GUIDE

Exploring Manufacturing's Emerging Regions

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After a tumultuous few years, the manufacturing industry faces a perfect storm of challenges in the face of recovery—from rising inflation to supply chain uncertainty, labor shortages, changing international regulations and economic policies, and everything in between. More daunting, these challenges are not isolated to any one region or sector; instead, they are felt by teams across industries and around the globe. For manufacturers, it can feel like there's nowhere in the world that will ensure safe passage through the rough waters ahead.

While it's true that these challenges cross borders and oceans, there are still ways to optimize your global footprint and mitigate their impact on your operations. One such approach is to reconsider the physical location(s) of your production facilities. Each of these obstacles affects different regions and sectors in different ways, and manufacturers can weigh these competing factors in order to decide where in the world makes the most sense for their factories.

As a result, countless business leaders have chosen to expand, scale back, or simply rethink their global footprints to support resilience within their operations. Achieving the optimal balance of offshored, reshored, nearshored, and onshored manufacturing facilities can make navigating political and economic challenges much less of a burden—but figuring out the where, when, and how is a challenge of its own.

In this report, we'll examine the factors driving these changes, dig into emerging regions to watch, highlight key regional considerations, and share solutions to streamline your global production efforts, regardless of their location.

EXPLORING MANUFACTURING'S EMERGING REGIONS

Location, Location, Location

Today's manufacturers have more options about where to set up shop than ever before. This is largely the result of our increasingly interconnected world, as cutting-edge digital tools and changing practices allow teams to connect facilities across the globe, operating across international borders and different time zones with ease.

While it's almost a given in contemporary manufacturing that different business units will operate in different geographic areas, the chosen location of these facilities is less straightforward. Where a manufacturer chooses to locate their production facilities can impact their business from end to end. Where production happens relative to other processes (and partners) impacts nearly every element of a manufacturer's operations, affecting their efficiency, reliability, and overall output.

Offshoring
Moving production to a country or region that's geographically far from the base of operations, usually in a different time zone

Nearshoring
Moving production to country that is geographically close to (and ideally in the same time zone as) the operations base

Onshoring
Moving production to a low-cost city or region in the same country as the operations base

Reshoring
Moving production to the same city or general area as the operations base

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A manufacturer's choice of location can dictate a number of factors, including:

Operational costs. Logistics, energy, transportation, labor, and material costs may rise or fall depending on a facility's location.

Supply chain stability. The distance between your production facilities and your home base, largest markets, suppliers, and other key locations can affect the impact global disruptions have on your operations.

Labor availability. Different cities, states, and countries have different labor pools with their own skill sets, which can make it easier (or more difficult) to fill specialized roles.

Factory size and availability. A region's level of development can affect your ability to find an existing physical structure that fits your needs. Choosing a less developed area might extend relocation timelines due to their lack of existing infrastructure.

Overall agility. Physical distance and time zone changes can slow down intraorganizational communications, even with the power of today's digital tools.

Regulatory and compliance responsibilities. Each country or region has its own set of rules to guide manufacturers operating within its borders and may be subject to additional organizational, industry, or international standards. These can significantly impact how you approach production processes.

For a time, places like China, Taiwan, and Vietnam were incredibly popular manufacturing hubs. These regions ticked enough of the boxes above to carve out their own reputations as go-to destinations for offshore production, attracting massive amounts of international business. Operational costs were low, labor availability was high, supply chains were stable, and the expectations for "agile" facilities were not yet demanding today's "real-time" results.

Now, however, these traditional offshore hubs are beginning to lose their widespread appeal. Amid significant market shifts, economic competition, and rising labor costs, manufacturers are exploring other options that make more sense for their business goals. This has resulted in an increased focus on methods like reshoring and nearshoring, which bring manufacturing closer to home.

