

## For U.S. Cotton 2006

Prepared by

Gary Adams, Vice President, Economic and Policy Analysis

Steve Slinsky, Senior Economist

Shawn Boyd, Agricultural Economist

Michelle Huffman, Agricultural Economist



## U.S. and World Economy

U.S. economic growth achieved in 2005 has been called “respectable” by many analysts. While less impressive than 2004, the economy’s ability to absorb the impact of higher energy prices, rising short-term interest rates and an unusually disruptive hurricane season demands respect. Domestic demand was boosted by relatively low long-term interest rates while the cumulative effect of past dollar depreciations helped improve net exports.

The Consumer Confidence Index is a tool designed by the Conference Board’s Consumer Research Center to gauge the mood of the American consumer with regards to the economy. According to this index, the American consumer’s fragile confidence was shaken significantly throughout 2005 (Exhibit 1). The volatility can be attributed to upward surges in fuel prices and three destructive Gulf Coast hurricanes. While the prolonged Iraq war and the threat of terrorist acts do not help consumer confidence, the most obvious drag on confidence is oil and gasoline prices. Late summer hurricane reconstruction efforts and momentary relief from escalating fuel prices initiated a rally in consumer confidence in time for the Christmas shopping season. Even at its peak, index values were negative, indicating that consumers still have their reservations.

Stymied by slow progress in Iraq and rising energy prices, Wall Street continued a steady but unimpressive performance throughout 2005. However, growing consumer confidence and optimism about corporate earnings lead to improved end-of-year performance. While it is unlikely that investors will enjoy 1990s-style gains in 2006, modest

stock-option premiums or prices indicate that investors won’t suffer the deep plunges that have characterized the markets in recent years.

Throughout 2005, the Fed continued its campaign of nudging the federal funds rate up in quarter-point steps to prevent inflation. While expected to raise short-term interest rates at least two more times, the Fed appears to be nearing the end of the current tightening cycle. The pace and sustainability of job growth may be a key driver of Fed policy in 2006. Even after rate increases, America’s real (i.e. inflation-adjusted) short-term interest rates are still extremely low.

As the U.S. economy continued its recovery, the dollar has begun to modestly rebuild strength against foreign currencies. For an export-oriented commodity such as cotton and an import-vulnerable textile industry, the weaker dollar helped increase U.S. competitiveness in world markets. However, some analysts are relieved to see the dollar strengthen, fearing the weakened state of U.S. currency may adversely affect the U.S. equities market as foreign investors begin to pull out.

Going into 2006, economic fundamentals appear generally sound. However, the outlook is dominated by downside risks. In particular, another negative oil shock or a more rapid increase in interest rates could result in a much more pronounced downturn.

### U.S. Gross Domestic Product

As measured by real Gross Domestic Product (GDP), the U.S. economy is

estimated to have grown by 3.6% in 2005 (Exhibit 2). While less than the 4.2% growth experienced in 2004 — the best showing in five years — many economists believe this was a decent performance. In fact, Chicago Federal Reserve Bank President Michael Moskowitz stated that he believes the United States has reached a point of self-sustaining economic growth after several years of fiscal and monetary stimulus.

The Commerce Department revised upward the third-quarter GDP growth rate from 3.8 to 4.3%, reflecting the economic activity resulting from hurricane clean-up efforts in late summer. This latest revision represents the fastest expansion in two years and the 10th consecutive quarter of growth averaging 4% in real terms on an annual basis.

The U.S. economy is expected to enjoy healthy growth, restrained inflation and modest interest rate increases in 2006, even as household savings remain low and the budget and trade deficits widen. A recent survey of 45 business economists conducted by the National Association for Business Economics puts expected economic growth at 3.3% in 2006.

Despite higher costs for energy, healthcare, food and a few other categories, consumer spending remained strong in 2005 (Exhibit 3). With ready access to credit and home equity lines, households have absorbed much of the energy cost increase. In fact, there was a 4.1% growth in real personal consumer expenditures in the third quarter of 2005.

Private investment, which tailed off in the second half of 2004, showed new life in 2005 (Exhibit 4). Some analysts

believe that the 2006 economy will be led by the business sector rather than the consumer sector for the first time since the current economic recovery began. To illustrate their point, consider that U.S. manufacturers are operating with less spare factory capacity than at any time in the past five years. Factories are being strained by orders from businesses seeking to replenish inventories or to replace equipment. Also keeping factories humming are huge public and private investments for rebuilding after the hurricanes. These investments are driving up demand for materials used in home building and reconstruction efforts.

