

Bureau of Labor Statistics > Publications > Beyond the Numbers



**HOME** 

**ARCHIVE** 

**ABOUT** 

**SUBSCRIBE** 

**SEARCH** 

September 2023 | Vol. 12 / No. 13

PRICES & SPENDING

# Historic coffee prices percolated after a bitter global supply crisis

By Angela Cantor

United States.

Americans drink more coffee each day than any other beverage—including tap water.  $\frac{1}{2}$  Yet, as one of the most widely traded agricultural products in the world, coffee could not evade COVID-19's bitter global supply chain crisis—culminating in a story that sheds truth on Murphy's law, which says "anything that can go wrong, will go wrong." Since January 2021, U.S. coffee importers have faced an escalating cost for the hot commodity. Import prices increased just over 65 percent in less than 2 years—reaching and then surpassing the record price index level from 2011. The following **Beyond the Numbers** article explains the reasons import prices for coffee have increased and discusses global supply issues that have arisen in the top coffee-supplying countries to the



## The decline of U.S. coffee imports

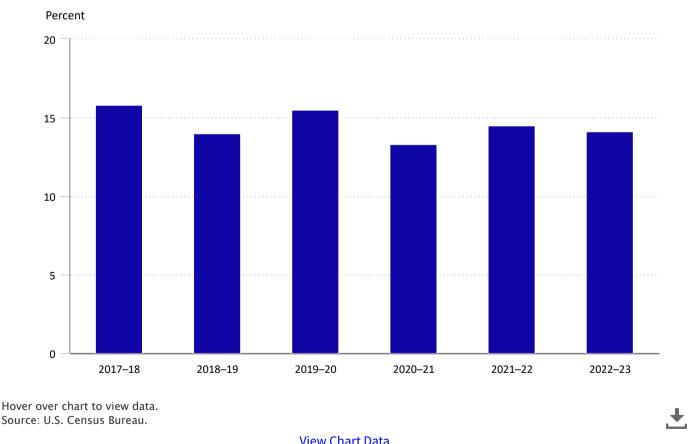
were lower relative to world production compared with previous years.

From 2007 to 2019, the United States imported, on average, 15 percent of global coffee production.  $\frac{3}{2}$  However, from 2019 to 2020, U.S. import coffee shares decreased from 15.5 percent to 13.3 percent. In terms of quantity of coffee, the seemingly slight decrease in import shares reduced the coffee imported by the United States in 2020 by 184,707.7 tons, or 10.6 percent. The decline in U.S. coffee imports was significant considering that 2020 was a fruitful year of coffee production, in which import volumes could have thrived.<sup>4</sup> But the COVID-19 pandemic closed markets in 2020. In 2021, as the global economy began to reopen, U.S. import shares of global coffee supplies increased by an underwhelming 2.4 percent—reaching only 14.5 percent of world coffee import shares. As seen in chart 1, both 2020 and 2021 U.S. import coffee volumes

### **RELATED ARTICLES**

- How currency appreciation can impact prices: the rise of the U.S. <u>dollar</u>
- The impact of the COVID-19 pandemic on food price indexes and data <u>collection</u>

