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Is There Price Fixing in the U.S. Peanut Industry?

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In 2020, U.S. peanut growers filed a class action antitrust lawsuit against the three largest peanut shellers in the country. The plaintiffs alleged that these peanut shellers engaged in a price-fixing conspiracy aiming to suppress and stabilize prices of peanuts paid to peanut growers beginning in 2014 and thus violated Section 1 of the Sherman Act (1890). This article examines competition (business conduct) issues revealed during the recent Peanut Farmers Antitrust Litigation.

U.S. Peanut Industry: Structure and Peanut Marketing

In the United States, 6,379 peanut growers sell raw peanuts to three large and a group of small peanut shellers (USDA NASS, 2022), which clean, shell, and sort the peanuts before selling them to food manufacturers (American Peanut Council, 2022). Birdsong and Golden Peanut are the two largest peanut shellers, with a combined market share of approximately 80% (In Re Peanut Farmers Antitrust Litigation, 2020). Olam is the third largest peanut sheller, with a market share of at least 10%. Approximately one dozen smaller peanut shellers comprise the remaining market share. Some of these smaller peanut shellers are cooperatives of peanut growers.

Since the peanut industry was deregulated in 2002 (the peanut quota buyout program), Marketing Assistance Loans (MALs) provided by the federal government and option contracts with peanut shellers have been the primary marketing options for peanut growers (Hollis, 2014). The U.S. Department of Agriculture MAL Program provides interim financing in the form of a government loan to producers of agricultural commodities covered by the program for up to 9 months following the harvest, when commodity prices are typically lowest (Schnepf, 2016). MAL rates act as price floors, practically ensuring that agricultural producers receive a minimum price equal to the MAL rate. Since 2002, the MAL rate for peanuts has been $355 per ton or 17.75 cents per pound of peanuts.

MALs are nonrecourse loans (Schnepf, 2019). Agricultural producers can either repay the loan principal and interest or forfeit their agricultural commodities to the Commodity Credit Corporation. In the latter case, the U.S. Department of Agriculture takes ownership of forfeited commodities. When peanut growers have their peanuts under MALs, if market prices are high (above the MAL rate), then peanut growers can sell peanuts in the market and repay the MAL (Schnepf, 2016). If peanut prices remain low (below the MAL rate), peanut growers may keep the MAL proceeds and allow the U.S. Department of Agriculture to take ownership of their peanuts. The total MAL proceeds received by agricultural producers under the MAL Program at the time of enrollment (after the harvest) are approximately equal to the statutory established loan rate for a particular commodity multiplied by the quantity of the commodity placed under the loan.

Before or during the peanut production season, many peanut growers sign option contracts with peanut shellers to lock in the peanut price and quantity specified in the contracts, while peanut delivery is after the harvest in the fall (Rural Advancement Foundation International-USA, 2007). Peanut growers own peanuts that they commit to option contracts. Due to the design of option contracts, peanut growers must be enrolled in the MAL Program. Under option contracts, peanut shellers have the exclusive right (option) to purchase peanuts out of the MALs of peanut growers signing these option contracts. For peanut shellers, option contracts are not an obligation to purchase peanuts. If a peanut sheller decides to not exercise the option contract, a peanut grower keeps the option premium. If the peanut sheller exercises the option contract, the sheller buys peanuts out of the MAL of the peanut grower at the current loan repayment rate. The sheller makes this payment (repays the loan on a grower's behalf) to the government. The peanut grower receives the option premium from the peanut sheller and the MAL proceeds originally received from the government when the grower signed up for the program.

The peanut pricing system included in option contracts has two main components: MAL repayment rate determined by the government and option premium (Adjemian et al., 2016). The MAL rate varies depending on peanut variety (Runner, Valencia, Virginia, or Spanish) and segregation (Segregation 1, 2, or 3); the latter reflects the overall quality of peanuts. In addition, the MAL rate for Segregation 1 is adjusted for premiums and discounts for the presence and/or absence of various peanut quality characteristics (USDA FSA, 2019).