Not all investment in expansion will add jobs and capacity. Instead many businesses are seeking productivity gains or run extra shifts. However, as equipment upgrades and plant expansions continue, business investment will buoy hiring and economic growth in 2006, compensating for any slowdown in housing or consumer spending.

Federal Reserve policy makers are watching factory-use rates for production bottlenecks that could force prices higher. The central bank said that "possible increases in resource utilization as well as elevated energy prices have the potential to add to inflation pressures."

## **U.S. Employment**

While the U.S. job market performance began a recovery in September 2003, the rate of job growth throughout 2004 remained stubbornly sluggish (Exhibit 5). However, employment growth began to improve in 2005. In fact the Federal Reserve District's *Beige Book* reported signs of tightening in labor markets and some difficulty in finding workers for certain occupations.

Most growth remained concentrated in the service-providing sector of the economy. Educational services, health care and social assistance, and professional and business services represent the industry sectors posting the strongest employment growth. These sectors are projected to grow more than twice as fast as the overall economy. Job growth should remain strong in 2006, with wage gains expected to pick up to some extent.

The number of U.S. manufacturing jobs bottomed out at 14.17 million in January 2004. Gains made throughout 2004 were lost as the number of manufacturing jobs dropped to 14.18 million in January 2005 (Exhibit 6). As mid-year manufacturing activity increased, there were very modest increases in manufacturing jobs.

Overseas competition and rising material and energy prices continue to weigh heavy on makers of apparel, paper products, and industrial materials and equipment. In fact, analysts at the Bureau of Labor Statistics project a -0.6% average annual rate of change in manufacturing jobs for the 2004-14 period. While this projection implies that employment in goods-producing industries faces further declines, it is a marked improvement over the previous ten-year period that averaged a -1.7% annual rate of change.

Throughout 2004 and 2005 the U.S. unemployment rate continued a slow downward trend that began in 3<sup>rd</sup> quarter, 2003 (Exhibit 7). By the end of 2005, the unemployment rate hovered around 5% – levels not experienced in almost 5 years.

## **Interest Rates**

The Federal Reserve Board's primary tool for influencing the economy is the federal funds rate – the interest rate that banks charge each other for overnight loans. In 2003, the Federal Reserve Bank continued cutting the federal funds rate to stimulate the struggling economy. By December 2003, the federal fund rate reached a 45-year low of 0.98% (Exhibit 8). However, as the economy responded, the Fed began to nudge rates up in quarter-point steps to curtail potential inflation. The Fed has boosted interest rates 13 times since June 2004 to bring rates from 1% back to 4.25%, the highest in more than four years.

Chairman Alan Greenspan has made no secret of the Fed's intention to continue to use monetary policy to prevent oil price increases or changes in the foreign exchange value of the dollar from carrying over to the underlying inflation rate. Against this backdrop of the economy's resiliency, the Federal Reserve is likely to raise short-term interest rates at least one more time in 2006 to keep a lid on inflation. Ben Bernanke is set to become Fed chairman as long-time Chairman Greenspan retires in February. The transition in Fed leadership is expected to be seamless.

The average 30-year mortgage rate fell to an all-time low of 5.23% in June 2003 (Exhibit 9). Net capital inflows continued to rise in 2005, helping to keep long-term interest rates below the twenty-two month high of 6.29% obtained July 2004 until November 2005 when rates climbed to 6.33%. Most market analysts expect the rate on a 30-year fixed rate mortgage to average 6.5% in 2006. While still extremely low by historical standards, these rates continue to be a supporting

factor in an already softening housing market.

The U.S. economy is at risk from a sharp disruption to net capital inflows, which could cause a surge in long-term rates. In fact, foreign investments need not actually decline for long-term interest rates to rise – just slowing the growth in the purchase of U.S. assets could be enough.

### **Federal Budget Situation**

Budget projections by the Congressional Budget Office (CBO) prepared in August 2005 show outlays will continue to exceed revenue for fiscal 2006 (Exhibit 10), giving a deficit of \$315 billion. Budget projections are based on current tax provisions and include the \$29 billion allocated for hurricane disaster relief. Bush administration officials have made known their desire for “temporary” tax cuts to be made permanent, but a push for tax reform in the near future is seen as unlikely given the current political and fiscal environment. While more discipline is expected in coming years, CBO projects deficits to persist through fiscal year 2015 (Exhibit 11).

So far, America's mounting foreign liabilities have not harmed the economy because the rise in debt in recent years has been offset by lower interest rates. As a result, America still enjoys a net inflow of foreign investment income despite being the world's biggest debtor. But, as interest rates rise, refinancing America's debt will become more costly.

