The Economic Outlook

For U.S. Cotton 2018

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Summary

As with any attempt to make projections into the future, there are uncertainties and unknowns that can change the outcome. For the coming year, a key factor that could affect the U.S. cotton industry is the record level of ending stocks outside of China. While China's stocks have been declining for the last three years, stocks outside of China have been increasing since 2016. With this report, National Cotton Council (NCC) staff hopes to present a thorough review of the current economic landscape and the prospects for the coming year.

Overall, cotton futures strengthened in 2017 relative to competing crops. Oil prices gained momentum in the second half of the year to reach $58 per barrel by December, which is the highest level since June 2015. The world economy is improving and stronger growth is projected for the next two years. World cotton demand is increasing and the latest USDA report projects a 5.3% increase in consumption in 2017, which is more than double the previous 5-year average. China's stocks are declining with USDA estimating a 9.0 million bale drop in 2017.

World cotton area and production bounced back from the low levels observed in 2015 and 2016. USDA projects a 13.5% increase in world production in 2017. Due to increased production and large carryover stocks, ending stocks outside of China are projected to increase by 8.6 million bales in the 2017 marketing year. The estimated 47.8 million bales of ending stocks is the highest level on record. U.S. stocks are estimated to reach the highest level since 2008 with a stocks-to-use ratio of 30.0%.

While the current supply and demand fundamentals would generally translate into downward pressure on prices, this has not been the case for the last few months. Strong demand for U.S. exports, heavy speculative buying, and large mill fixations are supporting prices. For the coming year, increased ending stocks, particularly outside of China, will likely put pressure on prices.

The cotton market continues to be influenced by uncertainty in government policies, developments in other commodity markets, and a changing macroeconomic climate. Many of those influences will carry over into the outlook for 2018.

To recap the current marketing year, U.S. producers planted 12.6 million acres of cotton in 2017, an increase of 25.3% from the previous spring. The increased acres were primarily the result of higher cotton prices relative to grains and oilseeds. According to USDA's January 2018 estimates, with only 10.0% of U.S. cotton acres un-harvested, the resulting 2017 crop of 21.3 million bales marked a 4.1 million bale increase from 2016.

The current marketing year began with cotton stocks at 2.8 million bales. When added to the recent harvest, total supplies for the 2017 marketing year are estimated at 24.0 million bales. Total supplies will be more than sufficient to satisfy estimated use of 18.4 million bales.

U.S. textile mills are expected to consume 3.4 million bales in the current marketing year, up 100 thousand bales from 2016. The Economic Adjustment Assistance Program (EAAP), continues to be an important source of stability, allowing mills to invest in new facilities and equipment.

U.S. exports are estimated to reach 15.0 million bales in the 2017 marketing year, which is higher than the January USDA

estimate of 14.8 million bales. U.S. export sales have been very strong with early sales surpassing recent crop years. The heavily discounted low micronaire Texas cotton also appears to be boosting export sales. If the current sales pace continues, the strong demand for U.S. cotton could push U.S. export commitments even higher. However, shipments have been lagging sharply behind sales during the first half of the marketing year. As of January 25, only 4.7 million bales had been shipped. While several factors led to shipping delays earlier in the marketing year, trucking shortages, along with increased trucking costs, are currently the main issue impacting cotton shipments. The shipment pace during the second half of the marketing year is generally higher as harvest and ginning is completed. Not surprisingly, the shipment pace has increased over the past few weeks. To reach the 15.0 million bale estimate, an average of about 380,000 bales must be shipped each week for the remainder of the marketing year.

The current U.S. export estimate breaks down into 14.4 million bales of upland cotton and 650 thousand bales of ELS cotton. The U.S. will remain the largest exporter of cotton with a market share of 39.1% as compared to 40.1% in 2016. World trade is projected to be higher in the 2017 marketing year, but increased competition from other major exporting countries has led to a decline in the U.S. market share.

India announced a higher minimum support price (MSP) for the 2017/18 crop year along with a bonus for farmers in Gujarat who sell their seed cotton to state procurement agencies. The higher MSP could limit India's exportable supplies if Indian prices decline and more production is procured by the government. Indian prices remained strong during the first half of the marketing year but have weakened in recent weeks. Chinese imports are not projected to increase in the 2017/18 crop year as China continues to work through the reserve stocks.

The current supply and demand estimates generate 5.5 million bales of ending stocks in the U.S. balance sheet, up 2.8 million bales from the previous year and the highest level since 2008.

With that review in mind, the projections for the 2018 marketing year will begin with the outlook for U.S. production. As in past years, the prospects for the U.S. crop are based on the results of the NCC planting intentions survey with assumptions made for abandonment and yields.

Survey respondents are asked to give their plantings of cotton, corn, soybeans, wheat, and other crops for 2017 and intended acreage for 2018. As always, the survey results should be viewed as a measure of grower intentions prevailing at the time the survey was conducted. Changing weather and market conditions could cause actual plantings to be significantly different from growers' stated intentions. During the 2018 survey period, the December cotton futures contract was trading at essentially the same level as last spring, while corn and soybean futures were trading slightly lower. Although the December 2018 futures price ratios of cotton to corn and soybeans are higher than in 2017, soybeans are expected to provide competition for available acres, due in part to the lower production costs relative to cotton. Grain and soybean prices have also strengthened a bit in the last few weeks.

In the Southeast, survey results indicate a 2.3% increase in the region's upland area to 2.6 million acres. All six states show an increase in acreage. In Alabama, the survey responses indicate 0.8% more cotton acreage and less wheat, soybeans, and 'other crops'.

Alabama respondents reported an increase in corn acres. In Florida, respondents indicated more cotton and soybeans and less 'other crops', likely peanuts. In Georgia, cotton acreage is expected to increase by 0.6%. Georgia growers expect to plant less soybeans and more corn and 'other crops', likely peanuts. In North Carolina, an 8.2% increase is expected as acreage moves away from soybeans. Corn and wheat acres are expected to increase slightly in North Carolina. In South Carolina, acreage is expected to increase by 3.4%. South Carolina growers expect to plant less corn and wheat and more soybeans and 'other crops'. Cotton acreage is expected to increase by 3.1% in Virginia. Virginia growers intend to plant more corn and soybeans and less wheat and 'other crops'.

In the Mid-South, growers have demonstrated their ability to adjust acreage based on market signals. The relative prices and potential returns of competing crops play a significant role in cotton acreage. Mid-South growers intend to plant 1.9 million acres, a decrease of 0.1% from the previous year. Survey results suggest that the slight decline in cotton acres can be attributed to a shift into soybeans. Another factor to take into consideration is the lower cottonseed prices. While cotton prices have improved relative to other crops, cottonseed prices are at the lowest level since the 2006 marketing year, thus increasing the net costs of ginning.

Across the region, Louisiana and Mississippi intend to decrease cotton acreage and Arkansas, Missouri, and Tennessee expect to increase acreage. The largest decline was reported in Mississippi with 5.5% less cotton acreage in 2018. Mississippi respondents expect to increase acreage of all other crops as less cotton acreage is planted. In Tennessee, cotton acreage is expected to increase by 1.5% as land shifts away from corn and wheat. Tennessee growers intend to plant more soybeans in 2018. Missouri growers expect to increase cotton acres by 3.8% and plant less corn and soybeans. In Louisiana, respondents intend to plant 2.6% less cotton acreage, more soybeans, and less of all other crops. All states in the Mid-South except Missouri intend to plant more soybeans in 2018.

Growers in the Southwest intend to plant 8.0 million acres of cotton, an increase of 5.7%. Increases in cotton area are expected in each of the three states. In Kansas, producers intend to plant 55.3% more cotton acres, along with more wheat and 'other crops', likely sorghum. Kansas growers intend to plant less corn and soybeans. In Oklahoma, a 21.0% increase in cotton acreage is expected as wheat acreage declines. Oklahoma respondents report a small increase in 'other crops'. Overall, Texas acreage is expected to increase by 3.7%. In south Texas, respondents indicate a 0.3% increase in cotton acreage. South Texas growers intend to plant less corn and more wheat, soybeans, and 'other crops'. Respondents from the Blacklands indicate an increase of 8.6% in cotton acreage, a decrease in wheat and corn acreage, and an increase in 'other crops'. In West Texas, respondents indicated a 4.0% increase in cotton acreage, an increase in wheat acreage, and a decrease in corn and 'other crops'.

With intentions of 293 thousand acres, producers in the West are expected to plant 6.8% less acres of upland cotton. Cotton acreage is expected to decline in Arizona and California and increase in New Mexico. The survey results for Arizona suggest a shift from upland cotton to ELS cotton, corn, and 'other crops'. In California, growers intend to plant more wheat and corn.

Summing across the 4 regions gives intended 2018 upland cotton area of 12.8 million acres, 3.8% above 2017.

The survey indicates that growers intend to plant slightly more ELS cotton in 2018. Arizona growers are expecting to plant 31.6% more ELS cotton. Overall, U.S. cotton growers intend to plant 254 thousand acres in 2018. Summing together the upland and ELS cotton intentions shows U.S. all-cotton plantings in 2018 of 13.1 million acres, 3.7% higher than in 2017.

For the past four years, U.S. cotton producers have struggled with low cotton prices, high production costs, and the resulting financial hardships. Many producers continue to face difficult economic conditions heading into 2018. Production costs remain high and prices are still not high enough to cover all production expenses for many producers.

Given the economic climate, it is important to discuss the factors affecting cotton acreage in 2018. Based on the current prices of cotton and cottonseed, total revenue is expected to fall short of total costs. However, in the Southwest, cotton is still the better alternative and a significant increase in acreage is expected for Oklahoma and Kansas. Low wheat prices along with above-average yields in 2017 will likely encourage more cotton acreage in the Southwest in 2018. Kansas had a tremendous increase in acreage in 2017 and another large increase is expected for 2018. Kansas growers have greatly benefited from the availability of Dicamba and 2,4-D tolerant varieties. In 2017, 65.0% of Kansas cotton acres were planted to Dicamba varieties, while 34.0% were planted to 2,4-D varieties. In the Southeast and Mid-South, cotton continues to be a good alternative, but some growers may expect higher returns from other crops in 2018. In the West, expected water availability may be influencing cotton acreage decisions.

Planted acreage is just one of the factors that will determine supplies of cotton and cottonseed. Ultimately, weather, insect pressures, and agronomic conditions play a significant role in determining crop size. The NCC economic outlook does not attempt to forecast weather patterns and the standard convention is to assume yields in line with recent trends and abandonment consistent with historical 5-year averages. However, due to the dry conditions that currently persist across the Cotton Belt and the forecasts of abnormally dry conditions throughout the spring, the assumed abandonment rates for Texas and Oklahoma are slightly higher than the recent 5-year average. As always, it is important to remember the volatility around projected production given the uncertainty of weather patterns.

With abandonment estimated at 15.4% for the U.S., Cotton Belt harvested area totals 11.1 million acres (Figure 56). Using an average 2018 U.S. yield of 842 pounds generates a cotton crop of 19.4 million bales, with 18.7 million bales of upland and 744 thousand bales of ELS. The projected crop represents a 1.8 million bale decrease from the latest 2017 estimate. If drought conditions continue across the Cotton Belt, further reductions in the 2018 production estimate may be necessary.

Turning our attention to demand for U.S. cotton, consumption by the domestic textile industry is projected to increase by 60 thousand bales to 3.4 million bales in the 2018 marketing year. Textile trade estimates for 2018 suggest that the overwhelming majority of products manufactured by the U.S. textile industry will move into export markets for further processing.

International markets, the primary outlet for U.S. raw fiber production, remain very competitive, with competition from not only growths of other cotton, but also manmade fibers. To fully assess the prospects for 2018 cotton exports, it is important to review the

expectations for key importing and exporting countries.

The U.S. will remain the largest cotton exporter and the U.S. export pace has remained strong early in 2018. In 2016, U.S. exports bounced back following a three-year decline. The current sales pace is well ahead of previous crop years. USDA is projecting a 5.3% increase in world cotton demand in 2017. China is currently the top export market for the 2017 crop year, followed by Vietnam and Pakistan. After several years of reduced exports to China, current U.S. export sales to China have surpassed sales at the same time in 2016 . Vietnam and Bangladesh are currently the fastest growing cotton consuming countries. Vietnam continues to be a strong and expanding market for U.S. cotton and the U.S. market share continues to increase. The U.S. market share in Bangladesh has historically been very low, but has been on an upward trend for the past two years.

Demand growth in major cotton consuming countries is expected to continue in 2018, with the largest increase of 1.8 million bales in China. USDA had projected a slight increase in China cotton imports for the 2017 crop year, but lowered the estimate in January 2018 due to a significant increase in China's expected 2017 cotton production. USDA is currently projecting a 3.7 million bale increase in China's production in 2017 due to increased acreage and yields. China is expected to continue to limit import quotas to the required WTO minimum tariff rate quota (TRQ) of 4.1 million bales for the 2017 crop year as China continues to work through reserve stocks. Various sources have reported the possibility of additional imports to rotate the reserve stocks. However, no official announcement has been made.

China will begin the next round of reserve auctions on March 6, 2018. China sold 14.8 million bales from the reserves in 2017 and another successful auction series is anticipated for 2018. China plans to gradually reduce stocks each year until the reserves reach what they consider a 'reasonable level'. The 2018 reserve auctions are scheduled to end on August 31, 2018.

China reduced acreage and production from 2011 through 2016 as cotton shifted out of the lower-yielding areas and into Xinjiang. China increased acreage in 2017 following two years with very low cotton acreage. However, the 2017 level of 8.2 million acres is still 41% below the 2007-2012 average. Looking ahead, China's cotton acreage is expected to remain fairly stable. Large increases in acreage are not expected in Xinjiang due to limited water availability.

The *Beijing Cotton Outlook* has projected a slight increase in acreage for 2018 and the Xinjiang Regional Development Reform Commission (NDRC) projected a slight decline. For 2018, China acreage is estimated to increase by 0.5%, resulting in a 26.3 million bale crop (23% below average 2007-12 production). China's consumption is expected to increase by 4.4% in 2018 to 41.8 million bales.

Although China's consumption has increased over the past three years, domestic use remains well below historical highs. Growth in world cotton demand remains a concern as competition from lower priced manmade fibers continues to weigh on the market. Between 2009 and 2013, China's mill use declined by almost 16 million bales as high cotton prices relative to manmade fibers forced spinners to turn away from cotton. Although internal cotton prices are still strong relative to polyester prices, polyester prices increased in 2017 and are currently at the highest level since 2014. The ratio of the China cotton to polyester price is now 1.8 as compared to 2.2 in 2016. China's

new environmentally-friendly policies could impact manmade fiber production and use in 2018.

The adjustments in China's supply and demand, including the success of the reserve auctions, will allow a reduction in stocks. For the 2017 crop year, the January USDA estimate includes a stock reduction of 9.0 million bales. In 2018, an additional 10.0 million bale reduction in total stocks is expected. The 2017 estimate assumes that the next auction series will be as successful as in the previous year. A successful auction series in 2018 could easily put China in a position to become a larger cotton importer again. The gap between China's cotton consumption and production is currently around 15 million bales, with the gap currently filled by reserve sales and imports. Once the reserves are further reduced, additional imports will be needed to fill the gap.

Increased sales of Chinese reserve stocks have led to more domestic spinning of cotton. The gap between domestic and international cotton prices has narrowed and yarn imports are expected to fall as domestic yarn becomes more price competitive. Vietnam was the top supplier of cotton yarn to China in 2017, followed by India and Pakistan.

USDA's latest estimates show a 5.3% increase in world mill use in 2017 and a 6.7% increase in China's mill use. Supported by continued growth in China, world consumption is projected to increase by 3.3% in 2018. The growth is leading to additional cotton import demand in key countries such as Vietnam and Bangladesh.

In terms of the global trade picture, government policies in India could play a significant role in the outlook for the coming year. India has not made an official announcement for the 2018 crop, but preliminary reports from India's 2018 budget review indicate that the MSP price is likely to increase in 2018. In this outlook, India's 2018 acreage is projected to increase slightly as internal cotton prices have strengthened relative to grain prices. However, if the MSP is increased by a significant amount, a further increase in acreage would be expected.

India experienced significant pest issues in Maharashtra in 2017, which could affect 2018 cotton acreage decisions. Assuming trend yields, India will remain the largest cotton producing country with a crop of 28.8 million bales in 2018. The latest USDA estimate shows a decline in India's exports for the 2017 crop year. India cancelled some export sales at the end of calendar 2017 due to stronger internal prices. India's exports are expected to increase to 4.6 million bales in 2018 due to increased world demand. The current balance sheet projects an increase in India's ending stocks for the 2018 crop year. However, it is important to note that some trade analysts estimate India's stock levels to be much lower than the current USDA projections. USDA did make some historical revisions to India's balance sheet which led to a small reduction in India's stock level. The latest estimate of 13.0 million bales for the 2017 crop year is still rather large and does not necessarily support India's increased imports and lower exports in 2016 and 2017.

As the net effects of the trade adjustments are aggregated, world cotton trade for 2018 is estimated at 39.0 million bales, up 638 thousand bales from 2017. The United States is expected to capture approximately 37.0% of world trade by exporting 14.3 million bales in the upcoming year. However, it is important to note that the U.S. projections are highly contingent on the global cotton market.

Competition from other cotton exporting countries as well as government policies in key importing countries could impact U.S. cotton exports. If India's MSP policy negatively impacts cotton exports in 2018, the U.S. market share could increase. Increased competition from other exporting countries could also impact U.S. cotton exports. While this outlook assumes a similar stance for China's cotton imports in 2018, the potential for additional import quota to meet the demand for high quality cotton is a possibility for the upcoming crop year.

When exports are added to U.S. mill use, total offtake is 17.7 million bales in the 2018 crop year. Recall that the U.S. crop is estimated at 19.4 million bales, thus leading to an increase in ending stocks of 1.5 million bales, when taking into account adjustments in the Unaccounted category of the U.S. balance sheet. Total ending stocks of 7.0 million bales would be the highest level since the 2007 marketing year and would result in a stocks-to-use ratio of 39.7%.

For the world balance sheet, global production of 119.3 million bales is just slightly lower than in 2017. World mill use is projected to increase to 124.8 million bales, exceeding production by 5.4 million bales. Cotton consumption has increased in each of the past six years.

World cotton stocks decline by 5.4 million bales in the 2018 balance sheet. While projections of global consumption exceeding production would normally be supportive of prices, the implications for the coming year may not be as clear cut. The decline in global stocks is due to reduced inventories in China. China's increased consumption of reserve stocks has increased mill use in 2017 and reduced China's demand for imported cotton yarn. This trend should continue as China continues to work through the reserve stocks. Stocks outside of China – an important barometer of price conditions – are projected to increase by 4.6 million bales.

While the Council's economic outlook does not attempt to project cotton prices, it is important to review some of the factors shaping the current price situation. Cotton prices have maintained a stronger appearance since October 2017 despite the projected increase in world production and resulting increase in ending stocks. Although the current supply and demand fundamentals are somewhat bearish, the strong demand for U.S. exports, weaker U.S. dollar, large speculative activity, and record unfixed on-call sales are all supporting current prices. The current price environment could also suggest that global stocks may be smaller than the current estimates and additional revisions to the world balance sheet may be necessary.

Based on the underlying assumptions and resulting cotton balance sheet, the increased stocks outside of China may contribute to a more bearish tone for cotton prices in 2018. As with any projections, there are always uncertainties and assumptions that can dramatically change the balance sheet. China's stocks and import policy, as well as India's price support policies, provide significant uncertainty for global markets.

Table 1 - Balance Sheet for Selected Countries & Regions

World	**12/13**	**13/14**	**14/15**	**15/16**	**16/17**	**17/18**	**18/19**
Harvested Area (Thou Acres)	84,832	80,448	84,142	75,702	73,080	82,341	82,668
Yield (Pounds/Acre)	701	718	680	610	700	705	693
Production (Thou Bales)	123,902	120,367	119,185	96,149	106,558	120,967	119,347
Trade (Thou Bales)	47,664	41,230	36,096	35,420	37,621	38,369	39,007
Mill Use (Thou Bales)	108,333	110,022	111,838	112,259	114,774	120,825	124,770
Ending Stocks (Thou Bales)	92,073	102,964	111,153	95,350	87,635	87,593	82,185
United States	**12/13**	**13/14**	**14/15**	**15/16**	**16/17**	**17/18**	**18/19**
Harvested Area (Thou Acres)	9,321	7,544	9,348	8,075	9,508	11,349	11,070
Yield (Pounds/Acre)	892	821	838	766	867	899	842
Production (Thou Bales)	17,314	12,909	16,319	12,888	17,170	21,263	19,415
Net Exports (Thou Bales)	13,016	10,517	11,234	9,120	14,910	14,990	14,318
Mill Use (Thou Bales)	3,500	3,550	3,575	3,450	3,250	3,350	3,410
Ending Stocks (Thou Bales)	3,800	2,350	3,650	3,800	2,750	5,500	7,037
Australia	**12/13**	**13/14**	**14/15**	**15/16**	**16/17**	**17/18**	**18/19**
Harvested Area (Thou Acres)	1,100	1,077	507	771	1,433	1,211	1,275
Yield (Pounds/Acre)	2,008	1,827	2,179	1,774	1,356	1,824	1,785
Production (Thou Bales)	4,600	4,100	2,300	2,850	4,050	4,600	4,742
Net Exports (Thou Bales)	6,168	4,852	2,404	2,828	3,727	4,300	4,379
Mill Use (Thou Bales)	40	40	35	35	35	35	35
Ending Stocks (Thou Bales)	2,399	1,807	1,818	1,955	2,393	2,808	3,286
Bangladesh	**12/13**	**13/14**	**14/15**	**15/16**	**16/17**	**17/18**	**18/19**
Harvested Area (Thou Acres)	99	104	106	106	106	106	106
Yield (Pounds/Acre)	524	532	542	538	565	565	565
Production (Thou Bales)	108	115	120	119	125	125	125
Net Imports (Thou Bales)	5,000	5,300	5,750	6,400	6,700	7,250	7,565
Mill Use (Thou Bales)	4,700	5,300	5,800	6,300	6,700	7,200	7,550
Ending Stocks (Thou Bales)	1,166	1,271	1,331	1,540	1,655	1,820	1,950
Brazil	**12/13**	**13/14**	**14/15**	**15/16**	**16/17**	**17/18**	**18/19**
Harvested Area (Thou Acres)	2,224	2,768	2,520	2,360	2,323	2,718	2,800
Yield (Pounds/Acre)	1,295	1,388	1,333	1,200	1,447	1,377	1,386
Production (Thou Bales)	6,000	8,000	7,000	5,900	7,000	7,800	8,088
Net Exports (Thou Bales)	4,242	2,083	3,886	4,223	2,600	3,975	4,297
Mill Use (Thou Bales)	4,100	4,200	3,400	3,100	3,200	3,400	3,475
Ending Stocks (Thou Bales)	5,801	7,668	7,532	6,259	7,609	8,184	8,650
China	**12/13**	**13/14**	**14/15**	**15/16**	**16/17**	**17/18**	**18/19**
Harvested Area (Thou Acres)	13,096	11,861	10,872	7,537	7,166	8,154	8,195
Yield (Pounds/Acre)	1,283	1,325	1,324	1,401	1,524	1,554	1,540
Production (Thou Bales)	35,000	32,750	30,000	22,000	22,750	26,400	26,293
Net Imports (Thou Bales)	20,280	14,096	8,213	4,278	4,971	4,950	5,450
Mill Use (Thou Bales)	36,000	34,500	34,000	35,000	37,500	40,000	41,750
Ending Stocks (Thou Bales)	50,361	62,707	66,920	58,198	48,419	39,769	29,762
India	**12/13**	**13/14**	**14/15**	**15/16**	**16/17**	**17/18**	**18/19**
Harvested Area (Thou Acres)	29,652	28,911	31,752	30,393	26,810	30,393	30,450
Yield (Pounds/Acre)	461	515	446	409	483	463	454
Production (Thou Bales)	28,500	31,000	29,500	25,900	27,000	29,300	28,830
Net Exports (Thou Bales)	6,574	8,586	2,973	4,692	1,814	2,700	3,060
Mill Use (Thou Bales)	21,750	23,250	24,500	24,750	24,000	24,750	25,250
Ending Stocks (Thou Bales)	11,795	11,459	13,486	9,944	11,130	12,980	13,500

Table 1 – Selected Countries and Regions (Continued)

Indonesia	**12/13**	**13/14**	**14/15**	**15/16**	**16/17**	**17/18**	**18/19**
Harvested Area (Thou Acres)	25	22	15	7	7	5	5
Yield (Pounds/Acre)	583	540	291	324	324	291	308
Production (Thou Bales)	30	25	9	5	5	3	3
Net Imports (Thou Bales)	3,132	2,984	3,338	2,926	3,386	3,495	3,580
Mill Use (Thou Bales)	3,050	3,050	3,250	3,000	3,300	3,450	3,550
Ending Stocks (Thou Bales)	541	500	597	528	619	667	700

Mexico	**12/13**	**13/14**	**14/15**	**15/16**	**16/17**	**17/18**	**18/19**
Harvested Area (Thou Acres)	383	304	450	329	255	519	450
Yield (Pounds/Acre)	1,298	1,473	1,408	1,377	1,441	1,425	1,425
Production (Thou Bales)	1,036	933	1,319	943	764	1,540	1,336
Net Imports (Thou Bales)	725	880	665	844	850	525	580
Mill Use (Thou Bales)	1,800	1,850	1,850	1,850	1,750	1,850	1,875
Ending Stocks (Thou Bales)	646	584	693	605	444	634	650

Pakistan	**12/13**	**13/14**	**14/15**	**15/16**	**16/17**	**17/18**	**18/19**
Harvested Area (Thou Acres)	7,413	7,166	7,289	6,919	5,930	6,919	7,100
Yield (Pounds/Acre)	602	636	698	486	623	569	580
Production (Thou Bales)	9,300	9,500	10,600	7,000	7,700	8,200	8,579
Net Imports (Thou Bales)	1,350	690	440	3,050	2,275	2,400	2,256
Mill Use (Thou Bales)	10,750	10,400	10,600	10,300	10,300	10,400	10,500
Ending Stocks (Thou Bales)	2,710	2,475	2,890	2,615	2,265	2,440	2,750

Turkey	**12/13**	**13/14**	**14/15**	**15/16**	**16/17**	**17/18**	**18/19**
Harvested Area (Thou Acres)	1,013	815	1,063	914	988	1,161	1,190
Yield (Pounds/Acre)	1,256	1,354	1,446	1,391	1,554	1,653	1,585
Production (Thou Bales)	2,650	2,300	3,200	2,650	3,200	4,000	3,929
Net Imports (Thou Bales)	3,474	4,042	3,439	3,987	3,345	3,200	3,393
Mill Use (Thou Bales)	6,050	6,300	6,400	6,700	6,500	7,000	7,250
Ending Stocks (Thou Bales)	1,315	1,357	1,596	1,533	1,578	1,778	1,850

Uzbekistan	**12/13**	**13/14**	**14/15**	**15/16**	**16/17**	**17/18**	**18/19**
Harvested Area (Thou Acres)	3,336	3,212	3,175	3,175	2,916	2,965	2,875
Yield (Pounds/Acre)	662	613	590	574	613	599	598
Production (Thou Bales)	4,600	4,100	3,900	3,800	3,725	3,700	3,580
Net Exports (Thou Bales)	3,200	2,600	2,250	2,300	1,300	1,200	1,053
Mill Use (Thou Bales)	1,450	1,600	1,750	1,800	2,050	2,300	2,400
Ending Stocks (Thou Bales)	1,348	1,248	1,148	848	1,223	1,423	1,550

Vietnam	**12/13**	**13/14**	**14/15**	**15/16**	**16/17**	**17/18**	**18/19**
Harvested Area (Thou Acres)	20	7	2	2	2	2	2
Yield (Pounds/Acre)	413	389	583	583	583	583	583
Production (Thou Bales)	17	6	3	3	3	3	3
Net Imports (Thou Bales)	2,410	3,200	4,275	4,500	5,500	6,600	6,962
Mill Use (Thou Bales)	2,250	3,200	4,100	4,400	5,400	6,250	6,800
Ending Stocks (Thou Bales)	492	498	676	779	882	1,235	1,400

West Africa	**12/13**	**13/14**	**14/15**	**15/16**	**16/17**	**17/18**	**18/19**
Harvested Area (Thou Acres)	5,864	6,000	6,647	6,434	7,035	7,297	7,350
Yield (Pounds/Acre)	349	350	370	313	347	338	344
Production (Thou Bales)	4,260	4,380	5,122	4,200	5,089	5,137	5,264
Net Exports (Thou Bales)	3,803	4,310	4,260	4,873	4,520	4,360	4,910
Mill Use (Thou Bales)	126	126	121	131	130	125	125
Ending Stocks (Thou Bales)	1,460	1,404	2,145	1,341	1,769	2,421	2,650

U.S. and World Economy

In the early weeks of 2018, global economic activity continues to expand. Increased optimism regarding the U.S. and global economy has led to an increase in projected growth for 2018 and 2019. Although political uncertainty and potential changes in monetary and trade policy could provide some downside risks over the medium term, global growth is expected to remain strong in the near term.