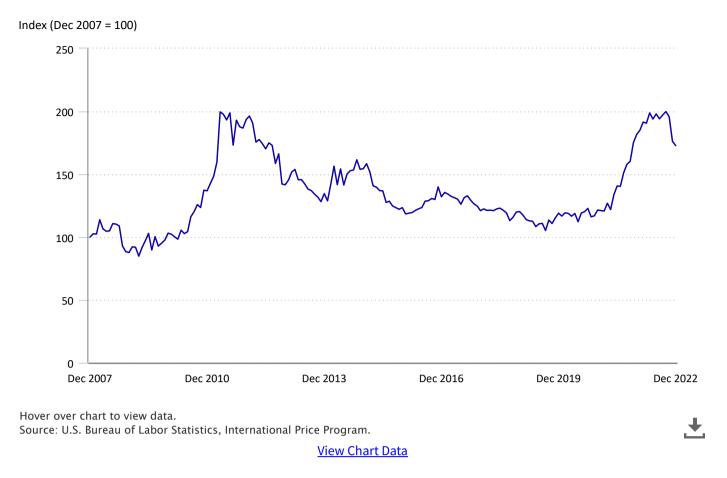




**View Chart Data** 

Despite the dip in U.S. import coffee volumes in both 2020 and 2021, the United States maintained its position as the number one importer of coffee in the world. As previously stated, although the COVID-19 pandemic certainly impacted where Americans bought and drank coffee (at home, rather than at cafes), the COVID-19 pandemic did not significantly change how much coffee Americans consumed overall. Domestic coffee consumption was not affected by lower imports because of existing stockpiles of coffee reserves. U.S. coffee reserves did not start falling until September 2021. Low stocks worldwide contributed to accelerated price increases for import coffee leading into 2022. And so, the supply crisis that began brewing with the onset of the pandemic combined with stable demand became the recipe for the historic rise in prices. (See chart 2.)

### Chart 2. Import green coffee prices, December 2007–22



## Coffee supply issues increase import prices

World prices for coffee jumped upwards in 2021. The increase was reflected in U.S. import coffee prices which also climbed to historic heights. Import prices erupted in 2021 when lower production in the United States' top source of coffee—Brazil—was compounded by pandemic-induced trade restrictions, port inadequacies, and labor shortages. There was also a shipping container scarcity amongst the world's top producers—Colombia, Vietnam, and Indonesia, which supply coffee to America. As seen in chart 3, the four countries combined—Brazil, Colombia, Vietnam, and Indonesia—provided approximately 66 percent of U.S. coffee imports in 2021. The turbulent conditions these top world coffee-producing countries faced since the onset of the pandemic impacted U.S. coffee import trends. In contrast, countries in Central America, such as Honduras, were not as strongly impacted by the COVID-19 pandemic during the 2021–22 coffee production season. The low availability from the large coffee-producing countries expanded export opportunities for Honduras and the rest of the Central American region. Despite the alternative supply source for U.S. coffee imports, coffee prices remained high in the United States and worldwide because of the supply constraints impacting the world's four largest coffee producers.

Click legend items to change data display. Hover over chart to view data.

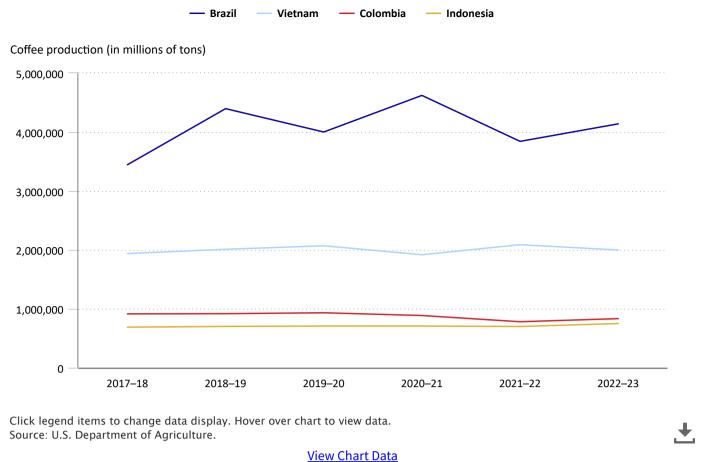
Source: U.S. Census Bureau.

# Reduced production in Brazil has consequences on prices

Brazil is known as the "coffee pot of the world" because the country produces more than 35 percent of the world's coffee. As the top coffee supplier to the United States, Brazil contributed approximately 30 percent of U.S. coffee imports in  $2021.\frac{10}{2}$  Production from Brazil is a strong indicator of U.S. coffee import volumes, and ultimately the price of coffee.

While unprecedented global supply chain disruptions limited the export capabilities of some of the United States' other top coffee suppliers, in 2021, Brazil was facing internal challenges as erratic weather took a critical toll on coffee production. 11 Chart 4 shows production levels from Brazil, Colombia, Indonesia, and Vietnam between 2017 and 2021. As observed, Brazil coffee production in 2021 was the lowest recorded in 4 years.

