

Manufacturing Employment Trends in the United States and Selected Trading Partners, 2014-2022

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This EBOT examines trends in manufacturing employment in a selection of the largest manufacturing economies in the world. The period from 2014 to 2022 saw manufacturing employment grow in the United States, Germany, Japan, Korea, Mexico, and Vietnam. The picture is less clear in China. During 2014–2022, the United States, Germany, Mexico, and Vietnam experienced growth in their working-age populations, while China, Japan, and Korea saw declines in their working-age populations.

A previous EBOT (“[Trends in Manufacturing Employment](#)”) found that, over 1998–2014, the United States was the only one of five large manufacturing economies (including also China, Germany, Japan, and Korea) that experienced shrinking manufacturing employment while also experiencing growth in working-age population. The other countries either experienced manufacturing employment growth or manufacturing employment declines concurrent with declines in working-age population.

This EBOT updates manufacturing employment data for the five countries in the previous EBOT, as well as adding Mexico and Vietnam, because these countries now account for larger shares of global manufacturing than previously. Over 2014–2022, most of these economies (including the United States) experienced growth in manufacturing employment, regardless of their trends in working-age population. The one possible exception is China, although data for China are difficult to measure, due to different estimates from different sources and areas.¹

Manufacturing employment grew in the United States, Germany, Japan, Korea, and Mexico over 2014–2022, as shown in table 1.² Growth in manufacturing employment occurred in these countries even though trends in working age population differed (increasing in the United States, Germany, and Mexico, while decreasing in Japan and Korea). Data for manufacturing employment in China and Vietnam are not available in the same format, and so are discussed after the table.

Growth in manufacturing employment in these countries generally occurred both before and after the COVID-19 pandemic and associated economic disruptions of 2020. From 2014 to 2019, manufacturing employment grew in the United States (5.2 percent), Mexico (17.2 percent), Germany (2.6 percent), and Japan (2.2 percent), while declining 0.7 percent in Korea. From 2019 to 2022, manufacturing employment grew 0.1 percent in the United States, 4.2 percent in Mexico, 2.4 percent in Germany, and 1.7 percent in Korea, while declining 1.8 percent in Japan.

¹ Abdelaziz and Darush, “[Manufacturing, Employment, International Trade, and China](#),” Policy Center for the New South, October 2019, p. 20.

² OECD or national data are not available for Vietnam, which is discussed below.

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Table 1: Manufacturing Employment and Workforce Growth Rates of the United States, Germany, Japan, Korea, and Mexico from 2014–2022

Country	Change in Manufacturing Employment, 2014-2022	Change in OECD Measure Of Working-Age Population, 2014-2022
United States	5.3 percent higher	2.3 percent higher
Germany	5.1 percent higher	0.3 percent higher
Japan	0.4 percent higher	4.8 percent lower
Korea	1.0 percent higher	1.6 percent lower
Mexico	22.1 percent higher	10.8 percent higher

Sources and notes: Data not available for Germany in 2020 due to the COVID-19 pandemic. All calculations have been conducted by the author based on (1) OECD data for total population and share of population that is working age, and (2) manufacturing employment data from the BLS or OECD (for the United States, Germany, Japan, Korea, and Mexico) and INEGI (for Mexico). For Mexico, fourth quarter data for each year were used.

China: Accurate data on manufacturing employment in China are difficult to obtain.³ Calculating based on World Bank data on the manufacturing employment as a share of total employment and CEIC data on China’s total employment produces an estimated 7.7 percent decline in manufacturing employment in China from 2014 to 2021. China’s working-age population fell 1.1 percent from 2014 to 2021. News reports indicate that Chinese manufacturers are having difficulty finding employees, and that Chinese manufacturing wages have tripled in the last decade, perhaps indicating labor supply tightness.⁴

Vietnam: Since 2014, Vietnam has emerged as a nascent manufacturing hub. Using World Bank data on manufacturing employment as a share of total employment and ILO data on total employment produces an estimated 60.4 percent increase in manufacturing employment in Vietnam from 2014 to 2021. Similarly, the Brookings Institute estimates that Vietnam added 1.5 million manufacturing jobs from 2014 to 2016.⁵ Vietnam’s working-age population has grown by 8.2 percent from 2014 to 2021.

Overall, most major world manufacturing economies added manufacturing workers between 2014 and 2022, although the picture for China is not clear.

Sources: Benedetto, “[Trends in Manufacturing Employment](#),” USITC, April 2018. INEGI, [Tabulados](#) (2023); OECD, [Employment By Economic Activity: Manufacturing: All Persons For Germany, Korea, And Japan](#), retrieved from FRED, Federal Reserve Bank of St. Louis (2023); OECD (2023), [Population \(Indicator\)](#); OECD (2023), [Working Age Population \(Indicator\)](#).

³ Abdelaziz and Darush, “[Manufacturing, Employment, International Trade, and China](#),” Policy Center for the New South, October 2019, p. 20.

⁴ Pak, “[Why More Workers in China are Ruling Out Factory Jobs](#),” Marketplace, April 17, 2023, Cheng, “[As China’s Wages Rise, Mexico Beckons Manufacturers](#),” Quartz, November 2, 2022.

⁵ Eckardt et al, “[Vietnam’s Manufacturing Miracle](#),” The Brookings Institute, April 17, 2018.

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