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On-Year for US Pistachios Still On

2020/21-2025/26 Market Outlook

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Summary

- US pistachio production will most likely exceed the 1bn-pound milestone during the 2020 on-year, setting a new production record. However, the crop may not be as large as many previously expected, as some issues during bloom impacted yield prospects. Here, we provide a six-year production outlook.
- Demand for pistachios – domestic and international – is set to keep up with the supply expansion. Although total demand may be impacted by the global economic downturn amid the Covid-19 pandemic, the demand outlook is still favorable in the longer run.
- International reference prices for pistachios have remained mostly steady through pandemic times. We expect average returns to the US grower to remain relatively stable through 2025/26, but potential volatility is always looming, particularly during these unprecedented times.
- We present a price outlook, assuming alternative market conditions, to showcase the sensitivity of the six-year average price to a hypothetical deeper-than-expected global economic recession and to alternative market share of US pistachios in Middle Eastern markets.

Demand and Shipments Keeping Pace in 2019/20

After reaching record shipments in 2018/19, pistachio sales – as a proportion of marketable supplies – are at similar year-on-year (YOY) levels in 2019/20. With three quarters of the 2019/20 marketing year already on the books, total US pistachio shipments are down about 22%, while marketable supplies – marketable crop plus carry-in – were 21% lower YOY during the current off-year season. Ending stocks are likely to be at multi-year lows.

Despite substantially lower availability, domestic shipments through May are down only 2% YOY in 2019/20. Pistachios and other tree nuts are well positioned as a source of healthy plant-based protein, with a demand that is set to continue to grow. The powerful combination of healthfulness, taste, and convenience will continue to be relevant demand drivers for pistachios in both domestic and export markets.

Due to some logistics bottlenecks related to the Covid-19 outbreak, pistachio export sales slowed down, particularly by early spring. Exports during the 2019/20 marketing year through May were down about 30% YOY, as industry statistics show. While consumption has been temporarily lower, consumer demand in key export markets will continue to expand in the longer run, according to industry estimates. Also, in comparing year-on-year shipments, we should always consider the alternating nature of pistachio production and availability. Prices have remained mostly steady amid a virus-stressed environment, and now it is time to think about this year's harvest.

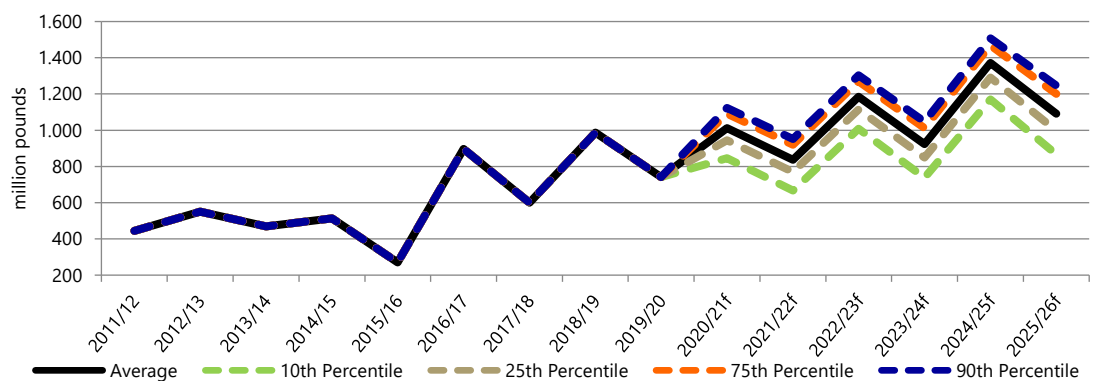
Will US Production Set a New Record in 2020/21?

The 2020/21 season was set to be an on-year for the US crop, after an above-average off-year harvest during the 2019/20 marketing year. Initially, some industry estimates put the record-setting crop up to 1.2bn pounds. Chill hours were fair, but growers reported issues during the pollination stage in some pistachio-growing regions in California, which may be reflected in

lower-than-expected yields this year. A crop over 1.1bn pounds is now less likely, but still a possibility.

We updated our production estimates from our proprietary analytical tool. With a 10% probability, the US pistachio crop could surpass 1.12bn pounds in 2020/21, according to our estimates. By the same token, our average production estimate is 1.01bn pounds, with a 50% chance of being between 945m pounds and 1.09bn pounds. We estimate the probability of having a record-setting crop this year to be about 80%. This will depend on final yields. As more pistachio acreage comes into production in the following years, California production is set to continue to grow. (For pistachio production expansion in the San Joaquin Valley of California, water availability and related regulations will continue to be the main limiting factors.) We expect bearing area to be about 372,000 acres in 2024/25, close to 30% higher than the bearing acreage in 2019/20. For 2024/25, our average production estimate is just shy of 1.4bn pounds (see *Figure 1*). Our percentile production estimates are non-symmetric, as downward yield variability is usually higher than upward yield variability under extremely favorable conditions, due to potential weather-related shocks.