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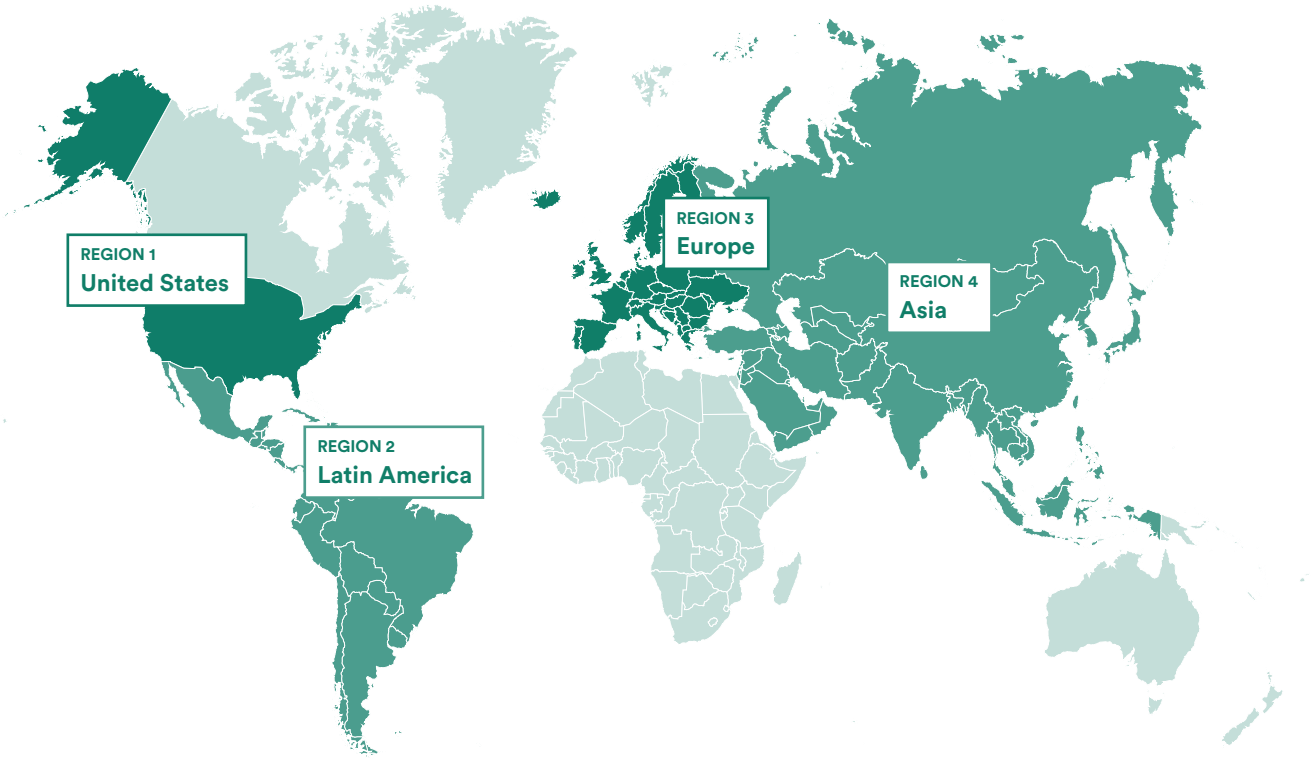

Regions to Watch

As manufacturing begins to shift, a number of key regions seem poised to reap the benefits. Companies that are looking to expand, scale back, or rethink their global footprint are presented with a wealth of viable regional options for their production facilities. Through strategic incentives, regulations, and investments, these areas hope to gain the bulk of the manufacturing business that is mobilizing away from traditional offshoring hubs.

It is worth noting that these factors are, of course, subject to change. While relevant at the time of publishing this report, the viability of different international benefits (for example: financial incentives, national investment, trade agreements, and regulations) is subject to the whim of political and economic forces. Things like investment freezes, international tariffs, and broken trade agreements can (and will) have a very real impact on near- and reshoring efforts. The following information should paint a general informative picture of relevant regions and should not be considered data that is set in stone.