The option premiums set by peanut shellers in option contracts vary depending on peanut variety, whether peanuts are irrigated or nonirrigated, quantity of peanuts, quality of peanuts (Segregation 1, 2, or 3), and additional requirements for specific peanut quality characteristics affecting quality of processed peanut products (Revoredo Giha, Nadolnyak, and Fletcher, 2005; Rural Advancement Foundation International-USA, 2007). The overall industry conditions affecting peanut shellers' decisions on the amount of option premiums to offer each year include peanut stock already available from the previous year, expected peanut production, and expected prices of competing crops (such as corn, cotton, and soybeans) that peanut growers may decide to plant (Adjemian et al., 2016).

Alleged Input (Peanut) Price Fixing Cartel

In May 2020, peanut growers filed a class action antitrust lawsuit against the three largest peanut shellers in the county—Birdsong, Golden Peanut, and Olam—alleging that these peanut shellers conspired and colluded to decrease and stabilize prices paid for Runner peanuts beginning in 2014. The plaintiffs argued that the following peanut industry conditions and conduct of the three largest peanut shellers (defendants) made the peanut price-fixing conspiracy economically plausible (*In Re Peanut Farmers Antitrust Litigation [In Re PFAL]*, 2020).

1. The peanut shelling stage of the peanut supply chain is highly concentrated and therefore susceptible to effective collusion (*In Re PFAL*, 2020: paragraphs 4, 52–55). The combined market share of Birdsong and Golden Peanut, the two largest peanut shellers, comprises 80%–90% of the national peanut shelling market. The market share of Olam, the third largest peanut sheller, is at least 10%.

2. Unlike many other agricultural industries, there are no spot and futures markets for peanuts, which indicates a lack of price transparency and efficient price discovery (*In Re PFAL*, 2020: paragraphs 8, 52, 56–58). Futures markets provide critical price information that agricultural producers use to make planting, production, and pricing decisions. Consequently, the peanut industry is characterized as a thin market, lacking market and price transparency, which makes it difficult for peanut growers to make informed production and pricing decisions.

3. Prior to 2014, peanut prices fluctuated, reflecting changes in peanut market conditions. Adverse weather affecting the peanut industry between 2011 and 2013 made it challenging for peanut shellers to manage risks and plan their shelling operations (*In Re PFAL*, 2020: paragraphs 6, 92–93). For example, dramatic changes in peanut production caused peanut prices paid by peanut shellers for Runner peanuts to increase from $448 per ton to $736 per ton in 3 years. This situation created incentives for peanut shellers to engage in a price-fixing conspiracy to suppress and stabilize Runner peanut prices paid to peanut growers.

   Since January 2014, peanut prices remained low and stagnant (*In Re PFAL*, 2020: paragraphs 5, 86–91, 118–120). Peanut prices did not fluctuate in response to changes in peanut production costs, supply, demand, or weather conditions. For example, in 2018, Hurricane Michael (Category 5) affected peanut crops in Florida, Georgia, and Alabama, leading to significant peanut supply disruptions, which was expected to cause peanut prices to fluctuate. Contrary to these expectations, peanut prices remained flat. According to the U.S. Department of Agriculture National Agricultural Statistics Service, beginning in 2014, Runner peanut prices received by peanut growers were lower and less volatile than those reported for the previous several years. The artificially low and stable peanut prices reflected effective collusion among peanut shellers beginning in January 2014.

4. Peanut shellers over-reported peanut inventory to the U.S. Department of Agriculture to create a false impression of a peanut oversupply and to use this situation to offer artificially low Runner peanut prices to peanut growers (*In Re PFAL*, 2020: paragraphs 6, 59–63, 92–99). For example, in July 2016, the Peanut Stocks and Processing Report (compiled and published by NASS) overstated the peanut supply by more than 750,000 tons, a substantial amount. These monthly reports rely on data submitted by peanut shellers on a voluntary and confidential basis. The U.S. Department of Agriculture later announced the overstatement and revised relevant reports. In addition, peanut shellers under-reported peanut prices to the U.S. Department of Agriculture to further suppress and stabilize Runner peanut prices (*In Re PFAL*, 2020: paragraph 6).

5. Peanut shellers offered practically identical option contracts for purchasing peanuts from peanut growers (*In Re PFAL*, 2020: paragraphs 7, 97–99). These contracts were offered on the same day or within a few days and often after one of the industry meetings sponsored by these peanut shellers. For example, after the defendants' executives had attended industry meetings at the beginning of 2016, these peanut shellers announced a contract peanut price of $375 per ton on the same day later that spring.