The new U.S. tax policy is expected to stimulate additional economic activity over the next few years. The U.S. economy has benefited from stronger export sales due to the weak dollar and an increase in global demand. The International Monetary Fund (IMF) January 2018 *World Economic Outlook* noted that although global growth is projected to pick up in 2018, growth prospects could be dampened if increased demand leads to a faster-than-expected rise in inflation and interest rates in advanced economics.

The Wells Fargo Securities January 2018 *Monthly Outlook* also included an optimistic outlook for the global economy. Improvement is occurring in economic indicators across the global economy. In the U.S., the new tax policy could enhance economic growth in the coming years. Strong economic growth could result in higher inflation and there is a concern that the Fed will increase interest rates more aggressively in 2018. As expected, the Federal Reserve increased short-term interest rates in December. Homebuilding should increase with interest rates remaining relatively low. Inflation is expected to approach 2.0% throughout the year which would cause the Fed to continue its cautious pace to increase short-term interest rates.

Positive expectations for future economic growth appear to be a driving factor behind the latest survey of consumer attitudes. As measured by the Reuters/University of Michigan's Consumer Sentiment Index, consumer confidence declined slightly in December to 95.9, mostly due to lower income households. However, the average level for 2017 was the highest level since 2000. The index is designed to gauge the attitudes of the American consumer with regards to the economy.

For January 2018, the index decreased slightly to 94.4 (Figure 1) due to a slight increase in uncertainty about future economic activity. Consumers reported the most positive assessments of their current finances in seventeen years. However, they do anticipate slightly lower income gains and a slightly higher inflation rate of 2.4% in 2018. An increase of 2.6% in real personal consumption expenditures is expected for 2018.

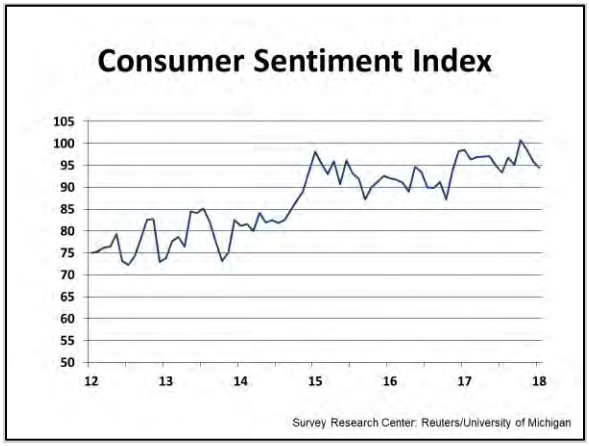

Figure 1 - Consumer Sentiment Index

U.S. Gross Domestic Product

As determined by the Bureau of Economic Analysis (BEA), the U.S. 2017 preliminary fourth quarter real Gross Domestic Product (GDP) increased by 2.6% (Figure 2), following on gains of 3.2% in the third

quarter. The increase in real GDP in the fourth quarter primarily reflected positive contributions from personal consumption expenditures (PCE), nonresidential fixed investment, exports, residential fixed investment, federal government spending, and state/local government spending that were partially offset by a negative contribution from private inventory investment. Imports, which are a subtraction in the calculation of GDP, increased.

Real GDP growth slowed in the fourth quarter due to a downturn in private industry investment that was partially offset by accelerations in PCE, nonresidential fixed investment, exports, state and local government spending, residential fixed investment, and federal government spending,

The Wells Fargo January 2018 *Monthly Outlook* projected GDP for the fourth quarter of 2017 at 2.2% and a 2017 rate of 2.2%. Economic growth is expected to gain some momentum in 2018 with a projected GDP growth rate of 2.9% in the first quarter and a 2.8% annual growth rate. Business fixed investment is expected to increase by 6.0% as compared to 4.7% in 2017, partially due to a rebound in oil exploration. Overall, the U.S. economy ended 2017 on a solid note with holiday retail sales surpassing expectations and strong capital spending. Home sales and housing starts increased again following a slowdown after the late summer hurricanes. The new tax policy will boost take-home pay and stimulate economic growth. The outlook for 2018 is more promising as oil exploration is expected to ramp up as oil prices have remained above $55 per barrel for the past few months.

The manufacturing Purchasing Managers' Index (PMI) increased in December following a three-month decline in the aftermath of the hurricanes. The current PMI indicates strong manufacturing activity, which is consistent with increased consumer confidence. U.S. manufacturing employment increased by 196,000 in 2017, compared to little change in 2016. Fiscal policy is expected to be more supportive of growth in 2018, but the speed of future monetary policy changes by major central banks is uncertain, particularly as the Federal Reserve continues to normalize interest rates.

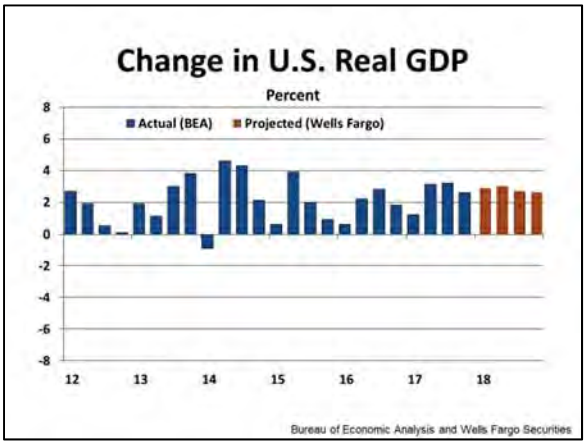

Figure 2 - Change in U.S. Real GDP

The latest IMF projections take a similar tone regarding U.S. GDP growth with expansion of 2.3% in 2017, followed by 2.7% growth in 2018. IMF also predicts an expansion in economic activity from the U.S. tax policy, particularly due to the investment response to the corporate income tax cuts.

An increase in consumer spending was a large factor in the improvement of the U.S. economy in 2017. According to the BEA, U.S. real personal consumption expenditures (PCEs) expanded in the fourth quarter of 2017 by 3.8% (Figure 3), compared with an increase of 2.2% in the third quarter. Durable goods increased 14.2% in the fourth quarter, compared with an increase of 8.6% in the third quarter. Nondurable goods increased 5.2% in the fourth quarter, compared with an increase of 2.3% in the third quarter. Services increased 1.8%,

compared with an increase of 1.1% in the third quarter.

The latest outlook by Wells Fargo puts the fourth quarter growth in PCEs at 3.0%. For 2018, PCEs are projected to grow at 2.3% to 2.5% per quarter.

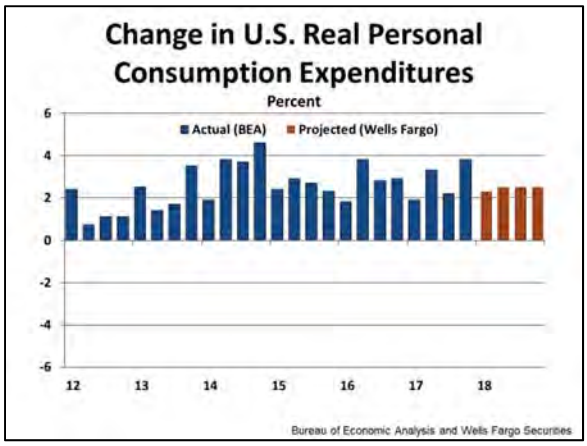

Figure 3 - Change in U.S. Real Personal Consumption Expenditures

U.S. Employment

Although still below pre-recession levels, the 2017 U.S. jobs market experienced its best performance of the current economic recovery. In December 2017, civilian employment stood at 60.1% of the population (Figure 4), relatively unchanged throughout 2017 and slightly above the previous year. The latest data fall short of the pre-recession levels of 63.0%, but still come as welcomed news after the stagnant data reported between 2010 and 2013.

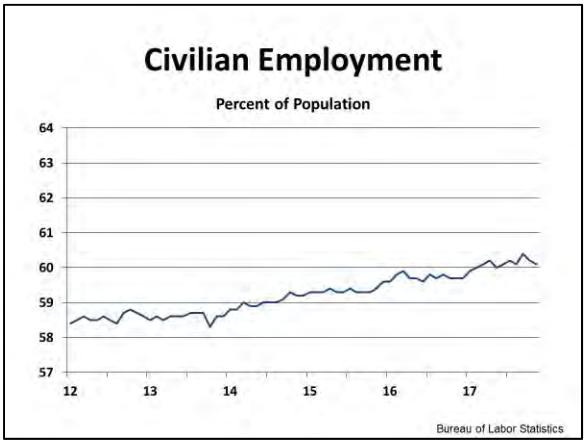

Figure 4 - Civilian Employment

Total nonfarm payroll employment increased by 148,000 in December. For 2017 as a whole, job growth totaled 2.1 million, compared with 2.2 million in 2016.

Employment in professional and business services increased by 19,000 in December, and employment in food services and drinking establishments increased by 25,000. Health care added 31,000 jobs in December.

Manufacturing employment increased by 25,000 in December. Construction employment increased by 30,000 and retail trade employment decreased by 20,000 in December. Employment in other major industries (mining, wholesale trade, transportation and warehousing, information, financial activities, and government) was relatively unchanged from the previous month.

According to the latest government estimates, the December 2017 unemployment rate was 4.1% (Figure 5). The unemployment rate has remained unchanged for the third consecutive month and is the lowest level since June 2008. For 2018, economists expect the labor market to continue to improve.

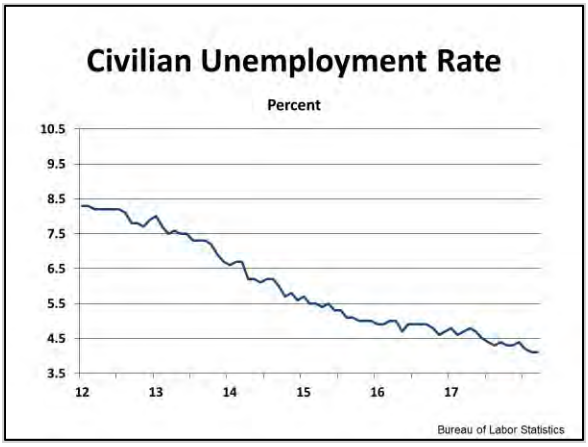

Figure 5 - Civilian Unemployment Rate

U.S. Housing Market

The housing industry, a key barometer of the well-being of the economy, showed further improvement in 2017 as housing starts continued to increase. However, construction dropped sharply at the end of 2017. According to the U.S. Census Bureau, the seasonally-adjusted annual rate for new-home construction was 1.2 million units in December (Figure 6). This is 8.2% below the revised November estimate of 1.3 million units and is 6.0% below the December 2016 rate. An estimated 1.2 million housing units were started in 2017, up 2.4% from 2016.

Figure 6 - U.S. New Housing Starts

According to Freddie Mac's *January 2018 Outlook*, 2017 was the best year in the housing market in a decade. The 2018 housing market is prepared for a strong start as the economic recovery appears to be gaining momentum. The strong labor market and the reduction in the corporate tax rate due to the new tax policy should boost GDP growth resulting in a modest increase in inflation. The tax reform bill does reduce some of the advantages of home ownership by increasing the standard deduction and reducing the mortgage interest deduction.

Freddie Mac expects gradual increases in interest rates in 2018 that should allow housing market activity to maintain momentum. Home sales, construction, and prices are expected to be slightly higher in 2018. The direct impact of the tax reform bill should be modest for the housing markets. Looking ahead, continued growth in the housing market is expected along with an increase in inflation and interest rates as the Federal Reserve moves toward policy normalization.

While the near-term outlook remains optimistic, Freddie Mac notes that a few signs of another recession are starting to accumulate, such as a flatter U.S. Treasury yield curve and a below normal unemployment rate. With increased prices in the housing market, housing affordability will decline as income gains will likely be smaller than the rise in prices. However, increased demand will allow the housing markets to absorb higher mortgage rates and home prices this year. Growth in the housing industry will depend on the ability of young adults to drive the single-family housing market forward.

At 4.0%, the 30-year mortgage rate for December 2017 increased by 0.7% from the previous month (Figure 7). In early 2017, mortgage rates were remaining stable with the most recent surveys indicating a preliminary January number of 4.0%. For 2018, Freddie Mac expects to see some additional increases in the interest rate.

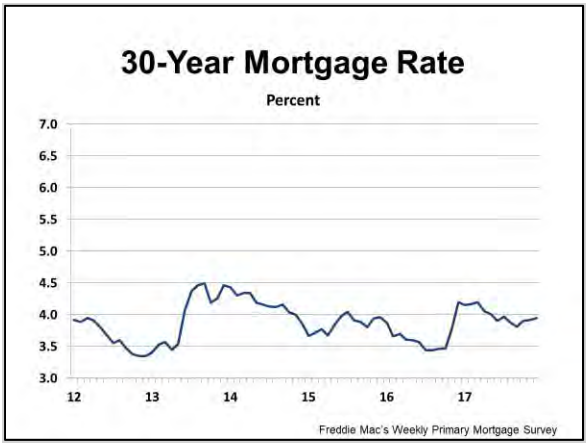

Figure 7 - 30-Year Mortgage Rate

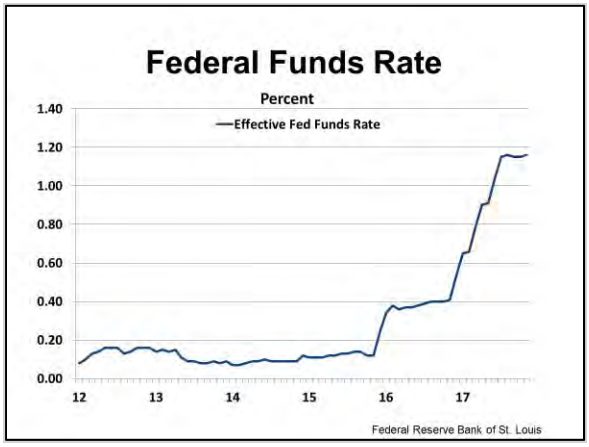

Figure 8 - Federal Funds Rate

Federal Reserve Board

Following an expansion in economic activity and a strengthened labor market in 2017, the target range for the federal funds rate was increased from 1.3% to 1.5% in December 2017 (Figure 8). According to the minutes from the December Federal Open Market Committee, gradual adjustments to monetary policy will allow economic activity to expand at a moderate pace and labor market indicators will continue to strengthen while inflation remains slightly below 2.0% in the near-term but returns to the 2.0% target in the medium-term.

The Committee will continue to assess economic conditions relative to its objectives of maximum employment and 2.0% inflation when making future adjustments to the federal funds rate. Since inflation is currently below the target level, the Committee will continue to monitor actual and expected progress toward its inflation goal. The Committee expects only gradual increases in the federal funds rate as economic conditions evolve. However, the actual path of the federal funds rate will depend on the economic outlook as informed by incoming data.

A January 2018 *Wall Street Journal* survey indicates that 92.5% of respondents expect the next increase in the federal funds rate in March, while 1.5% expect the next increase in May and 6.0% expect the next increase in June.

Federal Budget Situation

The Congressional Budget Office (CBO) generally releases its annual Budget and Economic Outlook in January. For 2018, the report is delayed in order to incorporate the effects of the recently enacted tax bill and major spending decisions by Congress expected in the next few weeks. The CBO projections from the June 2017 baseline are included in this report.

Projections by CBO indicate that federal outlays will continue to outpace revenues over the next decade. If current laws remain unchanged, CBO projects an upward path for budget deficits over the next decade due to higher spending for retirement and health care programs. For fiscal year 2017, federal spending is estimated at $4.0 trillion and revenue came in at $3.3 trillion (Figure 9), resulting in a deficit of $693 billion.

Revenues for fiscal year 2017, which are a new high, represent a slight increase from the 2016 value. Outlays in fiscal 2017 were up $155 billion, or 4.0% from the previous

year. For fiscal 2018, CBO projects that revenue will grow by 6.5%.

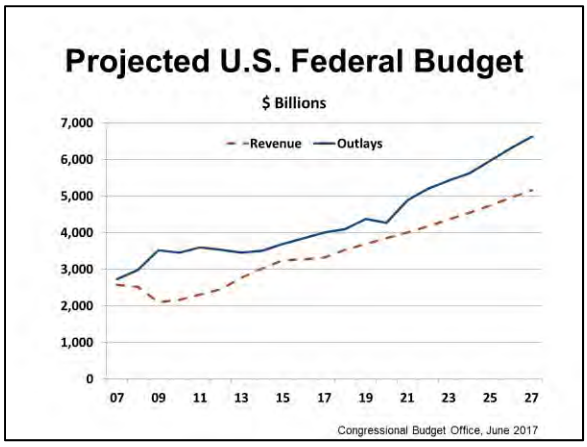

Figure 9 - Projected U.S. Federal Budget

For fiscal 2018, CBO estimates a deficit of $563 billion (Figure 10). At 2.8% of GDP, the 2018 deficit will be slightly lower than last year. According to CBO's long-term projections, the annual deficit increases to 3.3% of GDP in 2019 and resumes its upward trajectory reaching 5.2% of GDP by 2027.

The persistent and growing deficits that CBO projects would result in increasing amounts of federal debt held by the public. In CBO's baseline projections, that debt rises from 77.0% of GDP in 2017 to 91.0% of GDP in 2027. This amount would be the largest debt held by the public since 1947 and over twice the average of the past five decades as compared to GDP.

According to CBO, the large and increasing amount of federal debt would have serious negative consequences, including: increasing federal spending on interest payments, reductions in the nation's capital stock leading to lower productivity and total wages; less flexibility to use tax and spending policies to respond to unexpected challenges; and eventually increasing the risk of a fiscal crisis (in which investors would demand high interest rates to buy the government's debt).

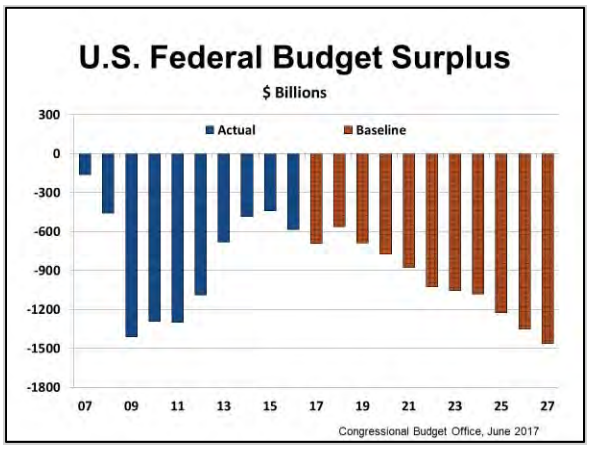

Figure 10 - U.S. Federal Budget Surplus

Consumer and Producer Price Indices

Inflation acts as a tax on investment by increasing the cost of equity-financed investment and reducing corporate equity values. U.S. inflation is commonly measured by the Consumer Price Index (CPI) and the Producer Price Index (PPI).

Measured by the December-to-December change, the CPI rose just 2.1% in 2017 after a 2.1% increase in 2016 (Figure 11). For 2017, the annual average CPI grew at 2.1%, which is higher than the 2016 value and recent historical averages.

In December, the shelter index increased and was largely responsible for the overall increase in all items. The energy index and gas index decreased. The food index increased as the indexes for food at home and food away from home both increased.

The index for all items less food and energy rose 0.3% in December, which is the largest increase since January 2017. Indexes for medical care, motor vehicle insurance, used cars and trucks, and new vehicles all increased in December. However, indexes for apparel, airline fares, and tobacco declined.

Over the last 12 months, the all items index rose 2.1%. The food index rose 1.6% over the last 12 months. The energy index increased by 6.9%, with all major components increasing. The index for all items less food and energy increased 2.1% over the last 12 months.

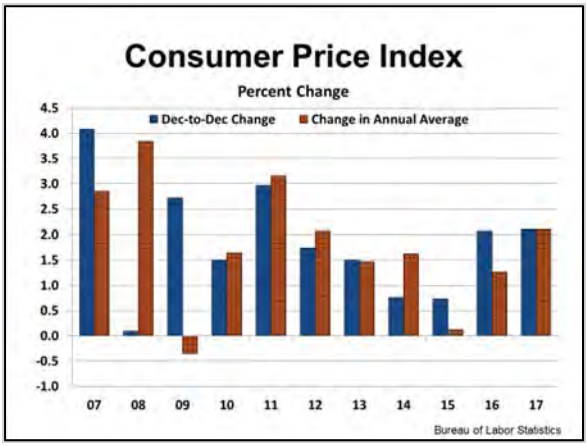

Figure 11 - Consumer Price Index

On a December-to-December basis, the PPI for finished goods increased in 2017 by 3.3% (Figure 12).

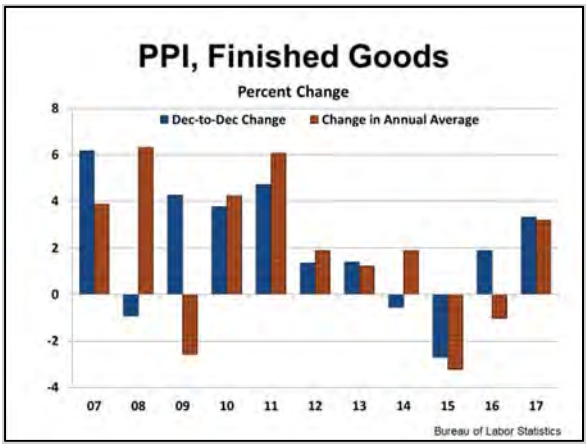

Figure 12 - Producer Price Index, Finished Goods

Energy Prices and Supply

For 2018, energy prices continue to stay at the forefront of any analysis of the general economy. After 5 years of crude oil prices (as measured by West Texas Intermediate (WTI) market) ranging between $80 and $100 per barrel, the latter half of 2014 brought a pronounced change in energy markets with price declines approaching 50.0%. By the end of 2015, prices dropped to $37 per barrel. Prices continued to decline to $30 per barrel in February 2016 before starting a slow upward trajectory. The average price in 2017 was $51 per barrel compared to $43 per barrel in 2016. At the end of 2017, prices reached $58 per barrel, which is the highest level since December 2014.

The Department of Energy's Energy Information Administration (EIA) estimates that global oil inventory draws averaged 0.4 million barrels per day (bbl/d) in 2017, which is the first year of global inventory draws since 2013. Global inventories are expected to rise in 2018 at a pace of 0.2 million bbl/d. The modest growth in global inventories will hold oil prices around $60 per barrel. The price increase in 2017 reflects the global inventory draws throughout the year.

Global consumption of petroleum and other liquid fuels grew by 1.4 million bbl/d in 2017, with most of the growth in countries not included in the Organization for Economic Cooperation and Development (OECD) countries. Consumption averaged 98.4 million bbl/d for 2017. EIA expects global consumption to grow by 1.7 million bbl/d in 2018, with 1.2 million b/d from non-OECD consumption, mostly in China and India. OECD consumption increased by 0.4 bbl/d in 2017 and is expected to increase by 0.5 million b/d in 2018 and 0.3 million bbl/d in 2019. The United States is the main driver of OECD consumption growth.

Organization of the Petroleum Exporting Countries (OPEC) countries produced an average of 32.5 million bbl/d in 2017, which is a 0.2 million bbl/d decline from 2016 mainly due to the November 2016 OPEC production agreement to limit production to 32.5 million bbl/d. EIA projects increased production in OPEC countries by 0.2 million

bbl/d in 2018 and 0.3 million bbl/d in 2019. In November 2017, the participants agreed to continue to limit production until the end of 2018 to reduce global oil inventories. Production declined in other countries due to various reasons. Venezuela had a substantial decrease in production to near 30-year lows due to political factors. In Mexico, production has been on a downward trend for over a decade, but a rapid decline occurred in 2017 due to very low rig counts.

In non-OPEC countries, EIA estimated an increase in crude oil supply of 0.7 million bbl/d in 2017, with most of the growth in the United States and Canada. For 2018, production in non-OPEC countries is expected to increase by 2.0 million bbl/day in 2018 and 1.3 million bbl/d in 2019 due to higher oil prices and increased drilling activity, particularly in the United States.

Uncertainty regarding global economic and political developments could affect EIA's price projections. Changes in the U.S. oil sector could affect current and future crude oil prices.

The average December 2017 WTI crude oil spot price reached $58 per barrel which is the highest level since June 2015 (Figure 13). The average price for 2017 was $51 per barrel compared to a 2016 average of $43 per barrel. EIA now expects WTI crude oil prices to average $55 per barrel in 2018.

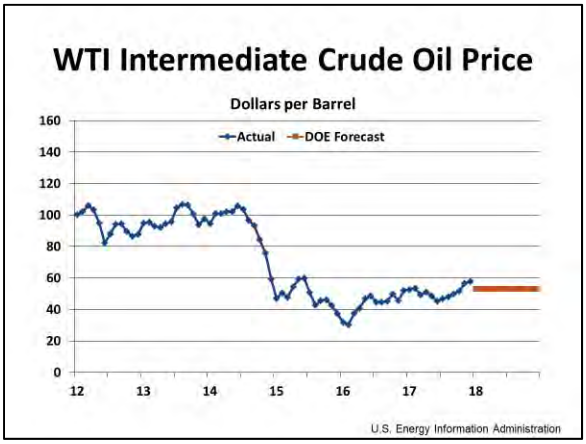

Figure 13 - WTX Intermediate Crude Oil Price

The EIA outlook cautions that during the forecast period, oil prices could continue to experience periods of increased volatility. Going into 2018, the oil market faces many uncertainties, including continued adherence by the OPEC countries and Russia to reduce oil production throughout 2018 as an effort to rebalance the oil market. Countries outside of the agreement, particularly the U.S., Canada, and Brazil, could increase production, which would result in an increase in global oil supplies. In early 2018, U.S. crude oil production was near a two-year high and is expected to rapidly expand in 2018.

