Reshoring Institute
Non-profit and Non-partisan

Global Labor Rate Comparisons

The Impact on Manufacturing Location Decisions and Reshoring

Moving to alternate low-cost countries, plus reshoring some production to America has rapidly become the dominant strategy of companies in the U.S. and in Western Europe. Moving away from China is broadly recognized as one major way to mitigate global risk. American companies were starting to rethink their global manufacturing strategies and considering moving out of China, even before the pandemic drove global supply chains into an unprecedented crisis mode. With labor rates rising, geopolitical climates changing, and environmental concerns becoming a priority, companies are now actively reconsidering their global locations.

The centerpiece of this decision is often the comparison of labor rates in various countries. While labor rates alone are not sufficient to make a fully informed decision, it is the starting point for many companies. This is particularly true if a company has been manufacturing in China, where labor costs have been rising over the past few years. Labor in China is no longer among the least expensive locations, taking its place in the middle of the global pack.

NEW PERSPECTIVES ON THE "FACTORY OF THE WORLD"

China is often referred to as the "factory of the world," but that is changing. In addition to geo-political risk, China has experienced a significant rise in average wages over the last decade, making companies realize that China may no longer be the cheapest and best alternative. In fact, with geopolitics and the threat of China invading Taiwan, manufacturing in China may be the riskiest option. A comparison of global labor rates demonstrates that China is now in the mid-range of labor costs with countries including India and Mexico at the lower end.

Subsequent to the Covid pandemic, companies started to consider the risks, challenges, and costs of having their factories on the other side of the world and the benefits of having proximity to major consumer markets. Just a few years ago, the benefits for companies operating in low-cost countries, including low labor costs, justified offshoring. Now, the difference between wages is shrinking and the premium that customers are willing to pay for a "Made in USA" label is growing. A recent study by the Reshoring Institute (www.ReshoringInstitute.org) indicates that Americans are willing to pay 15-20% more for products made in the U.S.

DIFFERENCES IN GLOBAL WAGES AND PRODUCTIVITY RATES

Chart 1 shows the difference in wages that manufacturing workers earn in different regions of the world and helps to explain the reason why manufacturing goods that are “high-touch, low-tech” are more suited to low-cost countries. The more labor content in goods produced, the more attractive low-cost labor countries appear to be.

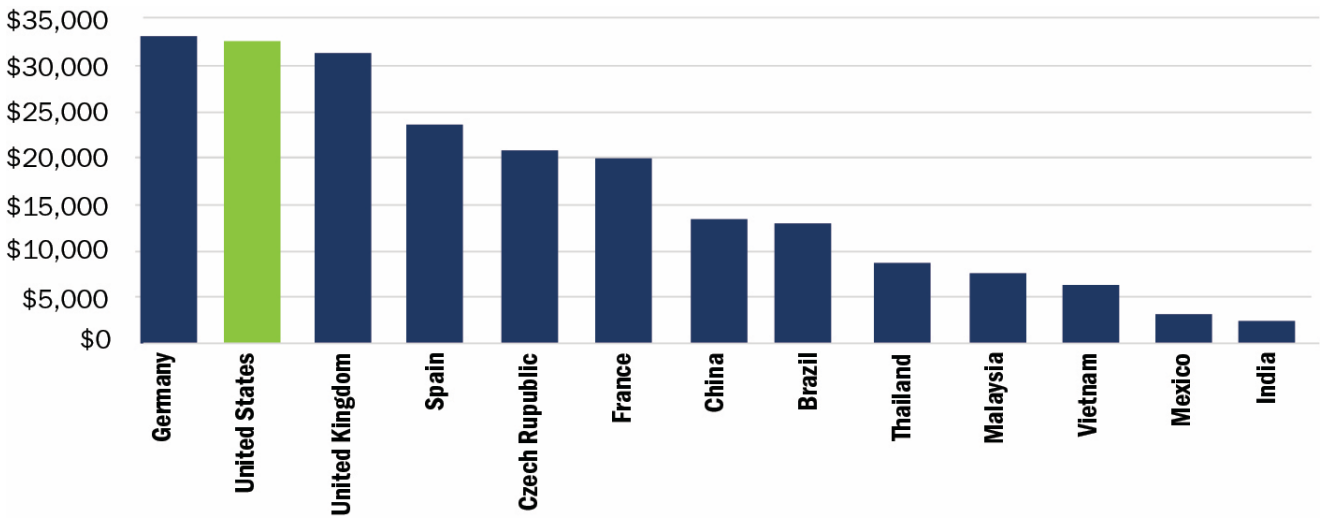
However, just comparing labor rates is not enough. It is very important to also compare productivity rates in individual factories in conjunction with labor rates. In some of the cases we have compared, the low-productivity rate and high error rates made Vietnam equal to or more expensive than workers in China despite Vietnam’s labor cost advantage. Productivity rates are calculated as the total output value of workers divided by hours worked. China is the clear winner in this calculation over most low-cost countries. The error and rework rate is also important to compare.