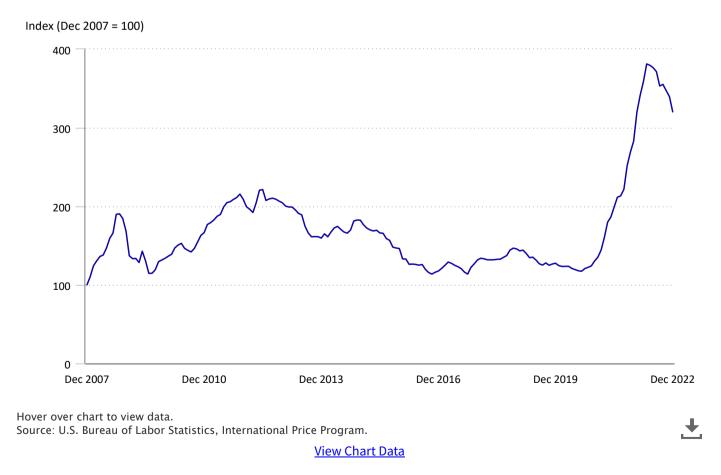
Chart 4. Coffee production from top world suppliers, 2017–22 (in millions of tons)



Americans' preferred coffee variety, arabica, dominates coffee production in Brazil and is strongly influenced by the "biennial effect". 12 Hence, coffee production in this region is predictable, alternating between years of low and high production, known as "off-years" and "on-years." (See chart 4.) Off-years result from a natural development that occurs as coffee trees become stressed after producing high volumes one season, which leads to decreased production in the following season. 13 In 2021, there was already an off-year in the arabica coffee production cycle—signifying a year of lower global supplies and potentially higher prices. But coffee production in Brazil decreased in 2021 by more than just this biennial effect. 14 Erratic weather has been an emerging issue in Brazil, leading to even lower production than recent off-years. Events such as the tropical storm La Niña and greater variability in temperatures, along with deforestation of the Amazon are causes for the volatility. 15 In a 1-year span, Brazil's 2021 production, as seen in chart 4, dropped below trend because of droughts, fires, and frosts. Prolonged dryness hindered bean development, fires caused some producers to lose more than 20 percent of their coffee growing areas, and an unexpected cold snap swept through Brazil's coffee belt. 6 All three happenings occurred within what was already going to be an off-year in the production cycle. The damage to global coffee production from 2021 was so severe that in 2022, Brazil was still considerably behind previous on-year crop levels, which peaked at nearly 50 million bags in 2019 and 2020.

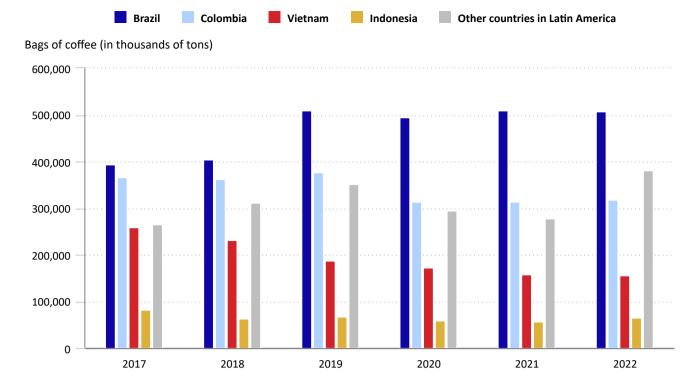
In addition to erratic weather, Brazil's production was also impacted by rising fertilizer prices stemming from the Russia-Ukraine war. As shown in chart 5, fertilizer prices of U.S. imports skyrocketed to highs never seen before, with record levels being hit month after month in 2022. From January 2021 to April 2022, fertilizer prices increased 182.0 percent. High prices of import fertilizers, pesticides, and insecticides in the U.S. market have been similar to high prices faced by coffee producers, as these inputs make up part of the essential raw materials costs that farmers must pay upfront to produce coffee.

Chart 5. U.S import fertilizers, pesticides and insecticides prices, December 2007–22



Despite significant production losses, Brazil contributed a greater share of coffee exports to the United States in 2021 than other countries that were plagued with lockdowns and supply chain challenges. (See chart 6.) A comparatively open economy in Brazil during the COVID-19 pandemic, an outstanding 2020 crop, and the devaluation of the Brazilian currency all put the country in an advantageous position to export to the United States, compared with Colombia, Vietnam, and Indonesia, as they all faced unparalleled logistical challenges. 20

## Chart 6. Annual U.S. coffee imports from the largest coffee supplying countries, 2017–22



Click legend items to change data display. Hover over chart to view data.

Note: Other Latin American countries included are Guatemala, Honduras, Mexico, Nicaragua, and Peru. One bag of coffee is 60 kilograms. Kilograms were converted to tons.