Retail diesel fuel prices (Figure 14), which track closely with crude oil prices, averaged $2.65 per gallon in 2017, which is 15.0% higher than the 2016 average price. The EIA projects diesel prices to average $2.95 per gallon in 2018 and $3.01 per gallon in 2019.

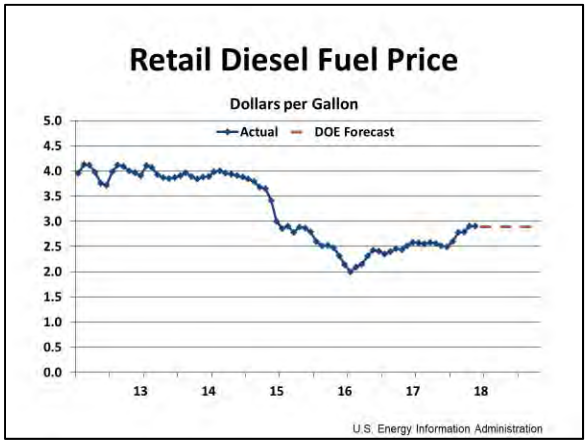

Figure 14 - Retail Diesel Fuel Price

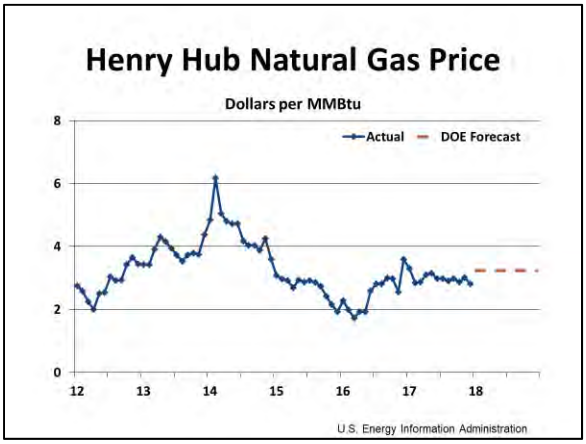

Figure 15 - Henry Hub Natural Gas Price

Natural gas prices increased throughout 2017 due to high natural gas use for electricity during the hot summer months and declining production. The Henry Hub natural gas spot price averaged $2.99 per one million British thermal units (MMBtu) in 2017 (Figure 15), up from a 17-year low in 2016. In December 2017, the spot price averaged $2.81 per MMBtu. EIA projects a price of $2.88 per MMBtu in 2018 and $2.92 per MMBtu in 2019. The 2018 price projection is lower due to the projected increase in natural gas production.

During the first quarter of 2017, residential and commercial space heating demand was lower than expected due to unseasonably warm temperatures. Natural gas production hit a record level in December 2017 due to increased demand over the past three months and the growth is expected to continue in 2018. EIA projects that U.S. total natural gas consumption will increase to an average of 77.5 billion cubic feet per day (Bcf/d) in 2018, compared with an estimated 74.0 Bcf/d in 2017.

U.S. Equity Markets

After closing 2016 at 19,763, the Dow Jones Industrials Average (Dow) increased 25.7% to 24,838 by the end of 2017 (Figure 16). At the end of January 2018, the Dow grew to 26,020.

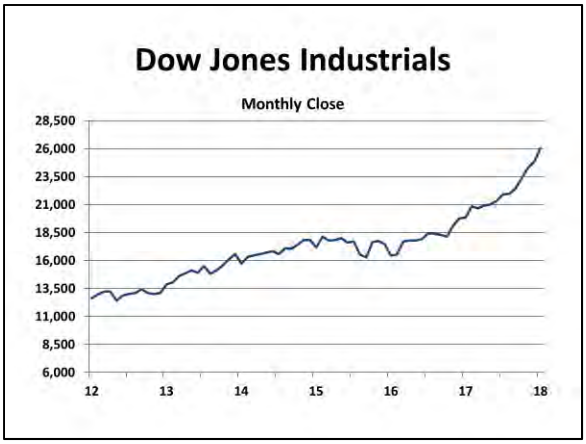

Figure 16 - Dow Jones Industrials

World Economies

Global economic activity improved modestly in 2017. The world economy continued its recovery in 2017 and additional growth is expected in 2018. According to the latest projections by the International Monetary Fund (IMF), the world economy grew by 3.7% in 2017, as compared to 3.2% in 2016 (Figure 17). Global growth was revised upward from earlier forecasts due to higher than anticipated activity in Europe and Asia, along with some growth in emerging market

and developing economies. Activity is expected to improve modestly in 2018 and 2019, due to growth in advanced economies. IMF projections call for the world economy to grow by 3.9% in 2018 and 2019.

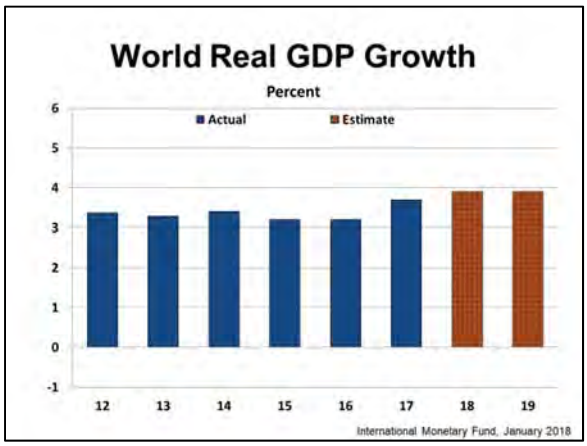

Figure 17 - World Real GDP Growth

The forecast is based on the expectation that favorable global financial conditions and increased consumer confidence will allow demand to continue to accelerate, particularly in economies with large exports. The U.S. tax reform is also expected to increase U.S. growth in the near-term and spill over to U.S. trading partners, particularly Canada and Mexico. The economic outlook for Germany, Italy, and the Netherlands has been revised upward due to stronger domestic and external demand. The growth forecast has also been revised upward for advanced Asian economies, including Japan.

The IMF projects that output of emerging and developing economies (EMDEs) will expand at 4.9% in 2018 and 5.0% in 2019. The growth forecast for EDMEs is relatively unchanged from 2017. Higher growth is projected for the Middle East as oil prices and domestic oil demand have strengthened. Growth projections were increased for Poland, Turkey, India, Brazil, Mexico, and Saudi Arabia. Projections were lowered for Venezuela.

In advanced economies, growth is projected at 2.3% in 2018 and 2.2% in 2019. Looking across key countries and regions, the economy in the Euro Area is projected to grow by 2.2% in 2018 and 2.0% in 2019 (Table 2). In Japan, growth is expected to drop in 2018.

According to the IMF report, growth in China is expected to slow to 6.6% in 2018 and 6.4% in 2019. However, it was revised up as compared to the October 2017 forecast due to increased external demand.

In the near-term, risks to the global outlook appear to be balanced and an increased economic growth path is likely to be maintained. Potential risks over the medium-term include a tightening of global finance conditions along with geopolitical issues.

Table 2 - Selected Economies: Real GDP

Year-Over-Year % Changes				
	2016	2017e	2018f	2019f
World	3.2	3.7	3.9	3.9
U.S.	1.5	2.3	2.3	2.2
Euro Area	1.8	2.4	2.2	2.0
Japan	0.9	1.8	1.0	0.9
China	6.7	6.8	6.6	6.4
India	7.1	6.7	7.4	7.8
Russia	-0.2	1.8	1.7	1.5
Brazil	-3.5	1.1	1.9	2.1
Mexico	2.9	2.0	2.3	3.0
Source: International Monetary Fund, January 2018				

Exchange Rates

During periods of market uncertainty, traders sell currencies that are perceived riskier and place their bets in safe havens.

In 2017, the euro averaged 0.90 per dollar, which is slightly higher than the average value in 2016 (Table 3). At the close of 2017, the euro stood at 0.80 per dollar. The Japanese yen depreciated in 2017 to 112 per dollar.

The Brazilian real appreciated against the dollar in 2017 and has been increasing in

2018. The real increased by 8.3% against the dollar in 2017 and further increased to 3.17 per dollar in late January 2018.

The South Korean Won and Indian Rupee showed a slight appreciation against the dollar in 2017. The Indonesia Rupiah, Pakistani Rupee, and Chinese Yuan had a slight decrease in 2017.

Table 3 - Selected Exchange Rates

Currency per U.S. Dollar			
	2015	2016	2017
Euro	0.90	0.90	0.89
Japanese Yen	121.05	108.78	112.15
Brazilian Real	3.34	3.48	3.19
South Korean Won	1,132	1,161	1,130
Indian Rupee	64.14	67.17	65.11
Indonesia Rupiah	13,397	13,302	13,380
Pakistani Rupee	102.78	104.73	105.32
Chinese Yuan	6.28	6.64	6.76
Source: WSJ.com			

The Federal Reserve Board publishes a real exchange rate index comparing the dollar to a weighted average of currencies of important trading partners, excluding major developed economies. Between early 2009 and mid-2011, the trade weighted index fell by almost 15 percentage points (Figure 18). However, the trend reversed course during the latter half of 2011 before peaking in mid-2012. The index subsequently declined through early 2013 before stabilizing in the second half of the year. The cyclical performance continued throughout 2014. The index has slowly trended upward since 2015. In December 2016, the index was at the highest level since 2009. Throughout 2017, the index has trended downward from the high observed at the end of 2016.

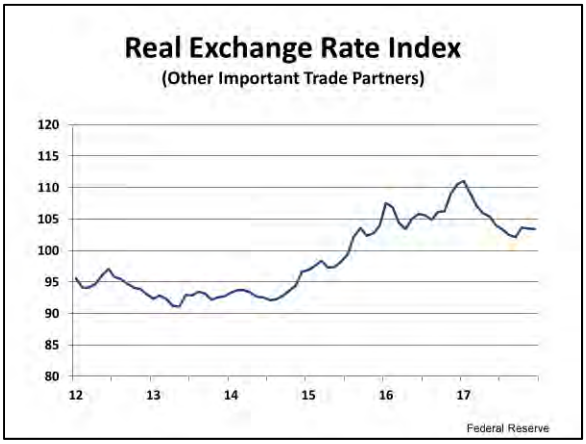

Figure 18 - Real Exchange Rate Index

Commodity Prices

The U.S. Department of Agriculture (USDA) publishes monthly indices of prices received by farmers. During 2017, the crop price index increased to a high of 91 in April, which is the highest level since August 2014. From May to September, the index fluctuated between 86 and 89. However, a decline occurred in the last few months of the year. The November index of 81 represented a 11.0% decline from the April high (Figure 19).

Looking at the latest data at the time of this report, crop prices were slightly higher than they were a year ago. The cotton price index steadily increased through July to 82.9, dropped to 72.5 in September and climbed back to 76.2 by November, which is 1.2% lower than a year ago. Higher prices reflected lower supplies of high quality cotton, large un-fixed on-call sales by mills, and heavy speculative trading activity.

The livestock price index trended upward reaching a two-year high of 111 in May, declined for a few months, and then bounced back to 99.7 in November 2017, which is 12.7% higher than a year ago. Compared with a year ago, prices of cattle, market eggs, hogs, broilers, calves and milk are higher, but prices are down for turkeys.

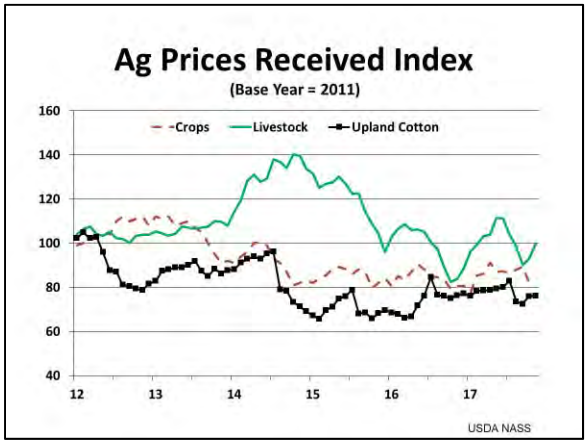

Figure 19 - Ag Prices Received Index

USDA also publishes monthly indices of prices paid by farmers for various production inputs. Of particular interest are the indices for energy related inputs such as diesel and nitrogen fertilizer. In line with the previous discussion on retail diesel prices, the diesel prices paid index declined during the first half of the year and increased for the latter half of 2017 (Figure 20). The diesel price index ended the year up 12.6% from the beginning of 2017.

Nitrogen prices increased until April, declined from May to September, and increased for the remainder of the year. (Figure 20). The nitrogen price index ended the year up 5.1% from the beginning of 2017.

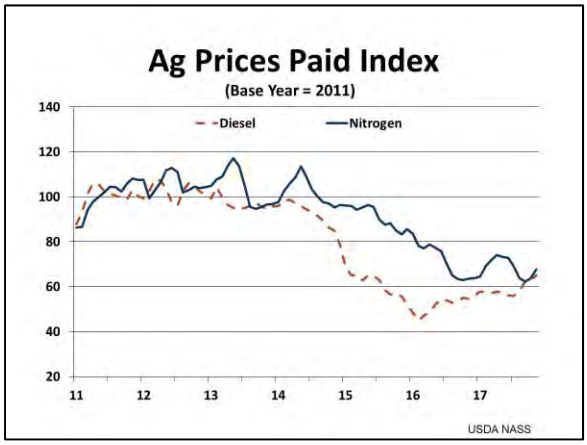

Figure 20 - Ag Prices Paid Index

U.S. Net Farm Income

The latest USDA estimates place U.S. net farm income at $63.2 billion in 2017, up 2.8% from 2016's estimate of $61.5 billion (Figure 21). Net cash income is forecast to increase by 3.9% in 2017.

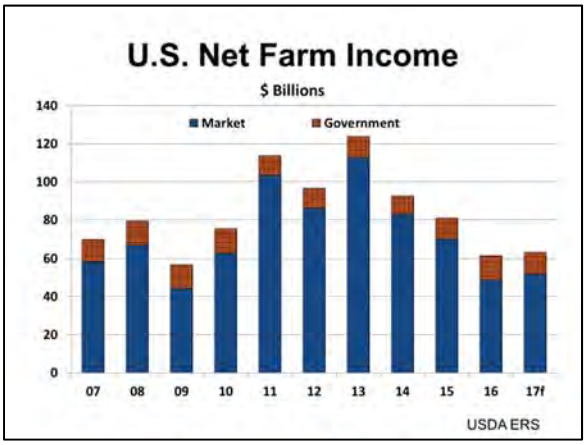

Figure 21 - U.S. Net Farm Income

According to USDA's Economic Research Service, total commodity receipts are projected to decline in 2017. Crop receipts are expected to decline by $3.8 billion in 2017 due to a decline in some crop prices, led by a forecast $4.4 billion decrease in fruit and nut receipts and a $3.2 billion decrease in soybean receipts. Cotton cash receipts are projected to increase by $2.2 million while vegetable and melon cash receipts are forecast to increase by $1.5 million. Cash receipts for broilers, hogs, cattle/calves are expected to see strong growth in 2017 after declines in 2016. Broiler receipts are projected to increase by 15.2%, a 10.0% increase is expected for milk receipts, and hog receipts are projected to increase by 8.7% in 2017. Cattle/calves receipts could increase by 5.2% in 2017. Government payments are projected to decline 13.8% to $11.2 billion in 2017.

Total production expenses are forecast to increase by 1.5%. Interest, labor, fuel, and oil inputs are expected to have the largest increases. Fertilizer and feed expenses are expected to decline.

Farm financial risk indicators such as the debt-to-asset ratio are expected to rise in 2017, for the fourth year in a row, indicating increasing financial pressure on the sector. However, debt-to-asset and debt-to-equity ratios remain low relative to historical levels.

Increasing farm sector assets are projected due to a modest increase in farm real estate assets. Farm sector debt is expected to increase by 2.9% in 2017, with real estate debt rising by 4.6%. Farm sector equity is expected to increase by 2.7%, while debt-to-asset levels are projected to remain unchanged from 2016.

U.S. Farm and Trade Policy

Agricultural policy provisions applying to the 2018 crop are authorized by the Agricultural Act of 2014, also known as the 2014 Farm Bill.

The Agricultural Act of 2014

The Agricultural Act of 2014 included considerable changes to the structure of upland cotton support. A few key changes and additions are discussed below.

Generic Base

The 2014 Farm Bill converts upland cotton base to generic base. For each farm, the number of cotton base acres credited to the farm on September 30, 2013 will be the number of generic acres established for 2014 and beyond.

Generic base acres planted to a covered commodity are eligible for Agriculture Risk Coverage and Price Loss Coverage (ARC/PLC) payments in that year and will be attributed to a covered commodity as determined by formulas detailed in the legislation.

Base Loan Rates, Marketing Loans and LDP's

The marketing assistance loan for upland cotton is maintained in the 2014 Farm Bill with the determination of the level of the base loan rate modified in order to address the findings of the WTO panel. The level of the upland cotton marketing loan rate is based on the 2-year moving average of the adjusted world price (AWP) as announced by USDA.

The loan rate is equal to the 2-year average AWP for the 2 most recently completed marketing years as of October 1 in the fall prior to planting. For example, the 2017 loan rate is based on the 2014 and 2015 marketing years since those are the 2 most recent years as of October 1, 2016. However, the loan rate cannot exceed its 2008 Farm Bill level of 52 cents per pound nor be less than 45 cents per pound. For 2017, the base loan rate dropped to 49.49 cents per pound. For the 2018 crop year, the base loan rate will increase to 52 cents.

Marketing loan repayment provisions and the determination of the premium and discount schedules remain unchanged from the 2008 farm law. Storage credits are maintained with the rate set at 90.0% of the 2006 rate.

The loan rate for ELS cotton is set at 79.77 cents per pound.

Payment Limitations and Eligibility Requirements

The 2014 Farm Bill contains significant changes in payment limitations and eligibility requirements. An income means test was established based on total adjusted gross income (AGI) of $900,000 for commodity and conservation benefits. A payment limit of $125,000 per entity was established for payments received under Title I price and revenue programs and marketing loan benefits, both marketing loan gains (MLGs) and loan deficiency payments (LDPs). The LDP/MLG is a significant departure from the 2008 farm law, which imposed no limit on marketing loan benefits. The current legislation maintains the separate limit for peanuts.

Commodity Marketing Certificates

Commodity certificates allow producers with outstanding MALs to purchase certificates and then exchange the certificate for their outstanding loan collateral rather than forfeit that loan collateral to CCC at loan maturity. By redeeming a loan with commodity certificates, the MLG, if

available, is not subject to the AGI means test or the $125,000 payment limitation. A commodity certificate exchange is not considered a "program benefit" but is considered an exchange in loan collateral.

Actively Engaged

In terms of eligibility for Title I price and revenue programs, the farm bill authorized fundamental changes in the rules that determine whether an individual is considered to be actively engaged in farming. Under the 2008 farm law, actively engaged in farming required a contribution of management and/or labor. The current legislation authorized the Secretary of Agriculture to define what constitutes a significant contribution of management for the purpose of being considered actively engaged and provides discretionary authority to establish a limit on the number of individuals who may be considered actively engaged when a significant contribution of management is used to meet the actively engaged requirements.

To be considered “actively engaged in farming”, certain requirements must be met for farming operations conducted by general partnerships and joint ventures that encompass non-family members. Additional details are available on the USDA-FSA website at www.fsa.usda.gov.

Stacked Income Protection Plan

The Stacked Income Protection Plan (STAX) is available for purchase in essentially all counties in which USDA’s Risk Management Agency (RMA) offers upland cotton insurance products. Administered in a manner consistent with current crop insurance delivery systems, STAX is designed to complement existing crop insurance products. The STAX plan addresses revenue losses on an area-wide basis, with a county being the designated area of coverage. In counties lacking sufficient data, larger geographical areas such as county groupings are necessary in order to preserve the integrity of the program.

The “stacked” feature implies that the coverage would sit on top of the producer’s individual crop insurance product. While designed to complement an individual’s buy-up coverage, a producer is not required to purchase an individual buy-up policy in order to be eligible to purchase a STAX policy.

STAX carries a premium subsidy of 80% and covers losses in expected revenue between 10% and 30%. In other words, the maximum coverage range is 70% to 90% of expected revenue. However, the coverage range is adjustable in 5% increments so a producer may customize the policy to best address their risk. Producers have the choice of customizing STAX based on the harvest price option and a protection factor that can scale indemnities up or down by 20%. STAX policies are available by irrigated and non-irrigated practices to the greatest extent possible.

Producers have the option to further differentiate STAX purchase decisions by production practice by electing a 0% coverage range. Having the upper and lower coverage levels the same would technically mean that all acres are insured, but there would be no indemnity associated with the 70-70% policy. Since all of the growers’ acres are insured, the growers must report their production from all acres, thus enhancing the accuracy of the county estimate.

STAX coverage is available in written agreement (WA) counties. There are 17 counties in which cotton underlying insurance policies are offered by WA. Producers can also purchase STAX for cottonseed through an optional endorsement.

An addition in 2017 is the ability to purchase STAX on farms covered under the Whole-Farm Revenue Protection policy.

As with other insurance products, STAX is not subject to payment limitations or means tests. County-specific details are available both on the NCC website www.cotton.org and the USDA-RMA website www.rma.usda.gov.

Other Crop Insurance Changes

For upland cotton acres not purchasing a STAX policy, producers may purchase an alternative product known as a Supplemental Coverage Option (SCO). Unlike STAX, an underlying policy is required in order to purchase SCO. Essentially, SCO provides coverage for a portion of the individual's deductible from the underlying policy. SCO indemnities are triggered on county experience and the SCO policy will be either a yield or revenue policy, depending on the underlying coverage. The SCO deductible is 14%, as opposed to 10% in STAX, and the SCO premium subsidy is 65%.

The current farm law makes permanent the option of insuring enterprise units and adds the option to insure enterprise units by practice. Producers will also have the option to make adjustments to their approved yield history and insure acres under different production practices at different coverage levels. In some regions of the Cotton Belt, the provision to adjust their approved yield will have significant benefits. Producers are encouraged to consult closely with their insurance agents to determine the best risk management options for their farming operation.

Potential Changes to 2014 Farm Bill Programs

Legislation to include a Title I cotton program in the 2014 Farm Bill is currently pending. The House passed a Supplemental Disaster Bill in December 2017 and included language authorizing seed cotton as a covered commodity eligible for the Title I ARC/PLC program in the 2014 Farm Bill. The legislation is currently pending action by the Senate. If a cotton program is included, the Senate may choose to modify the policy to include cottonseed instead of seed cotton to remain consistent with the language included in their FY2018 Agricultural Appropriations Bill passed in June 2017. The cotton program would be effective for the 2018 crop year.

Cotton Import Provisions

The 2014 Farm Bill continues without changing the rules for triggering import quotas. A Special Import Quota will be opened when the average U.S. quote in the international market exceeds the prevailing world market price for 4 consecutive weeks. Global Import Quotas are triggered when the base quality spot price for a month exceeds 130% of the average for the previous 36 months.

ELS Cotton Competitiveness Provisions

The farm law continues competitiveness payments for eligible domestic users and exporters of American Pima cotton. The payment rate reflects the difference between the American Pima quote in the Far Eastern market (APFE) and the lowest foreign quote in the Far East (LFQ), adjusted for quality.

Economic Assistance to Users of Upland Cotton

The highly successful assistance for U.S. textile mills continues in the 2014 Farm Bill. The program makes a payment of 3 cents per pound for all upland cotton consumed. Payments must be used for specific purposes such as acquisition, construction, installation, modernization, development, conversion, or expansion of land, plant buildings, equipment, facilities, or machinery.

Trade Negotiations & Disputes

Trade policy issues remain at the forefront for the U.S. cotton industry. Modernization, renegotiation, and withdrawal are some of the terms used to describe trade issues in 2017.

NAFTA Modernization

On May 18, 2017, U.S. Trade Representative Robert Lighthizer notified Congress of the President's intention to begin negotiations with Canada and Mexico to modernize the North American Free Trade Agreement (NAFTA). That notification began a 90-day process required by the Bipartisan Congressional Trade Priorities and Accountability Act of 2015 (2015 TPA) before negotiations can begin with any country. As part of this process, the United States Trade Representative (USTR) published a notice in the Federal Register on May 23, 2017, soliciting comments from the public on NAFTA modernization. In addition, three days of hearings were held from June 27-29, 2017 where the USTR heard from over 140 witnesses, who provided testimony on a wide range of sectors, from agriculture to manufacturing and digital trade. Agriculture and textile organizations submitted comments and provided testimony expressing the need for the United States to remain a participant in a vibrant NAFTA because it has been and can continue to be a very positive trading platform for U.S. agriculture, including cotton and textiles.

The National Cotton Council (NCC), American Cotton Shippers Association (ACSA), and AMCOT submitted comments showing how NAFTA has been a success story for the U.S. cotton industry, in large part due to the duty-free trade in raw cotton and cotton textile products. Maintaining NAFTA's benefits is crucial to the cotton industry's vitality and long-term survival. The NAFTA trading partners of Canada and Mexico are significant markets for U.S. food and fiber exports. With purchases exceeding 1 million bales, Mexico has emerged as one of U.S. raw cotton's top five export destinations, and NAFTA plays a critical role in North America's highly integrated textile and apparel supply chain.

The U.S. cotton industry urged the Administration to stay involved in this important trade agreement and not weaken current provisions. It was also noted that the general objectives of U.S. negotiators should be to preserve NAFTA's current benefits while encouraging further regional integration of the cotton and textile supply chain. This could be achieved through improvements to measures affecting trade in textiles and apparel, particularly the strengthening of the textile rules of origin.

The National Council of Textile Organizations (NCTO) also submitted comments expressing the importance of NAFTA to the U.S. textile industry and noting that Mexico and Canada are the two largest export markets for U.S. textiles. NAFTA's yarn-forward rule of origin has boosted growth in regional trade and facilitated regional integration to the benefit of the U.S. textile and cotton industries.

Unfortunately, NAFTA also includes exceptions that weaken the effectiveness of the yarn-forward rule of origin. Both NCTO and the cotton organizations encouraged negotiators to eliminate all tariff-preference levels (TPLs) from NAFTA, assess the effectiveness of the "single transformation" rule, the "special regime" based on the 9802 concept, and exemptions for specific textile components in order to make NAFTA more effective. TPLs allow certain fabrics and yarns to enter a NAFTA country from a third country, be processed into a finished textile product and still receive duty-free treatment under the agreement. Single transformation provides duty-free treatment

based solely on the assembly stage for specific apparel items. The special regime allows certain apparel or made-up articles to enter duty-free if the fabric is formed in the U.S. In such instances, the goods receive duty-free treatment regardless of the yarn's country of origin. NAFTA also currently exempts from the yarn-forward rule of origin certain components, such as sewing thread, pocketing, and narrow elastics.

The organizations also encouraged the U.S. to explore whether the NAFTA modernization effort provides an opportunity to close an exemption for products assembled in Mexico or Canada from application of the buy-American requirements of the Kissell Amendment. The Kissell Amendment requires the U.S. Department of Homeland Security (DHS) to purchase only textile products with 100.0% U.S. content, with limited exceptions. Unfortunately, DHS does not apply the Kissell Amendment to purchases by the Transportation Security Administration (TSA), since the U.S. failed to notify Mexico and Canada, per NAFTA's terms, of a reservation for TSA from the Government Procurement Agreement. The organization urged U.S. negotiators to look for ways to strengthen the Kissell Amendment's application with respect to Mexico and Canada.

Finally, the organizations all recommended the negotiating parties consider the establishment of a customs enforcement task force to combat duty evasion and other forms of textile-related customs fraud. Customs enforcement in the textile and apparel trade is especially important since U.S. imports in the sector account for approximately 40.0% of all U.S. duty revenue and involve 20.0% of all U.S. importers.

