overview of the Sector and Industry

B. Mexico at the Sub-national level.

- General information of states.
- Industry exports and imports by state
- Specialization /Revealed Comparative Advantages (RCA) and the Economic Complexity Index (ECI).

C. The manufacturing clusters in Mexico.

- The Sector by City
- Manufacturing Specialization
- Wages
- Unemployment
- Labor Strikes and Summons
- Industrial Facilities.
- Main Transportation and Logistics.
 - Background information
 - Container and trailer analysis
 - Freight Costs.
- Security and Matrix (Perception and Incidence)



6.1 DIA's First Approach: Data and Information

D. The Site Location Decision Matrix (SLDM)

We have developed a proprietary Site Location Decision Matrix (SLDM) that has proven to be highly helpful for company decision makers. Taking as input a grade on a list of relevant factors, the SLDM provides an overall score distribution suggesting the sites closer to serving the project's ideal requirements.

A relevance rating must be assigned by the company for each of the factors. The values for each factor are an integer number from 1 to 5. A rating of 1 implies the most relevant and a 5 the least relevant.

Example: Site Location Decision Matrix

Category	Relevance Rate (1-5)
Electronic Int. Trade	4
Int. Trade growth	3
RCA	3
ECI	5
Wages	1
Labor Pool	2
Unemployment rate	3
Distance to POS	1
Freight Cost	3
Lease Cost	3
Security / Crime	4

	Score Distribution
City One (Center)	9.5%
City Two (North)	13.4%
City Three (North)	14.3%
City Four (Center)	8.4%