### **Inflation and Energy Prices**

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). The CPI measures the change in prices from the perspective of the consumer while the PPI measures the change in prices from the perspective of the seller. The 2005 growth rates for the CPI and PPI were 3.0% and 6.2%, respectively (Exhibit 12).

High energy prices boosted overall inflation in 2005, but core inflation has remained low. Heretofore, firms have been able to pass higher energy and other costs along – but this effect is seen more from business-to-business than from business-to-consumer. Long-term inflation expectations remain contained.

In addition to higher energy costs, apparel manufacturers paid higher prices for synthetic fibers this year. Despite increased costs of production, the CPI for apparel decreased 0.4% in 2005 (Exhibit 13). Apparel manufacturers were again unable to pass higher costs down the supply chain. The lack of pricing power clearly illustrates the effects of surging imports and concentrated retail markets. There is little reason to believe the apparel prices will increase in 2006, even with a new U.S./China textile trade agreement.

Over the past 4 years, the average price of crude oil has increased a staggering 188% (Exhibit 14). Strong growth in the demand for oil worldwide – particularly in China and other developing countries – is generally cited as one of the driving forces behind these sharp price increases. Furthermore, the continuing unrest in the Middle East is also contributing to the stronger prices.

These factors point to a structural shift upward in the price of oil. However, the

peak in crude oil prices in early September 2005 (\$68.47 per barrel), which is 61% higher than the final December 2004 quote, was a result of supply disruption resulting from hurricane damage. U.S. Department of Energy (DOE) estimates that the price rises by \$4-\$6/barrel for every 1 million barrels a day of oil supply disrupted, given the current lack of spare capacity. Since September, prices receded somewhat due to measures taken by the Bush administration to provide temporary relief.

As for 2006, there is a distinct possibility that crude oil prices could remain high, or rise. DOE estimates imply that crude oil prices will increase about 5% in 2006 before softening. World crude oil prices could decline in 2006 if growth in consumption slows and producers increase their output in response to current high prices. On the other hand, another supply shock that reduced oil deliveries by 2 million barrels per day could push prices to more than \$90 a barrel for more than a year, resulting in a 1.5% reduction in global growth by the second year following the shock.

The recent controversy with Iran concerning their nuclear program only adds to the uncertainty of the oil price outlook. Iran, the second largest producer in OPEC, has threatened to cut oil exports if countries or international organizations attempt to impose economic sanctions.

Consumers saw similar movements in the prices of diesel fuel and natural gas. The highway price of diesel peaked at \$3.16/gallon in October and averaged \$2.40/gallon for 2005 (Exhibit 15). Natural gas prices increased on average

28% in 2005, peaking at \$10.97/million cubic feet in October 2005 (Exhibit 16). Current DOE projections indicate that diesel prices will increase slightly (0.7%) and natural gas prices will decrease significantly (10%) in 2006.

## **U.S. Equity Markets**

As financial markets closed out 2005, the Dow Jones Industrial Average (Dow) stood at 10,717, up a modest 2% from its January open (Exhibit 17). Calendar year 2005 market performance is characterized by an early spring slump followed by a modest rally. This sideways market is expected to continue into 2006.

In general, movement of the NASDAQ during 2005 mirrored that of the Dow (Exhibit 18). However, NASDAQ performance was a bit more impressive. The index rose 7% from January's 2,062 to December's 2,205. The S&P 500 posted gains of 6% in 2005, reaching 1,248 by year's end (Exhibit 19).

Most analysts are predicting another year of modest stock market gains. A number of strategists remain leery of many of the same factors that loomed over the markets in 2005: rising interest rates, high energy and commodity prices, overextended consumers, a possible housing bubble, U.S. budget and trade deficits, and slowing corporate profits. However, payroll growth in the last two months of 2005 was stronger than the average monthly growth from January through August, indicating that people are working and are able to spend money. The minutes from the most recent meeting of the Federal Open Market Committee indicated that the rate hike cycle will end soon, which is very good news for the stock market. Also, the housing bubble did not burst and core

inflation did not rise. If investors continue to accentuate the positives instead of the negatives, projections for the S&P 500 at 1,440 by year-end will prove to be conservative and stocks may get as much as a 12% boost this year.