By late January 2018, the U.S., Canada and Mexico have held six rounds of negotiations. The first round of negotiations was held in Washington, DC August 16-20, 2017. The sixth, and latest, round of negotiations was held in Montreal, Canada January 23-28, 2018. Currently press reports indicate that the seventh official round of negotiations will begin February 26 in Mexico City, Mexico.

Turkey Antidumping Duties

Turkey's antidumping (AD) investigation of imports of U.S. cotton came to a conclusion in 2016. The investigation was self-initiated by Turkey's Ministry of Economy (MoE) in October 2014.

On April 16, 2016, the Turkish government released its final decision on its anti-dumping investigation of U.S. cotton. Based on assertions that U.S. cotton was dumped into Turkey injuring the domestic market, a 3.0% CIF (cost, insurance and freight) duty was imposed on all U.S. cotton fiber imports into Turkey, effective immediately at the time of the final decision.

The duties put U.S. cotton at a competitive disadvantage to cotton produced in other countries, thus jeopardizing business with Turkish mills.

The 3.0% duty continues to be in place and is anticipated to remain in place for the foreseeable future.

WTO Trade Talks

The World Trade Organization (WTO) 11th Ministerial Conference was held December 10-13, 2017 in Buenos Aires, Argentina. The Ministerial Conference is the highest decision-making body of the WTO. Under the Marrakesh Agreement Establishing the WTO, the Ministerial Conference is to meet at least once every two years.

During the Ministerial, the team of negotiators from USTR and USDA insisted that the WTO remain focused on the long-

term goal of a balanced outcome that will expand trade. U.S. Trade Representative Lighthizer noted in his statement on the conclusion of the WTO Ministerial that "farmers and ranchers need a result on agriculture that is based on the realities of today, rather than a 16-year-old, outdated and unworkable framework." This was especially important for cotton, as some WTO members continue to call for concessions above and beyond the reforms that have already been made, without anything in return. Through the semi-annual dedicated discussions established by the WTO in December 2013, cotton is the only agricultural commodity with an explicit mechanism that allows for the evaluation of domestic support, export subsidies and market access.

Also at the Ministerial, the U.S., European Union and Japan issued a joint statement agreeing to strengthen their commitment to ensure a global level playing field. They agreed to enhance cooperation in the WTO and other forums to eliminate unfair market distorting and protectionist practices by other countries.

Trans-Pacific Partnership

Negotiations on the Trans-Pacific Partnership (TPP) agreement concluded in October 2015 among the negotiating partners of Australia, Brunei Darussalam, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, the United States, and Vietnam.

After being inaugurated as the 45th President of the United States, Donald Trump signed a memorandum on January 23, 2017 instructing the U.S. Trade Representative to take steps to remove the U.S. from the TPP and any future negotiations under the framework of the deal as laid out in the final provisions of the TPP text.

After the U.S. withdrew from the TPP the remaining 11 countries continued to work on an agreement. The agreement has been renamed the Comprehensive and Progressive TransPacific Partnership (CPTPP). In January 2018, the remaining countries agreed to sign the adjusted agreement and are planning to do so on March 8, 2018 in Santiago, Chile.

U.S. – Korea Free Trade Agreement

The U.S. – Korea Free Trade Agreement (KORUS) entered into force on March 15, 2012. In July 2017, U.S. Trade Representative Lighthizer formally notified the Republic of Korea that the U.S. was calling a special Joint Committee meeting under KORUS to consider amendments and modifications to KORUS to resolve several problems regarding market access for U.S. exports to Korea and to address the trade deficit that the U.S. has with Korea. The U.S. and Korea held two special sessions in 2017, one on August 22 and the other on October 4. A third meeting was held in Washington, DC on January 5, 2018. At this meeting the U.S. discussed proposals to move in key industrial goods sectors, such as autos and auto parts. Another meeting was held in Seoul, Korea January 31 – February 1, 2018. Discussions at this meeting focused on specific proposals, including those related to market access and tariffs. It was agreed that another meeting would be scheduled again in the near future.

Transatlantic Trade and Investment Partnership

Under the current U.S. administration, no negotiating rounds for TTIP occurred in 2017 and none have been scheduled as of yet for 2018. Future negotiations remain in doubt as the Trump administration has expressed an interest to move away from multi-lateral negotiations and focus on bi-lateral trade deals.

AGOA

The African Growth and Opportunity Act (AGOA) provides preferential access of textile and apparel products to the U.S. market for qualifying countries in Africa. The Trade Preference Extension Act extended the provisions of AGOA to September 30, 2025.

The AGOA legislation requires an annual determination of which countries are eligible to receive benefits under the trade act. Countries must make continued progress toward a market-based economy, rule of law, free trade, and economic policies that will reduce poverty, and protect workers' rights. There are now 39 countries that are eligible for economic and trade benefits under AGOA. Of those 39 Sub-Saharan countries, 27 of them are eligible to receive AGOA's apparel benefits. Twenty-six countries also qualify for the LDC special rule for apparel (third-country fabric). Seventeen countries also qualify for AGOA's provisions for hand-loomed and handmade articles. Five countries qualify for AGOA's ethnic printed fabric benefits.

A historical review of various trade agreements affecting textiles can be found at www.cotton.org.

U.S. Supply

Planted Acreage

U.S. farmers planted 12.6 million acres of upland cotton in 2017, an increase of 25.2% from the previous year (Figure 22). Increases were observed in all production regions. In the Southwest, cotton acreage increased as some land shifted away from wheat, corn, and grain sorghum. A significant increase in acreage occurred in the Mid-South region where producers are more responsive to changes in relative prices of competing crops due to favorable growing conditions and high yield potential for a variety of crops.

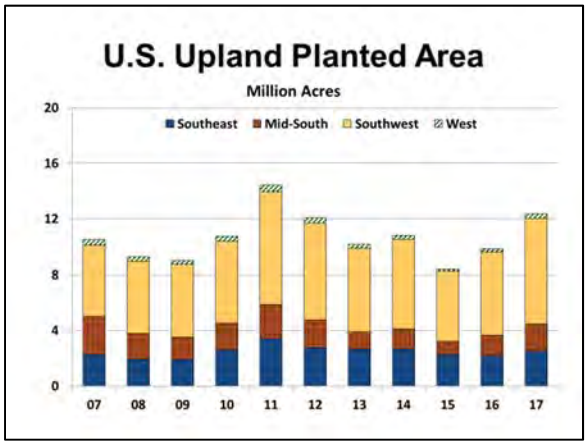

Figure 22 - U.S. Upland Planted Area

In the Southeast, the increase in 2017 cotton area was 352 thousand acres, or 16.2% (Figure 23). All states in the Southeast except Florida increased acreage in 2017. Alabama, Georgia, North Carolina, South Carolina, and Virginia increased cotton acreage by 26.1%, 8.5%, 33.9%, 31.6% and 15.1%, respectively. Acreage was reduced in Florida by 3.9%.

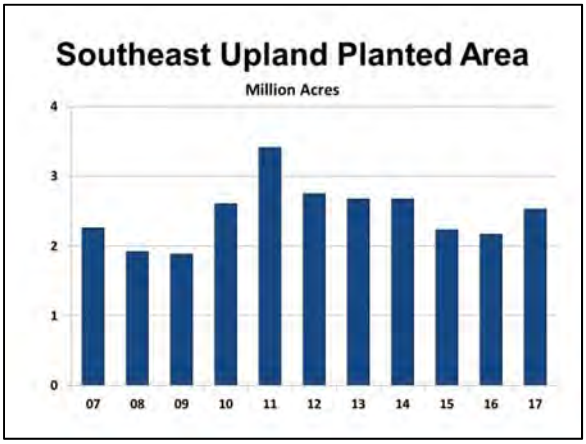

Figure 23 - Southeast Upland Planted Area

In 2017, plantings of 1.9 million acres in the Mid-South represented a 30.5% increase (Figure 24) from the previous year. In recent years, Mid-South farmers have demonstrated their ability and willingness to adjust their crop mix based on market signals. The increase in 2017 acreage continued that pattern as growers moved away from corn and soybeans and planted more cotton. All five states increased cotton acreage in 2017. For Arkansas, Louisiana, Mississippi, Missouri, and Tennessee, acreage increased by 17.1%, 57.1%, 44.8%, 8.9% and 35.3%, respectively. State totals for the region are: Arkansas – 445 thousand acres, Louisiana – 220 thousand acres, Mississippi – 630 thousand acres, Missouri – 305 thousand acres, and Tennessee – 345 thousand acres.

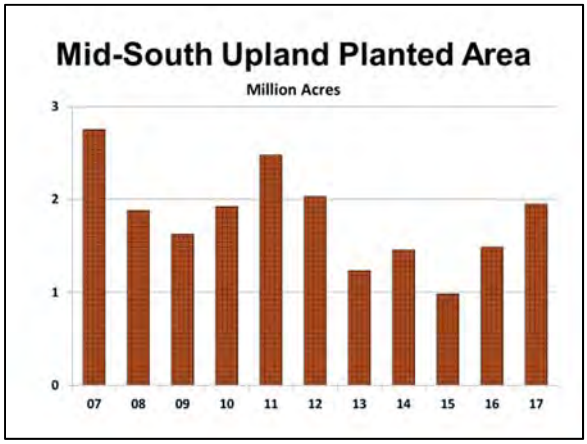

Figure 24 - Mid-South Upland Planted Area

In the Southwest, upland cotton area increased by 26.6% to 7.6 million acres (Figure 25). Higher cotton prices relative to wheat and sorghum contributed to the increase in each of the three states in the region. With a 91.8% increase, Oklahoma's cotton area expanded from 305 thousand acres to 585 thousand acres. Kansas area increased by 191.0%, bringing the 2017 total to 93 thousand acres. In Texas, producers planted 6.9 million acres, a 22.1% increase from 2016.

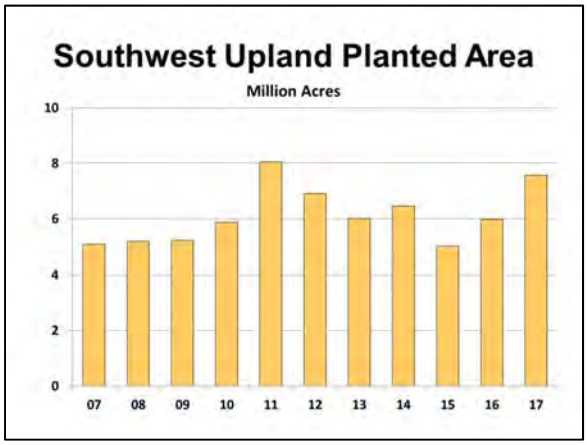

Figure 25 - Southwest Upland Planted Area

Upland acres in the West stood at 314 thousand acres, up 36.5% from 2016 (Figure 26). Acreage increased by 33.3% in Arizona, 39.7% in California, and 40.4% in New Mexico.

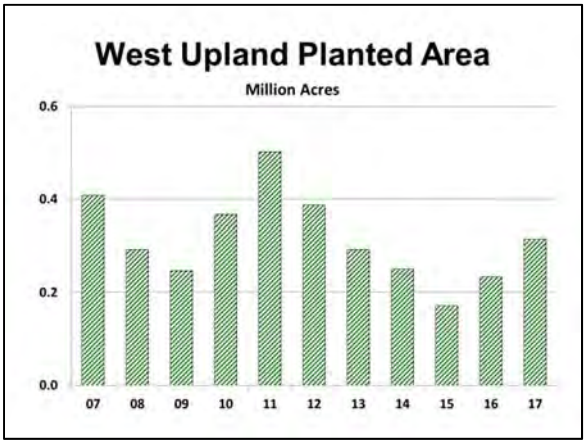

Figure 26 - West Upland Planted Area

In 2017, overall ELS acreage increased by 29.3%, with planted area at 252 thousand acres (Figure 27). The increase in U.S. acreage was the result of California producers planting 38.7% more acres. Arizona increased area by 3.4%, New Mexico decreased by 6.3%, and Texas decreased by 17.6%.

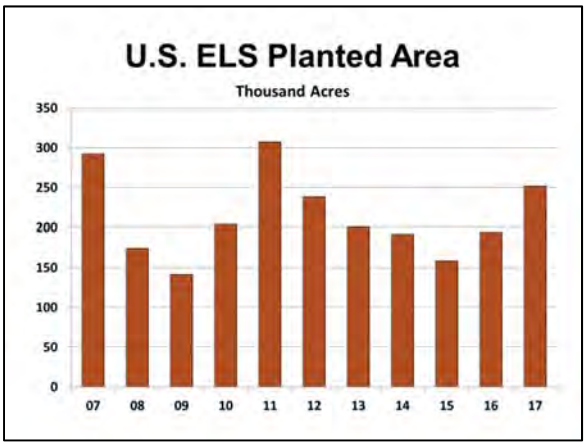

Figure 27 - U.S. ELS Planted Area

Harvested Acreage

Overall U.S. abandonment was 10.0%, which compares to a 5-year average of 16.3% (Figure 28). On a state-wide basis, 16.7% of Texas upland acres were un-harvested, which compares to a 5-year average of 26.7%. In Oklahoma, only 5.1% of acres were un-harvested, which is slightly higher than the previous year, but much lower than the 5-year average of 22.4%. In North Carolina and South Carolina,

abandonment was 2.1% and 0.8%, respectively, which is much lower than the highs observed in 2015 and 2016. The New Mexico abandonment rate was 28.8% for upland cotton, which is higher than the 5-year average of 16.8%. In other states, the 2017 abandonment was generally in line or improved from 5-year averages. For a few states, 2017 abandonment was slightly above the 5-year average.

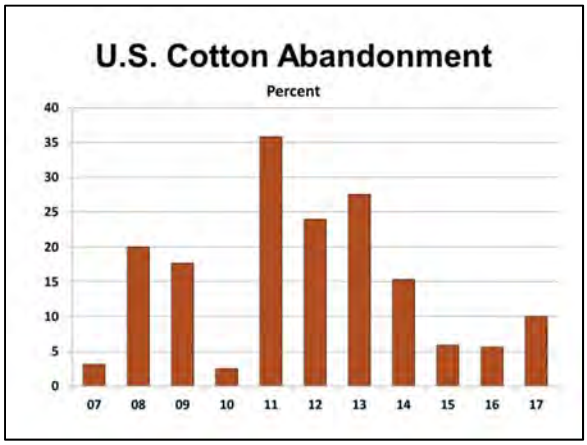

Figure 28 - U.S. Cotton Abandonment

Yields

In 2017, the national average cotton yield of 899 pounds was 60 pounds higher than the 5-year average of 839 pounds (Figure 29). Looking at the numbers in more detail provides a better insight to the varying conditions faced by growers across the Cotton Belt. In Florida, Georgia, Louisiana, Mississippi, and California, the 2017 yield was below the 5-year average. Yield losses occurred in some states due to hurricanes and other weather issues. The 2017 yield was lower than the previous year in 11 of the 17 states.

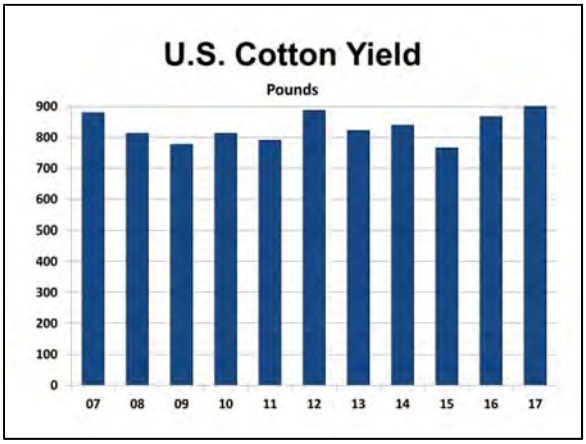

Figure 29 - U.S. Cotton Yield

While the northern part of the Southeast region experienced favorable growing conditions in 2017, the southern states were affected by Hurricane Irma. For the region as a whole, the 2017 yield of 888 pounds was 16 pounds lower than the 5-year average (Figure 30).

Yields in North Carolina, South Carolina, and Virginia recovered from the low levels of the previous two years. Virginia, with an average yield of 1,128 pounds recorded the highest yield of the six states. Florida had a lower yield in 2017 compared to the previous year and the 5-year average. In Alabama, the 2017 yield was lower than in 2016 but higher than the 5-year average. In both South Carolina and North Carolina, the 2017 yield was higher than the 5-year average. The Georgia yield was below the previous year and the 5-year average.

Southeast Upland Yields
Pounds per Harvested Acre

	2016	2017	5-Year Average
Alabama	988	904	899
Florida	922	784	839
Georgia	898	850	936
North Carolina	646	961	877
South Carolina	656	910	791
Virginia	667	1,128	967
SOUTHEAST	855	888	904

Figure 30 - Southeast Upland Yields

Overall, cotton acreage in the Mid-South produced yields slightly above the 5-year average in 2017. At 1,093 pounds, the 2017 yield is the third highest on record. (Figure 31).

Arkansas and Missouri had record yields of 1,205 and 1,172 pounds, respectively. The Tennessee yield of 1,031 pounds was 74 pounds above the 5-year average. At 1,075 pounds, the Mississippi yield was below the 5-year average. Louisiana had the lowest yield at 907 pounds, 12.6% below the 5-year average.

Mid-South Upland Yields
Pounds per Harvested Acre

	2016	2017	5-Year Average
Arkansas	1,075	1,205	1,096
Louisiana	939	907	1,038
Mississippi	1,207	1,075	1,135
Missouri	1,021	1,172	1,051
Tennessee	1,104	1,031	957
MID-SOUTH	1,096	1,093	1,067

Figure 31 - Mid-South Upland Yields

In all states in the Southwest, excellent yields were recorded for 2017, despite the losses in South Texas from Hurricane Harvey. For the region as a whole, the average yield of 807 pounds was the 2nd highest yield since 2007 and was 142 pounds above the 5-year average (Figure 32).

For all states in the Southwest, 2017 yields were higher than the 5-year average. At 987 pounds, the Kansas yield was 172 pounds above the 5-year average. The Oklahoma yield of 917 pounds represents an improvement of 141 pounds over the 5-year average. In Texas, the yield of 793 pounds was 194 pounds higher than the 5-year average and the 2nd highest yield on record. However, a portion of the Texas crop had low micronaire values resulting in discounts.

Southwest Upland Yields
Pounds per Harvested Acre

	2016	2017	5-Year Average
Kansas	1,099	987	815
Oklahoma	1,021	917	776
Texas	748	793	659
SOUTHWEST	764	807	665

Figure 32 - Southwest Upland Yields

The average upland yield in the West is estimated at 1,376 pounds, which is 140 pounds below the 5-year average (Figure 33). The Arizona and New Mexico yields were slightly above the 5-year averages, while the California yield was 447 pounds below the 5-year average. The reduction in yields was due to extreme heat and insect pressure.

West Upland Yields
Pounds per Harvested Acre

	2016	2017	5-Year Average
Arizona	1,525	1,509	1,503
California	1,897	1,324	1,771
New Mexico	1,030	1,021	982
WEST	1,538	1,376	1,516

Figure 33 - West Upland Yields

The national average ELS yield is estimated at 1,342 pounds, down 112 pounds from 2016 and 136 pounds below the 5-year average (Figure 34). Accounting for the majority of ELS acres, California heavily influences the U.S. average. With an average yield of 1,420 pounds, California was 145 pounds lower than the previous year and 149 pounds below the 5-year average. At 861 pounds, ELS yields in Arizona were 68 pounds below the 5-year average. New Mexico's yield of 908 pounds was 34 pounds above the 5-year average. The 2017 Texas ELS yield was 204 pounds below the previous year and 68 pounds below the 5-year average.

ELS Yields
Pounds per Harvested Acre

	2016	2017	5-Year Average
Arizona	851	861	929
California	1,565	1,420	1,569
New Mexico	886	908	874
Texas	1,056	849	917
U.S.	1,454	1,342	1,478

Figure 34 - ELS Yields

Production

USDA's latest estimate places the 2017 U.S. cotton crop at 21.3 million bales (Figure 35), up 4.1 million bales from 2016. The 23.8% increase in production comes as U.S. producers planted 2.5 million acres more than the previous year. The 2017 crop represents a 5.9 million bale increase relative to the 5-year average. Upland production is estimated at 20.6 million bales, and ELS farmers harvested 693 thousand bales.

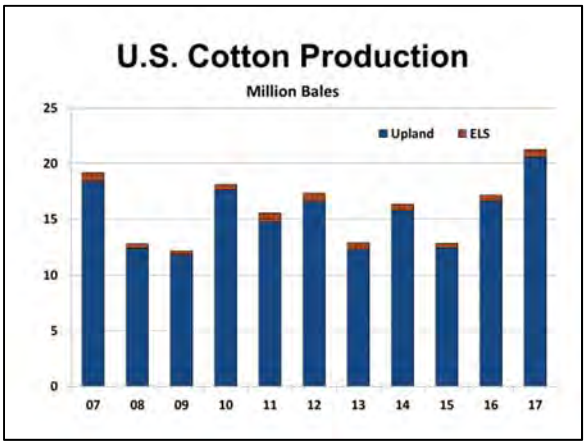

Figure 35 - U.S. Cotton Production

In 2017, the Southeast is estimated to have produced 4.6 million bales, accounting for 22.5% of the total upland crop (Figure 36). The region's 2017 crop was up by 845 thousand bales from the 2016 total.

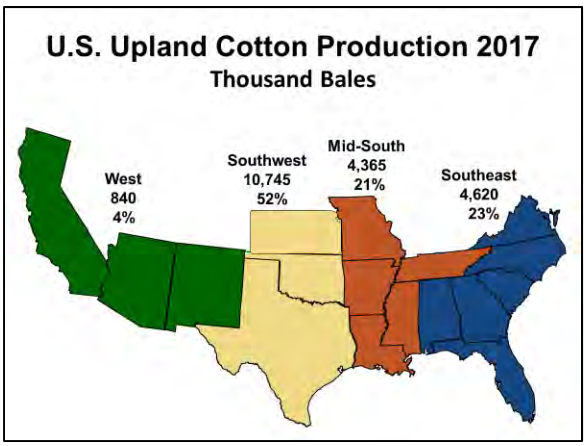

Figure 36 - U.S. Upland Cotton Production

For 2017, the Mid-South accounted for 21.2% of the total U.S. upland crop with 4.4 million bales.

At 10.7 million bales, production in the Southwest accounted for 52.2% of the U.S. upland crop. The 2.0 million bale increase from 2016 resulted from an increase in planted area of 1.6 million acres as well as a 42-pound yield increase. Texas production of 9.5 million bales was 1.4 million bales higher than 2016 and 3.7 million bales higher than the 5-year average. In Oklahoma, 2017 production was the highest on record and 71.8% higher than the previous year. At 1.1 million bales, the crop is 443 thousand bales higher than in 2016 and 746 thousand bales higher than the 5-year average. Kansas production increased by 114 thousand bales or 160.6% as compared the previous year.

The West produced 840 thousand bales of upland cotton in 2017, up 132 thousand bales from the region's 2016 crop. The region accounted for 4.1% of U.S. production. The Western crop surpassed the 5-year average by 30 thousand bales.

The 2017 ELS crop of 693 thousand bales was 124 thousand bales higher than 2016, and higher than the 5-year average of 596 thousand bales. At 630 thousand bales, the California ELS crop was 128 thousand bales higher than 2016 due to increased acreage (Figure 37). The state accounted for 90.9% of the total 2017 U.S. ELS crop. Arizona's ELS crop increased to 26 thousand bales, while the Texas crop dropped to 23 thousand bales. New Mexico's production of 14 thousand bales was unchanged from 2016.

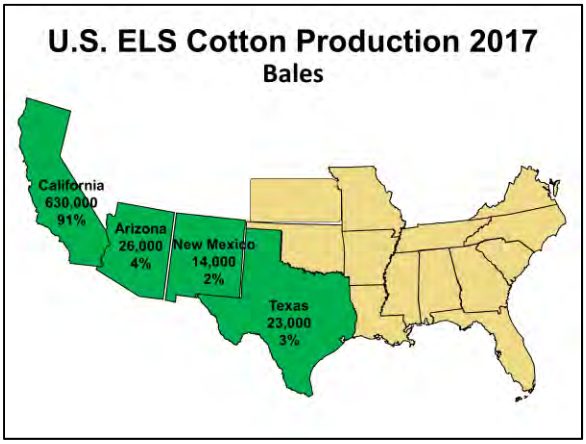

Figure 37 - U.S. ELS Cotton Production

Stock Levels

With U.S. cotton demand exceeding total production for the 2016 marketing year, the resulting carryout from the 2016 marketing year, and equivalent carry-in or beginning stocks for the 2017 marketing year, stood at 2.8 million bales (Figure 38). That represented a decrease of 1.1 million bales from the stocks that were brought into the 2016 marketing year. Upland stocks totaled 2.7 million bales and ELS stocks stood at 64 thousand bales.

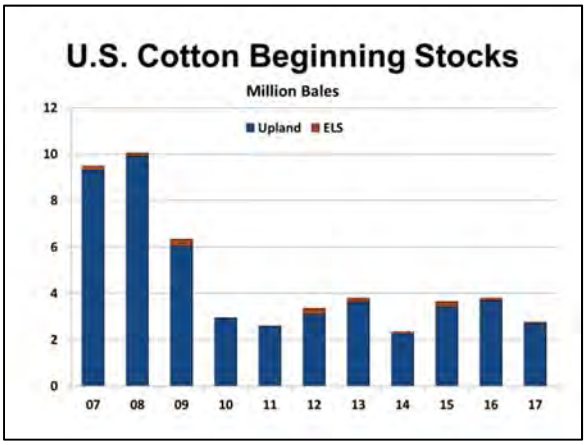

Figure 38 - U.S. Cotton Beginning Stocks

Total upland CCC loan stocks reached 4.7 million bales in December 2017, which is lower than in 2016. The 2017 crop was 23.9% higher than the previous year and total CCC loan stocks are expected to be higher this year. The late harvest and the large Southwest crop has resulted in unusual

ginning delays. More bales will be placed under the loan over the next few months as ginning nears completion. However, the total number of loans made for the 2017 crop year will likely be lower than anticipated due to strong demand and prices.

As of January 31, 2018, outstanding upland CCC loan stocks were 4.6 million bales (Figure 39), down from 5.0 million bales in January 2017. As of the end of January, the Mid-South accounts for 41.7% of cotton placed under loan, the Southwest accounts for 29.5%, the Southeast accounts for 24.9%, and the remaining 3.9% in the West.

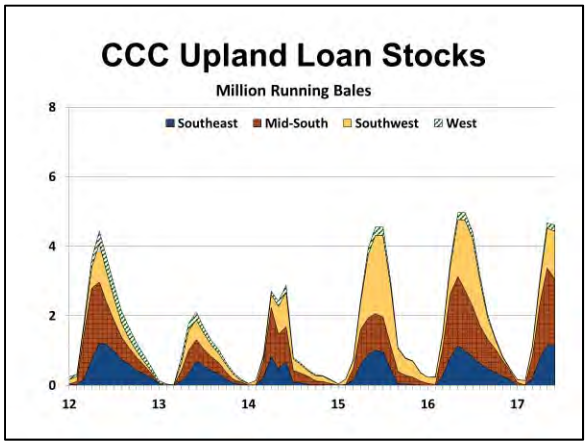

Figure 39 - CCC Upland Loan Stocks

Total Supply

Total supply for the 2017 marketing year is estimated to be 24.0 million bales, up from 21.0 million bales the previous year (Figure 40). The increased supplies result from higher production. Total supplies for the 2017 marketing year are 6.7 million bales above the 5-year average.