Chart 1 indicates the rising factory labor costs in China and the much lower labor costs currently in Vietnam, Malaysia, Mexico, and India.

CHART 1

Average Salaries of Production Workers / Machine Operators (World)

Source year: 2022, Indeed.com; Glassdoor.com; Salaryexplorer.com; Salary.com; Payscale.com



Now that the COVID-19 pandemic has subsided, what will happen next is unpredictable. We are now seeing manufacturing companies moving out of China and building additional factories in other developing low-cost countries such as Vietnam, Malaysia, Thailand, and Mexico.

As the Reshoring movement continues to gather momentum, companies are searching for domestic suppliers and developing the potential to manufacture in America, even though the labor rates are significantly higher. Labor costs can be extracted or significantly reduced through automation and process reengineering, making manufacturing in the U.S. and Europe more viable and efficient.

With skyrocketing logistics costs and considerable geopolitical risks, manufacturing in America becomes a real possibility and more attractive. Making products in close proximity to the region in which they will be sold reduces logistics costs, improves order cycle times, and lowers a company’s carbon footprint.

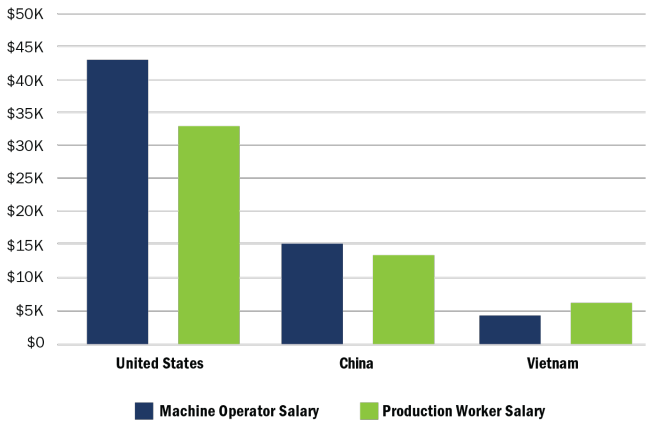
MACHINE OPERATORS AND OTHER FACTORY WORKERS

Chart 2 below shows the comparison between the average annual wages in US dollars of machine tool operators and factory workers from the most prevalent Southeast Asian countries in the global supply chain landscape. These counties include China, Vietnam, and Malaysia.

CHART 2

Average Salaries Comparison USA, China, Vietnam

Source year: 2022, Indeed.com; Glassdoor.com; Salaryexplorer.com



A machine operator is earning up to four times more in China than Vietnam. A typical production worker is earning, on average, two to three times more in China than in other countries around the region. But again, just comparing labor rates does not tell the whole cost story. It is also important to consider productivity rates, skilled labor availability, logistics costs, and the location of the supply base in an economic comparison.

Once the destination for international companies seeking cheap labor costs in manufacturing, China has seen its position as the "world's factory" shifting to other countries around Southeast Asia. The labor cost data supports what the Reshoring Institute has observed being adopted by many companies moving out of China. Companies manufacturing products with high labor content are still seeking low-cost countries to be able to manufacture and compete in global markets.

One prominent example of this trend is the giant consumer products company, Nike. In its last published 10-K, the official annual report required by the U.S. Securities and Exchange Commission, the company describes its operations and gives us a comprehensive summary of its financial performance. Nike states that for the fiscal year 2021, contract factories in Vietnam, Indonesia, and China manufactured approximately 40%, 26%, and 21% of total Nike brand footwear, respectively. This gradual shift away from China is likely to keep footwear manufacturing low cost.

Charts 3 and 4 show the comparison in salaries of production supervisors and managers in selected comparative countries. Mexico, India, and Vietnam pay the least for production managers, while the highest paid managers are in the U.S. and U.K. Production supervisors' pay, usually line supervisors, reflects the same pattern.