## **World Economies**

Compared with 5.1% growth rate achieved in 2004, expansion of the global economy slowed to an estimated 4.3% in 2005 (Exhibit 20). The slowdown was widespread, reaching virtually every economic region. The slower pace was precipitated by higher oil prices, resource-sector capacity constraints, tightening monetary policy in the United States and, in some countries, the maturation of the investment cycle following a year of very fast growth.

Strong exports and rising domestic demand continue to fuel China's economic boom (Exhibit 21). The World Bank and Organization for Economic Cooperation and Development forecast China's 2006 growth rate at approximately 9%. In the future, many economists believe that China's economy will increasingly be driven by domestic demand.

Performance of Asian stock markets looked significantly better than the U.S. equity markets (Exhibit 22). The Nikkei began the year at 11,388 and closed the year at 16,111, a gain of 41%. This comes after a modest 6% gain in 2004. The Hong Kong Hang Seng began 2005 at 13,721, and closed the year at 14,876, up 8% from the start of the year.

## **Exchange Rates**

Currency markets are reluctant to reverse the weak U.S. dollar trend that began in

2002. However, the dollar began to gain strength in 2005 and has some analysts looking for more strength as the Fed interest rate cycle appears closer to a peak. In January 2005, it took 0.763 euro to buy a U.S. dollar (Exhibit 23). By the end of 2005, the euro-dollar exchange was 0.843 euros per U.S. dollar. The dollar's rise, while modest, is good news for the euro zone.

The Japanese yen showed weakness towards the end of 2005 (Exhibit 24). This move reflects adverse portfolio flows — net domestic bond outflows overwhelming net foreign purchases of Japanese equity securities — that appear to have run its course. The Yen should find support from improving domestic growth prospects and the considerable current account surpluses that the country continues to generate.

For most of 2004 and 2005, the U.S. dollar dropped precipitously against the Brazilian real (Exhibit 25). The real derived its strength from a very favorable environment — positive capital flows, wide interest rate differentials and a strong commodity cycle. However, the real may not be able to strengthen much more. Currency strength is exacting a toll on both domestic economies and interest rate differentials are narrowing as policy makers respond.

The value of the U.S. dollar against the South Korean won decreased 11.4% in 2004 (Exhibit 26). This fall continued into early 2005 before stabilizing in March at 1,008 won per dollar. By December 2005, the exchange was 1,023 won per U.S. dollar.

To varying degrees, the U.S. dollar gained value against three important

currencies for trade in cotton textiles during the calendar year 2005. Towards the end of 2005, the Indian Rupee lost most of the value that it gained against the U.S. dollar at the end of 2004 (Exhibit 27). The stronger dollar makes the U.S. a bit more attractive to Indian textile imports. Even more impressive is the considerable strength gained by the Indonesian rupiah throughout 2005 (Exhibit 28). The value of the Pakistani Rupee (Exhibit 29) largely maintained its value against the U.S. dollar.

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. Mexico carries the largest weight, followed by China, South Korea and Taiwan. Throughout 2005, the index hovered at or below 2002 levels (Exhibit 30).

Last year, Chinese authorities took steps intended to moderate the pace of growth and achieve a soft-landing for their economy. These largely took the form of administrative controls, tighter restrictions on bank lending and modest rises in interest rates. Under great pressure from the U.S., China also initiated a series of changes in China's exchange rate policy.

In July, the Chinese government revalued the yuan by 2.1% against the U.S. dollar. Perhaps more significant, it also announced it would shift the exchange rate system from a traditional dollar peg to a "loose" currency basket system. Under such a system, the Chinese government would refer to a selection of multiple currencies or "currency basket" when implementing exchange rate policies. This currency basket is

essentially comprised of the U.S. dollar, the euro, the yen and the Korean won. Chinese officials also adopted a narrow band of 0.3% on either side of the central rate within which the yuan is allowed to fluctuate against the dollar.

China's monetary authorities will continue to pursue their cautious approach to exchange rate reform. Some experts believe the next step might be to reduce the weighting applied to the U.S. dollar in China's currency basket.

## **Commodity Prices**

The Commodity Research Bureau (CRB) maintains an index of commodity price movements. The commodities included in the index range from traditional U.S. agricultural commodities to heavily traded international agricultural products such as cocoa, coffee and sugar to metals and energy commodities.

The Index is a combination of arithmetic and geometric averaging which means its absolute value at any one time is not particularly informative. However, the movement in the index from any base point can be revealing.

Although commodity prices dipped in mid-2005, losses were more than recovered by the end of the year (Exhibit 31). The index averaged 284.8 for January 2005 and climbed to 347.9 by December.