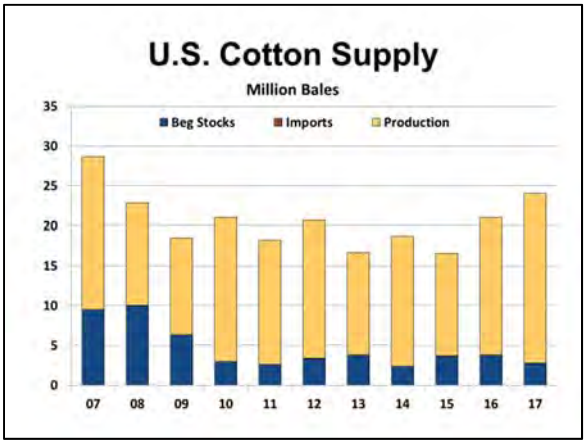

Figure 40 - U.S. Cotton Supply

Upland Cotton Quality

With 17.9 million running bales classed through February 1, the national average staple length (measured in thirty-second's of an inch) is 36.5, up from a 5-year average of 35.9 (Figure 41). The Southeast staple length of 36.6 is 0.8 thirty-seconds of an inch better than their 5-year average. In the Mid-South, the average staple length of 37.7 exceeds the 5-year average by 1.5 thirty-second's of an inch. The Southwest's average staple length of 35.8 exceeds the 5-year average of 35.6. The West reports an average staple length of 37.3, up 0.5 from the 5-year average.

The average strength of the 2017 upland crop is 30.0 grams per tex (gpt). The highest strength occurred in the West, with an average of 32.4 gpt, exceeding the 5-year average of 31.5. At 29.6 gpt, the Southeast is above its 5-year average. The Southwest crop has an average strength of 29.5 gpt, just below the 5-year average of 30.1 gpt. In the Mid-South, an average strength of 30.9 gpt is 0.2 gpt below the 5-year average of 31.1 gpt.

2017 Crop Staple and Strength

	Staple		Strength	
	2017	5-Year	2017	5-Year
Southeast	36.6	35.8	29.6	29.2
Mid-South	37.7	36.2	30.9	31.1
Southwest	35.8	35.6	29.5	30.1
West	37.3	36.8	32.4	31.5
U.S.	36.5	35.9	30.0	30.1

Figure 41 - Crop Staple and Strength

Overall, color grades for the 2017 crop are excellent. In total for the Cotton Belt, 89.5% of the 2017 crop is grading 41 or better, which compares to a 5-year average of 86.1% (Figure 42). The Southwest is the only region falling below their five-year average in terms of color with 82.6% of the crop grading 41 or better.

2017 Crop Color and Mike

	%SLM+		Micronaire	
	2017	5-Year	2017	5-Year
Southeast	96.4	79.8	44.3	46.2
Mid-South	95.7	94.4	43.5	47.4
Southwest	82.6	84.9	38.2	42.7
West	96.8	94.5	43.0	44.7
U.S.	89.5	86.1	41.1	44.8

Figure 42 - Crop Color and Mike

The average micronaire of the 2017 upland cotton crop is 41.1, which is below the 5-year average of 44.8. In the Southeast, the average micronaire of 44.3 was below the 5-year average of 46.2. The upland crop in the West, with a mike of 43.0, was slightly lower than the 5-year average. In the Mid-South and the Southwest, the average micronaire was below the 5-year averages of 47.4 and 42.7, respectively. While lower micronaire values were observed in all regions in 2017, the Southwest value of 38.2 was the lowest of all regions.

Cotton Prices

Upland Cotton Prices

Futures prices have exhibited a strong upward trend over the past four months (Figure 43). The market has received some mixed signals over the past year but several factors have influenced the price movement and volatility. Given the massive open interest and the large speculative participation, the market's volatility from January to October was not surprising. Futures traded at $0.73 in January, increased to $0.79 in May, dropped to $0.69 in July, increased to $0.71 in September, then dropped again to $0.68 in October. From October to the end of January 2018, prices have been on a strong upward trend partly due to large un-fixed on-call sales by mills, large speculative activity, stronger export sales, and quality issues in Texas and India. However, the current world supply and demand fundamentals do not necessarily support the price increase, which could point to lower than projected available stocks. The nearby New York futures and the Cotlook "A" Index maintained a relationship consistent with historical experience. The "A" Index ranged between $0.77 and $0.95 in 2017. Prices have continued to strengthen in early 2018.

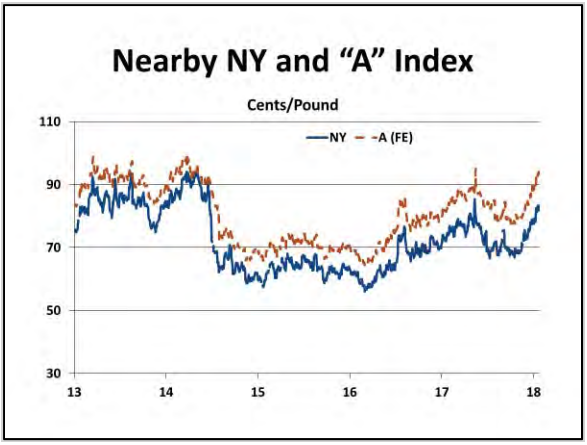

Figure 43 - Nearby NY and "A" (FE) Index

Spot prices in the U.S. followed a similar pattern to the futures market and the "A" Index. Thus far into the 2017 marketing year, spot 4134 values have averaged $0.69 per pound with a maximum price of $0.80 per pound and a minimum price of $0.65 per pound (Figure 44). The average spot 4134 value for the 2016 crop cotton was $0.71 cents per pound.

Figure 44 - Spot 4134 Price

ELS Prices

For 2017, ELS prices increased throughout the year. ELS cotton prices began 2017 at $1.45 per pound and ended the year at $1.47 (Figure 45).

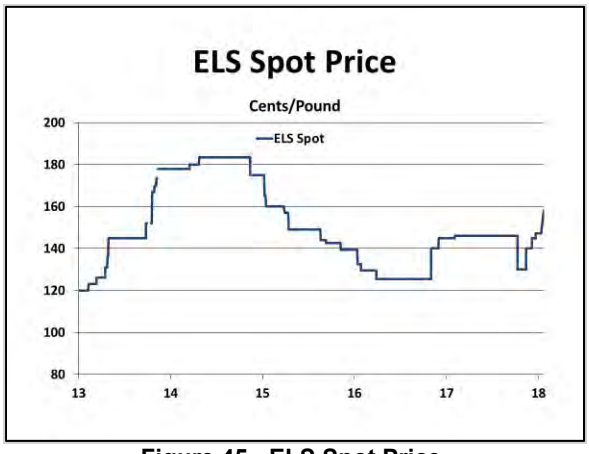

Figure 45 - ELS Spot Price

Cottonseed Situation

Cottonseed Supply

USDA estimates 2017 cottonseed production at 6.7 million tons, up 1.4 million tons from the previous year (Figure 46). The changes in cottonseed production generally mirror the movements in cotton lint production as average seed-to-lint ratios have remained relatively stable in recent years. From a longer-term perspective, seed-to-lint ratios, recently ranging between 1.31 and 1.34, are down over the past 15 years from a range of 1.55 to 1.60.

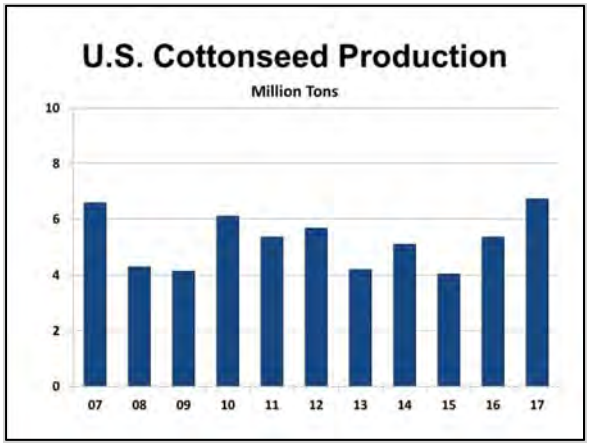

Figure 46 - U.S. Cottonseed Production

For the 2017 crop, a regional breakdown of production shows that the Southwest produced 3.4 million tons or 51.0% of the total, the largest of any region (Figure 47). They were followed by the Mid-South with production of 1.5 million tons for a 21.0% share. The Southeast produced 1.3 million tons, or 20.0% of total production, and the West accounted for 544 thousand tons, 8.0% of the total.

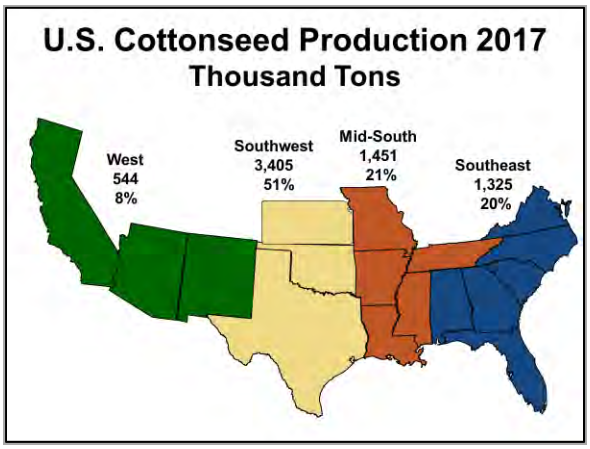

Figure 47 - U.S. Cottonseed Production

Supplementing U.S. production, beginning stocks of 399 thousand tons bring total cottonseed supply for the 2017 marketing year to 7.1 million tons (Figure 48). Total supplies for 2017 are up by 1.3 million tons from the previous year. The 2017 total is 1.8 million tons higher than the 5-year average.

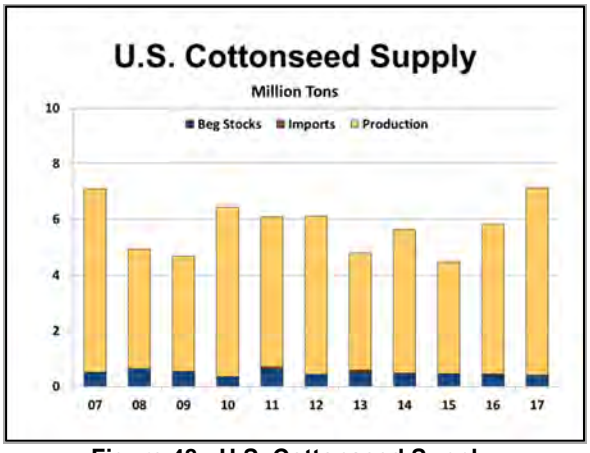

Figure 48 - U.S. Cottonseed Supply

Disappearance and Stock Levels

The current NCC estimate for cottonseed disappearance shows a crush level of 2.0 million tons for the 2017 crop year, which is lower than the USDA estimate of 2.3 million tons (Figure 49). Although cottonseed supplies are large, crush capacity is limited and will likely reach maximum capacity in 2017. Whole seed feeding is estimated at 4.1 million tons.

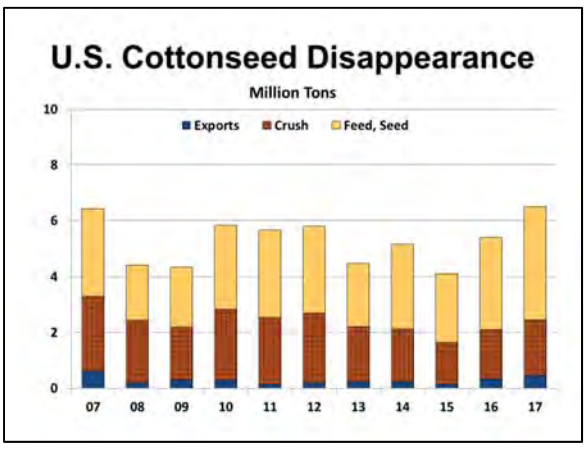

Figure 49 - U.S. Cottonseed Disappearance

As a result of higher supplies, cottonseed stocks are projected to increase to 624 thousand tons (Figure 50).

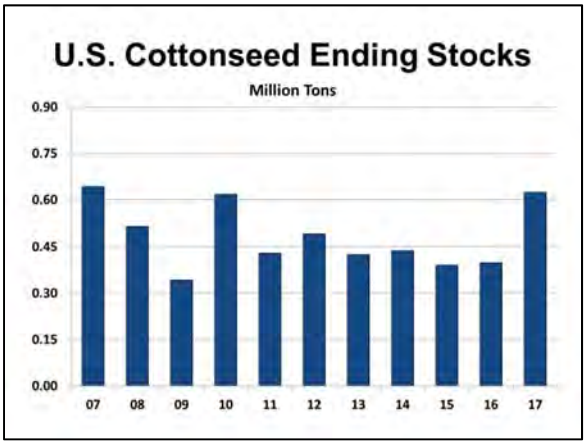

Figure 50 - U.S. Cottonseed Ending Stocks

Cottonseed Prices

The movement in cottonseed prices reflects changes in competing feed prices as well as available supplies (Figure 51). The average cottonseed spot price is a weighted average of the four production regions. Cottonseed prices were significantly lower in 2017 as compared to 2016. The average cottonseed spot price was $208 per ton in January 2017 and $154 per ton in November 2017. Prices increased a bit in January 2018 to $168 per ton due to increased feed demand but many are concerned that prices will drift lower in the next few months due to large supplies and changes in competing feed prices.

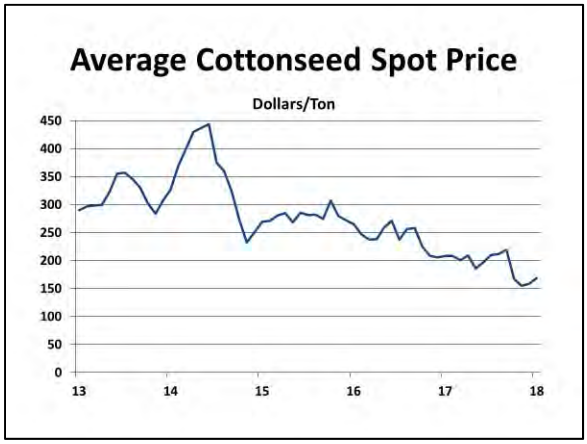

Figure 51 - Average Cottonseed Spot Price

2018 Planting Intentions

Price Prospects

Cotton growers are approaching the 2018 planting season with cotton harvest-time futures contracts at higher levels than the previous year. As of early February, the December 2018 contract was trading at $0.75 per pound, up 3 cents from year-ago levels (Figure 52). Strong export demand, high speculative positions, and a record number of un-fixed on-call sales are contributing to the current price environment.

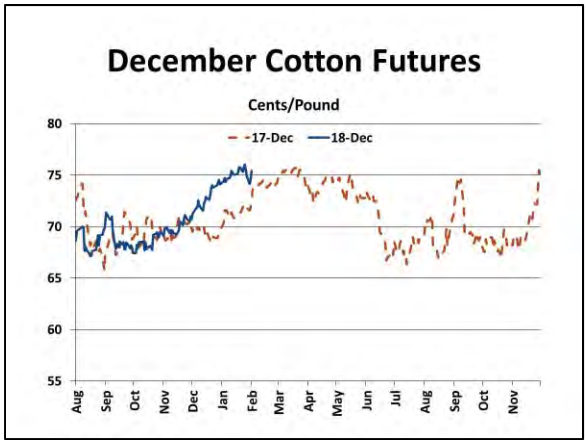

Figure 52 - December Cotton Futures

Unlike cotton, corn prices have been declining throughout most of the 2017 marketing year and are now similar to year-ago levels. As of early February, the December 2018 contract for corn was trading at $3.93 per bushel, which is just slightly below year-ago levels (Figure 53).

Weak export demand, large corn crops in the last three years, and slowing growth for renewable fuels are contributing to the current price climate.

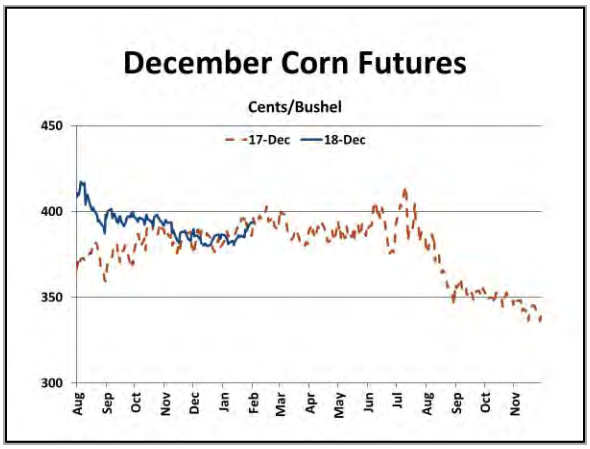

Figure 53 - December Corn Futures

Soybean prices, as measured by the Chicago Board of Trade November futures contract, have also declined relative to year-earlier levels. By early February, the November 2018 contract traded at $10.05 per bushel, approximately $0.07 lower than the November 2017 contract was trading a year earlier (Figure 54).

Relative to average futures in the first quarter of 2017, average soybean prices during the survey period were down by 2.9%, corn prices were trading about 2.1% lower, and cotton prices were trading 0.8% higher. Given the relatively lower costs of production, soybeans are expected to provide competition for cotton in 2018 acreage decisions.

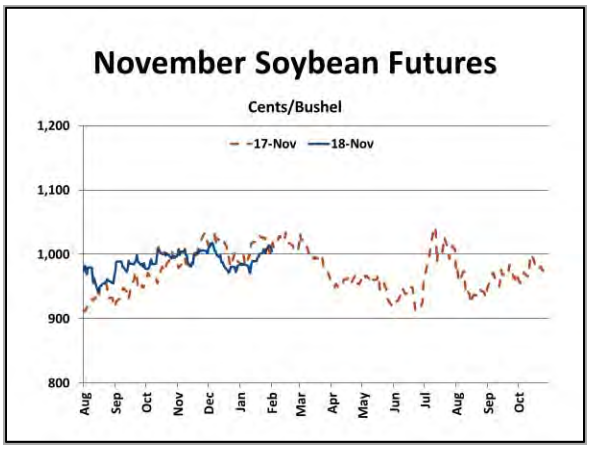

Figure 54 - November Soybean Futures

In consideration of their 2018 planting decisions, growers will compare prices for cotton, corn, soybeans and other regional crops. Growers will also be influenced by production costs for cotton and other crops. Given the recent increase in oil prices, diesel fuel costs should be higher than 2017 levels. While final acreage decisions are influenced by expected returns of cotton and competing crops, farmers will also take into account weather and agronomic considerations such as crop rotation.

2018 U.S. Cotton Acreage Intentions

In mid-December 2017 the NCC distributed the annual early season planting intentions survey. Respondents were asked to give their plantings of cotton, corn, soybeans, wheat, and 'other crops' for 2017 and intended acreage for 2018. As always, the survey results should be viewed as a measure of grower intentions prevailing at the time the survey was conducted. Changing climate and market conditions could cause actual plantings to be significantly different from growers' stated intentions.

In the Southeast, survey results indicate a 2.3% increase in the region's upland area to 2.6 million acres (See Table 4 on page 44). All six states show an increase in acreage. In Alabama, the survey responses indicate 0.8% more cotton acreage and less wheat, soybeans, and 'other crops'. Alabama respondents reported an increase in corn acres. In Florida, respondents indicated more cotton and soybeans and less 'other crops', likely peanuts. In Georgia, cotton acreage is expected to increase by 0.6%. Georgia growers expect to plant less soybeans and more corn and 'other crops', likely peanuts. In North Carolina, an 8.2% increase is expected as acreage moves away from soybeans. Corn and wheat acreage is expected to increase slightly in North Carolina. In South Carolina, acreage is expected to increase by 3.4%. South Carolina growers expect to plant less corn and wheat and more soybeans and 'other crops'. Cotton acreage is expected to increase by 3.1% in Virginia. Virginia growers intend to plant more corn and soybeans and less wheat and 'other crops'.

In the Mid-South, growers have demonstrated their ability to adjust acreage based on market signals, in particular, the relative prices and potential returns of competing crops. Mid-South growers intend to plant 1.9 million acres, a decrease of 0.1% from the previous year. Although cotton prices have improved slightly compared to other crops, cottonseed prices have dropped significantly, thus leading to an increase in net ginning costs. Across the region, Louisiana and Mississippi intend to decrease cotton acreage while Arkansas, Missouri, and Tennessee expect to increase acreage. The largest decrease was reported in Mississippi with 5.5% less cotton acreage in 2018. Mississippi respondents expect to increase acreage of all other crops as less cotton acreage is planted. In Tennessee, cotton acreage is expected to increase by 1.5% as land shifts away from corn and wheat. Tennessee growers intend to plant more soybeans in 2018. Missouri growers expect to increase cotton acres by 3.8% and plant less corn and soybeans. In Louisiana, respondents intend to plant 2.6% less cotton acreage, more soybeans, and less of all other

crops. With the exception of Missouri, all states in the Mid-South intend to plant more soybeans in 2018.

Growers in the Southwest intend to plant 8.0 million acres of cotton, an increase of 5.7%. Increases in cotton area are expected in each of the three states. In Kansas, producers intend to plant 55.3% more cotton acres, along with more wheat and 'other crops', likely sorghum. Kansas growers intend to plant less corn and soybeans. In Oklahoma, a 21.0% increase is expected as wheat acreage declines. Oklahoma respondents report a small increase in 'other crops'. Overall, Texas acreage is expected to increase by 3.7%. In south Texas, respondents indicate an 0.3% increase in cotton acreage. South Texas growers intend to plant less corn and more wheat, soybeans, and 'other crops'. Respondents from the Blacklands indicate an increase of 8.6% in cotton acreage, a decrease in wheat and corn acreage, and an increase in 'other crops'. In West Texas, respondents indicated a 4.0% increase in cotton acreage, an increase in wheat acreage, and a decrease in corn and 'other crops'.

With intentions of 293 thousand acres, producers in the West are expecting to plant 6.8% less acres of upland cotton. Cotton acreage is expected to decline in Arizona and California and increase in New Mexico. The survey results for Arizona suggest a shift from upland cotton to ELS cotton, corn, and 'other crops'. In California, growers intend to plant more wheat and corn.

Summing across the 4 regions gives intended 2018 upland cotton area of 12.8 million acres, 3.8% above 2017 (See Table 4 on page 44 and Figure 55). The survey indicates that growers intend to plant slightly more ELS cotton in 2018. Arizona growers are expecting to plant 31.6% more ELS cotton. Overall, U.S. cotton growers intend to plant 254 thousand acres in 2018. Summing together the upland and ELS cotton intentions shows U.S. all-cotton plantings in 2018 of 13.1 million acres, 3.7% higher than in 2017.

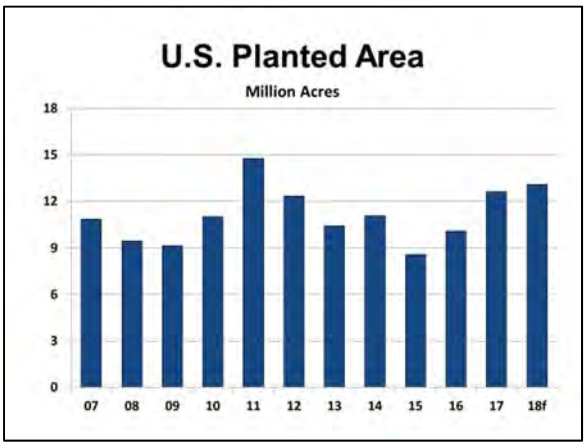

Figure 55 - U.S. Planted Area

2018 U.S. Cotton and Cottonseed Supply

Planted acreage is just one of the factors that will determine supplies of cotton and cottonseed. Ultimately, weather, insect pressures, and agronomic conditions play a significant role in determining crop size. Since the NCC economic outlook does not attempt to forecast weather patterns, the standard convention is to assume yields in line with recent trends and abandonment consistent with historical averages. However, due to the dry conditions that currently persist across the Cotton Belt and the forecasts of abnormally dry conditions throughout the spring, the assumed abandonment rates for Texas and Oklahoma are slightly higher than the recent 5-year average. Also, it is important to remember the volatility around projected production given the uncertainty of weather patterns.

With average abandonment for the U.S. estimated at 15.4%, Cotton Belt harvested area totals 11.1 million acres (Figure 56). Using an average 2018 U.S. yield of 842 generates a cotton crop of 19.4 million

bales, with 18.7 million bales of upland and 744 thousand bales of ELS.

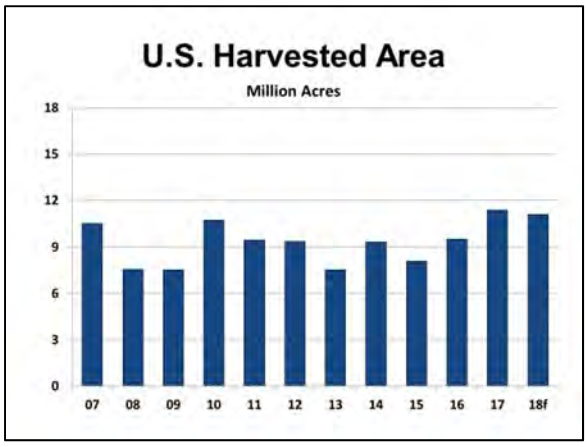

Figure 56 - U.S. Harvested Area

Combining projected production with expected beginning stocks of 5.5 million bales and imports of 10 thousand bales gives a total U.S. supply of 24.9 million bales (Figure 57). This is an increase of 902 thousand bales from the 2017 level.

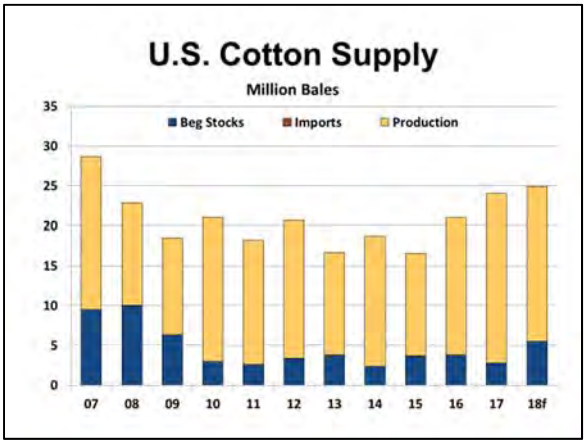

Figure 57 - U.S. Cotton Supply

For cottonseed, multiplying the point estimate of lint production by an average lint-seed ratio generates expected production of 6.2 million tons. With 624 thousand tons of beginning stocks, 2018 cottonseed supply totals 6.8 million tons (Figure 58).