6.2 DIA's Laser Focus and Road Show

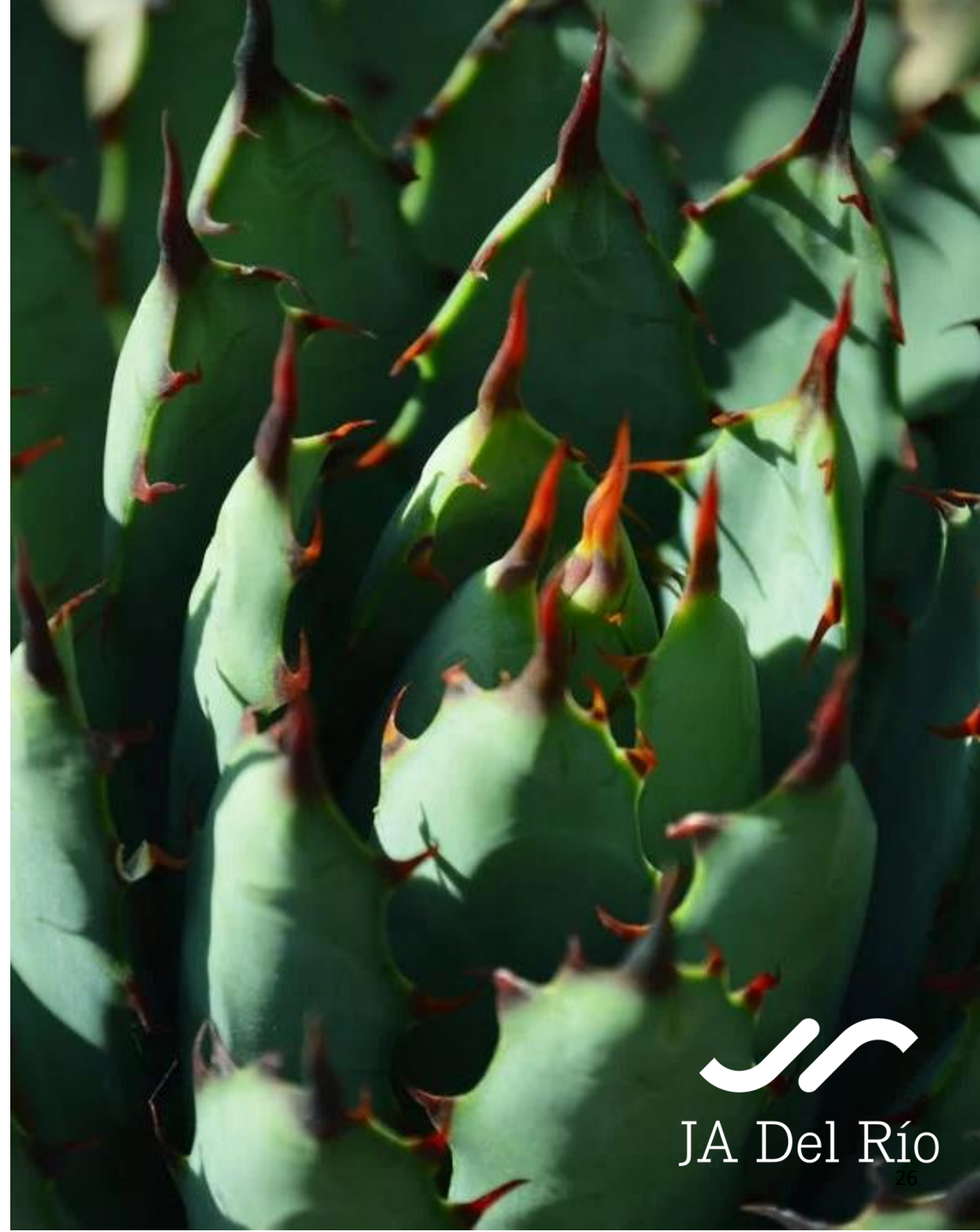


E. City Analysis (Finalists).

- Social & Economic Overview
- Other Relevant Manufacturers
- Labor analysis
 - Training Centers and Education
 - Human Resources
 - Labor Pool
 - Preliminary Labor Costs and Benefits
 - Labor Issues
- Infrastructure analysis
 - Industrial Infrastructure
 - Industrial Parks
 - Infrastructure and Energy Costs
 - Transportation Infrastructure
 - Main Communication Routes
 - Highways
 - Railway
 - Transportation Costs
- Availability of Local Incentives

6.2 DIAS's Laser Focus and Road Show

- F. Road Shows (Finalists).
 - Ground validation
 - Government presentations
 - Interviews with other companies
 - Industrial parks and land visits
 - Industry organization and cluster presentations
 - Potential supplier visits
 - HR Firms
 - Stakeholders



6.3 DIA's Closing Support and After Care.

- Beauty Contests and final decision.
- Government Incentive and cooperation agreements.
- Building and land offerings analysis, closing and agreements.
- Industry Organization and Cluster memberships.
- Foreign Trade Programs and USMCA compliance
- Supplier Development.
- Talent and staffing support.
- Incentive compliance and reporting.
- After-care for government and institutional relations.

7. Conclusions

The BIG SHIFT:

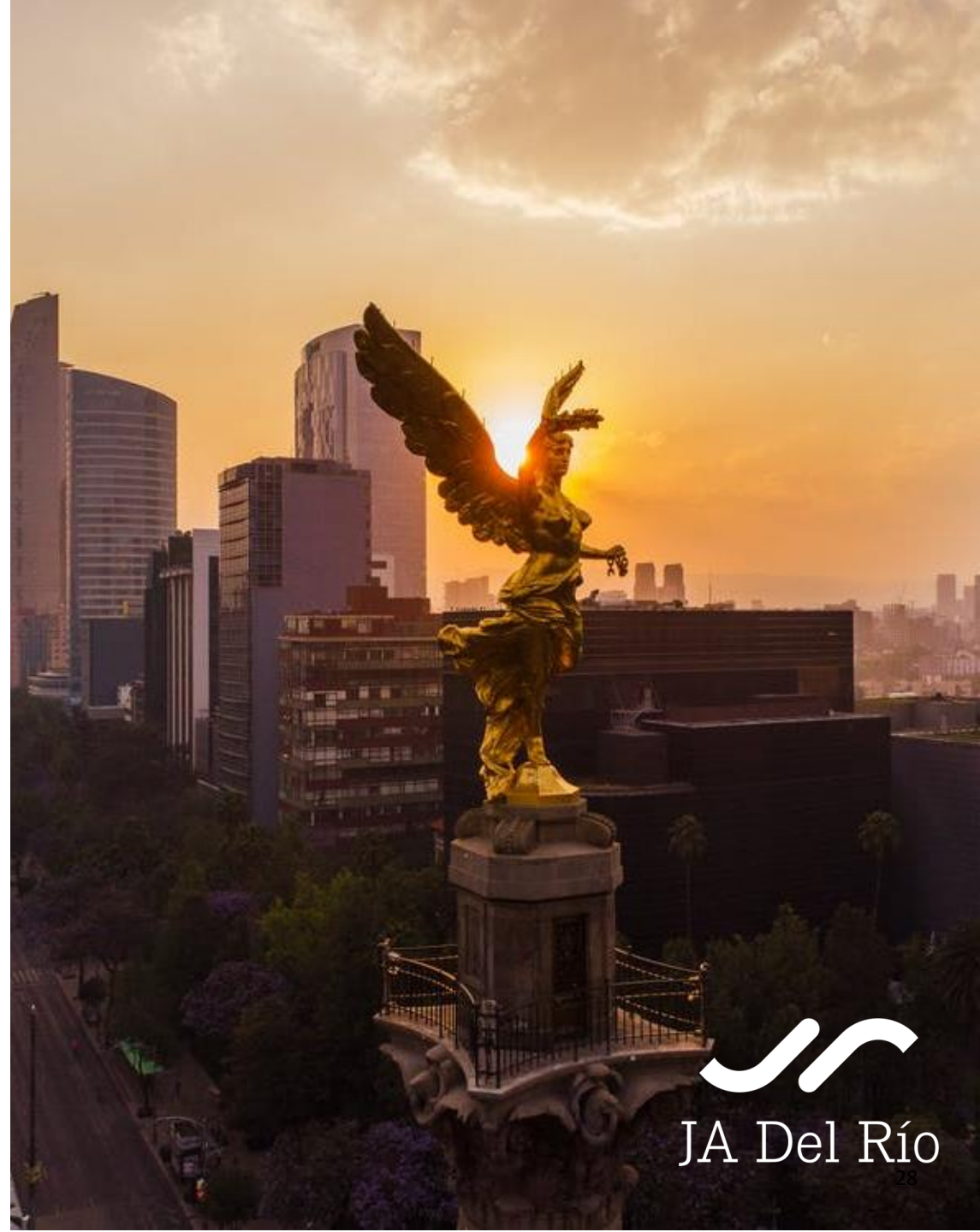
According to a Procurious survey of more than 600 procurement and supply chain leaders* (97%) experienced a supply chain disruption related to COVID-19.