The U.S. Department of Agriculture (USDA) publishes monthly indices of prices received by farmers. The index of crop prices received was 101 in January and rose steadily throughout the first half of 2005, reaching a peak of 122 in June (Exhibit 32). However, in the face of larger crops, prices began to fall and ended the year at 109. Starting the year at



121, livestock prices remained relatively flat, reaching an index value of 122 in April-May and again in September-October. The livestock price index closed the year at 119.

USDA also publishes monthly indices of prices paid by farmers for various production inputs. Of particular interest are the indices for energy related inputs: diesel and nitrogen fertilizer. The index of diesel prices paid was 181 in January and rose steadily throughout 2005, reaching a peak of 264 in November (Exhibit 33).

Starting the year at 180, nitrogen fertilizer prices continued to climb throughout the year finally closing at 234. These indices imply that producers

will face higher fuel and nitrogen fertilizer costs in 2006.

## **U.S. Net Farm Income**

The latest USDA estimates put U.S. net farm income at \$71.5 billion for 2005 (Exhibit 34). This represents a decrease of \$11 billion from the record \$82.5 billion posted in 2004.

The drop in net farm income is attributed to higher production expenses and a reduction in the value of crop and livestock inventories. These changes more than offset the increase in gross cash income. USDA estimates that government payments will total \$22.6 billion in 2005. Direct payments and counter-cyclical payments are expected to amount to \$9.2 billion in 2005.

## U.S. Supply

### Planted Acreage

U.S. farmers planted 14.20 million acres of cotton in 2005, an increase of 4% from the previous year. Upland area for 2005 totaled 13.93 million acres (Exhibit 35) while ELS area grew to 270 thousand acres. The larger ELS area came in response to planting-time spot prices that were 30 to 40% above levels observed during the previous planting season. The increase in upland acres was larger than early-season expectations, with the majority of the increase coming in the Mid-South.

Upland area in the Southeast grew 3% to 3.03 million acres in 2004 (Exhibit 36). Gains in the Carolina's and Virginia more than offset losses in Georgia and Florida, while Alabama's cotton acreage remained flat at 550 thousand acres. With 266 thousand acres planted, South Carolina experienced the largest percentage increase at 24%. Virginia's 93 thousand acres represents a 13% increase, while acreage in North Carolina was up 12% to 815 thousand acres. In all states, acreage shifted from corn and soybeans to cotton. Acreage in Georgia and Florida fell by 5% and 3%, respectively, from their 2004 levels. In both states, cotton acres appear to have shifted to peanuts.

In the Mid-South, 3.95 million acres of upland cotton were planted in 2005, an increase of 15% from the previous year (Exhibit 37). The acreage expansion, which occurred across all states in the region, can be attributed to two primary factors. First, record-yields in 2004 bolstered expectations for increased cotton returns. Second, cotton acreage increased at the expense of soybeans, due in part to concerns over Asian soybean

rust. In percentage terms, Louisiana and Tennessee led the way with increases of 22% and 21%, respectively. Growers in Missouri planted a record 440 thousand acres, a 16% increase above 2004. Arkansas increased cotton acreage by 15% and topped the 1-million acre mark for the first time since 2001. With 1.21 million acres of cotton, growers in Mississippi increased acreage by 9%.

With favorable moisture levels at planting time, growers in the Southwest planted 6.23 million acres, an increase of 1% from 2004 (Exhibit 38). However, acreage movements were not uniform across the region. Oklahoma planted 255 thousand acres, an increase of 16% and the highest since 2001. Acreage in Texas was up 1% at 5.90 million acres. However, with 74 thousand acres in 2005, Kansas planted 13% less than the previous year.

In the West, growers planted just 716 thousand acres, a decrease of 18% from the 2004 level (Exhibit 39). The 2005 total is the lowest upland plantings in the West region in recent history. Declines occurred in Arizona, California and New Mexico, with California leading the way both in actual and percentage declines. Competition from specialty crops and ELS cotton lowered California upland acreage to 430 thousand acres, down 23% from the previous year. With 56 thousand acres, New Mexico fell 18% below their 2004 level. Growers in Arizona planted 230 thousand acres, a 4% drop from 2004.

ELS plantings were up again in 2005 (Exhibit 40) as prices remained strong at planting time. In California, 230

thousand acres of ELS cotton were planted in 2005, up 7% from the previous year. Acreage in Arizona was only 4 thousand acres, but was still 37% higher than the previous year. In New Mexico, ELS area went up by 1 thousand acres, which is a 9% increase, while Texas planted an additional 4 thousand acres of ELS, or 18% above 2004.