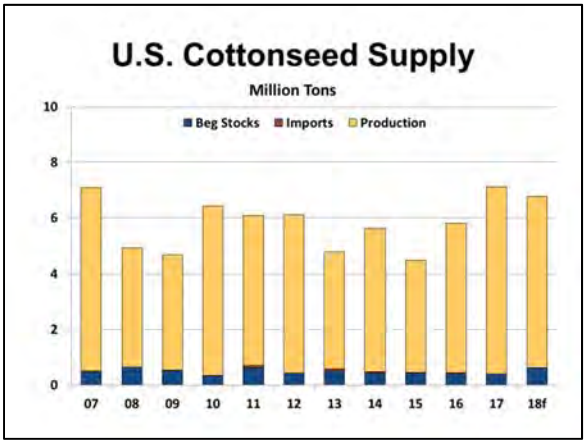

Figure 58 - U.S. Cottonseed Supply

Table 4 - Prospective 2018 U.S. Cotton Area

	2017 Actual (Thou.) 1/	2018 Intended (Thou.) 2/	Percent Change
SOUTHEAST	**2,523**	**2,582**	**2.3%**
Alabama	435	439	0.8%
Florida	99	106	6.9%
Georgia	1,280	1,287	0.6%
North Carolina	375	406	8.2%
South Carolina	250	258	3.4%
Virginia	84	87	3.1%
MID-SOUTH	**1,945**	**1,943**	**-0.1%**
Arkansas	445	466	4.7%
Louisiana	220	214	-2.6%
Mississippi	630	596	-5.5%
Missouri	305	317	3.8%
Tennessee	345	350	1.5%
SOUTHWEST	**7,578**	**8,007**	**5.7%**
Kansas	93	144	55.3%
Oklahoma	585	708	21.0%
Texas	6,900	7,154	3.7%
WEST	**314**	**293**	**-6.8%**
Arizona	160	138	-13.5%
California	88	78	-10.8%
New Mexico	66	76	14.6%
TOTAL UPLAND	**12,360**	**12,824**	**3.8%**
TOTAL ELS	**252**	**254**	**1.0%**
Arizona	15	20	31.6%
California	215	212	-1.3%
New Mexico	8	8	4.8%
Texas	14	14	2.9%
ALL COTTON	**12,612**	**13,078**	**3.7%**

1/ USDA-NASS
2/ National Cotton Council

U.S. Market

U.S. Textile Industry

Preliminary data from the U.S. Bureau of Labor Statistics indicate that textile industry employment in 2017 fell by approximately 18,700 workers. These figures represent employment in all three sectors of the U.S. textile industry - textile mills, textile product mills, and apparel mills.

Mill Use

Cotton mill use decreased from the previous year and is estimated at 3.3 million bales in calendar 2017, 3.5% below 2016 (Figure 59). For calendar 2018, NCC forecasts domestic mill use of cotton at 3.4 million bales. NCC projects domestic mill use of cotton at 3.4 million bales for the 2018 marketing year, slightly above the 2017 estimate (Figure 60).

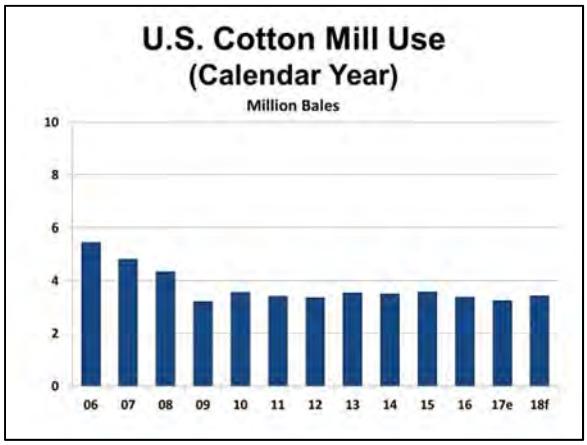

Figure 59 - U.S. Cotton Mill Use (Calendar Year)

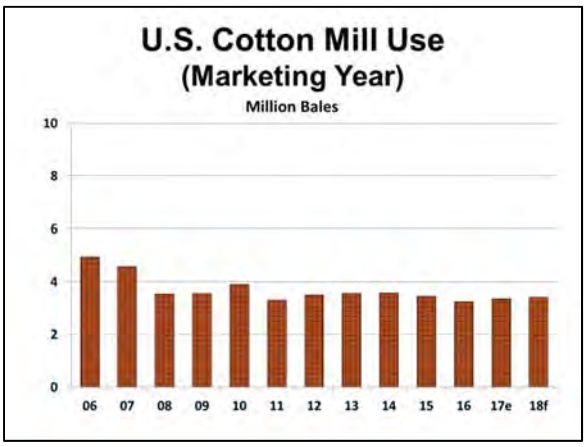

Figure 60 - U.S. Cotton Mill Use (Marketing Year)

U.S. mill consumption of man-made fibers decreased in 2017. NCC estimates mill use of man-made fibers at 17.0 million bales for 2017, a decrease of 0.5% from 2016 (Figure 61). Man-made fiber mill use is projected to increase to 17.2 million bales in calendar 2018.

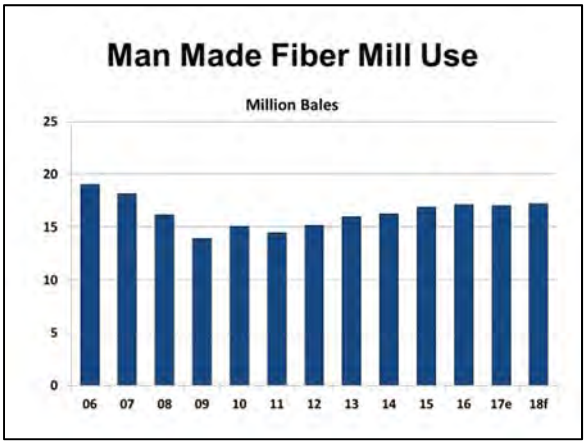

Figure 61 - Man Made Fiber Mill Use

Upland Cotton Economic Adjustment Assistance Program

The Upland Cotton Economic Adjustment Assistance Program (EAAP), re-authorized in the 2014 Farm Bill, has provided U.S. cotton textile manufacturers with much-needed assistance for capital investments and improvements.

Under the EAAP, domestic users receive 3 cents per pound for all upland cotton consumed. Recipients must agree to invest the EAAP proceeds in plants and equipment. In fiscal year 2017, 42 U.S. companies were approved to receive payments under the EAAP.

Net Domestic Consumption

Net domestic consumption is a measure of the size of the U.S. retail market. It measures both cotton spun in the U.S. (mill use) and cotton consumed through textile imports. Total fiber consumption in 2017 is estimated to be 51.4 million bale equivalents (Figure 62). Cotton's share of net domestic consumption decreased 0.1% this past year to 34.4%, which translates to 17.7 million bales. For 2018, NCC projects net domestic consumption of all fibers to increase to 53.2 million bales. With a projected share of 34.2%, cotton's net domestic consumption is projected to be 18.2 million bales.

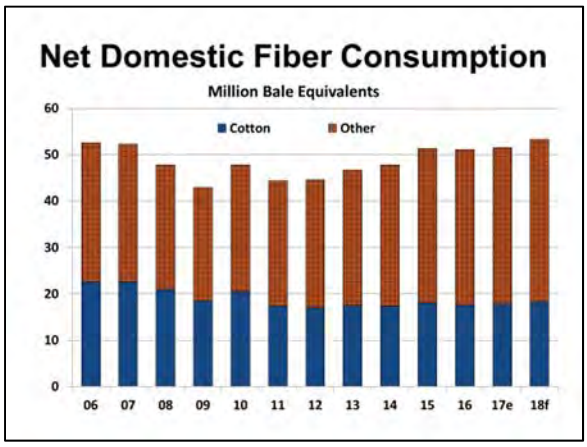

Figure 62 - Net Domestic Fiber Consumption

Imported goods make up the largest portion of U.S. net domestic consumption. Imported cotton textiles increased from 17.8 million bale equivalents in 2016 to an estimated 18.0 million in 2017 (Figure 63).

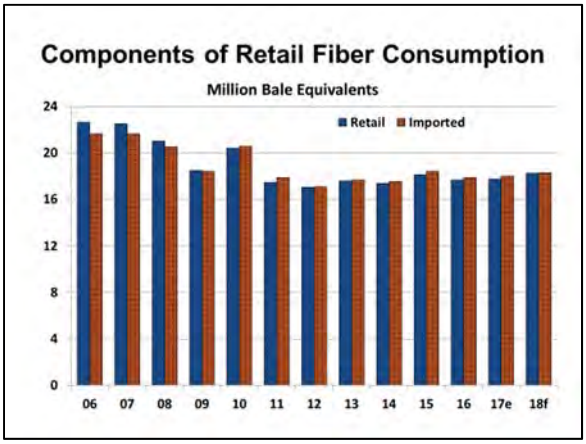

Figure 63 - Components of Retail Cotton Consumption

Textile Trade

Imports of cotton goods in calendar 2017 were estimated to have increased by 0.9% to 18.0 million bale equivalents (Figure 64). In calendar 2018, NCC projects cotton textile imports to increase to 18.3 million bales.

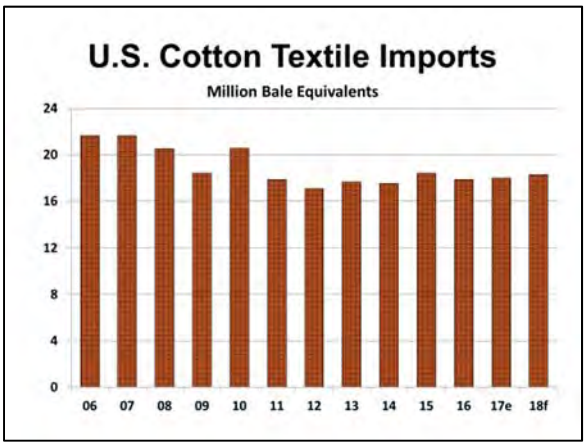

Figure 64 - U.S. Cotton Textile Imports

For textile imports, it is important to consider that a significant portion of imported goods contain U.S. cotton. Since much of what the U.S. exports to the NAFTA (North American Free Trade Agreement) and the CBI (Caribbean Basin Initiative) countries is in the form of fabric and piece goods that come back in the form of finished goods, the trade gap is not as wide as implied by gross imports and exports. NCC analysts estimate that 26.1% of all cotton goods imported in 2017

contained U.S. cotton. This is a 0.2% decrease over the previous year. In bale equivalents, these imported cotton goods contained 4.7 million bales of U.S. cotton (Figure 65). This is due, in large part, to our trading partners in NAFTA and the CBI.

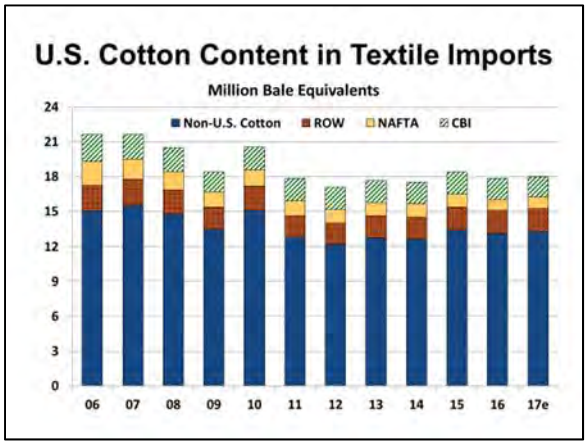

Figure 65 - U.S. Cotton Content in Textile Imports

U.S. Cotton Product Imports

Apparel was once again the largest category of imported cotton goods when compared to yarn, thread and fabric, and home furnishings (Figure 66). Cotton apparel imports were estimated at 12.5 million bale equivalents for 2017, down 0.6% from 2016. Imports of cotton home furnishings (including floor coverings) increased 9.0% in 2017 to an estimated 4.1 million bale equivalents. Cotton yarn, thread and fabric imports decreased 1.0% in 2017 to an estimated 1.4 million bales.

Once again, countries in NAFTA and CBI represented significant sources of imported cotton goods in 2017 (Figure 67). Imports from Mexico in 2017 were estimated at 962 thousand bales, up approximately 4.5% from the previous year (Figure 68). Imports of cotton goods from Canada declined to an estimated 67 thousand bales in 2017, down 7.4% from the previous year (Figure 69). Imported cotton goods from CBI for the year were estimated at 2.2 million bale equivalents (Figure 70), down 3.1% from the previous year. The CAFTA-DR countries of Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and the Dominican Republic are all part of the CBI region. Imports of cotton goods from CAFTA-DR in 2017 were 1.9 million, or 88.5% of the cotton textile imports from CBI. Combined, imports from NAFTA and CBI countries decreased 1.0% and accounted for 17.9% of total U.S. cotton product imports in 2017.

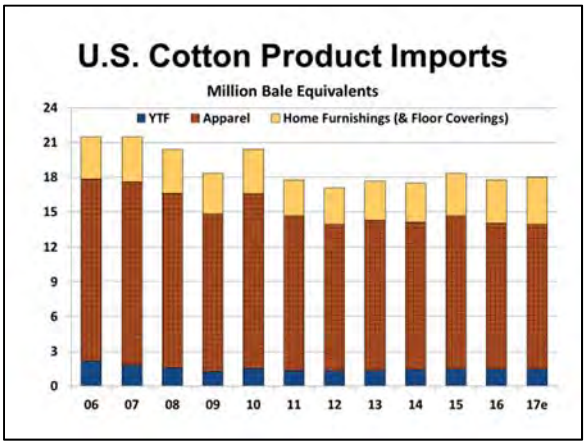

Figure 66 - U.S. Cotton Product Imports

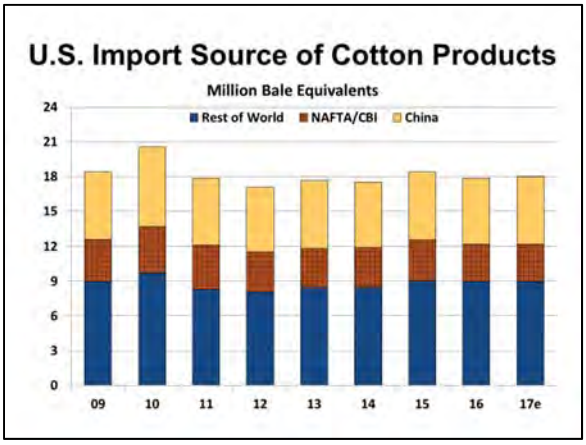

Figure 67 - U.S. Import Source of Cotton Products

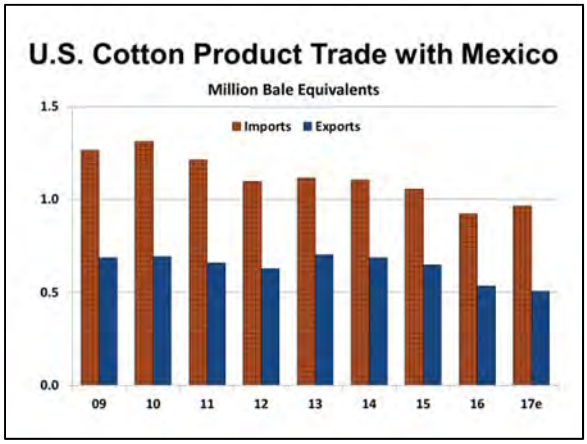

Figure 68 - U.S. Cotton Product Trade with Mexico

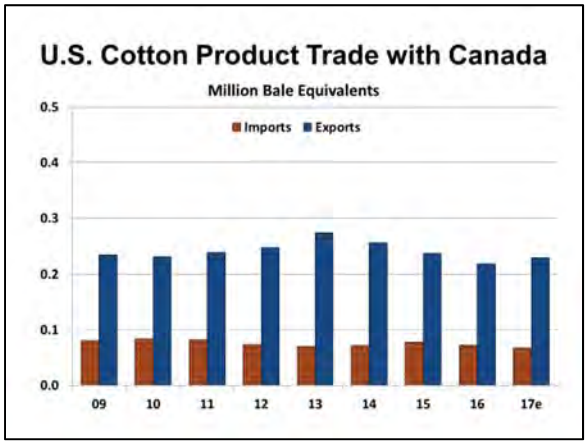

Figure 69 - U.S. Cotton Product Trade with Canada

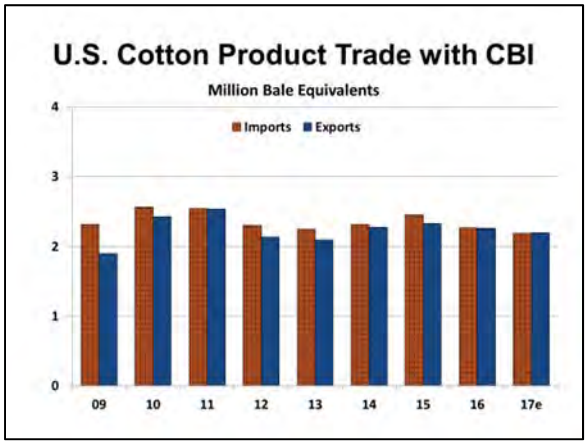

Figure 70 - U.S. Cotton Product Trade with CBI

Other top sources of imported cotton goods in 2017 were China, Pakistan, India, Hong Kong, Bangladesh, Vietnam, and South Korea. For the thirteenth consecutive year, China was the largest supplier of cotton textile imports into the U.S. (Figure 71).

Total cotton product imports from China increased to an estimated 5.8 million bale equivalents in 2017, up 3.0% from 2016 and up by more than 600% from 2001 when China entered the WTO. China's share of imported cotton goods in the U.S. market accelerated from 10.9% in 2004 to an estimated 32.2% in 2017.

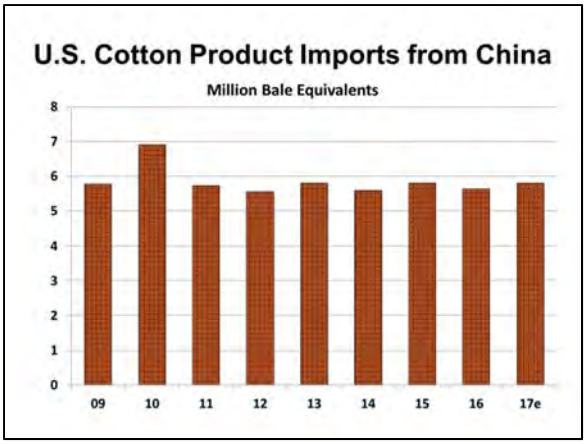

Figure 71 - U.S. Cotton Product Imports from China

Imports of cotton products from Pakistan are estimated at 1.5 million bale equivalents in 2017, a decrease of 6 thousand bales. Pakistan's share of imported cotton goods in the U.S. market decreased last year to 8.1%.

Imports from India stood at 1.3 million bale equivalents for 2017. This was a 28.5% decrease from last year. India now accounts for 7.5% of all U.S. cotton product imports.

Imports from Hong Kong in 2017 were 22 thousand bale equivalents, down 14.3% from 2016. Hong Kong's share of imported cotton goods in the U.S. remained steady at 0.1% in 2017.

Bangladesh showed an increase in cotton product imports into the U.S. when compared to the previous year. Imports from Bangladesh in 2017 were up 2.2% from 2016 to 1.3 million bale equivalents. Bangladesh accounted for an estimated 7.4%

of all cotton goods imported into the U.S. in 2017.

Vietnam showed an increase in cotton product imports into the U.S. when compared to the previous year. Total cotton product imports from Vietnam increased to an estimated 1.5 million bale equivalents in 2017, up 7.8% from 2016. Vietnam's share of cotton goods imported into the U.S. in 2017 increased to 8.2%, up 0.5% from the previous year. Cotton product imports from South Korea decreased 8.3% from 2016 to 126 thousand bale equivalents in 2017.

It is important to note in the following discussion that the most reliable data on imports by product category and by country is in the form of square meter equivalents (SME), rather than pounds or bales. Since different products have different weights per square meter, total imports reported in bale equivalents will not necessarily show the same trend as total imports expressed in SME. NCC reports imports in bale equivalents whenever possible, but the measurement of SME best represents product categories imported from individual countries.

Mexico

Although declining relative to other countries, Mexico remained a large shipper of cotton goods to the U.S. in 2017. Cotton trousers remained the largest category of imported cotton goods from Mexico. Trousers accounted for 31.3% of all cotton product imports from Mexico based on SME (Figure 72). Knit cotton shirts were the next largest category of imports, accounting for 17.4%, followed by "other cotton apparel" (10.5%) and "other cotton manufacturers" (7.5%). The U.S. Customs Service category "other cotton apparel" includes items such as waistcoats, swimwear, bodysuits and scarves. The U.S. Customs Service category "other cotton manufactures" includes items such as tablecloths, napkins, dishtowels and pillow covers.

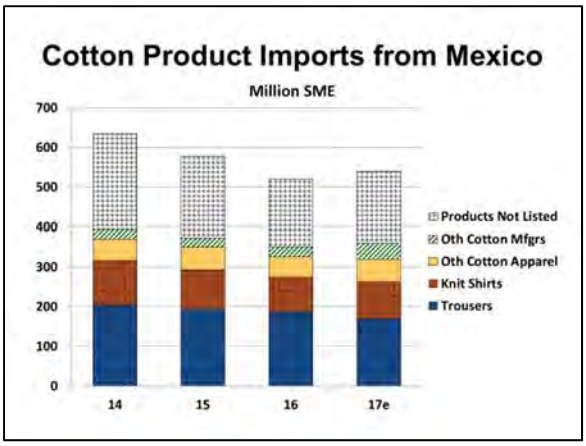

Figure 72 - Cotton Product Imports from Mexico

Canada

U.S. cotton SME imports from Canada increased slightly in 2017. The largest category of imports from Canada in 2017 was "other cotton manufactures", which accounted for 23.7% of total SME of cotton product imports from Canada (Figure 73). The next largest category was "other cotton apparel" with 18.4% of total imports, followed by terry towels at 2.6% and carded cotton yarn at 1.7%.

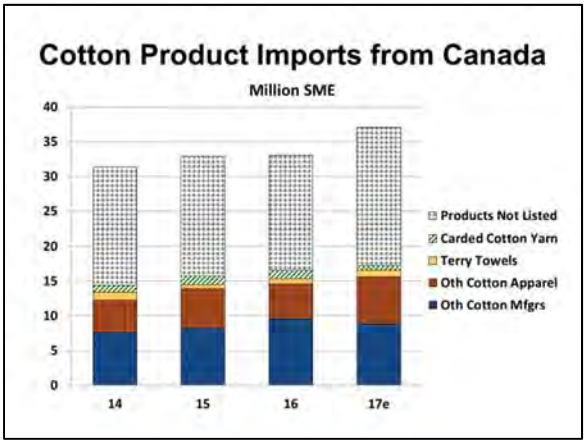

Figure 73 - Cotton Product Imports from Canada

Caribbean Basin Initiative (CBI)

Continuing the trend, CBI countries shipped more cotton goods to the U.S. than did NAFTA countries in 2017. The largest category of imported cotton goods from the region was knit shirts, accounting for 45.2%

of total imports, based on SME (Figure 74). Approximately 87.8% of the cotton knit shirt imports from CBI came from the CAFTA-DR countries. Underwear, the second largest category, accounted for 29.1% of imports, followed by cotton trousers (10.0%) and cotton hosiery (8.5%). Of these imports, 92.2% of the underwear, 83.6% of the cotton trousers and 100.0% of the cotton hosiery were from the CAFTA-DR countries.

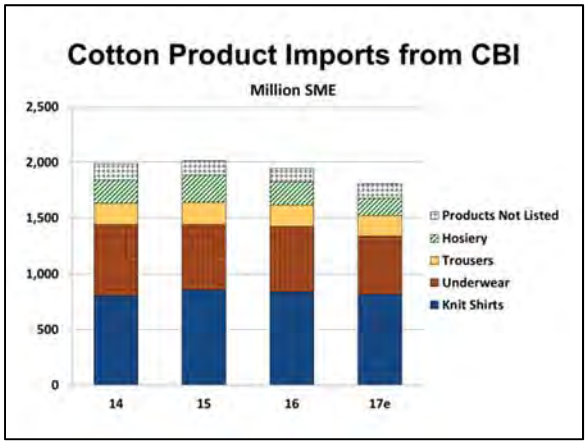

Figure 74 - Cotton Product Imports from CBI

African Growth & Opportunity Act (AGOA)

Over the past year, total cotton apparel product imports from the AGOA region decreased by 2.0% to an estimated 106.5 million SMEs (Figure 75). During the past year, the percentage of U.S. cotton apparel imports from the AGOA region receiving preferential treatment under the act decreased from 98.3% to 98.2%.

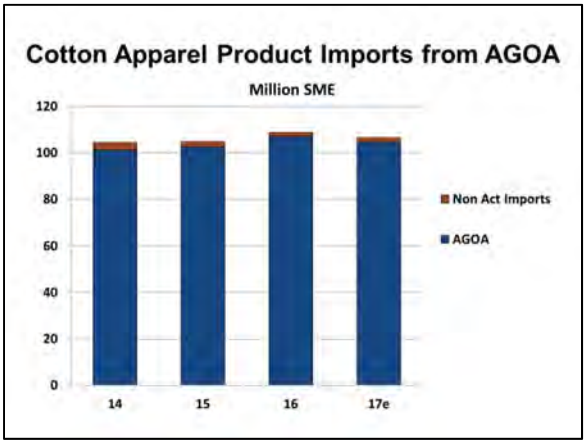

Figure 75 - Cotton Apparel Product Imports from AGOA

Pakistan

The largest category of imported goods from Pakistan in 2017 was "other cotton manufactures" (Figure 76). This category accounted for 45.9% of all cotton product imports from Pakistan based on SME. The second largest category imported from Pakistan was cotton sheets with 11.6% of total imports, followed by bedspreads and quilts (9.3%) and terry towels (5.1%).

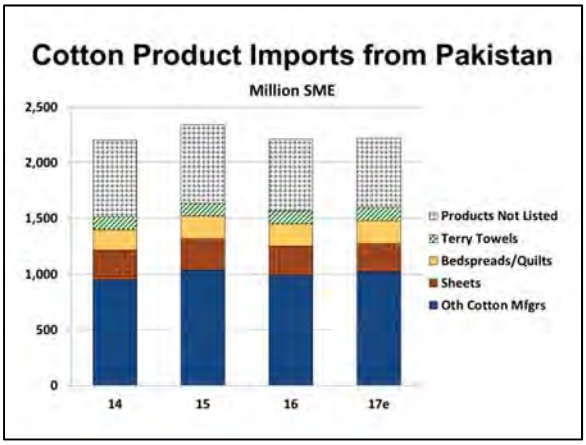

Figure 76 - Cotton Product Imports from Pakistan

China

Again last year, the single largest supplier of imported cotton goods into the U.S. market was China. On a SME basis, the largest category of cotton product imports from China in 2017 was "other cotton manufactures", which accounted for 23.9% of all cotton product imports from that country (Figure 77). Trousers was the

second largest category, comprising 14.0% of total cotton product imports from that country. Nightwear accounted for 5.4% of U.S. cotton textile and apparel imports from China in 2017. "Other cotton apparel" was the fourth largest category and accounted for 4.9% of cotton product imports.

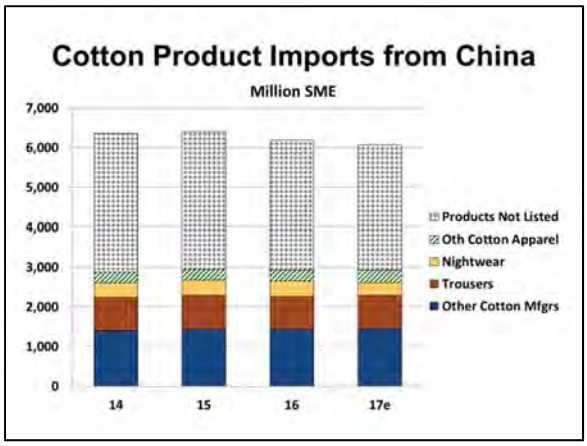

Figure 77 - Cotton Product Imports from China

India

As was the case with Pakistan and China, the largest category of imported cotton goods from India in 2016 was the category of "other cotton manufactures" (Figure 78). When based on SMEs, this category represented 34.4% of all cotton goods imported from India. The next largest category was cotton sheets (14.6%), followed by knit shirts (5.2%) and underwear (5.0%).