Source: U.S. Census Bureau.

**View Chart Data** 

# Colombia: fiscal policies during pandemic incite protests and devastate country's coffee export capabilities

Colombia is the second leading coffee supplier to the United States and third leading coffee producer in the world—contributing approximately 19 percent of U.S. coffee imports and 8 percent of world coffee production in 2021. From 2017 to 2019, U.S. coffee import volumes from Colombia had been relatively stable, but then significantly regressed in 2020 and stayed at that level in 2021 and 2022. (See chart 6.)

The COVID-19 pandemic had a devastating impact on Colombia's ability to export coffee. Following lockdowns, Colombia experienced a national strike against a COVID-19 pandemic reform plan proposed by the president to raise taxes on water, gas, electricity, and food to stabilize public and fiscal debt accumulated during the pandemic. As a result, from April 2021 to August 2021, demonstrators halted commerce and set up road blockades. The Colombian coffee industry was dramatically destabilized as Buenaventura, the port from which 60 percent of coffee is exported, was shut down for 48 days. Other ports were also shut down or operating at limited capacity. Many farmers could not transport coffee to milling plants or purchasing centers. And although the bill was withdrawn in May 2021, 1 month after it was introduced, protests continued through late summer. When the ports finally reopened, there was a backlog of inbound and outbound traffic, and shipments rolled out months later due to congestion and scarcity of bookings.

The disorder resulted in cancellation of coffee contracts for Colombian exporters, as they failed to deliver 1 million bags in 2021 and the industry was forced to seek government bailout funds. Meanwhile, international roasters searched for other origins from which to import green coffee. Ultimately, the United States saw a 16-percent decrease in Colombian coffee supplies from 2019 to 2021, with a slight edge up in 2022.

# Vietnam: travel restrictions during pandemic result in workforce declines and decreased exports

Vietnam is the third leading coffee supplier to the United States and second leading coffee producer in the world—contributing to approximately 9 percent of U.S. coffee imports and 19 percent of world coffee production in 2021. U.S. import volumes from Vietnam sustained yearly decreases. (See chart 6.)

In part, U.S. import levels from Vietnam contracted because of growing competition from other origins, such as Indonesia and Brazil, which have weakened Vietnam's export volumes over time. The COVID-19 pandemic further hindered U.S. imports from Vietnam. As a series of COVID-19-related stringent travel restrictions were imposed throughout dozens of cities in Vietnam, the country's workers were affected. In the summer of 2021, during the Delta variant surge, the government imposed consecutive months of 24-hour lockdowns with workers being held in their work dormitories. Subsequently, a mass exodus of migrant workers materialized once orders were lifted. Migrants rushed out from industrial provinces and back to their hometowns because of fears they would get locked down at their workplaces again if there were another wave of infections. As a result, the Vietnamese workforce suffered a serious decline, as many refused to go back to work regardless of the incentives or promises of higher wages.

The decline of the workforce compounded the COVID-19 induced restrictions on the country's processing and transportation capabilities, resulting in Vietnam's record gross domestic product slump in the third quarter of 2021. Coffee and other goods faced historic obstacles in reaching their port destinations within Vietnam. This resulted in the United States seeing a 16-percent decrease in Vietnamese coffee supplies from 2019 to 2021 that changed little in 2022.

## Indonesia: insufficient infrastructure and pandemic woes lead to fewer coffee exports

Indonesia is the sixth leading coffee supplier to the United States and the sixth largest coffee producer in the world—contributing to approximately 3 percent of U.S. coffee imports and 6 percent of world coffee production in 2021. Since 2017, U.S. coffee import volumes from Indonesia have been declining. (See chart 6.) The reduction in imports is partly because Indonesia's maritime logistics have long been insufficient for supporting the country's needs. Indonesia has a scarcity of ports and international cargo facilities. The shortfalls have made Indonesia one of the most expensive import and export territories in Southeast Asia. And since the onset of the pandemic, import levels of coffee to the United States from Indonesia have been strikingly low.