6. The defendants' executives attended various industry meetings on a regular basis, where they had opportunities to discuss and exchange private market and price information to facilitate and enforce their price-fixing conspiracy (*In Re PFAL*, 2020: paragraphs 68–79). In addition, peanut shellers exchanged private price information using phone calls. For example, the defendants are members of the American Peanut Shellers Association, the American Peanut Council, and the Peanut and Tree Nut Processors Association. Membership in these top industry associations provided opportunities to communicate and collude with one another.

The peanut growers (plaintiffs) claimed that the alleged peanut price-fixing cartel was a violation of Section 1 of the Sherman Act (1890). As a result, they received peanut prices that were lower than competitive prices and were underpaid. Section 1 of the Sherman Act prohibits contracts, combinations, and conspiracies in restraint of trade in interstate commerce. Price-fixing agreements (cartels or conspiracies) are examples of the restraints of trade that are most damaging to the market. Price-fixing agreements aim to increase, decrease, or fix (stabilize) product prices and can be verbal, written, or inferred from the conduct of firms (Federal Trade Commission, 2024).

The market effects of a typical *input* price-fixing cartel are a decrease in the product quantity purchased by the cartel members (buyers of the product), a decrease in the product price paid to the sellers of this product, a welfare transfer from the sellers to the buyers (underpayment), and a deadweight loss, due to which there are sellers who do not sell the product because of lower prices (Bolotova, 2023). The underpayment is the basis for damages in the *input* price-fixing cartel cases.

The underpayment measured in dollars per pound of peanuts is the difference between the peanut price received by peanut growers in the cartel period and the peanut price they would have received absent the cartel. The total dollar underpayment attributed to all peanut growers is the underpayment measured in dollars per pound multiplied by peanut quantity sold by peanut growers during the cartel period. Underpayments are calculated using transaction prices obtained from the defendants.

For a violation of the Sherman Act, plaintiffs—peanut growers—were entitled to recover treble damages (3 times the underpayment) under the Clayton Act (1914). The peanut shellers settled the lawsuit with peanut growers at the end of 2020 and beginning of 2021. The monetary settlements included $7.75 million paid by Olam, $45 million paid by Golden Peanut, and $50 million paid by Birdsong (*In Re Peanut Farmers Antitrust Litigation* webpage, 2022). While they agreed to pay monetary damages, the peanut shellers did not admit any wrongdoing in their settlement agreements with peanut growers (*In Re Peanut Farmers Antitrust Litigation Notice of Class Certification*, 2022).

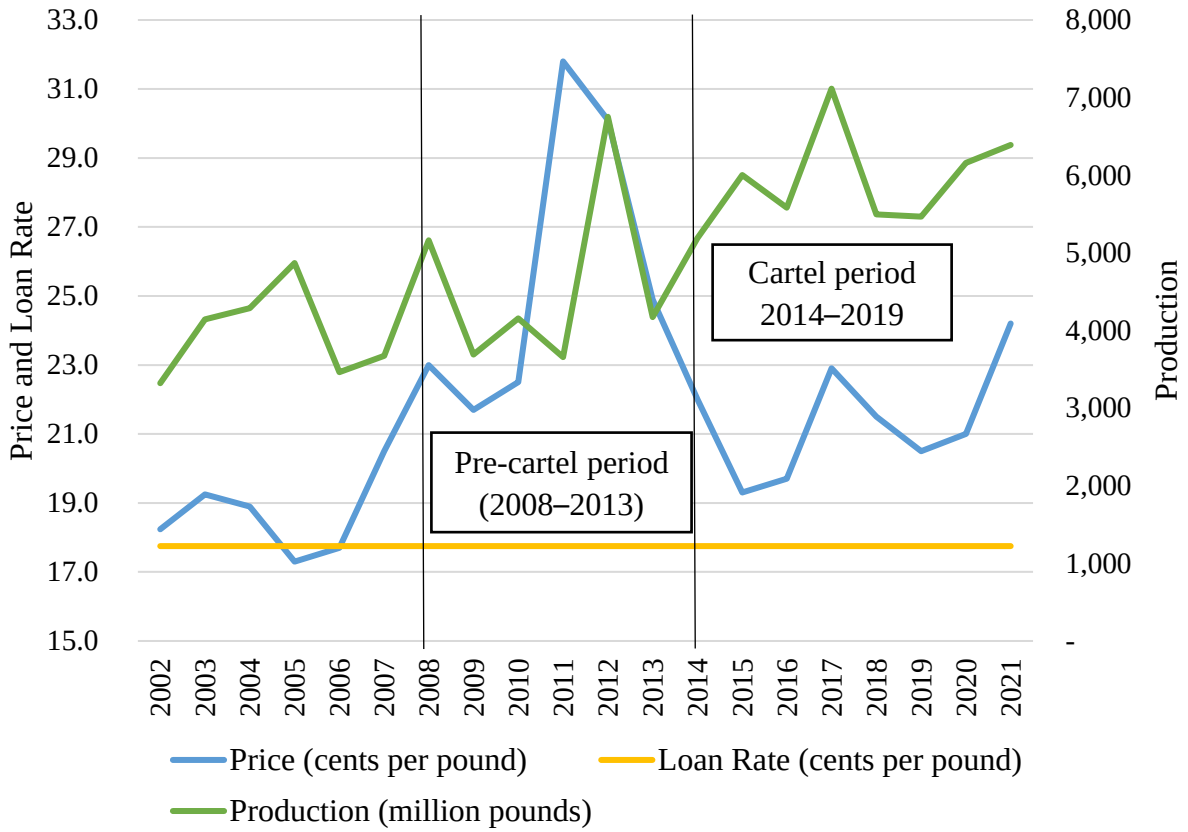
Peanut Production, Prices, Profitability, and Demand

