



Agricultural Finance

Summer 2019

Agricultural Outlook

Agricultural Economy

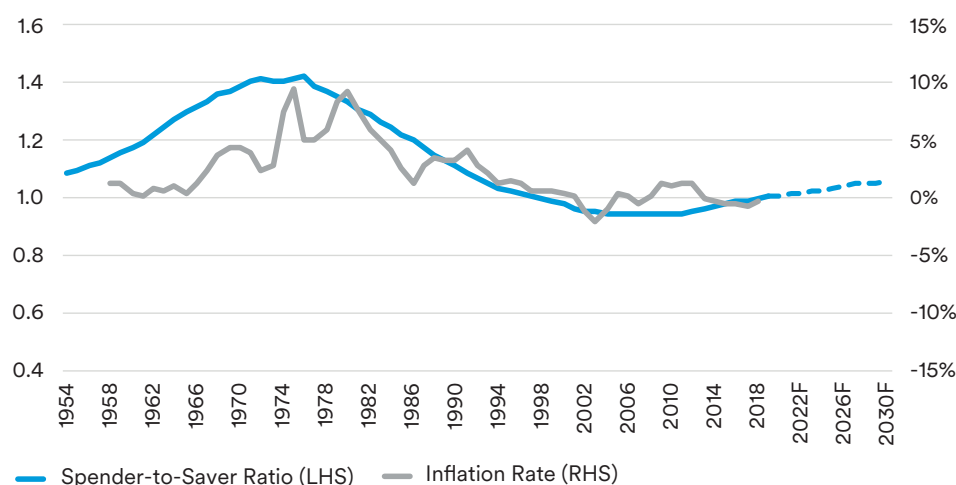
Against the backdrop of a strong U.S. economy, U.S. agricultural producers in 2019 continue to endure trade disputes, large inventories, and weather induced planting delays. U.S. economic data remains positive through the first half of 2019 as the U.S. economy nears a record long expansion. GDP growth was a strong 3.2% in Q1 and the unemployment rate through May has dropped to its lowest level since the 1960s.¹ While the agricultural sector has not fared as well over the past year, trade relief payments, relatively stable farmland values, and ample capital availability have all helped keep delinquency rates on farm loans near or below their long-term average.²

Although most U.S. economic indicators remain positive, broad based inflationary pressure has yet to materialize. Inflation has remained sub-3% since 2011 and remained at a modest 2% despite the current historically tight labor market.³ The lack of inflation is so confounding that many economists, including former Federal Reserve chair Janet Yellen, commonly cite the perceived absence as a mystery.⁴

The current environment has drawn many comparisons to the 1960s. Both then and now, tax cuts helped a thriving U.S. economy achieve historically low unemployment rates with very little impact on inflation. However, the low inflation of the 1960s gave way to soaring inflation that lasted through the 1970s and into the 1980s.⁵ The Federal Reserve, which faced pressure during the 1960s to keep interest rates low, was eventually forced to respond by raising interest rates as high as 19% in attempting to rein in inflation.⁶

While many parallels exist between today's economy and the mid-1960's, demographics represent one key difference. The age structure of an economy can have an impact on inflation. People spend more than they earn when they are young, save money during their working career, and then spend their accumulated wealth during retirement.⁷ Figure 1 charts the ratio of spenders to savers through time against the U.S. inflation rate. A ratio above one indicates there was a greater number of spenders than savers in the economy, while a ratio below one indicates that savers outnumbered spenders. As the chart shows, inflationary pressure increased when the ratio was above one, and declined when the ratio was below one.

Figure 1 | Core Inflation vs. Age Structure of Economy



Source: BEA, Haver, MIM

In 2018, the ratio reached 1.0 for the first time in 20 years and current demographic forecasts suggest it will continue rising through 2030. While nowhere near the demographic wave that occurred during the 1960s and 1970s, we believe inflationary pressure will continue to build over the coming years as the “Baby Boom” generation enters retirement.

An uptick in inflation would likely benefit agricultural producers. Commodity prices, farmland values, and timberland values all historically exhibit a strong correlation with inflation.

There are a multitude of explanations for this relationship, one being that holding cash is detrimental when inflation increases, so demand increases for real assets which boosts their value. Increased inflation also erodes the value of debt as borrowers are able to repay with devalued dollars. Therefore, in an agricultural sector where the volume of debt outstanding has increased the past five years,⁸ a modest uptick in inflation would be a welcome reprieve for many producers.