In 2020, there were plans to expand Indonesia's shipping capacity by upgrading existing facilities and building new ones. The Sea Toll Road Program would have added 24 shipping sites across the country. Due to the COVID-19 pandemic, the project was delayed. What followed in 2021 was a severe container shortage and skyrocketing freight costs. The cost to export coffee from Indonesia sharply increased during this time. Factors diverting U.S. coffee demand

from Asian countries included the high cost of shipping and the dearth of shipping containers.  $\frac{28}{2}$  Ultimately, the United States saw a 15-percent decrease in Indonesian coffee supplies from 2019 to 2021, with a return to 2019 levels in 2022.

## Uncertain future: better or bitter?

Throughout 2021 and 2022, the United States experienced dramatic import price increases for a product that is an essential part of the daily lives of many Americans. The combination of record-low coffee production and pandemic-induced supply chain obstacles ultimately made for a bitter-tasting brew as import coffee prices reached historic levels.

By the end of 2022, coffee traders were optimistic about seeing some stabilization in the market as they placed their bets on the expectation of the 2022–23 season being an on-year in the coffee production cycle, and the rise of breakbulk shipping as a solution for the lack of containers. At the time, rapidly decreasing prices seemed to confirm that expectation. However, at the start of 2023, prices made an unexpected turnaround to the high levels that were last seen in the fall of 2022. Throughout 2023, high U.S import coffee prices persisted, hovering just below 2022's high price record, as Brazil continues to deal with the aftermath of the impact of severe frosts, high temperatures, and the below-average-rainfall that occurred in 2021, and as Colombian coffee yields remain low because of growers' decision to limit fertilizer use due to its price spike. Further, there is now a shortage of coffee laborers in Central America as many have abandoned the region in search of better opportunities. A peek beyond the numbers reveals the extraordinary experiences Brazil, Colombia, Vietnam, and Indonesia continue to face since the pandemic.

This **Beyond the Numbers** article was prepared by Angela Cantor, economist in the Office of Price and Living Conditions, U.S. Bureau of Labor Statistics. Email: <a href="mailto:cantor.angela@bls.gov">cantor.angela@bls.gov</a>; telephone: (202) 691-7922.

If you are deaf, hard of hearing, or have a speech disability, please dial 7-1-1 to access telecommunications relay services. This article is in the public domain and may be reproduced without permission.

#### SUGGESTED CITATION:

Angela Cantor, "Historic coffee prices percolated after a bitter global supply crisis," *Beyond the Numbers: Prices & Spending*, vol. 12, no. 13 (U.S. Bureau of Labor Statistics, September 2023), <a href="https://www.bls.gov/opub/btn/volume-12/historic-coffee-prices-percolated-after-a-bitter-global-supply-crisis.htm">https://www.bls.gov/opub/btn/volume-12/historic-coffee-prices-percolated-after-a-bitter-global-supply-crisis.htm</a>