Figure 1 depicts the yearly peanut production, prices, and Marketing Assistance Loan Rate for the period of the alleged peanut cartel (the cartel period, 2014–2019) and a prior, more competitive period (the pre-cartel period, 2008–2013). While peanut production is volatile, the overall trend is for peanut production to increase over both the pre-cartel and cartel periods. Total peanut production each year is affected by the peanut area planted/harvested and yield per acre. The yearly peanut price exhibits a high level of volatility reaching an extremely high peak in the pre-cartel period and decreasing to a relatively low level in the cartel period.

The following changes in the U.S. peanut industry dynamics between the pre-cartel and cartel periods are reported in the literature (Bolotova, 2023). The yearly average peanut area harvested increased by 20.5% (from 1.297 million acres to 1.563 million acres). The yearly average peanut yield per acre increased by 7.3% (from 3,626 pounds per acre to 3,891 pounds per acre). The yearly average peanut production increased by 26.3% (from 4.599 billion pounds to 5.808 billion pounds).

An increase in product production would generally decrease this product's price, often causing oversupply in agricultural markets. The yearly average peanut price decreased by 18.3% (from $0.257/lb to $0.210/lb). The yearly average profit of peanut growers based on operating costs decreased by 33.3% (from $0.12/lb to $0.08/lb). The yearly average profit of peanut growers based on total production costs decreased by 300% (from $0.01/lb to -$0.02/lb). Figure 2 depicts the yearly average profit measures expressed as a percentage of the peanut prices for the pre-cartel and cartel periods. In the case of both the pre-cartel and cartel periods, the average profit based on total production costs is negative in four out of six years and positive in two out of six years. These profit measures do not include government payments received by peanut growers.

Figure 1. U.S. Peanut Industry Production, Prices, and Marketing Assistance Loan Rate, 2002–2021



Source: USDA ERS (2022a).

Figure 3 depicts peanut quantities allocated to different demand uses for the period from 2002 to 2020. Peanuts used as food represent the largest share of all peanuts available in the market, followed by peanuts diverted to export, crush, and seed uses. The peanut quantity included in each demand category exhibited an increasing trend over the pre-cartel and cartel periods, reflecting increasing peanut production.