In response, the majority (73%) of organizations are now planning major shifts in supply chain and procurement strategy including supply base expansion (38%) and reductions in supply chain globalization (34%).

“Where and how to re-locate are the big questions. Information, ethics and experience are key to a successful FDI project.

JA Del Río

*Released June 11 and conducted from April 28 and May 12, 2020





Thank you!

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Slide 4: (Figure)

-Joe Terino, Chris Rolfe, Amit Nagar, and Carlos Cruz (May 31th, 2022). Bain & Company. *Supply Chain Reset: A Different Reality Demands a Different Approach*. Retrieved June 3, 2022, from <https://www.bain.com/insights/supply-chain-reset-a-different-reality-demands-a-different-approach/>

Slide 6: (Data: Inflation)

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Slide 6: (Data: Factory shortages)

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Slide 6: (Data: Oil fluctuations)

-Kimberly Amadeo (April 13th, 2022). The Balance. *Oil Price History—Highs and Lows Since 1970*. Retrieved June 3, 2022, from <https://www.thebalance.com/oil-price-history-3306200>
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Slide 5: (Data: Bottlenecks & Shipping rates)

-Augusta Saraiva and Brendan Murray (November 22th, 2021). Bloomberg US Edition. *Every Step of the Global Supply Chain is Going Wrong – All at Once*. Retrieved June 3, 2022, from <https://www.bloomberg.com/graphics/2021-congestion-at-americas-busiest-port-strains-global-supply-chain/>

Slide 6: (Graph: Global Supply Chain Pressure Index)

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Slide 7: (Graph: Supply Chain Disruption by Region)

-Edward Sweeney (January 19, 2022). World Economic Forum. *The big challenges for supply chains in 2022*. Retrieved June 3, 2022, from <https://www.weforum.org/agenda/2022/01/challenges-supply-chains-covid19-2022>

Slide 8: (Graph: Stockouts in US by Sector)

-Alberto Cavallo and Oleksiy Kryvtsov (Oct 7th, 2021). Harvard Business School & Bank of Canada. *Pandemic Shortages and Inflation: From Empty Shelves to Higher Prices*. Retrieved June 3, 2022, from <https://econofact.org/pandemic-shortages-and-inflation-from-empty-shelves-to-higher-prices>

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Slide 9: (Table: Oil fluctuations)

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Slide 10: (Data: Freight Shipping rates per 40-foot container)

-AIQ Editorial Team (January 28th, 2022). Aviva Investors. *Eight charts on supply chain disruption*. Retrieved June 3, 2022, from <https://www.avivainvestors.com/en-us/views/aiq-investment-thinking/2022/01/supply-chain-disruption/>

Slide 11: (Graph: US Inflation)

-Martin Armstrong (April 13th, 2022). Statista. *US Inflation Surges to a 4-Decade High*. Retrieved June 15, 2022, from <https://www.statista.com/chart/18344/year-over-year-change-of-the-consumer-price-index-for-all-urban-consumers/>

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Slide 12: (Data: US-China Trade Tensions)

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Slide 13: (Graph: US-China Trade Tensions)

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Slide 14: (Graph: US imports from China)

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Slide 15: (Graph: Impact on producers)

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Slide 16: (Data: Manufacturing trends & motives)

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Slide 17: (Data: Median age in Mexico)

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Slide 17: (Data: Economic Complexity Index)

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Slide 18: (Data: Why Invest in Mexico)

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Slide 19: (Data: Mexico Third Largest IT Services Exporter)

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