Notes

#### Notes

- 1 "Coffee continues record high popularity and post-COVID recovery," *National Coffee Association*, September 29, 2022, <a href="https://www.ncausa.org/Newsroom/Coffee-continues-record-high-popularity-and-post-COVID-recovery">https://www.ncausa.org/Newsroom/Coffee-continues-record-high-popularity-and-post-COVID-recovery</a>.
- <sup>2</sup> For data access, select BEA end use import indexes under index type and EIUIR00000 green coffee under the items catergory followed by clicking on the "get data" button to retrieve data at <a href="https://data.bls.gov/PDQWeb/ei">https://data.bls.gov/PDQWeb/ei</a>.
- 4 "Coffee: world markets and trade", (U.S. Department of Agriculture, December 10, 2020), <a href="https://downloads.usda.library.cornell.edu/usda-esmis/files/m900nt40f/377214491/z029pw759/coffee.pdf">https://downloads.usda.library.cornell.edu/usda-esmis/files/m900nt40f/377214491/z029pw759/coffee.pdf</a>.
- <sup>6</sup> "Coffee, consumers, & COVID-19: road map to recovery," *National Coffee Association*, June 9, 2021, <a href="https://www.ncausa.org/Research-Trends/Market-Research/NCDT/Coffee-Consumers-COVID-19-Road-Map-to-Recovery">https://www.ncausa.org/Research-Trends/Market-Research/NCDT/Coffee-Consumers-COVID-19-Road-Map-to-Recovery</a>.
- <sup>7</sup> Tatiana Freitas, "Coffee reserves plunge to lowest in more than two decades," *Bloomberg*, February 7, 2022, <a href="https://www.bloomberg.com/news/articles/2022-02-07/world-coffee-reserves-plunge-to-lowest-in-more-than-two-decades?leadSource=uverify%20wall.">https://www.bloomberg.com/news/articles/2022-02-07/world-coffee-reserves-plunge-to-lowest-in-more-than-two-decades?leadSource=uverify%20wall.</a>)#xj4y7vzkg.
- Emiko Terezano, "Coffee hits 10-year high as shipping bottlenecks squeeze supply," *Financial Times*, December 8, 2021, <a href="https://www.ft.com/content/41251b3f-4ef8-4000-9299-df19fffd1c9c">https://www.ft.com/content/41251b3f-4ef8-4000-9299-df19fffd1c9c</a>.
- <sup>9</sup> Juan Fiallos, "Coffee annual: Honduras," (U.S. Department of Agriculture, June 2022), <a href="https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName">https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName</a>? fileName=Coffee%20Annual Tegucigalpa Honduras HO2022-0005.pdf.
- 10 "Coffee: world markets and trade", (U.S. Department of Agriculture, December 2022), https://downloads.usda.library.cornell.edu/usdaesmis/files/m900nt40f/9c67xz908/kp78ht90h/coffee.pdf.
- 11 Sergio Barros, "Brazil's semi-annual coffee report," (U.S. Department of Agriculture, November 16, 2021), <a href="https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=Coffee%20Semi-annual Sao%20Paulo%20ATO Brazil 11-15-2021.pdf">https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=Coffee%20Semi-annual Sao%20Paulo%20ATO Brazil 11-15-2021.pdf</a>.
- 12 Jaimie Wisniowski, "American coffee: How do Americans drink coffee?" Coffee Affection, January 25, 2023, https://coffeeaffection.com/american-coffee/.
- 13 Roberto Samora, "Brazil arabica coffee could invert cycle for larger 2023 crop," *Reuters*, May 12, 2022, https://www.reuters.com/article/brazil-coffee-crops/brazil-arabica-coffee-could-invert-cycle-for-larger-2023-crop-idUSL5N2X48RN.
- 14 "Brazil: Frosts heighten supply concerns," (U.S. Department of Agriculture, December 2021), https://downloads.usda.library.cornell.edu/usdaesmis/files/m900nt40f/9g54zj36v/hx11zg97f/coffee.pdf.
- 15 Peter Millard, Fabiana Batista, Lesslie Patton, and Bloomberg, "Fire, frost and drought are ravaging the country that makes breakfast for the world," *Fortune*, September 28, 2021, <a href="https://fortune.com/2021/09/28/fire-frost-and-drought-are-ravaging-the-country-that-makes-breakfast-for-the-world/">https://fortune.com/2021/09/28/fire-frost-and-drought-are-ravaging-the-country-that-makes-breakfast-for-the-world/</a>.
- 16 Nayara Figueiredo and Marcelo Teixeira, "Freak Brazil frost hits heart of coffee belt, damaging crops," *Reuters*, July 21, 2021, https://www.reuters.com/world/americas/freak-brazil-frost-hits-heart-coffee-belt-damaging-crops-2021-07-21/.