That said, some of the most prominent emerging regions for reshoring and nearshoring manufacturing production include:

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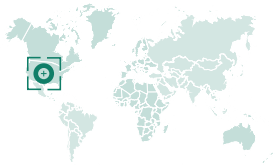
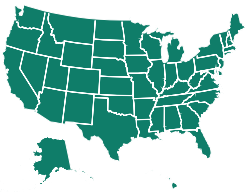


REGION 1
United States



Key Industries

TRANSPORTATION

AUTOMOTIVE

TEXTILES

CHEMICALS

FOOD & BEV

The United States

Background

As of early 2024, the United States' annual investment in new manufacturing facilities had reached over $225 billion. The disruption of global supply chains during the COVID-19 pandemic, the desire to boost jobs and bolster national security, and the drive to support the American economy have resulted in initiatives and investments aimed at revitalizing domestic manufacturing. This focus on "made in America" manufacturing led to investments like the CHIPS Act, Infrastructure Investment and Jobs Act (IIJA), and Inflation Reduction Act (IRA) in recent years. Overall investment in domestic manufacturing is expected to drive over $10 trillion in economic returns over the next decade, should the IIJA and IRA stand.

Key Challenges

The futures of the CHIPS Act, IIJA, and IRA are uncertain as federal-level policy decisions placed an immediate freeze on funds disbursed through these programs. Though the move was quickly reversed, the scope and longevity of the order are unclear. Depending on where things land, the impact on investments could diminish the monetary incentives of reshoring for American manufacturers. It's also worth noting that—despite the current administration's signaled intent to break from its predecessors—its focus on bringing manufacturing within the country's borders hints that other or additional incentives may be in the works.

Key Regions

Roughly 2 million reshoring/Federal Direct Investment (FDI) jobs have been created since 2010.

- **The American South:** About 60% of these jobs are in the American South (both Southwest and Southeast). In fact, nearly half of the manufacturing space currently under construction in the U.S. is located in the South.
- **The American Midwest:** Roughly a quarter (22%) of reshored jobs are located in the Midwest. A former automotive hotbed, the Midwest is beginning to reap the benefits of reshoring investments by large manufacturers like Ford, who have committed to building plants in Ohio and Michigan (as well as southern Tennessee and Kentucky) to support electric vehicle (EV) manufacturing.

EXPLORING MANUFACTURING'S EMERGING REGIONS

REGION 2
Latin America

Key Industries

AUTOMOTIVE

TEXTILES

PHARMACEUTICAL

RENEWABLE ENERGY

Latin America

Background

In recent years, Latin America has appeared poised to benefit from nearshoring initiatives rather than reshoring. This has been driven by U.S. manufacturers' need to bring operations as close to home as possible to surmount supply chain and global shipping challenges. If reshoring to the U.S. is not feasible, Latin American nations provide the next closest options. The Inter-American Development Bank (IDB) estimates that nearshoring could boost the annual exports of goods/services in Latin America and the Caribbean by close to $78 billion in the medium term.

Key Challenges

Recent United States policy decisions are also likely to impact key benefits of nearshoring operations to Latin American nations. This includes a proposed 25% tariff imposed on products shipped into the U.S. from Mexico and Canada, which will allegedly take effect on Feb. 1, 2025. These tariffs could offset the benefits of standing free trade agreements and regional tax deductions or incentives for relocating businesses.

Key Regions

- **Mexico:** Geographic proximity and existing free trade agreements have made Mexico a key destination for nearshoring efforts. In fact, Mexico replaced China as the United States' largest trading partner in 2023, with the U.S. buying 83% of their exports. Mexico also offers a range of tax deductions for local and foreign companies that set up shop in their country.
- **Uruguay:** Uruguay's high political and social stability and proximity to North American companies have made it a promising location for nearshoring. The country is also home to a thriving technology sector, with over 550 IT companies that operate within its borders. This provides existing infrastructure that could support tech nearshoring efforts.
- **Chile:** Chile's nearshoring incentives include membership in over 31 trade agreements, enhanced property rights protection, a developed and stable economy, and a highly skilled workforce focused on IT, business process outsourcing, and financial services.