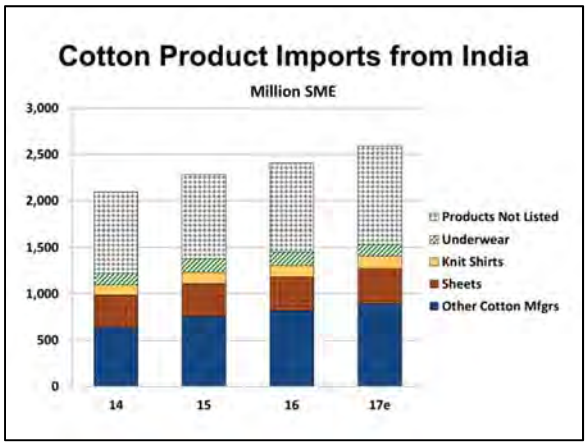

Figure 78 - Cotton Product Imports from India

Hong Kong

The largest category of imported cotton goods from Hong Kong in 2017 was "other cotton manufacturers" (Figure 79). When looking at SMEs, "other cotton manufacturers" accounted for 17.9% of all cotton products imported. The second largest category was cotton trousers with 16.0% of imports, followed by nightwear (11.3%) and cotton dresses (8.6%).

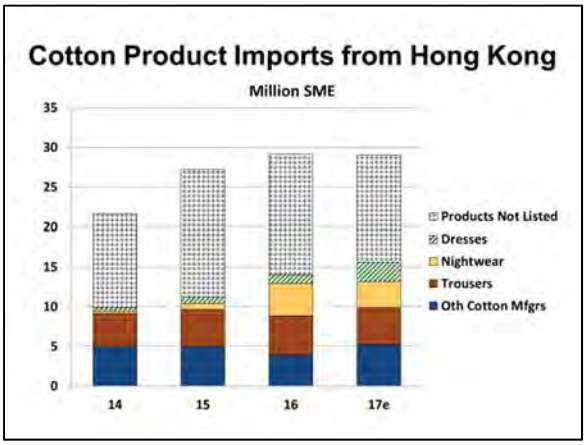

Figure 79 - Cotton Product Imports from Hong Kong

Bangladesh

Based on SMEs, the largest category of cotton goods imported from Bangladesh in 2017 (36.6%) was trousers (Figure 80). The second largest category in 2017 was cotton underwear (15.1%). Cotton woven shirts was the third largest category in 2017, representing 14.2% of total cotton goods imported from Bangladesh, followed by knit shirts at 7.2%.

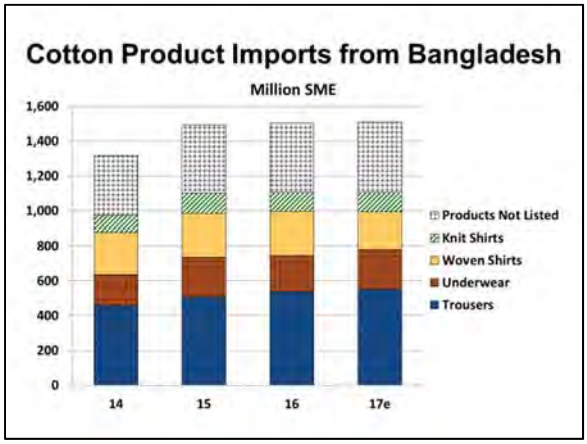

Figure 80 - Cotton Product Imports from Bangladesh

Vietnam

Vietnam continues to be a more significant supplier of cotton product imports (Figure 81). U.S. cotton product imports from Vietnam have increased by over 6,500% based on SME since 2001. In 2001, the U.S. imported 24.3 million SME of cotton goods from Vietnam. This number increased to an estimated 1.6 billion SME in 2017. The largest category of imported cotton goods from Vietnam in 2017 was trousers. Based on SMEs, this category represented 25.5% of all cotton goods imported from Vietnam. The next largest category was underwear (18.4%), followed by knit shirts (16.3%) and nightwear (7.0%).

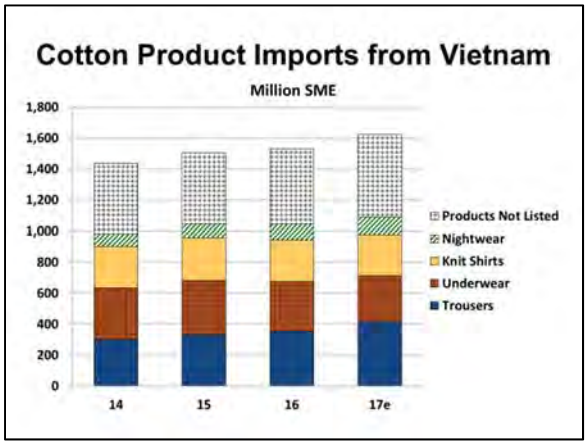

Figure 81 - Cotton Product Imports from Vietnam

South Korea

Based on SMEs, the largest category of cotton goods imported from South Korea in 2017 was combed cotton yarn, which accounted for 43.3% (Figure 82). The second largest category in 2017 was cotton sheeting fabric (25.5%), cotton hosiery (14.0%) and cotton gloves and mittens (2.4%).

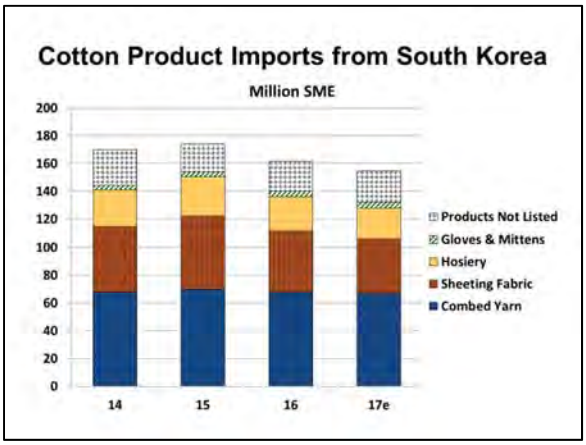

Figure 82 - Cotton Product Imports from South Korea

Turkey

Based on SMEs, the largest category of cotton goods imported from Turkey in 2017 was cotton sheets, which accounted for 28.5% (Figure 83). The second largest category in 2017 was "other cotton manufactures" (17.8%), followed by terry towels (7.8%) and cotton trousers (6.9%).

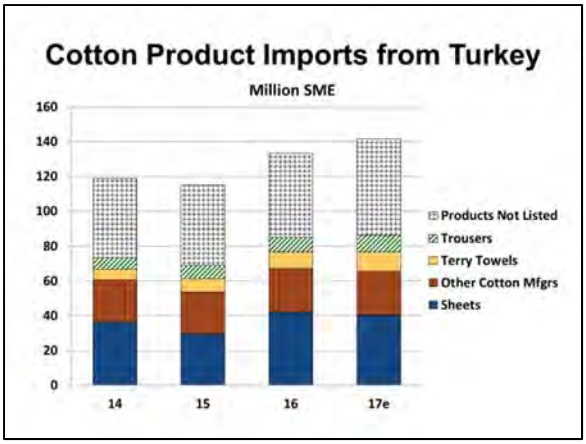

Figure 83 - Cotton Product Imports from Turkey

U.S. Cotton Product Exports

Exports of U.S. cotton textile and apparel products decreased in 2017 (Figure 84) by 6.5% to an estimated 3.5 million bale equivalents. This decrease was due to a decline in exports of cotton yarn, thread and fabric (Figure 85). Exports of cotton yarn, thread, and fabric decreased by 2.2% to 3.1 million bale equivalents. Exports of cotton apparel increased by 3.0% in 2017 to 292 thousand bale equivalents. Exports of home furnishings (including floor coverings) increased by 11.6% over the previous year to an estimated 108 thousand bale equivalents. For 2018, NCC projects U.S. cotton textile exports to decrease 79 thousand bales to 3.5 million bale equivalents.

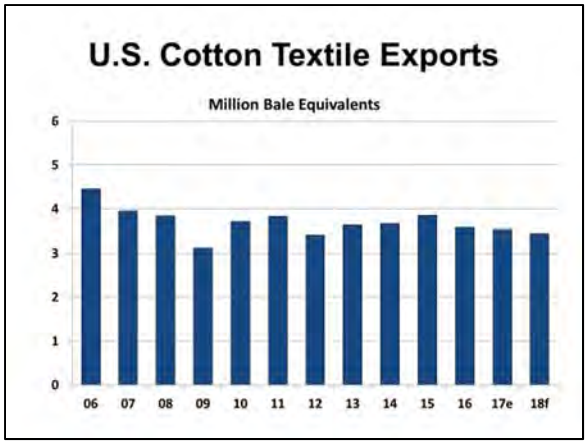

Figure 84 - U.S. Cotton Textile Exports

The top customers of exported U.S. cotton textiles and apparel in 2017 were once again the NAFTA and CBI countries (Figure 86). Exports to the NAFTA countries last year totaled an estimated 736 thousand bale equivalents, down 2.1% from the previous year.

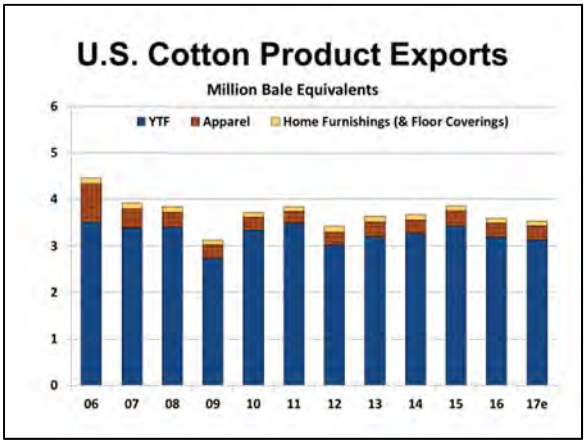

Figure 85- U.S. Cotton Product Exports

Exports to the region accounted for 20.9% of all U.S. cotton product exports. Exports to Mexico decreased to an estimated 506 thousand bale equivalents from 534 thousand in 2016. Cotton product exports to Canada grew by an estimated 5.1% to 230 thousand bale equivalents for 2017.

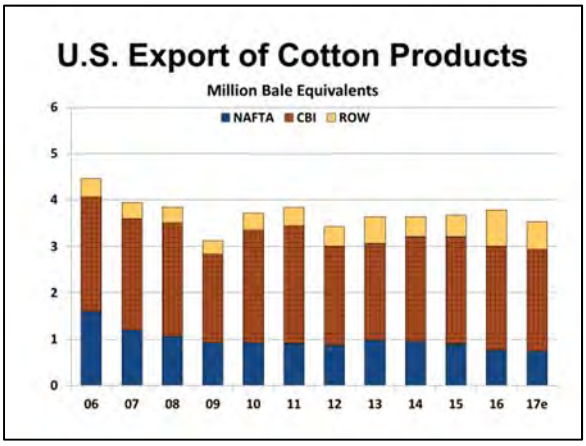

Figure 86 - U.S. Exports of Cotton Products

U.S. exports to the CBI countries declined last year. In 2017, exports decreased 2.6%, totaling 2.2 million bale equivalents or 62.2% of all U.S. cotton exports. Approximately 98.0% of the cotton products exported to CBI went to the CAFTA-DR countries.

World Market Situation

World cotton prices, as measured by Cotlook Ltd.'s "A" Index, ranged between 77.4 and 94.9 cents per pound during the course of calendar year 2017 (Figure 87). For the current marketing year-to-date, the "A" Index has averaged 82.5 cents per pound, 3.0 cents higher than this time last year.

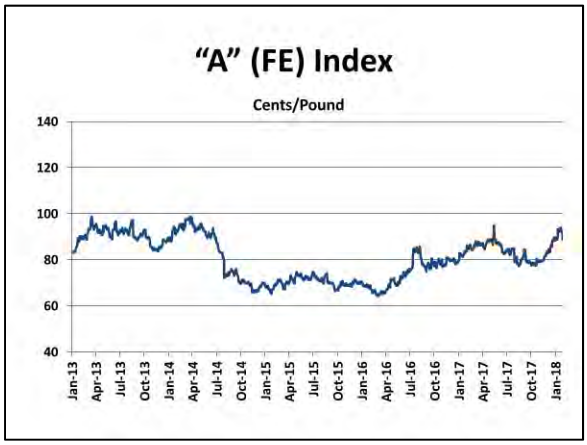

Figure 87 - "A" (FE) Index

World

The 2017 marketing year saw an increase in cotton production with an estimated world crop of 121.0 million bales (Figure 88). India and China remain the leading producers while Pakistan and Brazil continue to be significant producers. The United States produced a crop of 21.3 million bales, 4.1 million bales higher than the 2016 crop.

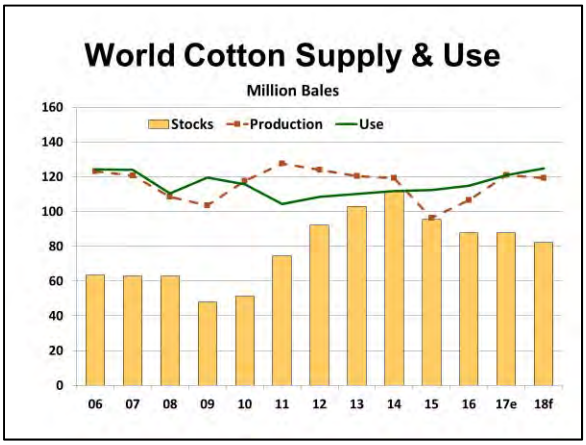

Figure 88 - World Cotton Supply & Use

After bouncing back above mill use in 2010 and 2011, the trend of world production exceeding demand continued uninterrupted through the 2014 marketing year. In 2015, the trend reversed with consumption estimated at 112.3 million bales, 16.1 million bales higher than the 96.1 million bale world crop. The January 2018 USDA estimates show 2017 production at 121.0 million bales, 142,000 bales higher than current mill use estimates. World consumption is estimated at 120.8 million bales for 2017.

World production is projected to fall slightly in the 2018 marketing year to 119.3 million bales with an increase in consumption to 124.8 million bales. Ending stocks will fall to 82.2 million bales resulting in a stock-to-use ratio of 65.9%.

China

China remained one of the largest cotton producers with a 2017 crop of 26.4 million bales (Figure 89). The crop estimate was raised from 2016 as both crop area and yields were increased from the previous crop year.

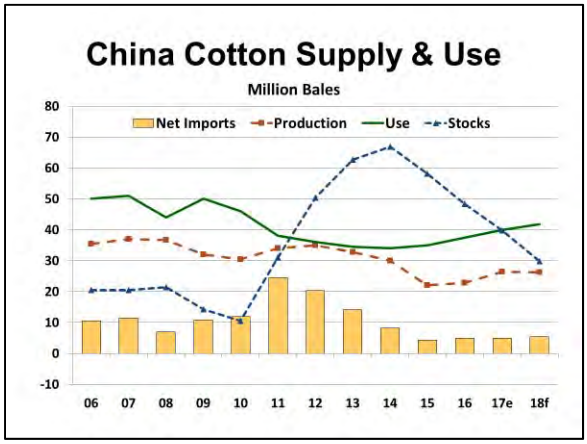

Figure 89 - China Cotton Supply & Use

Xinjiang continues to be the country's major cotton production base. The weather conditions in Xinjiang continue to be an advantage for cotton farming. The use of biotech cotton varieties is reportedly increasing to reduce sprays, although pests are less prevalent than in other provinces. Conventional varieties with specific traits, such as a dwarfed plant height and early maturity, continue to raise yields. The Xinjiang Production and Construction Corp (PCC) farms, which are organized on a larger scale than other typical Chinese cotton farms, are able to incorporate particular agronomic practices to improve yields, such as high-density sowing, plastic sheet covering, and drip irrigation technology. Mechanized harvest is increasingly popular throughout the Xinjiang Province, in particular on the PCC farms seeking to reduce the need for labor inputs. This growing trend in mechanization is expected to continue in the years to come. That said, there have been complaints about yield losses and lower fiber quality as a result of mechanized harvest. Hence, it will take some time for the Xinjiang cotton sector to develop more adequate technology, including appropriate cotton varieties and agronomic practices, for mechanized harvest to fully upgrade the overall productivity of its cotton farming.

Weather conditions and the use of new technologies, including biotech cotton varieties, continue to be key factors in yield gains. The use of biotech cotton varieties to reduce pest-related losses will continue to dominate in the provinces within the Yangtze River and the Yellow River regions. However, weather uncertainties in these regions, such as flooding or drought, frequently delay harvest, affect fiber quality, and impact yields. A 2018 crop of 26.3 million bales is projected, down 107,000 bales from 2017. A slight increase in area is offset by slight reduction in yields based on the assumption of yields returning to trend.

China's overall increase in demand for textile and apparel products is fueled by higher disposable income, rising living standards, population growth and urbanization. China's GDP growth is expected to remain stable, ranging from 6.5% to 7.0% in 2017 as compared to 6.7% growth in 2016.

According to China's National Statistics Bureau (NSB), from 2011 to 2015, China's average annual net population growth was 6.8 million. The government's amendment to the "one child policy" in 2016 pushed net population growth to 8.1 million in 2016 and this trend is expected to continue in 2017 and beyond. Additionally, rapid urbanization continues with an annual average growth in urban population of 20.1 million from 2011 to 2015, with 21.8 million new urban residents added in 2016. NSB data also highlights that sales of new homes/apartments in 2016 jumped by 22.5% from the previous year encouraging demand for more home textile products.

Despite the growing population and consumer income, the textile industry faces significant challenges, including higher cotton prices compared to other competitors, and rising production costs for key inputs such as electricity and labor. In addition,

environmental pressures (emission limits), particularly in eastern China, also discourage the expansion of facilities.

To address these ongoing hurdles, the Chinese textile industry continues to restructure. Industry sources report that during China's stockpiling years (2013-2015) many small mills with a capacity of about 20,000 spindles suspended operations or closed as a result of China's comparatively high domestic cotton prices. China's total spinning spindles decreased to 120 million by the end of 2016 compared to 150 million in 2014. In search of lower-priced raw materials, labor, and a more favorable investment environment, other industry leaders have moved their operations to China's central and western regions (Henan, Sichuan, Anhui, Jiangxi, Xinjiang and Ningxia Provinces) and to foreign countries. China's industry leaders also reported Chinese investment in spinning facilities in the United States, Vietnam, Cambodia and other southeastern Asia countries. These developments may continue to impact China's cotton consumption in the long-term. Despite ongoing expansion in other countries, China's textile industry is consuming more cotton, particularly with increased availability due to auctioning of reserve cotton. An increase in cotton mill use is expected during the current marketing year, and for the 2018 marketing year as well.

Net cotton imports for 2017 are forecast to reach 5.0 million bales. As China continues to work through the reserve stocks, China's imports are expected to increase slightly in 2018. Net imports are projected at 5.5 million bales.

The adjustments in China's supply and demand, coupled with the success of the auctions, are resulting in a reduction in stocks, down 8.7 million bales to 39.8 million bales in the 2017 marketing year. Stocks are projected to fall by another 10.0 million bales during the 2018 marketing year. If realized, stocks would be down over 37.0 million bales from the 2014 peak.

India

The latest USDA estimates have India producing 29.3 million bales for the 2017 marketing year (Figure 90). If these estimates hold, the 2017 crop will be 2.3 million bales higher than the 2016 crop as increased acreage more than offset slightly lower yields.

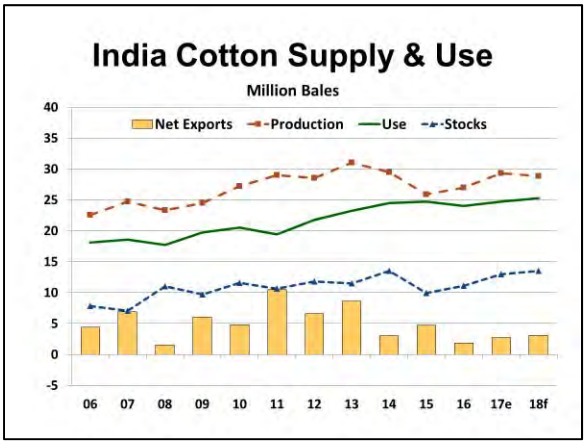

Figure 90 - India Cotton Supply & Use

India accounts for more than a third of global cotton area. Within India, two-thirds of cotton is produced in the central cotton growing zone, including the states of Maharashtra, Madhya Pradesh, Gujarat and Odisha where much of the crop is rain fed. The northern zone, which consists of the states of Punjab, Haryana and Rajasthan, produces cotton under irrigated conditions and the cotton area is relatively stable from year to year. In the south, the states of Andhra Pradesh, Karnataka and Tamil Nadu account for 30.0% of production. Farmers consistently exhibit a strong preference for cotton relative to other crops. Planting decisions are driven by expected price realizations although additional factors such as the relative cost of production of competing crops, water availability, central/state government support (including

the anticipated minimum support price) and a timely monsoon are crucial factors.

The production growth through 2013 was largely fueled by rapid gains in productivity. The rapid growth in yields can be attributed to the introduction and expansion of Bt cotton and improved hybrid cotton varieties, improved crop management practices and overall favorable weather conditions. Since its introduction in 2002, Bt cotton has been widely adopted and now accounts for an estimated 92.0% of total cotton area and over 95.0% of India's cotton production. The Government of India has approved six biotech events and more than 300 hybrids for cultivation in different agro-climatic zones. In addition to the approved varieties, there are estimated 40-50 Bt cotton hybrids that are developed and multiplied informally outside of regulated marketing channels and sold at cheaper rates relative to approved hybrids. One of the results of the adoption of Bt cotton has been a significant shift in the varietal profile and share of different types of cotton being produced in India. Most of the Bt hybrids are of medium and long staple cotton (26 to 32 mm) which has resulted in declining production of short staple (below 22 mm) and extra-long staple (35 mm and above) cotton. If the current trend continues, the domestic textile industry may seek to augment their extra-long staple and short staple cotton requirements through imports.

However, since 2013, yields have become more stagnant, and as a result, production has been stable to declining. For 2018, production should be down slightly from the 2017 level assuming yields are in line with recent averages.

The textile sector is in relatively good financial condition. The textile and clothing industry is largely cotton-based and is the second largest provider of employment after agriculture. The industry accounts for 12.0% of total industrial production, 15.0% of total export earnings, 2.0% of GDP and provides direct employment to over 45 million people and indirect employment to an additional 55 million people. The "organized" or modern textile sector accounts for 80.0% of the industry. Domestic demand is supported by a rising consumer class with greater disposable income that wants readymade garments and home textiles.

India's textile industry would benefit from increased value addition by weaving and garment manufacturing, but the industry continues emphasizing spinning sector expansion. The Indian textile industry includes both an "organized" sector (large-scale spinning units and composite mills) and an "unorganized" sector (small-scale spinning units, power looms, handlooms, hosiery units). More than 95.0% of yarn is from the organized sector. The weaving industry is represented more by the unorganized sector as power looms account for 59.0% of cloth production while hosiery units and handlooms represent, respectively, 26.0% and 11.0% of total cloth production. The organized sector weaving mills account for the remaining 4.0% of cloth production. Cotton and cotton blend- textile exports account for 45.0% of total textile exports. Cotton ready-made garments account for the major share of cotton textile exports followed by cotton yarn and cotton fabric. Cotton yarn exports have been on Open General License (OGL) (i.e., not subject to quotas) since April 2011.

With continued government support and available ample supplies of cotton, India's mill use should grow to 25.3 million bales in the 2018 marketing year.

In terms of the global trade picture, government policies in India will play a role in the outlook for the coming year. India is expected to continue as a net exporter. The government of India has enacted a variety of

trade policies to ensure that competitively-priced and adequate supplies of cotton are available to the textile industry. India's national fiber policy affirms that cotton exports should be limited to an exportable surplus. Cotton and cotton yarn exports are allowed under an OGL without any quantitative restrictions.

Uzbekistan

Current USDA estimates put Uzbek cotton production at 3.7 million bales for 2017 (Figure 91), down 25,000 bales from the previous year. Cotton has been the cash crop in Uzbekistan for generations and a significant source of employment and foreign exchange.

The government of Uzbekistan (GOU) continues to maintain tight control over all aspects of cotton production, including planting area, production targets, prices, inputs, procurement and marketing. The GOU is moving along with the recent plan to carry out structural reforms in agriculture and the economy. Accordingly, cotton planting area will be reduced gradually until 2020 to lower domestic production to about 3.0 million metric tons (MMT) of seed cotton, which is about 3.9 million bales of lint cotton, compared to 3.4 MMT of earlier years, about 4.3 million bales of lint cotton. The intention of the government is to reduce planting in areas where field yields are lower than the country average, such as in highly salinized areas and mountain regions, and to facilitate production of other crops such as vegetables (particularly potatoes), fruits, and grains instead. It is indicated that with the new initiative, a total of 170 thousand hectares of land will be available to plant products other than cotton. As a result, the target acreage and production for the 2017 marketing year was 1.2 million hectares and the production target was 3.18 MMT of seed cotton (or, about 4.22 million bales of lint cotton), which represents a reduction of 4.0% and 3.0%, respectively, from the government's 2016 target.

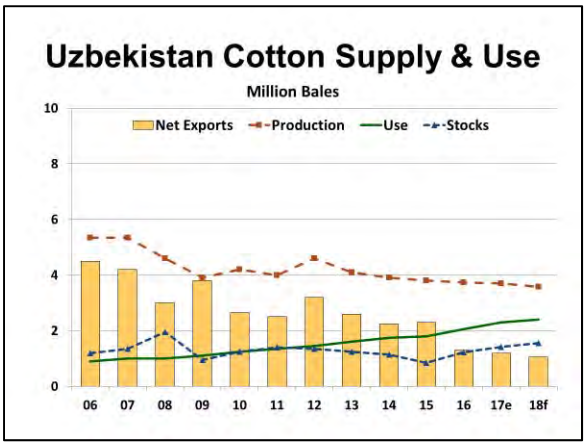

Figure 91 - Uzbekistan Cotton Supply & Use

For the 2018 marketing year, Uzbek cotton production is projected to fall slightly to an estimated 3.6 million bales.

The GOU is continuing to promote domestic consumption by assisting local and foreign investments in yarn, textiles and garment production. According to industry sources, about 40.0% of locally produced cotton is consumed domestically. The textile industry plays an important role in Uzbekistan's economy. It employs one-third of the industrial work force and its share of industrial output is 26.0%. Presently about 180 enterprises are engaged in textile production in Uzbekistan. The Uzbek government is encouraging new partnerships for larger use of cotton domestically. Many new textile production investments are approved that will increase domestic consumption gradually in the coming years. Uzbekistan's exports of cotton yarn, textiles, and readymade garment exports are estimated to exceed US$1 billion annually.

As a result, Uzbek domestic cotton consumption is estimated at 2.3 million bales in the 2017 marketing year. For 2018, Uzbekistan's mill use is projected to increase to 2.4 million bales.

Uzbekistan generally exports about 60.0% of its lint cotton production annually. Lower production in MY 2016/17 and an increase in domestic consumption has reduced the availability for exports. Uzbekistan will likely remain a net exporter of cotton for the foreseeable future, exporting an estimated 1.1 million bales of cotton in the 2018 marketing year.