Annual Crops

Expectations for large inventories weighed on both corn and soybean prices to begin 2019 but setbacks due to weather have since caused market dynamics to diverge. The wettest spring on record in the Midwest significantly delayed annual crop planting, causing a rally in corn prices.⁹ Conversely, declining soybean demand from China due to the ongoing trade dispute and a



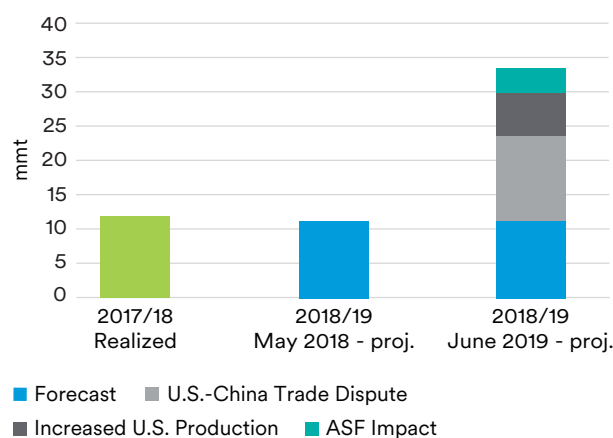
disease outbreak within their pork sector has weighed on U.S. soybean prices. The global stocks-to-use ratio, which measures ending inventories as a percentage of consumption, is expected to decrease 13% year-over-year (yoy) for corn and increase 1% yoy for soybeans in 2019.¹⁰ The increase in soybean stocks is especially pronounced in the U.S., where the stocks-to-use ratio is projected to increase to the highest level in 33 years.¹¹ Despite the negative outlook, trade relief payments will offer soybean farmers some reprieve in 2019.

Difficult planting conditions could further impact U.S. annual crop production in 2019. Wet weather hampered farming operations across much of the Midwest this spring, causing planting progress for many crops to lag historical averages. While the weather throughout the remainder of the year will ultimately determine crop yields, delayed planting has historically negatively impacted yields. Facing the prospect of both lower yields due to delayed planting and lower crop prices due to trade, many farmers opted to forgo planting altogether and chose to declare preventive plant.

U.S. soybean growers have seen a dramatic shift in the market outlook over the past year. As recently as May 2018, USDA projections showed ending stocks of soybeans declining in the U.S. this marketing year. However, the outlook shifted abruptly with the onset of the U.S.-China trade dispute and tilted even more bearish with last year's record U.S. soybean harvest and the outbreak of African Swine Fever (ASF) in Southeast Asia. U.S. soybean ending inventories this year are now projected to increase by nearly 23 mmt compared to May 2018 projections. Figure 2 illustrates our estimated impact of each of the three different causes. The record large U.S. soybean harvest last year along with reduced feed demand due to ASF account for 7 mmt (29%) and 4 mmt (16%) of the projected increase in inventories, respectively. However, China's boycott of U.S. soybeans explains most of the projected increase – 12 mmt (55%).

While the potential for a significant rally in soybean prices will likely be limited to a U.S.-China trade resolution, the recently announced trade aid package offers U.S. soybean growers some reprieve. As of May 2019, U.S. soybean prices were 22% lower yoy, due largely to the trade dispute with China.¹² To help offset the ongoing trade dispute, the USDA announced in May that \$16 billion had been authorized for a 2019 trade relief program.¹³ Details of the program continue to be released, but most producer payments are expected to remain near or above last years. Unlike last year, though, payments will not be linked to the type of crops planted but instead linked to the number of acres planted. While seemingly a minor change, this change reduces the incentive to plant soybeans and should help limit a further build-up in inventories.

