Key Takeaways

- Trade tensions, geopolitics (including Russia/Ukraine and the escalation of China-Taiwan matters), and COVID and accompanying supply chain disruptions are persistent factors which have strengthened the case for supply chain localization or “reshoring” of US manufacturing. We are seeing increased evidence that reshoring is in fact happening.

- In addition, ESG (Environmental Social and Governance) is also a reshoring driver amid increased focus on carbon emissions, need for more transparent/less complex supply chains and workforce health and safety considerations.

- According to the Reshoring Initiative, 44% of reshoring jobs since 2010 has come from China and 63% from Asia overall. South and Midwestern states have been the biggest reshoring/FDI (foreign direct investment) destinations with nearly 60% of jobs in the South and another 22% in the Midwest.

The case for reshoring continues to strengthen

While supply chain localization or “reshoring” of US manufacturing has been an area of focus for corporates and investors for some time, we are seeing increased evidence that reshoring is in fact happening. Trade tensions, geopolitics (including Russia/Ukraine and the escalation of China-Taiwan matters) and COVID and the accompanying supply chain disruptions are all factors that have persisted and in turn, have strengthened the case for reshoring.

In addition, ESG is also a driver amid increased focus on carbon emissions, need for more transparent/less complex supply chains and workforce health and safety considerations. As we highlighted in Corporate Strategies for Net Zero earlier this year, corporates within the majority of sectors are employing reshoring as a strategy to reach Net Zero – in fact, it was one of the most popular strategies across industries after enhancing energy efficiency and switching to clean energy/renewables.

Multiplier effect & the US economy

There are multiplier effects to the US economy from the reshoring of manufacturing, including higher growth, greater employment, and higher wages – and the uptick in manufacturing job listings is a bullish sign for these multiplier effects. According to the Economic Policy Institute, for every manufacturing job brought back to the US, seven new jobs are created in other industries. The National Association of Manufacturers has also cited that manufacturing has one of the largest sector multipliers in the US (after mining and transportation/warehousing), with five US workers added for every US manufacturing worker added.

Exhibit 1: Multiplier effects of local manufacturing on the economy

<table>
<thead>
<tr>
<th>Implications of reshoring/relocation to US economy</th>
</tr>
</thead>
</table>

Source: BoA Global Research
Reshoring is happening, but where?

According to the Reshoring Initiative, 1.3 million reshoring and foreign direct investment (FDI) manufacturing jobs were announced from 2010–21, with a big uptick in recent years. According to their data, 44% of US reshoring since 2010 has come from China and 63% from Asia overall.

*Exhibit 2:* Over 1.3 million reshoring + FDI jobs since 2010...

Cumulative Reshoring + FDI jobs announced, 2010-2021


Where are these jobs going? The Southern and Midwestern States have been the biggest reshoring/FDI destinations with nearly 60% of jobs in the South and another 22% in the Midwest. Key states for reshoring in the most recent year include Michigan, Texas, Tennessee, Arizona and North Carolina. Regional data on US manufacturing job listings compiled by BofA Global Research’s Predictive Analytics team from Revelio Labs corroborates not only the momentum in US manufacturing hiring, but also bigger increases in listings in key reshoring states (Arizona, Texas, Michigan and Tennessee) since 2020, even when normalized by total job listings or state populations.

*Exhibit 4:* Manufacturing job listings as a share of the population or of total job listings have been climbing over the past year

Manufacturing job listings data for US overall, 3Q19-2Q22

Source: Revelio, Haver Analytics, BofA Global Research

Jobs from reshoring surged in 2021

Since 2010, the Reshoring Initiative has been tracking US manufacturing job announcements tied to reshoring (based on over 8,000 cases tied to a specific company making a specific product at a specific US location). In 2021, jobs tied to reshoring activity surged to another record high, reaching nearly 180,000 jobs. This represents a ~1.4% boost to the total US manufacturing labor force (12.3 million in 2021). In 1Q22 (latest data) a further 73,786 reshoring job announcements across 281 companies were recorded. This suggests the sustained momentum of reshoring, even as the COVID pandemic wanes.

*Exhibit 5:* Bigger increase in manufacturing jobs for key reshoring states than for overall US since end of 2019 (for example, manufacturing listing

Manufacturing job listings relative to end of 2019 for key reshoring states vs. overall US, end of 2019-2Q22

<table>
<thead>
<tr>
<th>State</th>
<th>Manufacturing jobs listings as a % of total job listings: today vs. 2019 (ratio)</th>
<th>Manufacturing jobs listings as a % of population: today vs. 2019 (ratio)</th>
<th>% increase in manufacturing jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>TX</td>
<td>1.30</td>
<td>4.13</td>
<td>324%</td>
</tr>
<tr>
<td>TN</td>
<td>1.34</td>
<td>4.15</td>
<td>323%</td>
</tr>
<tr>
<td>MI</td>
<td>1.26</td>
<td>3.98</td>
<td>297%</td>
</tr>
<tr>
<td>AZ</td>
<td>1.73</td>
<td>4.76</td>
<td>392%</td>
</tr>
<tr>
<td>Overall US</td>
<td>1.24</td>
<td>3.76</td>
<td>278%</td>
</tr>
</tbody>
</table>

Source: Revelio, Haver Analytics, BofA Global Research
Exhibit 6: US manufacturing jobs from reshoring activities
2021 was a record year for reshoring

Source: Reshoring Initiative, BofA Global Research

Other evidence of reshoring includes increasing mentions on US earnings calls, based on data from AlphaSense as shown in Exhibit 7. As Exhibit 8 shows, this has been correlated with the rise in US manufacturing job listings.