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REGION 3
Europe

Key Industries

AUTOMOTIVE

CHEMICALS

FOOD & BEV

ENGINEERING

Europe

Background

Europe also felt the significant supply chain impacts of the COVID-19 pandemic in recent years. This was paired with additional disruptions stemming from the war in Ukraine, which disrupted regional trade and aggravated inflation for goods like food, metals, and energy. Combined with the desire to become less economically reliant on Chinese manufacturing, these disruptions have driven the European Commission to recognize the need for more robust and sustainable regional supply chains. This has led to the development of and investment in European Value Chains (EVCs) to promote their industrial economy.

Key Challenges

For one, the war in Ukraine continues to play a role in regional stability, trade opportunities, and economic recovery. In addition, the escalation of a global trade war—spurred by international tariffs and rescinded trade agreements—would impact Europe as well. While the EU currently places tariffs on food, cars, and agricultural products imported from the United States, the Trump administration has considered imposing their own blanket tariffs of anywhere between 10-20% on imports from the EU. While these have yet to be confirmed, they would significantly impact the economic viability of reshoring to European countries.

Key Regions

- **The United Kingdom:** Over half (58%) of UK manufacturers have begun reshoring efforts to bring factories back to their own shores, deriving more value and increasing security and reliability. This region supports reshoring efforts with a strong manufacturing and trade heritage, existing manufacturing infrastructure, a diverse and skilled workforce, and continued government support of manufacturing initiatives.
- **Eastern Europe:** Eastern European countries like Hungary, Poland, and Romania are promising locations for reshoring due largely to their geographic location between Western European and Asian markets. These countries have witnessed a rise in foreign direct investment and offer reduced transportation costs and lead times, technical infrastructure, and a growing market of IT, manufacturing, and semiconductor production.

EXPLORING MANUFACTURING'S EMERGING REGIONS

REGION 4
Asia

Key Industries

TECHNOLOGY

FOOD PROCESSING

PHARMACEUTICAL

CHEMICALS

Asia

Background

Asian countries—especially China—have long been key for offshoring production, as organizations relied on inexpensive labor and large-scale infrastructure to create low-cost goods for global distribution. However, recent macroeconomic shifts and geopolitical tensions have begun shifting focus away from China. Due to this production exodus, some nearby Asian countries have realized fringe benefits from businesses that are leaving manufacturing's historical powerhouse.

Key Challenges

While existing infrastructure and trade routes are promising, businesses in the United States or Europe may still prefer to move operations closer to home to minimize transportation and logistical costs. The "America First" policy of the current presidential administration also threatens to impact the viability of Asian exports from the region.

Key Regions

- **India:** India offers industry-specific incentives and financial benefits for companies looking to reshore their manufacturing away from China. This has made India a hotbed for manufacturing across technology, mobile phones, electronics, and food processing. Much of this is also borne out of India's desire to become a global manufacturing hub and is owed to investments made in the pursuit of the country's goal to become a $10 trillion economy in the near future. India has been subject to some recent setbacks on this front – while over half of the over-the-counter drugs in the U.S. came from India in 2022, more recent quality test failures have resulted in scrutiny and large-scale investigations. Overall, India provides a large market, skilled labor, existing infrastructure, and a strategic supply chain position for manufacturers looking to reshore away from China.

EXPLORING MANUFACTURING'S EMERGING REGIONS

Factors to Keep in Mind

Understanding which regions show promise for reshoring and nearshoring is one thing, but deciding whether or not that region is right for *your* business is its own question entirely. Both internal and external factors will influence your choice regardless of your company's industry or preferred region, so it's important to recognize what these factors are and how they may impact your efforts.

External Factors:

Political Stability

- Is the region you are moving into (or the country you operate out of) politically stable?
- Are there any impending policies or regulations that may impact the efficacy of your reshoring initiatives?

Economic Stability

- Is the economy of the region you're considering stable and ripe for significant investment?
- Are there any economic benefits associated with your choice of country that you can leverage to minimize costs?
- Are existing economic factors expected to change in the near future due to the addition or rescinding of investments?

Labor Market

- Is there a market of available, appropriately skilled workers in the region?
- What kind of skills is the region known for, and how easy will it be to attract these workers from other roles/competition?
- Will labor costs increase or decrease in this region, and are you prepared to handle the costs?

