

FARSHORING VERSUS NEARSHORING - US/TEXAS, MEXICO AND CHINA

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DEFINITIONS

- **Outsourcing:** Shifting tasks/jobs to an external contractor for a period of time.
- Three types of outsourcing:
 - **Onshoring:** Shifting tasks to a contractor who performs the task in the **same** country as the outsourcing firm.
 - **Nearshoring:** Shifting tasks to a contractor in a **neighboring** country.
 - **Farshoring:** Shifting tasks to a contractor in a **distant** foreign country.
 - **Offshoring** encompasses both near- and farshoring.
- Historically: Onshoring first, then nearshoring, more recently farshoring

REASONS FOR OUTSOURCING

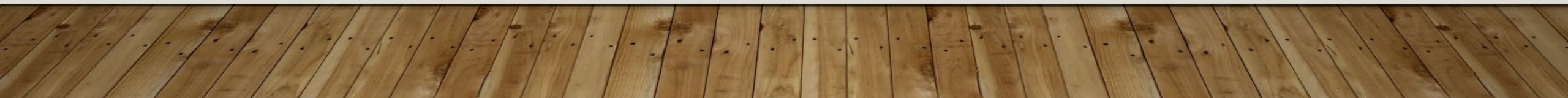
- Cost savings (lower labor cost, lower taxes, cheaper energy, lower rents...)
- Least stringent environmental and labor regulations
- Allows firm to focus on the core business (where it has a comparative advantage)
 - Note: the outsourced task is the comparative advantage of the contracting firm

OUTSOURCING TRENDS: 1990-2023

Increase in farshoring from 1990 to 2017 Driven By:

- Reduction in trade barriers (FTAs, China and Russia in WTO)
- Reduction in transport costs (larger container ships, bigger and more efficient container ports, low fuel costs)
- Transition of centrally planned to free market economies (Russia, Poland, ...)
- Creation of a free market sector in remaining communist countries (China, Vietnam, Lao)
- End of cold war (“peace dividend”)

However, since 2018, the farshoring approach has been questioned due to:

- Covid pandemic/supply chain breakdowns
 - Higher transport costs
 - Trade wars
 - War in Ukraine
 - Overreliance on China as “World’s Factory”
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FUTURE OUTLOOK

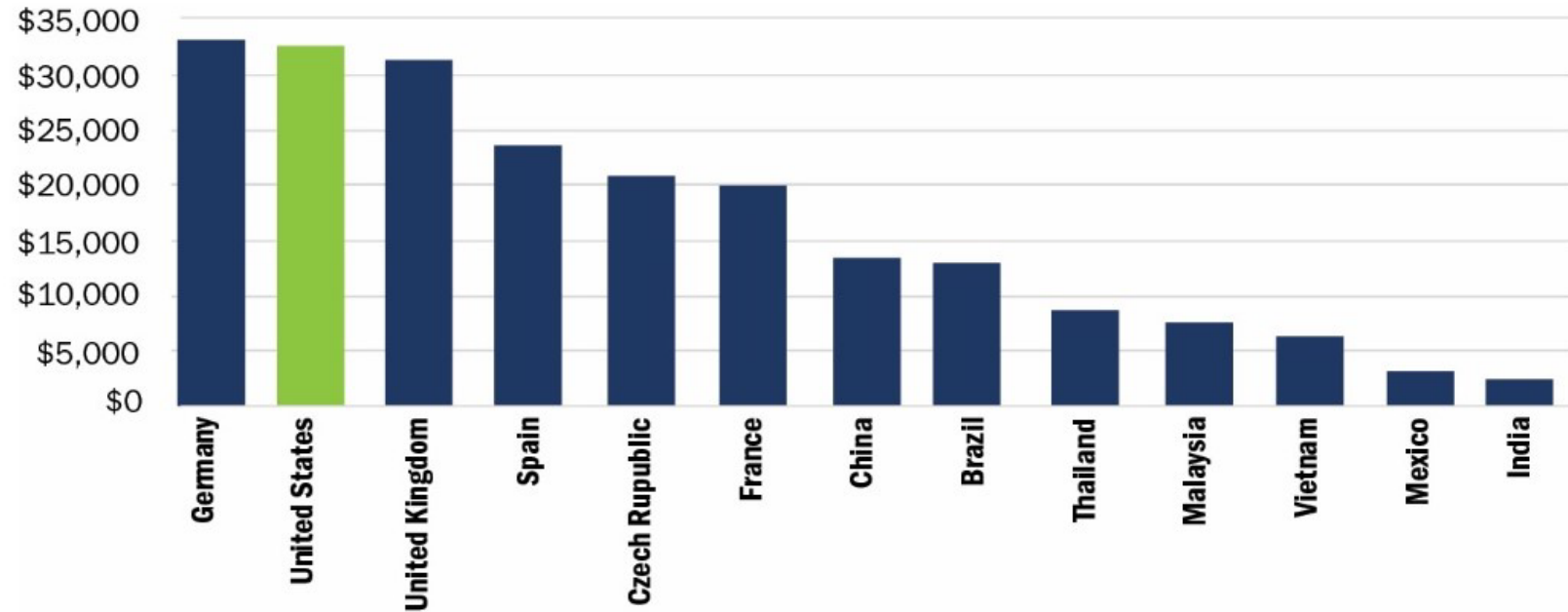
- What are the chances for near-/onshoring in North America?
- How does Mexico (nearshoring) compare to China (farshoring)?
- Outlook for onshoring in US/Texas

FARSHORING VERSUS NEAR-/ONSHORING:

LABOR COST DIFFERENTIAL FAVORS MEXICO

Average Salaries of Production Workers / Machine Operators (World)

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



FARSHORING VERSUS NEAR-/ONSHORING:

TRANSPORTATION COST DIFFERENTIAL FAVORS MEXICO

- sea container shipping cost from China: to Seattle (\$4,800); to Chicago (\$8,800)
- container shipping cost from Mexican border facility to nearby Texas distribution center: \$250
- Shipping time from China: up to three weeks
- Shipping time from Mexican border facility to any US destination: 1-2 days

FARSHORING VERSUS NEAR-/ONSHORING:

TRADE BARRIERS & ECONOMIC DISPUTES DIFFERENTIAL FAVORS MEXICO

- USMCA/NAFTA (free trade and capital flows in North America since 1994)
- Mexico has FTAs with EU, Japan, Colombia, Chile, member of CPTPP and WTO
- No China-US FTA
- US trade war with China since 2018 (even though both are WTO members)
- US battles China over semiconductor chips (rising # of export restrictions), IPP, China's near monopoly on the 17 rare earth minerals

FARSHORING VERSUS NEAR-/ONSHORING:

GEOPOLITICAL DIFFERENTIAL FAVORS MEXICO

- Strong economic, political and social ties between US and Mexico
 - Trade
 - Foreign Direct Investment
 - Migration
 - Tourism
- Deterioration of economic and political relations between US and China
 - Less bilateral trade due to trade war
 - US FDI in China fell during Covid and is subject to legal constraints by Biden administration
 - China-Russia alliance
 - Fewer Chinese students enrolled at US universities

OBSTACLES TO NEAR-/ONSHORING/RESHORING

CUTTING BUSINESS TIES WITH CHINA IS DIFFICULT (I.E. COSTLY):

- Long-term contracts with suppliers
- Exit taxes
- Loss of direct access to largest consumer market in the world (e.g. Tesla)
- Large pool of qualified and motivated workers
- China's excellent infrastructure
- China's manufacturing expertise and well-developed upstream and downstream supply chains

OBSTACLES TO NEAR-/ONSHORING/RESHORING:

BOTTLENECKS IN US AND MEXICO

- Tight labor markets
- Artificial Intelligence and automation may help alleviate shortages but not in short run
- WEF estimates: by 2025, AI/automation will create at least 12 million more jobs than they eliminate

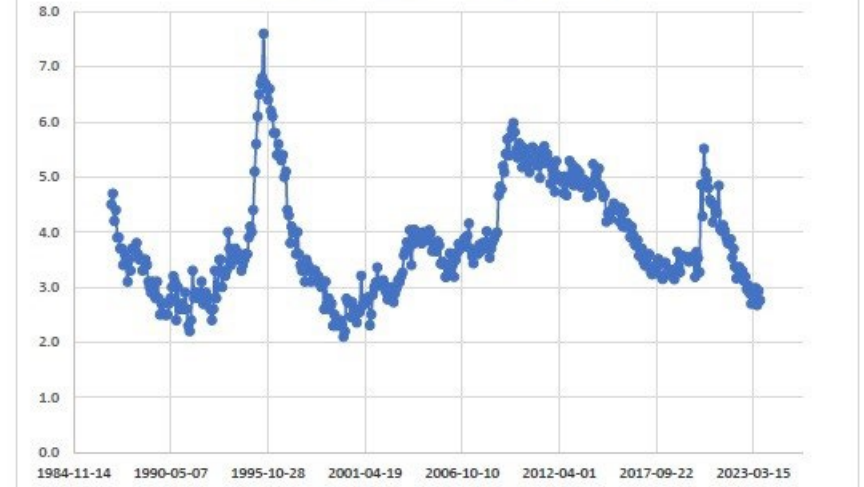
State Unemployment Rate - August 2023

Rank	State	Rate
1	Maryland	1.7
2	New Hampshire	1.8
3	Vermont	1.8
4	North Dakota	1.9
5	South Dakota	1.9
6	Nebraska	2
7	Alabama	2.1
8	Maine	2.5
9	Montana	2.5
10	Utah	2.5
...
40	New Mexico	3.7
41	Arizona	3.8
42	Alaska	3.9
43	New York	3.9
44	Kentucky	4
45	Delaware	4.1
46	Illinois	4.1
47	Texas	4.1
48	New Jersey	4.2
49	California	4.6
50	District of Columbia	5
51	Nevada	5.4

Source : BLS

<https://www.bls.gov/web/laus/laumstrk.htm>

Unemployment Rate in Mexico: 1987-23



OBSTACLES TO NEAR-/ONSHORING/RESHORING:

OBSTACLES IN US AND MEXICO

- In US: Staggering cost of new manufacturing facilities due to high labor and material costs
 - Intel's chip factory in Ohio: 20 billion USD, may expand to 100 billion
 - Micron's chip factory in upstate New York: 100 billion USD over 20 years
 - Samsung's chip factory in Taylor, TX: 25 billion USD
 - Partly offset by subsidies from Infrastructure Investment Act and CHIPS and Science Act
- In Mexico: Slow transition to carbon neutral production and infrastructure
 - Creates obstacle for net zero by 2050 goal of many multinational companies

CONCLUSION

- Good arguments to be made for nearshoring (Mexico) and Onshoring (US/Texas)
- Due to the high cost of abandoning farshoring altogether, many multinationals lean toward
 - China +1 (China + Mexico)
 - China + 2 (China + Mexico + Vietnam)
- Goal is to diversify the supply chains on the one hand but preserve most of the advantages of farshoring on the other
- India may be the up-and-coming country for farshoring over the next decades