Exhibit 7: Reshoring mentions on earnings calls for US stocks have skyrocketed since 2020...
Trend in reshoring mentions on US corporate earnings calls (based on earnings transcripts; 2006-2021 by quarter)

Source: AlphaSense, BofA Global Research

Exhibit 8: ...which has been correlated with the trend in manufacturing job listings above since 2019

Source: Revelio, AlphaSense, BofA Global Research

More to come; who is reshoring?
Multi-Industrials

US manufacturing jobs above prior peak
In the past five US recessions, manufacturing employment levels never reached pre-recession levels. However, as of July 2022, US manufacturing employment (12.83 million) is above pre-COVID levels (12.79 million in February 2020). While reshoring is one of many factors behind the growth in US manufacturing, this time is quantitatively different as compared to prior recoveries.

Benefits from US infrastructure bill still to come
The Infrastructure Investment and Jobs Act (enacted 11/15/21) is a multi-year tailwind to multi-industrials and the US CapEx cycle. The $1.2 trillion bill includes $550 billion of federal investment in new infrastructure. Funds will be primarily spent on roads, bridges, and other major surface transportation projects, rail, public transit, clean drinking water, power grid infrastructure, and broadband infrastructure. Funds are authorized to be spent over fiscal years 2022 through 2026. “Buy America” provisions outlined in the bill may drive further reshoring and investment in industrial automation.

Multiple growth drivers for industrial automation
Even before COVID, labor productivity in both the US and other developed nations had slowed. US manufacturing wages are now rising at the fastest pace since 1982, a leading indicator for automation investment. BofA Global Research sees less scope for alternatives to automation investments, as offshoring and globalization of supply chains are facing new headwinds. Executive surveys, conference call transcripts, and industrial robot sales all show rising interest in automation.
Wage inflation has historically served as a catalyst for companies to invest in productivity-enhancing initiatives. This could include industrial automation, substitution of intermediary goods, or increased skill-based training. However, all these initiatives take time. Since US manufacturing wages are rising at the fastest pace since 1982, history would suggest that companies will respond with high levels of productivity-focused investments.

**IT Hardware & Electronics Manufacturing Services**
Over the past 20 years, Original Equipment Manufacturers (OEM) have shifted production from the West to the East. COVID provided another inducement on top of US-China trade tensions and security issues (chip manufacturing) for companies to review their manufacturing footprint. Malaysia, Vietnam, Indonesia, India, Taiwan, Mexico and longer-term, perhaps the U.S. (especially in specialized areas like medical device manufacturing), could potentially benefit. Reshoring is also likely to benefit Electronics Manufacturing Services (EMS) companies that have a global manufacturing footprint and significant capacity available outside of China to support OEMs who wish to move their manufacturing.

**CHIPS Act moving forward - $50 billion for US semi capacity**
In August 2022, President Biden signed the Creating Helpful Incentives to Produce Semiconductors for America Fund (CHIPS Act). As background, the FY21 National Defense Authorization Act included language to provide Federal grants and tax incentives for US semiconductor capacity additions and research & development (R&D), but did not include any funding. The CHIPS Act provides $39 billion for construction of semi plants and $11 billion for semi R&D spread over FY22-26. The CHIPS Act could further add to the momentum in US manufacturing reshoring.

While the US is a global leader in semiconductor production and design, the US has lost ground in recent decades versus other regions from a manufacturing standpoint. Passage of the CHIPS Act provides a $53 billion incentive package for US chip production and research. We note the increasing trend to diversify production of advanced semis away from Taiwan/China, and the desire to improve the self-sufficiency of US semiconductor manufacturing. The US version of the CHIPS Act follows on the heels of the $46 billion European Chips Act and similar programs in Korea, Japan and China. We expect the US CHIPS Act funds to be allocated next year with fab buildouts in 2023, followed by production in 2024.

**Industrial REITs (Real Estate Investment Trusts): the benefits to warehouse space demand**
About half of all global sectors in North America declared an intent to ‘reshore,’ according to BofA Global Research, this was particularly true for high-tech sectors and industries for which energy is a key input. If borne out, this could represent the first reversal in a multi-decade offshoring trend, and drive incremental demand for warehouse space for more resources in the manufacturing supply chain to be kept on-hand domestically and increase consumer spending in regions with more manufacturing jobs reshoring to the US and Mexico from Asia is most likely. According to BofA Global Research, evidence suggests reshoring has been happening already.

According to BofA Global Research based on Prologis data, low-cost production centers around the globe such as Mexico and Central Europe have already experienced increased warehouse tenant demand from supply chain reconfigurations. BofA Global Research expects a similar trend for select US warehouse markets with a return of manufacturing to North America. Manufacturers would need warehouse space to store raw materials used in the production process and completed goods. These changes are likely to be a long-term trend that plays out over years.

Warehouse space demand is highly correlated to consumer spending and residential construction. More manufacturing jobs would also grow retail consumption in these markets and drive incremental warehouse space demand to serve them. Accelerated e-commerce adoption and an increase in inventory on hand to reduce the risk of future supply chain disruption remain key demand tailwinds for the sector as tenants adjust to changing consumer needs in population centers. We note real estate only comprises ~5% of total logistics costs (45% transportation, 32% labor, 18% inventory) making strategic warehouse space decisions cost effective for tenants.

**The bottom line**
With trade tensions, geopolitics, and COVID and the resulting supply chain disruptions as factors, there is increasing evidence of an uptick of reshoring. Higher growth, greater employment, higher wages and availability of manufacturing jobs should prove to be multiplier effects for the US economy – strengthening the case for reshoring. We also view ESG as a driver amid increased focus on carbon emissions, the need for more transparent/less complex supply chains and workforce health/safety considerations. Overall, we expect that it will be a multi-year trend, and not happen overnight.
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