Figure 1: Historical US pistachio production and production forecasts, 2011/12-2025/26f



Source: Administrative Committee for Pistachios, Rabobank 2020

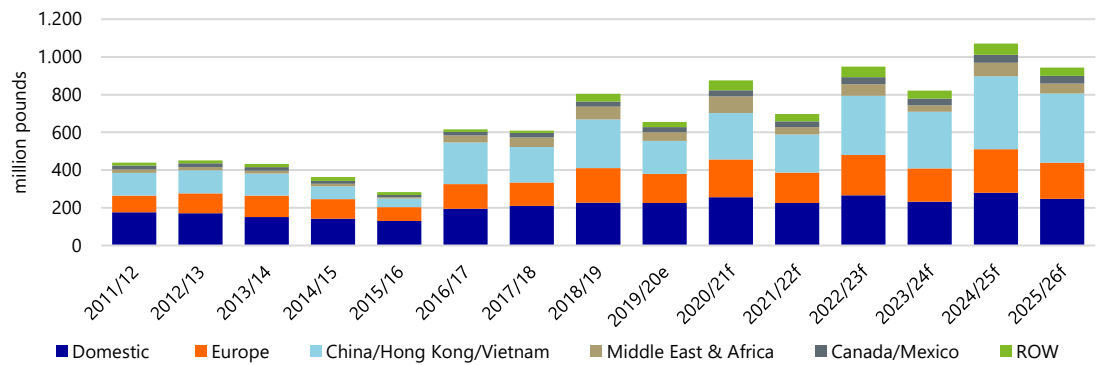
Demand Set to Keep up With Supply Expansion

During 2018/19, US export shipments reached a record high, despite retaliatory tariffs on US pistachios going into China. As a matter of fact, US pistachio exports directly to China increased about 27% YOY in 2018/19. Combined shipments to China/Hong Kong/Vietnam jumped 36% YOY during the aforementioned marketing year, exposing a successful marketing story.

The story in 2019/20 will be different, amid lower pistachio availability and supply chain disruptions due to the Covid-19 pandemic. The coronavirus outbreak in China disrupted trade and some food consumption during the high-pistachio-demand Chinese New Year. Moreover, the market window between the 2019/20 US pistachio harvest and the Chinese New Year was narrower than usual, due to an earlier holiday this year. US pistachio exports to Asian markets will be down about 38% YOY, while exports to Europe will be off about 19% YOY during 2019/20.

We estimate the demand for US pistachios for each of the main markets as a function of prices, exchange rates, per capita GDP, and other standard variables. For 2020/21, our average estimate has shipments up about 33% YOY, to about 875m pounds (see *Figure 2*). By the end of our projected period, we anticipate China/Hong Kong/Vietnam to remain the main destination market. As a baseline, we assume that retaliatory Chinese tariffs will last this marketing year and the next, being eliminated for the remainder of the period. Shipments to Europe will likely represent slightly over 20% of total US shipments by 2024/25. These are only our average shipment estimates, without shipment percentiles or inventory adjustments/losses.

Figure 2: US pistachio shipments and average shipment estimates by market, 2011/12-2025/26f



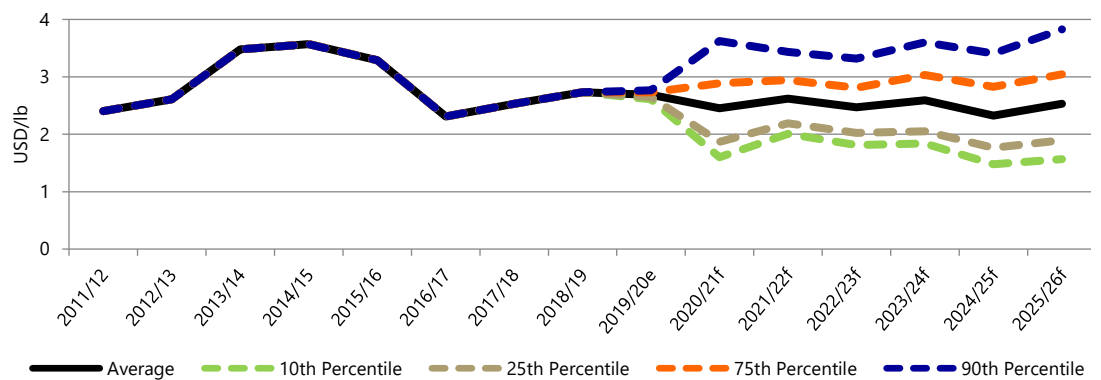
Source: Administrative Committee for Pistachios, Rabobank 2020

For a more detailed discussion on domestic and international demand factors for US pistachios, please see the Rabobank report [Will US Pistachios Continue to Crack the Market?](#)

Relatively Favorable Pistachio Price Outlook, But...

