

## A Changing of the Guard? Emerging Southeast Asian Suppliers of Medical Technology

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*China has quickly emerged as the epicenter of the global supply chain for medical technology (medtech). The country's unique blend of low-labor costs, burgeoning home market, and domestic policies aimed at attracting foreign capital have all played a role. However, the ongoing trade dispute with the United States has raised fresh concerns about the viability of investing in China. This concern, coupled with China's diminishing reputation as a low-cost manufacturer has recently led U.S. medtech firms to diversify their investments in other players in the region. This EBOT explores the factors driving greater investments in three emerging Southeast Asian suppliers in the region: Malaysia, Singapore, and Vietnam.*

### Conditions in China are Changing

China has long attracted investment from U.S. medtech firms seeking to lower their production costs and to supply the local market. Capitalizing on the country's low-labor costs, these firms often offshored the production of parts and other goods of low-value to a local affiliate, or outsourced these activities to contract manufacturers or to local Chinese companies. These goods were then imported back to the United States for final production. However, two relatively recent developments may be driving investments into regional countries.

The first, and most recent, is the year-long imposition of tariffs against China. At the time of writing, the United States had applied tariffs on an estimated \$250 billion worth of imports from China, with more expected by the end of the year. Roughly \$1.5 billion, or one-quarter the value of all U.S. medtech imports from China have been affected.<sup>1</sup> Given that roughly one-third of U.S. medtech imports from China represent transactions between parent companies and their Chinese affiliates, these tariffs may have raised production costs on some U.S.-based firms.<sup>2</sup>

The second, and more enduring trend, is China's rising labor costs. Increased labor competition coupled with the country's ascension into higher-value added elements of the global value chain, have translated into increased labor costs in China—especially in the eastern part of the country—over the past decade.<sup>3</sup> According to IDC Worldwide Robotics, average yearly manufacturing wages in China have risen by 80 percent since 2010. Oxford Economics estimated that labor costs in China are only 4 percent less than those in the United States (when adjusted for productivity).

### Asia's Burgeoning Medtech Cluster

Medtech multinational corporations (MNCs) have increasingly sought to manage supply chain risks by investing in Malaysia, Singapore, and Vietnam. During 2008–18, these countries amassed nearly \$1 billion in inbound foreign direct investment (FDI) to the medtech sector. In sum, nearly 100 MNCs (e.g. Agilent, B. Braun, St. Jude Medical, and Medtronic) operate in these three countries, mostly concentrated in Singapore (60) and Malaysia (30). MNCs typically produce higher-end goods for the local market or for export to other markets; local producers principally manufacture goods in the low-middle tier of the local market.

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<sup>1</sup> Author's calculations based off Official Statistics of the Department of Commerce (accessed September 5, 2019). U.S. medtech imports from the world totaled \$57.5 billion in 2018 according to IHS Markit, Global Trade Atlas.

<sup>2</sup> Author's calculations based off U.S. Department of Census, Related Party Database (accessed September 5, 2019).

<sup>3</sup> Torsekar, "[China's Changing Medtech Landscape: Shifting Exports](#)," March 2018.

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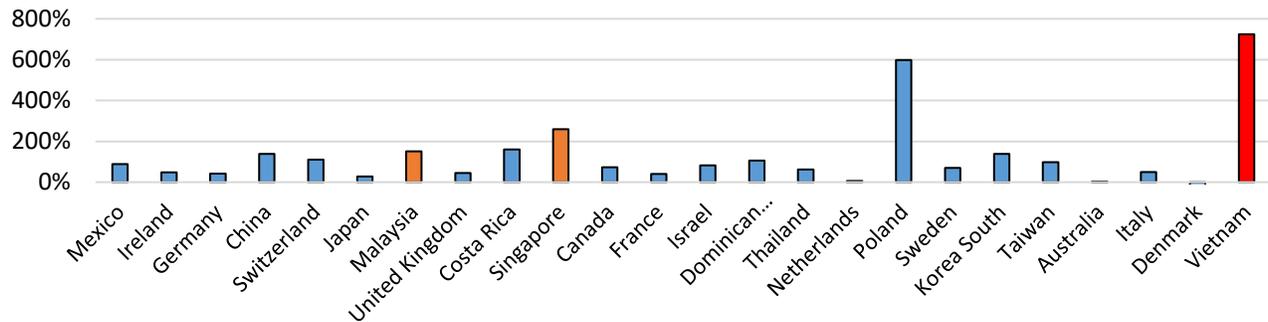
**Other supporting factors driving these investments**

These trends reflect several factors including competitive production costs (particularly in Malaysia and Vietnam); skilled workforce (especially in Singapore); favorable government policies (e.g. duty-free, Special Economic Zones and adoption of internationally recognized industry standards); an English speaking workforce, which facilitates close collaboration between U.S. multinationals and their foreign counterparts; and participation in a strong network of free trade agreements (e.g. the ASEAN Free Trade Area and the more recently minted Comprehensive and Progressive Agreement for Trans-Pacific Partnership).

**Trade Overview and Outlook**

Malaysia, Singapore, and Vietnam have quickly emerged as being among Asia’s fastest growing medtech suppliers for the United States. Malaysia and Singapore are both top ten medtech suppliers to the United States (and top five suppliers in the Asia-Pacific region behind China and Japan). Although Vietnam is only the United States’ 24<sup>th</sup> largest provider of medtech, the growth rate of U.S. imports from that country has outpaced the rates of any other leading supplier over the past decade (figure 1).

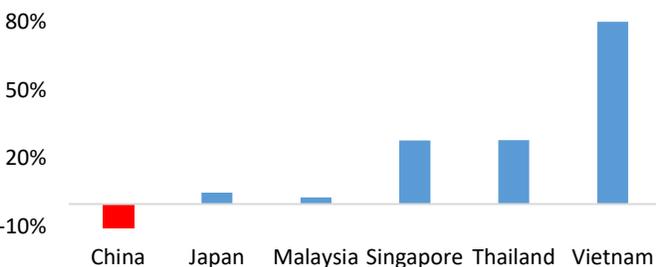
**Figure 1:** Growth rate of U.S. medtech imports from its top 24 suppliers, 2008-18



Source: IHS Markit, Global Trade Atlas (date accessed August 13, 2019).

The most recent trade data suggests an apparent shift in U.S. imports away from China and towards other regional players (figure 2). Specifically, between July 2018 (when the first 301 tariffs took effect) and June 2019, U.S. imports from China fell by six percent, while Malaysia, Singapore, and Vietnam (as well as Japan) each increased their medtech exports to the United States during this time.

**Figure 2:** Changes in U.S. Medtech Imports From Selected Asian Suppliers, July 2018-June 2019



Source: Source: Official Statistics from the U.S. Department of Commerce, September 16, 2019.

**China Still Reigns...for now**

Despite rising production costs—owing to tariffs and climbing wages—incurred by U.S. importers of intermediates from China, the appeal of investing in the country remains strong. China’s robust healthcare market, coupled with its entrenched industrial base still make it an attractive opportunity. On the other hand, the outcome of the U.S.–China dispute remains uncertain and may alter the long-term calculus for investors. If so, Malaysia, Singapore, and Vietnam may enlarge their presence in the global medtech supply chain.

**Sources:** Gross, “[Malaysia Gets More Proactive](#),” May 10, 2012; EDB Singapore, “[Medical Technology](#),” n.d.; Lomas, “[Which Asian Country](#),” February 18, 2017; FT, “[Goodbye China](#),” August 21, 2019; IHS Markit, Global Trade Atlas; contact author for full list of sources.

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