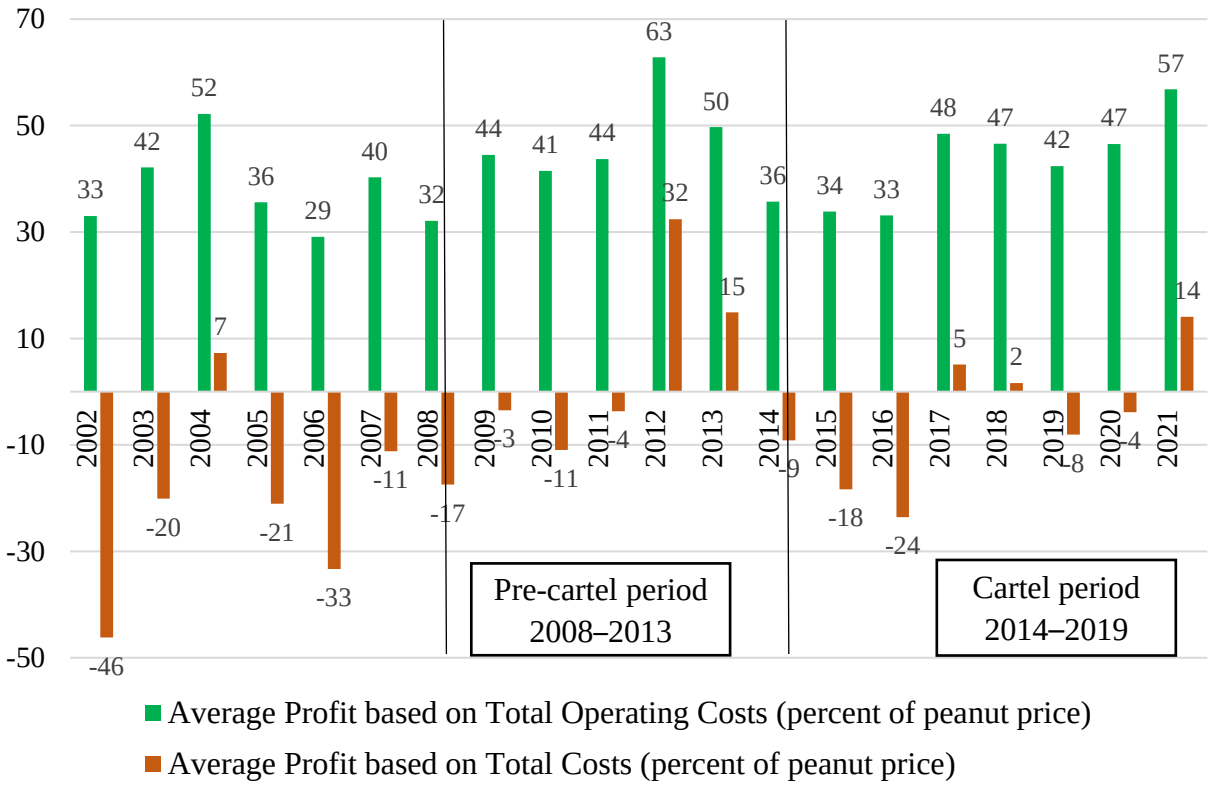
Business and Policy Implications

Competition concerns on a high level of concentration in the U.S. peanut industry, the ability of the largest peanut shellers to exercise buyer market power potentially leading to lower peanut prices for peanut growers, and the limited marketing and risk management options for peanut growers will likely remain in the future.

For the market concentration to decrease, new firms must enter peanut shelling. While there are cooperatives of peanut growers active in the industry, their market share is very small compared to the combined market share of the three largest peanut shellers. More peanut growers should consider entering peanut shelling by either organizing new cooperatives or joining existing cooperatives. While different forms of business organizations are available for peanut growers, they may benefit from organizing their peanut shelling businesses as the Capper–Volstead cooperatives, which collective marketing activities have a limited antitrust immunity to the Sherman Act.

The modern peanut market is characterized as thin because the spot (cash) market for peanuts is practically absent (Adjemian et al., 2016). To some extent, thin markets lack market and price transparency, and they may be prone to market and price manipulation. The two marketing strategies available for peanut growers are MALs provided by the government and option contracts with peanut shellers. The peanut price structure in option contracts has two components: MAL rate and option premium. While peanut shellers cannot control MAL rate, they can control option premium. The buyer market power of peanut shellers would decrease the amount of option premiums in option contracts. Given that the MAL rate has not been changed since 2002, when the MAL program became available to peanut growers, a decrease in the yearly peanut price in the alleged cartel period, as compared with the pre-cartel period, may be due to a decrease in the option premiums offered by peanut shellers (Figure 1).