**Figure 2 | U.S. Soybean Ending Stocks – 2018/19
Attributing the Increase**



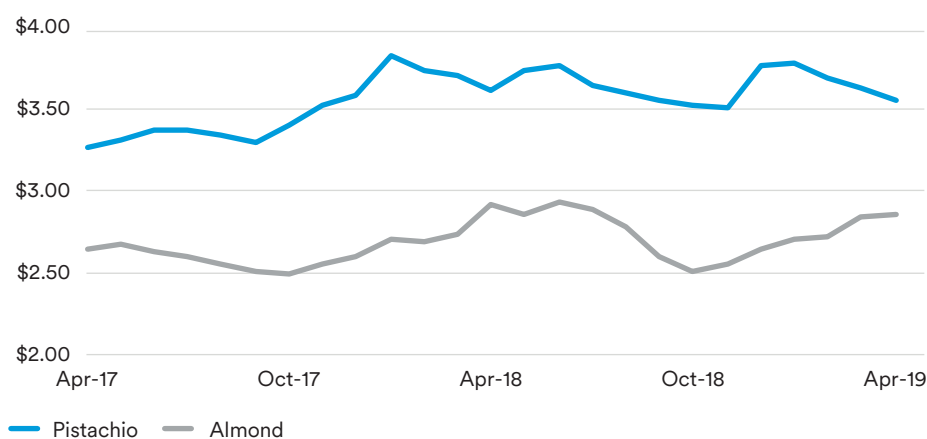
Source: Bloomberg, U.S. Census, USDA, MIM

Permanent Crops

Strong global demand continues to support the growth in California's tree nut industry. U.S. almond and pistachio production reached record levels of 2,220 and 994 million pounds, respectively, in 2018.¹⁴ With good early season growing conditions, initial estimates expect another record almond crop for 2019 at approximately 2,500 million pounds.¹⁵ Pistachio production is projected to decline to 690 million pounds as 2019 is an off-year for the alternate bearing crop.¹⁶

The trade dispute with China has had a limited impact on U.S. almond and pistachio exports. Total U.S. almond exports declined marginally yoy in 2018, while exports to China were up 2% yoy.¹⁷ Conversely, U.S. pistachio exports hit a record high of 478 million pounds despite volumes to China being down 5% yoy.¹⁸ Other emerging export markets like Vietnam and India have continued to increase imports of U.S. tree nuts. This has helped support demand regardless of the direction that U.S.-China trade talks take. As shown in Figure 3, strong global demand has helped export prices for almond and pistachio prices remain relatively stable through the first half of 2019.

Figure 3 | Tree Nut Export Prices (monthly, \$/lb.)



Source: USDA FAS, MIM

Livestock

Livestock markets have seen many favorable developments during 2019. Pork and beef prices have been supported by the prospect of increased demand due to ASF in China and the removal of retaliatory tariffs on agricultural products by Mexico and Canada. Meanwhile, dairy prices continue to rebound due to a global pullback in production.

U.S. beef and pork prices have rallied in 2019, buoyed primarily by expectations for greater demand from China. Live cattle and lean hog futures prices increased 6% and 21% yoy, respectively, in May.¹⁹ Initially, the rally in prices was driven by expectations that China would increase purchases of U.S. pork and beef to offset the impact of ASF on domestic supplies. Through March, China's 2019 pork purchases increased 166% yoy, before a portion of these orders were later cancelled due to stalled trade talks.²⁰ However, cancelled orders had little impact on pork and beef prices which found support from Canada and Mexico lifting retaliatory tariffs on U.S. agricultural goods.

Reduced trade uncertainty with Mexico and Canada has also benefitted U.S. dairy producers but not to the same extent as the global pullback in milk production. Following four quarters of falling milk prices, the All Milk price reported by the USDA, which reflects price movements for all classes of milk, increased 8% yoy in Q1 2019.²¹ The biggest support for milk prices thus

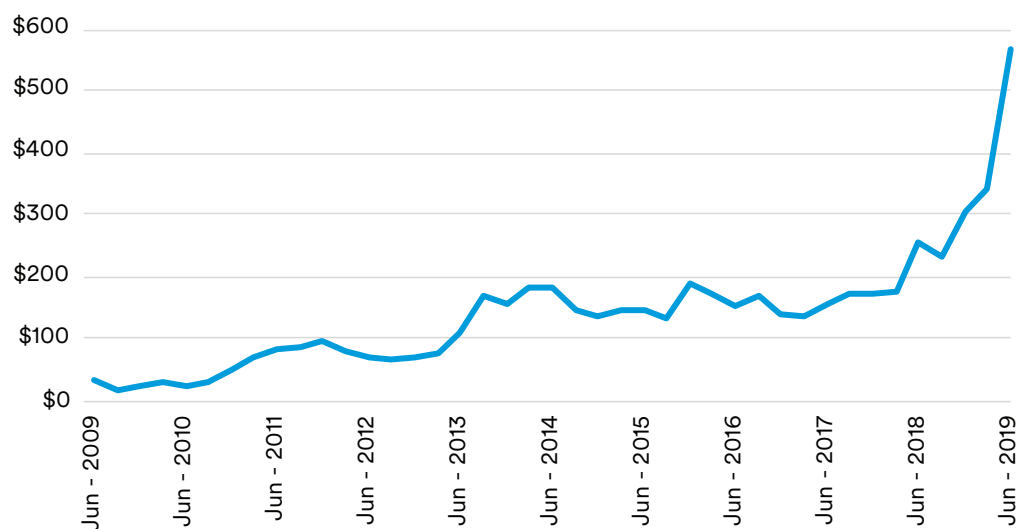
far in 2019 has been reduced production in several export-oriented dairy producing regions. Milk production in Australia²² and New Zealand²³ declined 12% and 8% yoy, respectively, in Q1 2019, while output in the U.S. was unchanged. In addition, Mexico's removal of retaliatory tariffs on the U.S. is also a positive development for the dairy sector as the country is the largest importer of U.S. dairy products.²⁴