### **Harvested Acreage**

In the 2005 season, cotton growers abandoned just 3.5% of their planted acres (Exhibit 41). This is the second consecutive year of below-average abandonment and well below the 5-year average of 11%. Favorable yield prospects and generally good harvest-time weather lowered the number of un-harvested acres.

### **Yields**

For the U.S. as a whole, the average cotton yield is estimated at 831 pounds per acre in 2005. While this falls short of the record yield of 855 pounds set in 2004, the 2005 yield exceeds the preceding 5-year average by more than 100 pounds (Exhibit 42). The 2005 upland yield is estimated to be 824 pounds, 116 pounds above the 5-year average. The ELS crop did not enjoy the same favorable growing conditions and above-average yields, particularly in California. The average ELS yield for the U.S. in 2005 is pegged at 1,171 pounds, which is 108 pounds below the 5-year average.

For the upland crop, generally favorable weather conditions in a number of areas were a major factor behind the record yield. In addition, it is very likely that new higher-yielding varieties are contributing to the strong yields. The widespread success of the boll weevil

eradication program is also a positive for U.S. yields.

In the Southeast, the regional average yield reached an all-time high of 824 pounds, up 155 pounds from the 5-year average and just above the previous record of 820 pounds in 1994 (Exhibit 43). During the growing season, overall moisture levels were adequate, and the region was spared from significant hurricane damage, which is in sharp contrast to the hurricane activity during the fall of 2004. While all states exceeded their respective 5-year average yield by more than 100 pounds, Georgia and Virginia led the way with record yields. Georgia, which accounts for 40% of the Southeast production, registered a yield of 853 pounds, which is almost 200 pounds above the 5-year average and exceeds the previous record of 843 pounds in 1994. Growers in Virginia averaged 965 pounds per acre, as compared to a 5-year average of 749 pounds. At 749 pounds per acre, Alabama's yields exceeded the 5-year average by 103 pounds. In Florida, an average yield of 728 pounds was 181 above the average. At 847 and 761 pounds, respectively, North and South Carolina did not match the record yields set in 2004, but still exceeded average levels by more than 100 pounds.

Hurricane damage from Katrina and Rita, coupled with dry weather during the summer, did not allow the Mid-South to repeat the record yields of 2004, but the 2005 harvest still came in well above the 5-year average. Across the 5-state region, yields are estimated at 917 pounds per acre, as compared to the 5-year average of 812 pounds (Exhibit 44). Despite the weather challenges, the average yield in Arkansas was 1,011, marking the second

consecutive year to top the 1,000-pound mark. Missouri followed with an average yield of 970 pounds, almost 130 pounds better than the 5-year average. With yields of 896 and 864 pounds, respectively, Louisiana and Mississippi suffered the brunt of the hurricane damage. Tennessee's average yield of 847, while exceeding their 5-year average, suffered due to periods of dry weather in July and August.

The year 2005 was a record-breaker in the Southwest region. The wet conditions that hindered the harvest of the 2004 crop provided excellent soil moisture for development of the 2005 crop. While parts of south Texas experienced yield losses due to dry weather, those were more than offset by favorable conditions in other parts of the state. Across the Southwest region, the 2005 average yield of 716 pounds tops the previous record set in 2004 by 24 pounds (Exhibit 45). With a yield of 655 pounds, Kansas experienced the biggest increase relative to 2004. Oklahoma's average yield of 730 pounds is 141 pounds above their 5-year average, while growers in Texas harvested an average of 716 pounds per acre, which is 184 pounds above average.

The average upland yield in the West is an estimated 1,200 pounds, down from a 5-year average of 1,345 pounds (Exhibit 46) and the lowest since 1998. In Arizona and California, planting was delayed by rain and below-normal soil temperatures. With an average of 1,178 pounds, California experienced the largest decline in yields, relative to the previous year as well as the 5-year average. In Arizona, growers harvested 1,300 pounds per acre, which was only slightly below the 5-year average of 1,312 pounds. New Mexico did not suffer from the same weather

conditions and average yields hit an all-time high of 941 pounds, which is more than 100 pounds better than the 5-year average.

The national average ELS yield is estimated at 1,171 pounds, 109 pounds below the 5-year average (Exhibit 47) and 273 pounds below the record yield set in 2004. Across the 4 states which produce ELS, only California, with a yield of 1,216 pounds, experienced a decline from 2004. Arizona, at 937 pounds, and New Mexico, at 918 pounds, experienced better yields in 2005 than 2004 and slightly improved their 5-year averages. Growers in Texas will harvest 900 pounds per acre of ELS cotton, down 108 pounds from the 5-year average.