Pakistan

Cotton is one of Pakistan's three major Kharif (summer) crops, and alternate planting options are limited by seed supplies and agronomic factors. For example, cotton areas may not be suitable for rice and sugarcane's longer growing season does not easily lend itself to crop changes. Production is concentrated in two provinces with Punjab accounting for nearly 75.0% and Sindh nearly 25.0% of the area. For the most part, cotton is produced by small farmers cultivating less than five hectares of land. Pakistan primarily produces medium staple cotton. Cotton area is expected to increase, but the expansion will be limited as some farmers have shifted to long-duration sugarcane. Increasingly popular corn for Pakistan's growing livestock and poultry sectors is leading to a shift of well-irrigated productive land away from cotton.

There are a number of factors that could affect yields, some positive and some negative. Factors weighing against improved yields include: 1) Pakistan's continued reliance on a back-crossed 15-year-old biotechnology event means that crops are susceptible to bollworms and 2) "Sucking insects" such as white fly continue to spread cotton leaf curl virus and other plant diseases that affect yields and require farmer vigilance. Factors that are supportive of yields include: 1) the major cotton-producing provinces of Punjab and Sindh have approved or are expected to soon approve 12 new seed varieties that seem to be liked by farmers and supplies of certified seed are up to 45.0% of all cottonseeds from 30.0% a year ago, 2) farmers are increasingly aware of the risks associated with the weak expression of the Bt gene in local cotton plants and the need to monitor for bollworms, 3) farmers are also increasingly attuned to the damage of "sucking" insects. and 4) the government continues to heavily subsidize the supply of fertilizer, water, and power for farmers.

In 2017, cotton production was estimated at 8.2 million bales, which represents an improvement over 2016. An increase in production is expected for the upcoming marketing year based on the assumption of increased harvested acres. Assuming normal weather conditions and low pest infestation, production is projected to be 8.6 million bales in 2018 (Figure 92). However, it is important to note that Pakistan continues to face Bt-resistant boll worms, and the ability to address this issue will have a significant bearing on production.

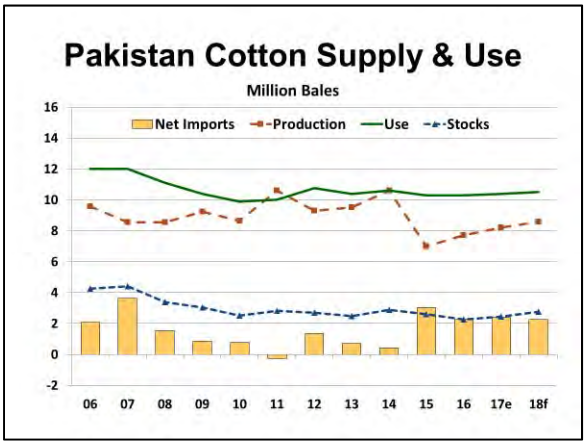

Figure 92 - Pakistan Cotton Supply & Use

On January 10, 2017, the Government of Pakistan announced an incentive package worth $1.7 billion to boost the country's exports of textile products. The 18-month package starting from January 1, 2017 to June 30, 2018 covers duty drawback rates of local taxes and abolition of sales tax on import of textile machinery, customs

duty/sales tax on import of raw cotton and duty on man-made fiber. Some in the textile sector have noted that a number of changes were quickly priced into textile products or the expectations of buyers, thus negating some of the advantages. Time will tell if the new policies increase the consumption of cotton.

Consumption has been flat for over a decade and is only expected to increase modestly in coming years. Cotton continues to face competition from man-made fibers, and the textile industry has tended to discount some of the efficacy of the new textile package. Pakistan also faces significant competition from competing manufacturers in Asia. Still, textiles continue to play an important role in Pakistan's economy.

The textile sector is the largest industrial sector in Pakistan and accounts for about 40.0% of the industrial labor force and employs 10 million people. The sector also generates 8.0% of Gross Domestic Product and over 50.0% of foreign exchange earnings. The integrated cotton and textile sector includes 1,000 ginneries, 425 textile mills, and 300 cottonseed crushers and oil refiners. China's increased investment in Pakistan's energy and infrastructure sectors could help to spur future growth in the textile sector. Pakistan has also emerged as a major importer of cotton, primarily medium staple from India. The United States consistently supplies large quantities of long staple cotton and pima cotton.

Pakistan continues to be a net importer of cotton, primarily because of strong demand for better grades of cotton for blending and producing export-oriented quality textile products. Typical imports include upland and long staple cotton, as well as medium staple cotton, to augment domestic supplies for processing and re-export. Demand for better quality fabrics for the export market and specialized products for the domestic market are growing. Thus, Pakistan's textile industry is expected to increasingly rely on imported long staple and quality cottons to produce high quality textile products.

These practices should keep Pakistan a net cotton importer in 2018. Net cotton imports for the 2018 marketing year are expected to be 2.3 million bales.

Turkey

Production grew to 4.0 million bales in 2017 (Figure 93). For 2018, production is projected to be slightly lower at 3.9 million bales as increased area is offset with lower yields.

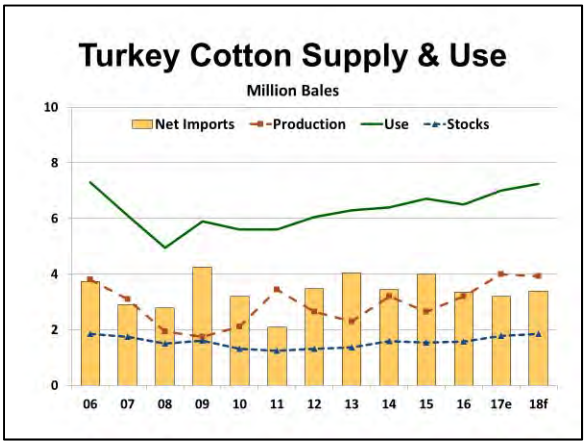

Figure 93 - Turkey Cotton Supply & Use

Despite the imposition of the 3.0% AD duty, Turkey continues to be a large export market for U.S. cotton. Turkey has a large textile industry capacity driving the demand for cotton, and due to low domestic cotton production and the slow pace of the GAP development project, the country will continue to import cotton for years to come.

The textile industry continues to be one of the most important sectors for the Turkish economy, accounting for 8.0% of GNP, 16.0% of industrial employment, and 18.0% of total exports. Turkish textile mills continue to renew their technology with new equipment to remain competitive in international markets. Accordingly,

investments by the Turkish textile industry since 1985 are estimated to be more than US$90 billion. Presently, Turkey's production capacity is estimated to reach 7.5 million spindles and 700 thousand rotors. Turkey ranks among the top five countries in the world in terms of yarn production capacity and number six in ready-to-wear-items production. Turkish textile exporters have the advantage of faster order response times and higher quality than their competitors.

As a result of these and other factors, Turkey's mill use is projected to remain stable in 2018. Turkey is projected to have net imports of 3.4 million bales, slightly higher than the 2017 crop year.

Australia

Current estimates put Australia's cotton production at 4.6 million bales for the 2017 marketing year (Figure 94). Australia's cotton production should increase to roughly 4.7 million bales in 2018.

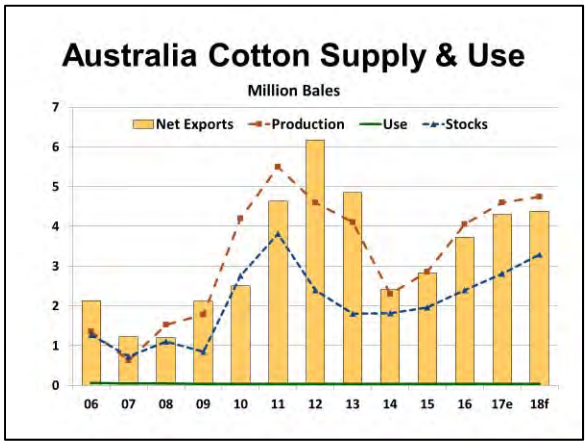

Figure 94- Australia Cotton Supply & Use

Cotton is predominantly irrigated and grown in New South Wales (NSW) and southern Queensland. The major production area in NSW stretches south from the Macintyre River on the Queensland border and covers the Gwydir, Namoi and Macquarie valleys. In NSW, cotton is also grown along the Barwon and Darling Rivers in the west and the Lachlan and Murrumbidgee rivers in the south and has been spreading into new regions such as Forbes. In Queensland, cotton is grown mostly in the south in the Darling Downs, St George, Dirranbandi and Macintyre Valley regions. The remainder is grown near Emerald, Theodore and Biloela in Central Queensland. Cotton is planted from September in Queensland to mid-November in NSW and then harvested from March to June, respectively. Australia is an efficient producer with the world's highest cotton yields due to the predominance of irrigation and the use of genetically modified varieties. Dryland cotton has declined in recent years because of low soil moisture but accounts for around one-third of cotton grown.

Australia is one of the world's largest exporters of raw cotton with over 90.0% of the domestic crop exported, mainly to China, Indonesia and Thailand. For the 2017 marketing year, net exports are estimated to reach 4.3 million bales. With production hovering around the 4.7 million bale mark during the 2018 marketing year, net exports are expected to climb to 4.4 million bales.

Brazil

Current estimates place production for the 2017 marketing year at 7.8 million bales (Figure 95). For the 2018 marketing year, harvested area is estimated at 2.8 million acres, up slightly from the previous year, resulting in a production estimate of 8.1 million bales in 2018.

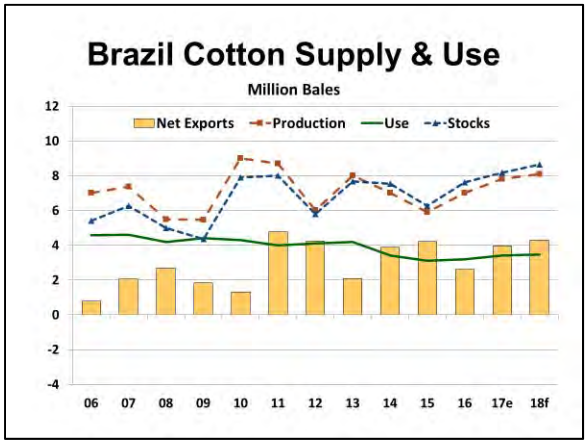

Figure 95 - Brazil Cotton Supply & Use

Brazilian mill use for the 2017 marketing year was up slightly to an estimated 3.4 million bales when compared to the previous year. Brazilian cotton consumption is expected to climb in the 2018 marketing year with mill use estimated at 3.5 million bales.

In terms of trade, Brazil is expected to reach net exports of 4.0 million bales of cotton in the 2017 marketing year. For the 2018 marketing year, net exports are expected to climb 322 thousand bales to roughly 4.3 million bales.

West Africa

In the West African cotton-producing countries, cotton production continues to play an important role in the economy. For all West African countries, the planting season for cotton generally begins in June; the harvest starts in September/October and ends in November. Ginning mills collect cotton from October/ November to March. Farm gate prices, which are fixed by each government, are generally announced in April. Spurred by increased area, cotton production in 2017 was an estimated 5.1 million bales.

Burkina Faso remains the top cotton producer in the region followed by Mali, Cote d'Ivoire, Chad, and Senegal. Despite the obstacles facing cotton producers in these countries, and the other cotton producing countries in this region, cotton remains an important cash crop in most of Francophone West Africa, Cote d'Ivoire and Senegal.

The current projections have West Africa producing 5.3 million bales in 2018 (Figure 96). West Africa continues to measurably affect the cotton export market, since virtually all of its production is sold abroad. The region exports between 95.0% and 98.0% of its cotton production. For the 2017 marketing year, it is estimated that the region will remain net exporters with net exports of 4.4 million bales. For 2018, West African net exports are expected to climb to 4.9 million bales, providing increased competition for U.S. cotton exports.

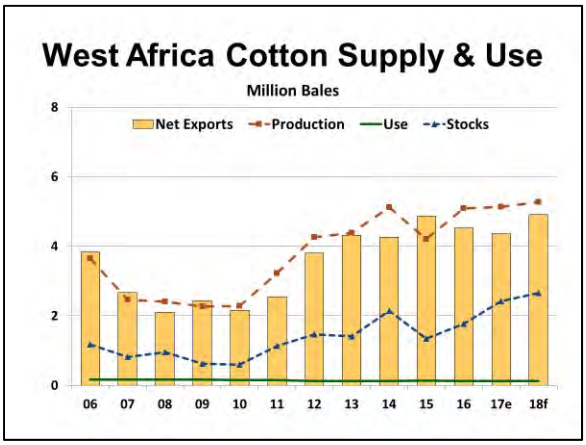

Figure 96 - West Africa Cotton Supply & Use

Longer term, West Africa's potential for growth and stability depends on whether or not they can address a number of internal issues related to their production, ginning, price discovery, and distribution systems.

Mexico

Mexican cotton production for marketing year 2017 climbed 776 thousand bales to 1.5 million bales. A sharp increase in area and stable yields contributed to recovery from the 2016 harvest, which was the lowest since the 2009 crop year.

With a decline in acres estimated for 2018, production falls with an estimated crop of 1.3 million bales in the 2018 marketing year (Figure 97).

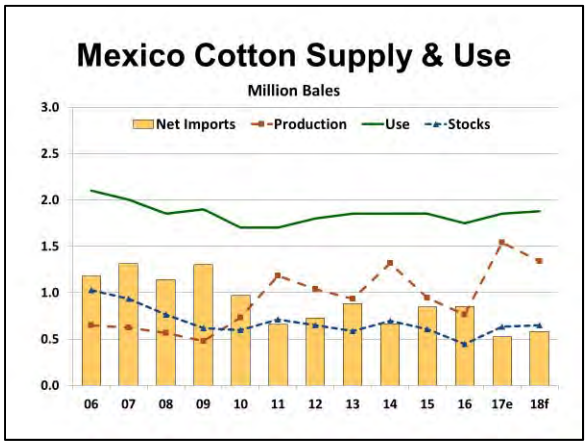

Figure 97 - Mexico Cotton Supply & Use

In terms of consumption, Mexico's outlook remains basically unchanged. Marketing year 2017 mill use is estimated at 1.9 million bales. For the 2018 marketing year, Mexican mill consumption is projected to remain unchanged at 1.9 million bales.

Net imports dropped to an estimated 525 thousand bales during the 2017 marketing year. The U.S. should continue to be the main supplier, accounting for practically 100.0% of Mexico's cotton imports. Mexico's net imports are expected to increase to roughly 580 thousand bales for the 2018 marketing year.

Indonesia

Indonesian cotton production was estimated at 3 thousand bales in the 2017 marketing year (Figure 98). Current projections show this number unchanged for 2018.

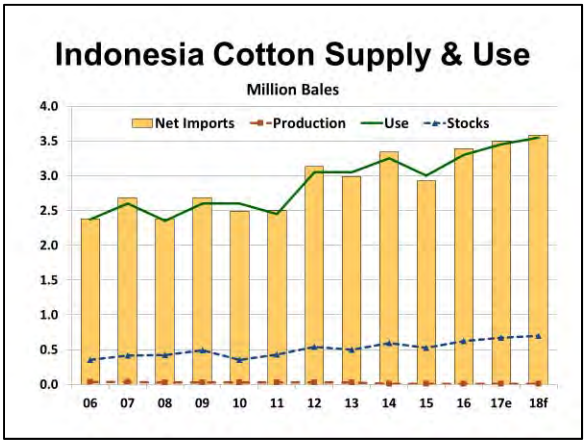

Figure 98 - Indonesia Cotton Supply & Use

Indonesia's textile industry continues to face strong competition from manufacturers in other Asian markets. Indonesian cotton consumption in marketing year 2018 is estimated to remain relatively unchanged at 3.6 million bales. The same holds true for net imports, estimated at 3.6 million bales for the 2018 marketing year.

Vietnam

For the 2017 marketing year, Vietnam's cotton production stands at an estimated 3 thousand bales with production estimates unchanged for the 2018 crop (Figure 99).

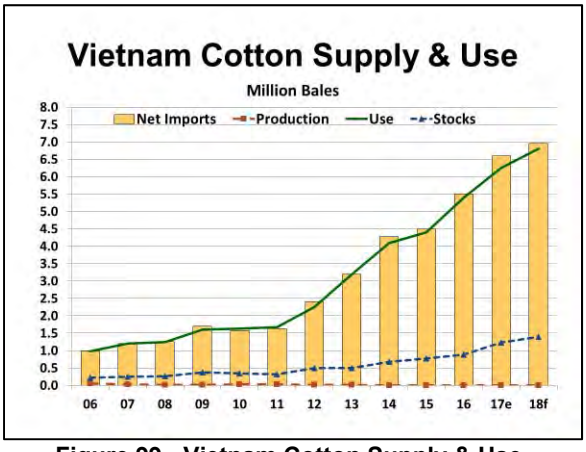

Figure 99 - Vietnam Cotton Supply & Use

The textile and garment industry has been ranked as one of Vietnam's top export industries for many years and significantly contributes to the nation's GDP growth. Export revenue in calendar year 2016 was

reported at $28.5 billion, up about 5.0% over the past year, and equivalent to 16.0% of Vietnam's total export value. However, this important sector's growth has experienced a declining trend over the past three years, from 20.9% in 2014 to 10.9% in 2015 and to 5.0% in 2016. Stagnant global market demand in addition to tougher competition from key rivals like China, India, Pakistan and Bangladesh, are major factors that could adversely affect Vietnam's textile and garment exports. As a result, the industry's export growth for 2017 was modestly projected at 6.0% - 8.0%, down from the routine double-digit growth rates for the previous several years.

The U.S. remains the largest market for the Vietnam textile and garment industry. Other important international markets for Vietnam apparel products include the EU (12.0%), Japan (10.2%) and South Korea (8.0%). Vietnam's FTA with the EU is scheduled to be implemented in 2018. This trade pact may present opportunities for accelerating textile and garment exports. The agreement aims to eliminate duties applied on textiles and apparel in seven years.

Vietnam's textile and apparel industry has continually attracted a large flow of investment from both foreign and local investors over the past years. The investment is visible across the supply chain including spinning, weaving and knitting, dyeing and finishing, and garment making. Newly established and expanded investment projects have been made to capture opportunities offered by free trade agreements that Vietnam has signed with its trade partners, such as the Free Trade Agreement with the EU, the Asian Economic Community (AEC) and FTA Vietnam – Korea.

Estimates place 2017 marketing year mill use at 6.3 million bales. Growth continues into the 2018 marketing year with consumption climbing to 6.8 million bales.

In order to keep pace with this rising cotton demand, Vietnam will remain a net importer for the foreseeable future, with the U.S. being a significant supplier. For the 2017 marketing year, Vietnam's net imports are estimated to be 6.6 million bales and estimates are higher for the 2018 marketing year at 7.0 million bales.

Bangladesh

Marketing year 2017 cotton production in Bangladesh totaled 125 thousand bales (Figure 100). Cotton production is vulnerable to excessive rainfalls/floods and pest infestations which are common in Bangladesh. With that in mind, production for the 2018 marketing year is expected to remain unchanged at 125 thousand bales.

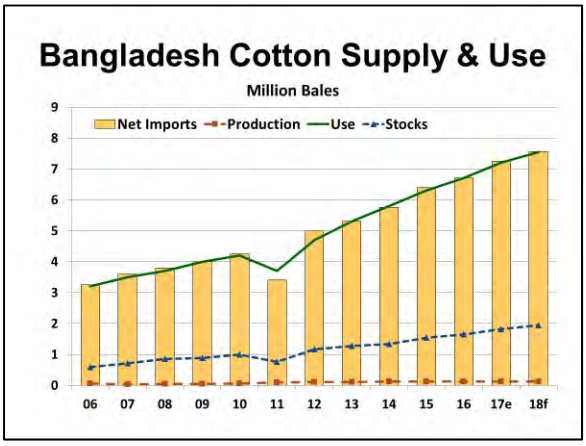

Figure 100 - Bangladesh Cotton Supply & Use

In terms of consumption, marketing year 2017 mill use was estimated at 7.2 million bales and an increase is expected in the 2018 marketing year with an estimate of 7.6 million bales.

As a result of increasing demand, raw cotton imports have steadily grown. Net imports have increased to an estimated 7.3 million bales for the 2017 marketing year and are projected to increase in 2018 to roughly 7.6 million bales.

United States Trade

For the 2017 marketing year, net U.S. exports of raw cotton are estimated to be 15.0 million bales (Figure 101), up 80 thousand bales from the 2016 crop year. Net exports decline in the 2018 marketing year with projections of 14.3 million bales. The reliance of the U.S. cotton market on exports has increased dramatically over the past 15 years as the domestic textile industry has contracted. It is estimated that exports will constitute more than 80.0% of total use for the 2017 marketing year.

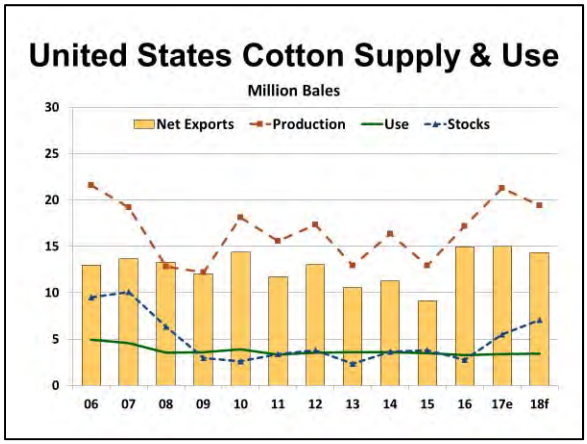

Figure 101 - United States Cotton Supply & Use

Customers of U.S. exports have changed in recent years. Mexico remains one of the top customers, along with Pakistan, Turkey, Vietnam, Indonesia and, China (Figure 102).

Top U.S. Raw Cotton Export Destinations

2010		2017YTD	
Country	(1,000 480-Lb. Bales)	Country	(1,000 480-Lb. Bales)
China	4,860	China	2,097
Turkey	2,076	Vietnam	2,078
Mexico	1,244	Pakistan	1,241
Indonesia	889	Turkey	1,237
Vietnam	717	Indonesia	1,109
Thailand	712	Mexico	1,065

Figure 102 - Top U.S. Raw Cotton Export Destinations

World Trade

In the 2017 marketing year, world cotton trade climbed to roughly 38.4 million bales (Figure 103). Current projections put 2018 marketing year world cotton trade at 39.0 million bales, the highest level since the 2013 marketing year. As previously discussed, U.S. exports are projected to be 14.3 million bales in the 2018 marketing year.

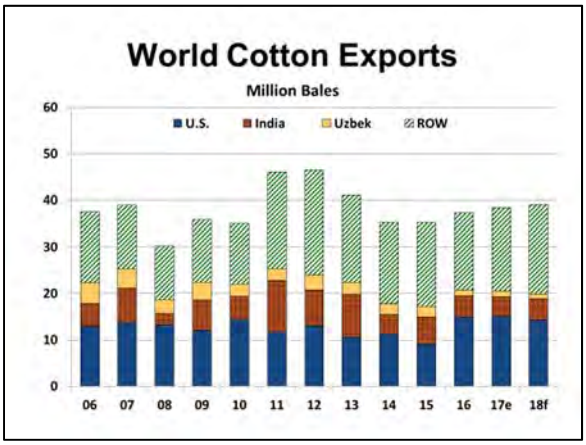

Figure 103 - World Cotton Exports

Pakistan has the greatest drop in imports with an estimated 2.3 million bales, down 144 thousand bales from 2017 (Figure 104).

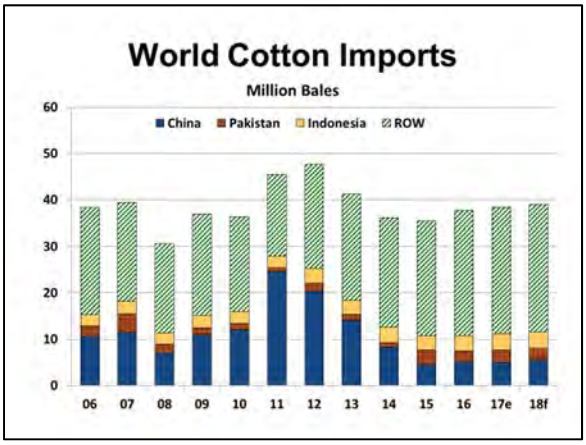

Figure 104 - World Cotton Imports

Examining the world trade-to-mill use ratio for the 2017 marketing year shows a slight decline to 31.8% from 32.8% in 2016 (Figure 105). For 2018, the ratio is expected to fall to 31.3%.

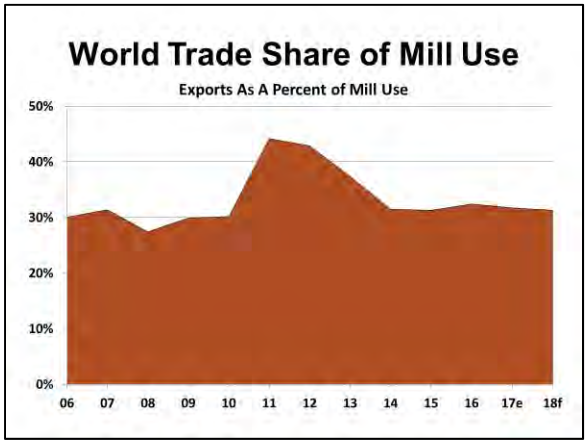

Figure 105 - World Trade Share of Mill Use

World Ending Stocks

For the 2018 marketing year, ending stocks are estimated to fall to 82.2 million bales (Figure 106). The two largest producers – China and India – will continue to be significant holders of cotton stocks due in part to various government programs.

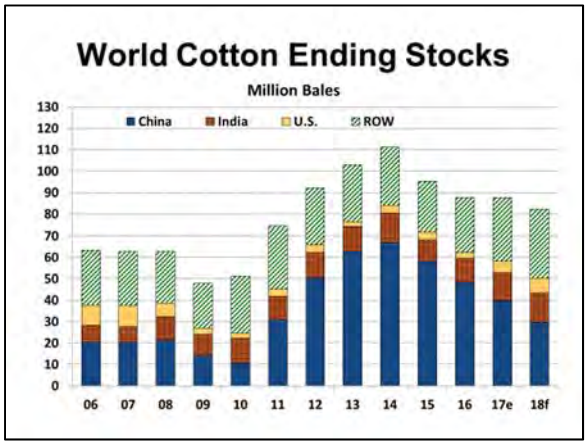

Figure 106 - World Cotton Ending Stocks

The projected world stocks-to-use ratio falls to 65.9% for the 2018 marketing year (Figure 107). Although global stocks are projected to fall, stocks outside of China are expected to increase by 4.6 million bales, reaching a record level of 52.4 million bales. Declining global stocks would normally be supportive of prices, but in this case, the changing disposition of stocks could signal pressure on prices.

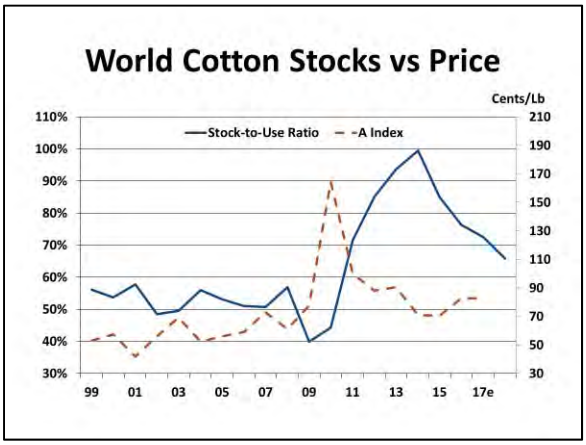

Figure 107 - World Cotton Stocks vs Price