CHART 3

Average Salaries in Selected Countries for Production Managers and Supervisors

Source year: 2022, Indeed.com; Glassdoor.com; Salaryexplorer.com; Salary.com

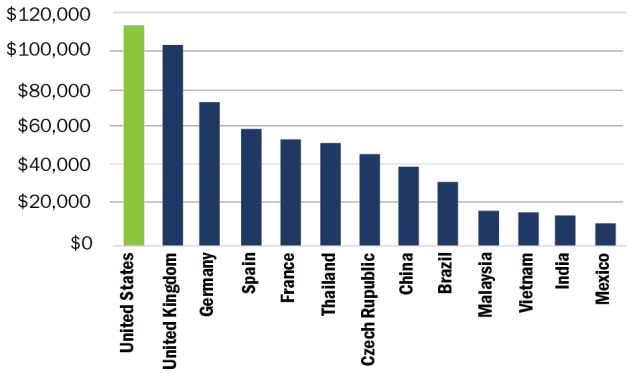
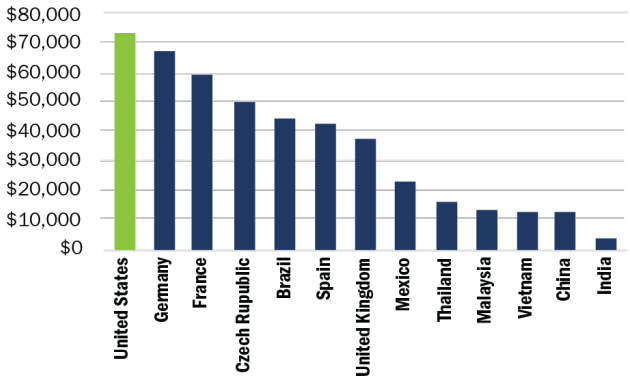


CHART 4

Average Salaries in Selected Countries for Production Managers and Supervisors

Source year: 2022, Indeed.com; Glassdoor.com; Salaryexplorer.com; Salary.com



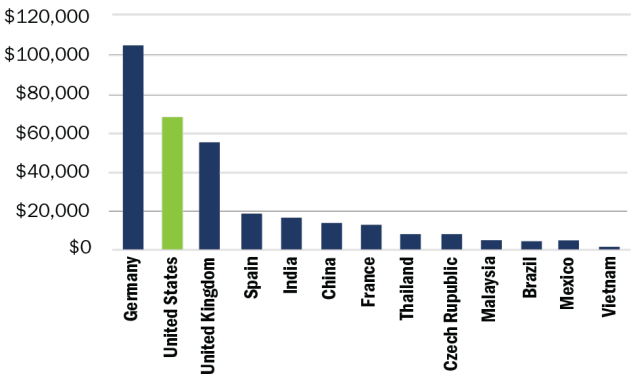
Welders, electricians, tool and die makers and other skilled laborers are in very short supply in the U.S. As manufacturing moved offshore in the 1990s and 2000s, there was a decline in the demand for such jobs and little need for training more skilled laborers in the U.S. But now, as companies start to reshore manufacturing, expand their American operations, and increase domestic sourcing, the need for this type of skilled labor has far exceeded the supply and driven up skilled worker wages.

Chart 5 shows the wide variation in welders' salaries around the world, and the high salaries resulting from shortages in the U.S., U.K., and Germany.

CHART 5

Average Welders' Salaries in Selected Countries

Source year: 2022, Glassdoor.com; Salary.com; Payscale.com; Salaryexplorer.com



LEAVING CHINA

The decision to leave China is not a simple one. Leaving any foreign country almost always involves problems with intellectual property, government disinvestment regulations, IP theft, exit taxes, and political consequences. Companies wanting to leave China are particularly vulnerable to these departure consequences and should make the effort and take the time to depart legally. Because departing China may be risky, many companies are leaving part of their production in China, while developing new manufacturing in one or more additional countries. This strategy is commonly referred to as "China +1 or China +2." In addition, with growth rates in China and across all of Asia in the double digits, it makes sense to leave at least some production there to serve regional markets. A burgeoning middle class – now nearing 800 million people in China – will continue to drive demand for all kinds of consumer and industrial products.

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China is no longer considered a low-cost labor market. With the rapid development of the Chinese manufacturing economy, China's labor rates have risen enough to be average among the countries considered. Vietnam has now replaced China as the low-cost rising star.

EUROPE BY COMPARISON

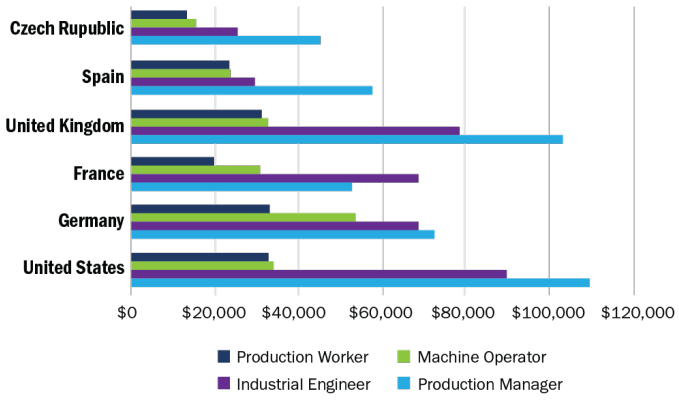
Taking a closer look into the labor rates of the major European countries against the wages in the United States (Chart 6), it is easy to see that the Czech Republic's wages are considerably less than other European Union countries and more aligned with wages in low-cost Asian countries