## **Production**

USDA's latest estimate places the 2005 U.S. cotton crop at a record high of 23.72 million bales (Exhibit 48), which is approximately 500 thousand bales larger than the previous year. The final production estimate is more than 2 million bales larger than USDA's first objective production estimate released in August. Relative to 2004, gains in the Southeast, Mid-South and Southwest more than offset a smaller crop in the West. The upland crop, estimated at 23.06 million bales, is 4.41 million bales higher than the 5-year average. Weather problems, particularly in California, reduced the U.S. ELS crop to 655 thousand bales, down 91 thousand bales from 2004 but still above the 5-year average.

The Southeast produced 5.16 million bales of upland cotton in 2005, accounting for 22% of the total upland crop (Exhibit 49). This is up 700 thousand bales from the 5-year average

and 533 thousand bales above the 2004 level. Relative to 2004, all states increased production with Georgia and North Carolina accounting for the majority of the increase. Georgia's cotton crop is estimated at 2.15 million bales, an increase of 353 thousand bales from the previous year. North Carolina's production of 1.43 million bales is the largest since 2001 and 169 thousand bales above their 5-year average. Growers in Alabama harvested 850 thousand bales, more than 100 thousand bales above their 5-year average. With 420 thousand bales, South Carolina also had their largest crop since 2001 and exceeded their 5-year average by 90 thousand bales. USDA estimates that Virginia harvested 185 thousand bales, which is 36 thousand above their recent average. Florida's crop of 129 thousand bales is 20 thousand bales above the 2004 level.

With increased acreage and above-average yields, upland production in the Mid-South reached a record 7.48 million bales, some 1.14 million bales above the 5-year average and 341 thousand bales above the 5-year average. For 2005, the region accounted for 32% of the total U.S. upland crop. Of the 5 Mid-South states, Arkansas' crop of 2.19 million bales was the largest. Their crop, the largest ever produced in Arkansas, was 426 thousand bales above the 5-year average. Mississippi's crop of 2.16 million bales was the second largest in the region, but down from their 2004 level due to hurricane damage. Louisiana's crop rebounded to 1.12 million bales, an improvement of 200 thousand bales from the 5-year average. Much of the increase is attributed to increased plantings in 2005. Growers in Tennessee produced a record crop of 1.12 million bales, an increase of 244

thousand bales from the 5-year average. The 2005 crop also represents the first time to top the 1-million bale mark. With 885 thousand bales, Missouri also achieved a new high for cotton production, besting their 5-year average by 210 thousand bales.

The upland crop in the Southwest is estimated at an astounding 8.66 million bales, 3.32 million bales above the 5-year average, and surpasses the 2004 crop by 541 thousand bales. The region accounted for 38% of total upland production in 2005. Production in Texas is estimated at 8.20 million bales, more than 3 million bales above the 5-year average. Oklahoma's crop of 365 thousand bales falls well short of the record high for the state, but is still the largest crop since 1990 and 149 thousand bales better than the 5-year average. With 90 thousand bales, Kansas also set a new high for the state and exceeded the 5-year average by 32 thousand bales.

The West produced 1.77 million bales of upland cotton in 2005, down almost 750 thousand bales from the region's 5-year average. The region's share of U.S. production fell to just 8%. California's upland crop of 1.05 million bales was the second smallest in the past fifty years, and only slightly larger than the 1967 level of 1.04 million bales. In Arizona, the upland crop of 620 thousand bales was 53 thousand bales below the 5-year average. New Mexico's crop fell to 100 thousand bales, which is in line with their 5-year average.

The ELS crop of 655 thousand bales represents an increase of 66 thousand bales from the 5-year average but is 91 thousand bales below 2004. At 580 thousand bales, the California ELS crop

was 103 thousand bales smaller than the 2004 crop (Exhibit 50). The state accounted for 89% of total U.S. ELS production in 2004. ELS crops in Arizona and New Mexico recovered in 2005 to 8 thousand and 22 thousand bales, respectively. Texas produced 45 thousand bales of ELS cotton, up 7 thousand bales from the 2004 level and the 5-year average.

### **Stock Levels**

USDA estimated U.S. cotton stocks at the beginning of the 2005 marketing year at 5.54 million bales, an increase of 2.03 million bales from the previous year (Exhibit 51). The 23+ million-bale crop in 2004 exceeded total consumption, allowing stocks to recover. However, the recovery in stocks was driven solely by upland cotton. Upland stocks at the beginning of the 2005 marketing year are estimated at 5.53 million bales. In contrast, stocks of ELS cotton virtually disappeared as strong exports during the 2004 marketing year more than outpaced the larger crop. By the end of the 2004 marketing year, stocks of ELS cotton were estimated at only 13 thousand bales.

