

## COVID-19: The Impact on U.S. Imports of Cellular Phones

[Sharon Ford](#), Office of Industry and Competitiveness Analysis

*The COVID-19 pandemic and associated circumstances had marked impacts on U.S. imports of cellular phones. The shocks and interventions affected production and consumption of the devices in China and the United States, respectively. During the first year of the pandemic, U.S. imports of cellular phones fell steeply and then rose sharply. In the second and third years of the pandemic, the value of U.S. imports of cellular phones continued to rise.*

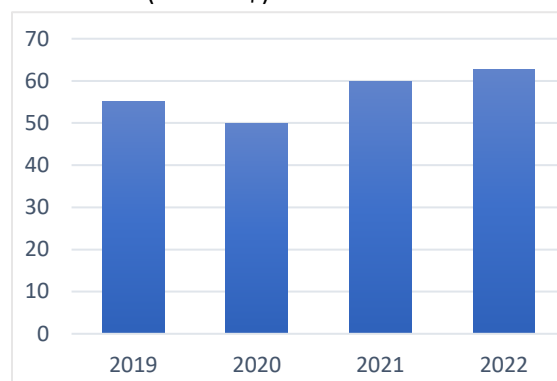
### COVID-19 disrupted global manufacturing of cellular phones

China is the world's leading supplier of cellular phones and their critical components.<sup>1</sup> Other important manufacturers of cellular phones and components include Vietnam, South Korea, Japan, and India.<sup>2</sup> All these countries faced disruptions in their manufacturing operations due to measures taken to address the spread of COVID-19, such as population lockdowns and factory closures.

### Impact on U.S. demand and imports of cellular phones

U.S. demand for cellular phones weakened as pandemic-related economic contraction spread worldwide and global macroeconomic conditions deteriorated during 2020. U.S. real gross domestic product (GDP) declined by 3.5 percent in 2020, a significant contraction following 2.2 percent growth in 2019. The pandemic and associated uncertainty with lockdowns limiting mobility and consumers postponing purchasing new phones in anticipation of new 5G cellular phone options contributed to the fall in imports.<sup>3</sup> From 2019 to 2020, U.S. imports of cellular phones decreased by \$6.4 billion (11.6 percent) to \$48.8 billion (figure 1).<sup>4</sup>

**Fig. 1** U.S. imports of cellular phones by year, 2019-2022 (billions \$)



Source: [USITC DataWeb/Census](#) (accessed 2/9/23).

Measures to limit contagion in the United States triggered changes in consumer behavior, leading later to increased spending on cellular phones. In 2021, the U.S. and global economies recovered from the downturn: the 5.7 percent rise in U.S. GDP; pent-up demand; and release of 5G options contributed to the surge in demand for more technologically advanced cellular phones.<sup>5</sup> In 2021, U.S. imports of cellular phones rose by \$11 billion (22.5 percent) to \$59.8 billion, despite

<sup>1</sup> China accounts for nearly 85 percent of the total value of components utilized in smartphones. PRN Newswire, "[Impact of COVID-19 on the Global Manufacturing Industry, 2020](#)," April 16, 2020.

<sup>2</sup> From 2019-2022, the top five source countries accounted for over 99 percent of U.S. imports of cellular phones.

<sup>3</sup> In February 2020, the U.S. government began steps, such as travel and entry controls and by mid-April 2020, every state and territory had measures to limit contagion. CDC, "[Morbidity and Mortality Weekly Report](#)," February 7, 2020, 140; FEMA, "[Pandemic Response](#)," January 2021, 17; CDC, "[Covid Data Tracker](#)," accessed January 19, 2023.

<sup>4</sup> USITC, "[Trade Shifts, 2021](#)," June 2022. Note that 2019-2021 data for cellular phones used HTS subheading 8517.12 (telephones for cellular networks or other wireless networks) and data for 2022 used a new subheading effective that year, 8517.13 (smartphones), which account for most U.S. cellular phone imports.