- 17 Bethany Haye, "Coffee farmers face doubling of fertilizer costs," *STiR*, October 16, 2022, <a href="https://stir-tea-coffee.com/tea-coffee-news/coffee-farmers-face-doubling-of-fertilizer-costs/">https://stir-tea-coffee.com/tea-coffee-news/coffee-farmers-face-doubling-of-fertilizer-costs/</a>.
- 18 For data access, select BEA end use import indexes under index type and EIUIR12510 fertilizers, pesticides & insecticides under the items catergory followed by clicking on the "get data" button to retrieve data at <a href="https://data.bls.gov/PDQWeb/ei">https://data.bls.gov/PDQWeb/ei</a>.
- 19 Sarah Charles, "The fertiliser crisis will affect coffee yields and farmer incomes for years," *Coffee Intelligence*, February 22, 2023, https://intelligence.coffee/2023/02/fertiliser-crisis-coffee-yields/.
- 20 Evgenia Ustinova and Katherine Woody, "Brazilian agricultural sector thrives despite COVID-19," (U.S. Department of Agriculture, June 12, 2020), <a href="https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=Brazilian%20Agricultural%20Sector%20Thrives%20Despite%20COVID-19%20Pandemic%20\_Brazilia\_Brazil\_06-11-2020.">https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=Brazilian%20Agricultural%20Sector%20Thrives%20Despite%20COVID-19%20Pandemic%20\_Brazilia\_Brazil\_06-11-2020.</a>
- 21 "Coffee farmers and exporters affected by weeks of protests in Colombia," *Cafelumbus*, August 21, 2021, <a href="https://cafelumbus.com/2021/08/21/coffee-farmers-and-exporters-affected-by-weeks-of-protests-in-colombia/">https://cafelumbus.com/2021/08/21/coffee-farmers-and-exporters-affected-by-weeks-of-protests-in-colombia/</a>.
- 22 "Traders and roasters face losses as Colombian coffee farmers default on deliveries," *Allegra World Coffee Portal*, October 12, 2021, <a href="https://www.worldcoffeeportal.com/Latest/News/2021/October/Traders-and-roasters-face-losses-as-Colombian-coff">https://www.worldcoffeeportal.com/Latest/News/2021/October/Traders-and-roasters-face-losses-as-Colombian-coff</a>.
- 23 Thanh Vo, "Coffee annual," (U.S. Department of Agriculture, May 14, 2021), <a href="https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName">https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName</a>? fileName=Coffee%20Annual Hanoi Vietnam 05-15-2021.pdf.
- 24 Govi Snell, "Fears of COVID surge in Vietnam as workers flee Ho Chi Minh City," *Aljazeera*, October 6, 2021, <a href="https://www.aljazeera.com/news/2021/10/6/fears-of-covid-surge-in-vietnam-as-workers-flee-ho-chi-minh-city">https://www.aljazeera.com/news/2021/10/6/fears-of-covid-surge-in-vietnam-as-workers-flee-ho-chi-minh-city</a>.
- 25 Sui-Lee Wee and Vo Kieu Bao Uyen, "As holidays near, bosses try to coax Vietnam's workers back to factories," *New York Times*, November 15, 2021, <a href="https://www.nytimes.com/2021/11/12/business/vietnam-workers-covid.html">https://www.nytimes.com/2021/11/12/business/vietnam-workers-covid.html</a>.
- 26 "Report nn the Covid-19 impacts on labour and employment situation in the third quarter of 2021," (Vietnam's General Statistics Office, December 10, 2021), https://www.gso.gov.vn/en/data-and-statistics/2021/10/report-on-the-covid-19-impacts-on-labour-and-employment-situation-in-the-third-quarter-of-2021/, and

Himani Sarkar, editor, "We are tired': Workers flee Vietnam's largest city as long lockdown eases," *Reuters*, October 4, 2021, <a href="https://www.reuters.com/world/the-great-reboot/we-are-tired-workers-flee-vietnams-largest-city-long-lockdown-eases-2021-10-04/">https://www.reuters.com/world/the-great-reboot/we-are-tired-workers-flee-vietnams-largest-city-long-lockdown-eases-2021-10-04/</a>.

- 27 Geoff De Freitas, "High container costs set to hamper Indonesia's post-pandemic recovery," *HKTDC Research*, June 6, 2022, <a href="https://research.hktdc.com/en/article/MTA2OTk3MTY10Q">https://research.hktdc.com/en/article/MTA2OTk3MTY10Q</a>.
- 28 Gregory LaRocca, "Rising maritime freight shipping costs impacted by Covid-19," (U.S. International Trade Commission, April 2021), <a href="https://www.usitc.gov/publications/332/executive\_briefings/ebot\_greg\_larocca\_freight\_costs\_weighing\_covid\_pdf.pdf">https://www.usitc.gov/publications/332/executive\_briefings/ebot\_greg\_larocca\_freight\_costs\_weighing\_covid\_pdf.pdf</a>.
- 29 "A Solution for these times: Breakbulk," Sucafina Specialty, August 15, 2022, https://www.sucafina.com/na/news/a-solution-for-these-times-breakbulk.

Publish Date: Friday, September 22, 2023

U.S. BUREAU OF LABOR STATISTICS Division of Information and Marketing Services PSB Suite 2850 2 Massachusetts Avenue NE Washington, DC 20212-0001

Telephone:1-202-691-5200\_ Telecommunications Relay Service:7-1-1\_ www.bls.gov/OPUB Contact Us