Figure 2. U.S. Peanut Industry Profitability, 2002–2021

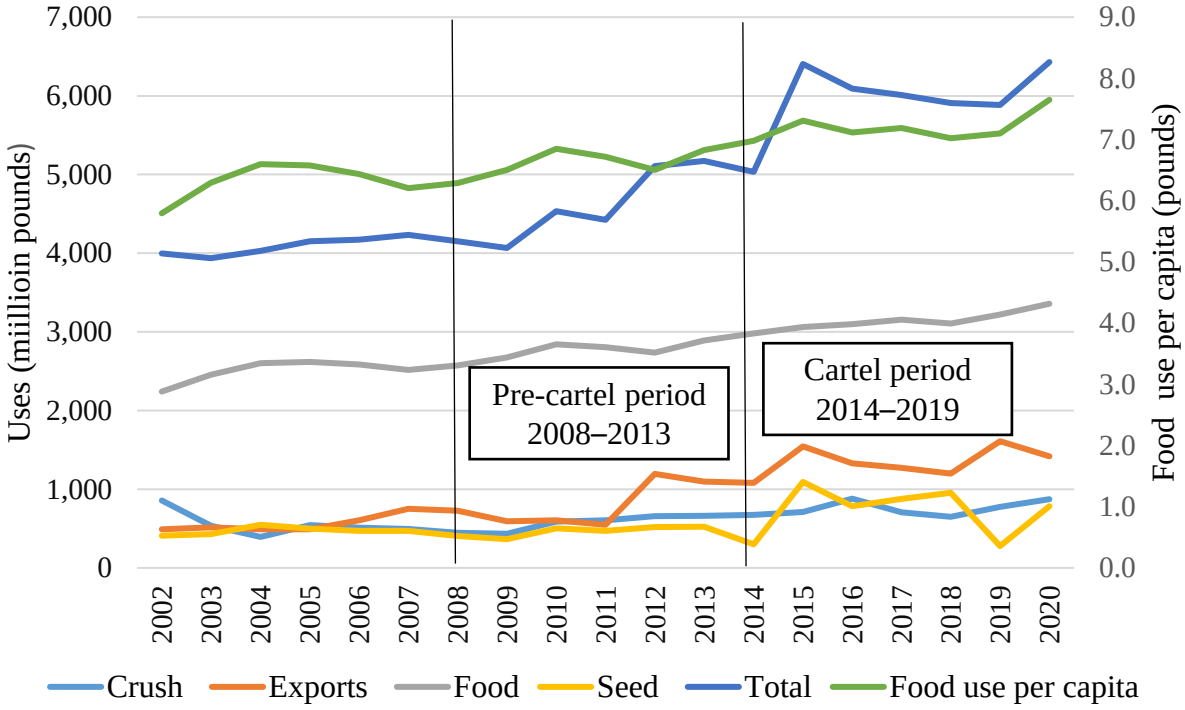


Source: USDA ERS (2022b).
Note: The profit measures depicted in this figure are from Bolotova (2023).

Peanut growers would benefit from having additional marketing arrangements, similar to those available to agricultural producers of other commodities eligible for the MAL Program (e.g., corn, soybeans, wheat). However, these additional marketing arrangements, in particular most commonly used marketing (forward) contracts, rely on the presence of futures and options markets in these industries. These marketing contracts use futures prices as reference prices. It seems that without the introduction of futures markets for peanuts, peanut growers' marketing strategies will be limited to the MAL Program and option contracts. As for managing peanut price risks, a viable strategy may be a peanut cross-hedging by trading futures contracts for other agricultural commodities that peanut growers produce (e.g., corn and soybeans) (Cuffey et al., 2022).

To inform future policy directions and provide information relevant to market monitoring efforts, the following research directions are suggested. First, conduct a peanut price analysis by evaluating the effects of market supply and demand conditions on the peanut price behavior over time. Second, evaluate the peanut price structure in option contracts by focusing on changes in option premiums over time, factors affecting option premiums, and the relationship between the MAL rate and option premium. Third, research evaluating the MAL rate level underpinning the entire price structure in the industry that serves as a price floor would provide evidence on whether the MAL rate should be adjusted in the future. Fourth, research evaluating the feasibility of cross-hedging for peanuts would provide relevant information for developing peanut price risk management strategies. Finally, research relevant for peanut growers planning to enter peanut shelling would evaluate alternative legal forms of doing business that would be most beneficial for them.

Figure 3. U.S. Peanut Industry Demand (Disappearance), 2002–2020



Source: USDA ERS (2022a).
Note: The seed category also includes loss, shrinkage, and residual uses (farm use and local sales).

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