Agribusiness

Livestock processors continue to enjoy strong profit margins due to low input prices and strong export demand for U.S. meat products. Beef and pork processing firms across the Midwest benefitted from a cold, wet winter to start 2019 which incentivized cattle and hog farmers to sell livestock. This kept input prices relatively low and resulted in beef and pork processing profits that were 26% and 22% above their long-term averages, respectively, in Q1 2019.²⁵ Margins have since moderated but remain positive as the spread of ASF across Asia has led to increased export demand for U.S. meat.

In the refrigerated warehouse sector, merger and acquisition (M&A) activity continued to increase through the first half of 2019. The refrigerated warehouse sector has historically been characterized by specialized facilities with high barriers to entry. Recently, large participants looking to capitalize on economies of scale have led a sustained uptick in M&A activity. As shown in Figure 4, M&A activity increased significantly in 2019, led by the \$1.2 billion acquisition of Chiller Holdco by Americold Realty Trust in April.²⁶ M&A activity tends to occur in waves and could slow during future quarters. However, we expect investor interest in the refrigerated warehouse sector to remain strong due to positive underlying fundamentals, like growing global demand for fresh and frozen food and limited cold chain infrastructure.

Figure 4 | Cold Storage Sales Volumes (millions - USD, rolling 4-quarter average)



Source: CoStar, RCA, MIM

Timber

U.S. lumber prices continue to stabilize in 2019 following the correction from record highs in 2018. Prices moderated on expectations that lower mortgage rates and falling home inventories will cause U.S. housing starts to rebound. Lumber futures prices declined 23% yoy in Q1 2019 but increased 15% from Q4 2018.²⁷ However, local log prices continue to vary across geographies due to differences in supply and processing capacity.



Although U.S. housing starts remain tepid through the first half of 2019, the 6% yoy increase in new single-family home sales and falling housing inventories suggests housing demand is recovering.²⁸ Low borrowing costs caused new single-family home sales in March to reach their second highest level since 2007.²⁹ As shown in Figure 5, the average interest rate on 30-year home mortgages has declined over 1% from the recent peak in November of 2018.³⁰ The uptick in new single-family home sales has caused unsold housing inventories to fall through the first half of 2019 and could spur an uptick in U.S. housing starts, especially if borrowing costs continue trending downward.

Figure 5 | 30-Year Home Mortgage Rate (weekly)



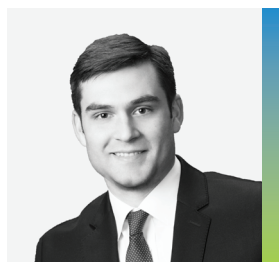
Source: Freddie Mac, MIM

The impact of falling lumber prices in 2018 on timberland operations varied by geography. Softwood log prices in the Pacific Northwest (PNW) fell 20% yoy in Q1 2019,³¹ while softwood log prices in the U.S. South increased 5% yoy.³² Timber supplies are much tighter in the PNW than in the U.S. South, making log prices much more sensitive to changes in lumber prices. Although the magnitude of the yoy decline in PNW log prices was large, the decline was from a previous record and current log prices remain near the 5-year average. Conversely, U.S. South log prices experienced the largest quarter over quarter increase in two years due to wet weather conditions, which limited harvest activity and increased log demand due to investments in timber processing capacity in the region.

Endnotes

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Agricultural Market Research



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