Our six-year average return to the grower for the 2020/21-2025/26 period is about USD 2.50/lb in-shell pound, including base price and bonuses. For the 2020/21 marketing year, we expect an average return to the grower of USD 2.45/lb, with significantly higher price risk amid a global economic downturn in 2020, a strong US dollar, production uncertainty, and other risks. For 2021/22 – an off-year with expected global economic recovery – our average estimated grower return is USD 2.62/lb, with a 50% probability of being between USD 2.19/lb and USD 2.94/lb (see *Figure 3*). Our average estimated return to the grower slightly declines over the projected period, but, under standard economic conditions, it will likely remain at profitable levels for growers.

Figure 3: Historical and forecast average US pistachio returns to the grower, 2011/12-2025/26f



Source: Administrative Committee for Pistachios, Rabobank 2020

Shipment and Demand Disruptions Can Happen

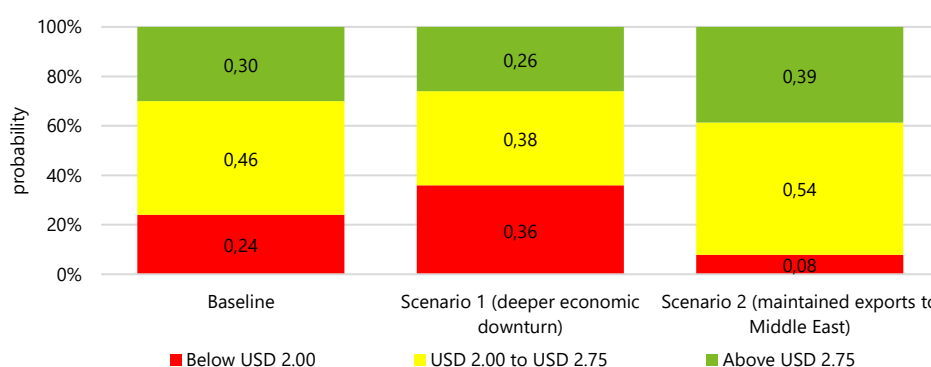
Under baseline conditions, we assumed a global GDP decline of almost 3% YOY during 2020, with the global economy resuming the growth path from 2021 and beyond. Our baseline estimates show that there is a 24% probability that the six-year average price during 2020/21-2025/26 will be below USD 2.00/lb, and a 46% chance of that being between USD 2.00/lb and USD 2.75/lb.

Under alternative scenario one, we arbitrarily stressed the economic performance, with global GDP declining 6% YOY during 2020 and sluggish economic growth in 2021. Under this scenario, the demand for US pistachios – and therefore prices – would be under pressure. We estimate that, under this hypothetical scenario, the probability of observing a six-year average price below USD 2.00/lb would be 36%, with a 38% chance of that being between USD 2.00/lb and

USD 2.75/lb, and slimmer chances of getting higher prices. Lasting strength of the US dollar may also have significant negative consequences on the price outlook.

In a more positive scenario, we maintained the baseline economic performance, but assumed stronger demand for US pistachios in Middle Eastern markets, similar to what was observed during the previous two seasons. This is regardless of the Iranian crop size. In other words, we evaluated the scenario wherein Middle Eastern consumers prefer and buy US pistachios due to quality and marketing efforts. Thus, the probability of having a six-year average price below USD 2.00/lb declines to about 8%, while the probability of having average prices for the 2020/21-2025/26 period between USD 2.00/lb and USD 2.75/lb increases to about 54% (see Figure 4). Increasing production in other regions, such as Iran and Turkey, has the potential to interfere with the occurrence of this scenario, as they would become the default providers to Far East markets amid current trade tensions.

Figure 4. Probability ranges for average returns to US pistachio growers under alternative scenarios, 2020/21f-2025/26f



Source: Rabobank 2020

Some US pistachios exported to the Middle East find their way to India and other markets, according to industry sources. India has been a traditional market for Iranian pistachios, but US pistachios are recognized and preferred as better looking, with more consistent quality and food safety. "The Indian consumer buys with his eyes," an Indian pistachio trader stated at an industry forum earlier in 2020. This is a quality-conscious market, where consumers are willing to pay a significant price premium based on product characteristics, such as color and homogeneity.

Pistachio Positioning

The US is already the largest global supplier of pistachios. Consistent food quality and food safety of US pistachios have been key to having access to new markets. Marketing ahead of production and continued building of strategic relationships with importers and roasters will be increasingly relevant in order to successfully sell the expanding US pistachio crop.

Recent industry research has found supporting evidence of the healthfulness of pistachios and of the great-quality protein they provide. According to some research, pistachios provide a better quality protein than quinoa, chickpeas, and other foods. Industry representatives estimate that these findings will be a game-changer for the industry, as promotional efforts will focus on these nutritional benefits more heavily going forward. Continued industry-wide efforts on product innovation and on promoting pistachios as a healthy snack and ingredient in desserts and other foods will also continue to be relevant demand-shifting factors.

Imprint

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