The data shows that wages in the European market have some parity between countries such as Germany and France. Wages in Eastern European countries such as the Czech Republic and Poland are far lower. But because of Russia's war on Ukraine, manufacturing in Eastern European countries becomes much riskier, and this may be the deciding factor in where to locate.

CHART 6

Average Salaries – the United States and Europe

Source year: 2022, Glassdoor.com; Payscale.com; Salary.com Salaryexplorer.com; Indeed.com



CONCLUSION

Considering the total cost is important in addition to a strict comparison of labor rates. The total cost of ownership (TCO) is one way of evaluating all of the costs including labor, logistics, transportation, customs duty rates, and others. However, it is also imperative to compare productivity rates for factory workers, infrastructure advantages, production quality, and work ethic. China is the clear winner in many cases when these additional variables are considered.

Another important factor to consider is that manufacturing policies are evolving from country to country, and this introduces yet another variable to consider. Manufacturers should re-evaluate location strategies from time to time. China's "Made in China 2025" initiative, for example, has the objective of upgrading the manufacturing infrastructure of the country to move away from being the "world's factory" to more of a producer of high-end and high-value products. China is shedding low-tech/low-cost/low-skill jobs to other developing low-cost countries. This movement up the manufacturing maturity curve puts China on a trajectory to match the manufacturing might of Germany, Switzerland, Japan, and the U.S.

According to the University of Cambridge, Germany is the world leader in high-technology manufacturing, demonstrating that advanced manufacturing is the backbone of the country's economy and a priority for the government. Germany has the largest national economy in Europe and the fourth largest by nominal GDP in the world.

Moving production to Mexico is a viable strategy in terms of cost and capability. Manufacturing in Mexico may be a solution to the problem of finding workers for manufacturing companies. Mexico's skilled labor force, low labor costs, Maquiladora programs, and shelter workshops, plus the proximity to the U.S. markets are all attractive reasons to locate in Mexico. The industrial profile is not as organized or mature as China, but still may be the best alternative manufacturing location.

After the data analysis and considering the context that we are experiencing as we move away from the COVID-19 crisis, it is clear that the decision of what products to reshore must involve more than a simple comparison of labor costs. A better understanding of where companies should manufacture their products around the world must be a more holistic approach including a comprehensive analysis of labor costs, productivity, geopolitics, risk, where customers are located, and how markets are growing.

With new funding and tax incentives now available through the Chips and Science Act, the Inflation Reduction Act, and the Build Back Better Infrastructure Bill, reshoring and expanding operations in America have rapidly become popular choices for American manufacturers.

For more information on this study and other research by the Reshoring Institute, visit our website at www.ReshoringInstitiute.org or email us at info@ReshoringInstitute.org

ABOUT THE AUTHORS



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Rosemary Coates is the Founder and Executive Director of the Reshoring Institute a non-profit and non-partisan organization. She is a seasoned executive with 25+ years of experience in Global Supply Chain Management, Operations Management, Project Management, and Systems Consulting. Ms. Coates earned a BS in Business at Arizona State University and an MBA at the University of San Diego. She resides in Silicon Valley.



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SOURCES

https://eurobuildcee.com/en/news/30068-czech-most-attractive-european-manufacturing-hub-cw

https://www.china-briefing.com/news/made-in-china-2025-explained/

https://www.deutschland.de/en/topic/business/why-is-the-german-economy-so-strong-seven-reasons

U.S. Bureau of Labor Statistics https://www.bls.gov/

https://www.dol.gov/

https://u.osu.edu/nikeshoes/manufacturing-process/#:~:text=Almost%20all%20Nike%20shoes%20are,are%20being%20produced%20world%20wide.https://u.osu.edu/nikeshoes/manufacturing-process/ - :~:text=Almost all Nike shoes are,are being produced world wide.

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ABOUT THE RESHORING INSTITUTE

We are a non-profit and non-partisan organization providing information, research, and consulting services for companies that are reshoring or expanding their sourcing and manufacturing in America. This includes domestic supplier selection, factory site selection, total cost of ownership (TCO), trade compliance, MADE in USA labeling, case studies, and white papers. For more information, contact info@ReshoringInstitute.org

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