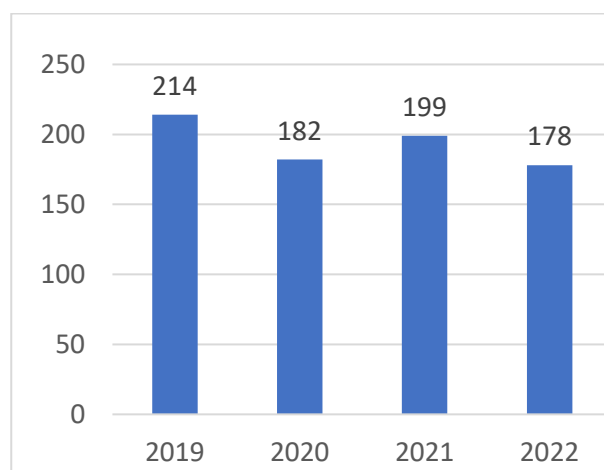
<sup>5</sup> BEA, "[Gross Domestic Product](#)," February 24, 2022.

*The views expressed solely represent the opinions and professional research of the author. The content of the EBOT is not meant to represent the views of the U.S. International Trade Commission, any of its individual Commissioners, or the United States government.*

increasingly prevalent supply-chain bottlenecks.<sup>6</sup> In 2022, U.S. imports of cellular phones continued to rise, growing by \$2.8 billion (4.7 percent) to \$62.6 billion, the highest yearly dollar volume since 2007, when the HTS began tracking cellular phones.

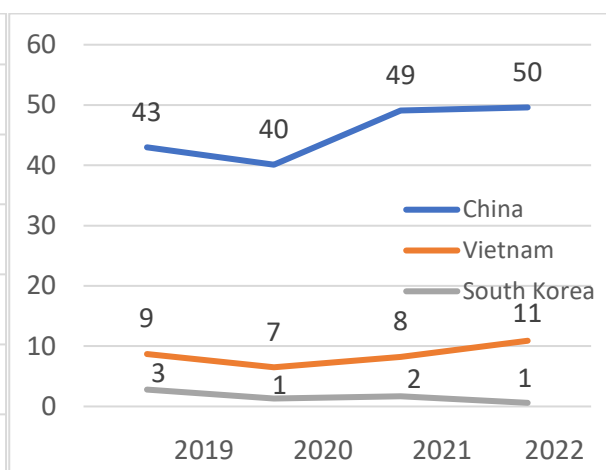
The increase in the value of imports of cellular phones in 2021 and 2022 was likely driven by the imports of 5G-enabled phones with higher average prices.<sup>7</sup> U.S. imports of cellular phones surpassed pre-pandemic levels by \$4.6 billion (8.3 percent) and \$7.4 billion (13.4 percent), in 2021 and 2022 respectively. Total U.S. imports of cellular phones declined in quantity from pre-pandemic levels possibly due to market saturation or consumers holding onto phones longer (figure 2).

**Fig. 2** U.S. imports of cellular phones by year, 2019–2022 (millions of units)



Source: [USITC DataWeb/Census](#) (accessed 2/9/23).

**Fig. 3** U.S. imports of cellular phones by source and year, 2019–2022 (billions \$)



Source: [USITC DataWeb/Census](#) (accessed 2/9/23).

The source composition of the imports changed slightly, as well (figure 3). U.S.-headquartered Apple and South Korea-headquartered Samsung and LG manufacture most of the smartphones sold in the U.S. market. Apple imports phones from China while Samsung and LG phones are shipped from Vietnam and South Korea. From 2019 to 2022, U.S. imports of cellular phones from China and Vietnam rose by \$6.3 billion (15.3 percent) and \$2.2 billion (25.1 percent), respectively. The value share of U.S. imports from China increased from 77.9 to 79.2 percent. The value share of U.S. imports from Vietnam increased from 15.7 to 17.4 percent.<sup>8</sup> Imports from South Korea, the third-largest source country fell by \$2.8 billion (77.4 percent) and the share of U.S. imports from South Korea declined from 0.05 to 0.01 percent.

<sup>6</sup> Business Wire, “[Global Smartphone Shipments Expected to Grow 5.3%](#),” December 2, 2021.

<sup>7</sup> 5G phones have greater capacities and lower latency, FCC, “[5G FAQs](#)” (accessed June 6, 2023); the average unit value of a U.S. cellular phone import rose from \$257 in 2019 to \$352 in 2022, USITC DataWeb/Census, [Imports for consumption](#), HTS subheadings 8571.12 and 8517.13, accessed February 9, 2023.

<sup>8</sup> The increase reflects investments from Samsung and LG, Reuters, “[Samsung, LG Plan](#),” December 6, 2022.