Infrastructure

- How feasible is moving your physical operation, including equipment and factory space, to this new location?
- Do they have the necessary critical infrastructure (energy, water, and other utilities) required for your operation, and are these utilities privately or publicly owned?
- Will factories need to be built from the ground up, or is there existing construction you can leverage?

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Supply Chain

- What is the existing supply chain connectivity in the region?
- Will this new geographic location turn your supply chain on its head, or will it improve shipping lines and make for a more efficient and cost-effective system?

Public Perception

- What kind of reputational effects might these efforts have on a manufacturer?
- Will consumers have a positive or negative reaction to the regions in which factories are being re- or nearshored?
- Will this have a significant effect on customer loyalty and public perception of the manufacturer?

Internal Factors:

Sector

Is the region in which you're choosing to re- or nearshore conducive to the sector your business operates in? Regions that already have existing infrastructure and supply chain routes that benefit your sector are a better option than those with no similar businesses. Some regions may offer additional benefits for specific sectors, making the move more financially beneficial. These factors can enable you to get a head start on operations rather than starting over from square one.

Operational Goals

What are your business's key goals, and how might they be impacted by these efforts? Will reshoring enable net positive change, or will it have drawbacks on your short-term efficiency and productivity? Reshoring and nearshoring are significant investments of time, money, and labor, so they should be considered in relation to all of your existing business goals.

Exising Workforce

Will reshoring take positions away from employees with experience and loyalty to your company? Will the loss of this expertise be outweighed by the benefits of moving, or could it be a detriment to your worker satisfaction and productivity? Will it take longer to train new laborers than it would to upskill existing workers? How might this decision reflect back on your reputation and public perception?

EXPLORING MANUFACTURING'S EMERGING REGIONS

It'd be foolish to assume that there's a "best-of-all-worlds" scenario that provides a manufacturer with all of the positives and none of the drawbacks of re- or nearshoring. That said, a careful consideration of the internal and external factors above will help any team make a decision that is intentional, well-researched, and in alignment with the best possible outcome.

Future-Proof Your Footprint with TrakSYS™

As manufacturers grapple with these decisions, data can – and should – play a key role in informing their choices. The more information you can access and analyze about your current operations, the more accurately you'll be able to anticipate the impact of moving production facilities to new regions.

That's why collecting and connecting data from across your manufacturing ecosystem is key to the success of today's globally distributed businesses. The data and analytics generated by connected operations can:

- Reduce the complexity associated with identifying optimal facility locations and footprints.
- Help your organization's leaders understand and retool supply chains as needed.
- Shed light on how potential reshoring or nearshoring plans might impact labor, materials, transportation, and other operational spending.

Parsec's manufacturing execution system (MES), TrakSYS™, is purpose-built to connect your manufacturing operations and enable your team to make informed, data-driven decisions on subjects like reshoring and nearshoring. TrakSYS:

- Automates data collection, contextualization, and analysis to ensure manufacturers have a clear and accurate picture of where they stand, how they can improve, and how a move will impact their performance.
- Helps boost productivity to streamline processes and mitigate relocation-associated overhead.
- Promotes site-by-site collaboration and innovation by establishing enterprise-wide visibility, knowledge, and control.
- Improves onboarding and training programs for a new labor force.

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Conclusion

The world's manufacturing hubs—as well as the global, political, and economic forces that influence them—will no doubt continue to evolve, and production and operational geographies may need to change along with them. As they do, manufacturers will need to rely on MES and other specialized technologies to assess local conditions, regulatory environments, and workforce capabilities.

As the industry adapts, those willing to embrace change and innovation will not only survive but thrive in this new manufacturing era.

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About Parsec

Utilizing their 30 years of experience in manufacturing, Parsec created TrakSYS: a best-in-class operations management software application and solution platform designed to significantly improve manufacturing operations. TrakSYS aggregates data from multiple sources to deliver real-time, actionable intelligence that helps manufacturers reduce production costs, decrease lead time, and improve profitability. TrakSYS is deployed at thousands of factories in more than 140 different countries.

PARSEC™

Parsec Automation Corp.
TrakSYS MES Platform (parsec-corp.com)