As of December 31, 2005, outstanding CCC loan stocks were 8.51 million bales (Exhibit 52). Mid-South loan entries dominated, accounting for 51% of outstanding loans. The Southeast accounted for 21%, the Southwest 17% and the West about 12%. Almost 75% of the cotton under loan was Form G (cooperative) while the remaining 25% was Form A (producer).

At a comparable point in the 2004 marketing year, loan stocks were 9.76 million bales. Almost all of this cotton was eventually redeemed. As of early January 2005, loan forfeitures of the

2004 upland cotton crop were less than 10 thousand bales.

### **Total Supply**

Total supply for the 2005 marketing year is estimated to be 29.30 million bales, up from 26.79 million the previous year (Exhibit 53). The 2005 level also represents a record high for total cotton supply. Larger supplies came about as the record crop in 2005 added to the increased stocks held over from the previous record crop produced in 2004. For the 2005 marketing year, imports of raw cotton are expected to be 40 thousand bales, with the majority being long-staple cotton from Egypt. Over the past five years, total supply has averaged approximately 24.53 million bales.

### **Upland Cotton Quality**

As a whole, the quality of the 2005 crop is exceeding the recent 5-year averages for staple, strength, color, and micronaire. With almost 21 million bales classed, the national average staple length (measured in 32<sup>nd</sup> of an inch) is 34.9, up from a 5-year average of 34.7 (Exhibit 54). All regions improved relative to their 5-year average with the Southwest exceeding their 5-year average by almost a full thirty-second. The Southeast is also showing a significant increase with an average staple length of 34.8, up 0.5 from the 5-year average. In the Mid-South, the average staple length is 34.7, up 0.1 from the 5-year average. The average staple length in the West is up 0.5 to 36.7.

The 2004 upland crop is showing excellent strength characteristics with a national average of 29.2 grams/tex, up 0.6 grams/tex from the 5-year average. Strength is up in all regions with the West showing the largest improvement. At 32.2, the average strength in the West

is 2.2 grams/tex better than the 5-year average. In the Southwest, the average strength is 29.1 grams/tex, up from 28.5. The crop in the Mid-South has an average strength of 29.0 grams/tex, which is 1.1 better than the 5-year average, while strength in the Southeast averages 28.9 grams/tex (+1.2).

Color grades for the 2005 crop exceed the 5-year average for all regions except the Southeast (Exhibit 55). For the U.S., 88.2% of the crop is grading 41 or better, which compares to the 5-year average of 82.3%. In the West, color grades were higher than the 5-year average as 97.1% had a grade of 41 or better. In the Southwest, 93.2% of bales classed had a color grade of 41 or better. This compares to a 5-year average of 74.7%. In the Mid-South, 88.1% of the crop achieved a 41 or better, an 11.1% increase from the 5-year average. Color grades in the Southeast were below the 5-year average as 78.4% of the crop reached a 41 or better, as compared to the 5-year average of 83.8%.

The average micronaire of the 2005 upland cotton crop is 42.9, down from the 5-year average of 44.6. The largest decrease is found in the Southwest, dropping 4.6 to 38.4. Micronaire in the West averaged 43.8, as compared to the 5-year average of 45.1. In the Mid-South, micronaire came in 0.6 lower than the 5-year average of 46.3. Only the Southeast had an average micronaire for the 2005 crop that was above the 5-year average (44.8 as compared to 44.1).

## **Cotton Prices**

### ***Upland Cotton Prices***

Calendar 2005 ended with the spot 4134 cotton price at 50 cents/lb., some 8 cents higher than the beginning of the year

(Exhibit 56). Throughout 2005, cotton prices moved in a much narrower band than what was observed in the previous three years. In early February, the spot price hit a low of 40 cents and then peaked at 53 cents in October. The rally in prices that culminated in October began in August as weather concerns raised questions about the size of the U.S. crop. In particular, there was uncertainty as to the extent of the damage from hurricanes in the Mid-South.

Thus far into the 2005 crop year, spot 4134 values have averaged 49 cents/lb.; the average spot 4134 value for 2004 crop cotton was about 46 cents/lb.

World cotton prices have followed a similar path as the spot price. Beginning calendar 2005 at about 49 cents/lb., the “A” Northern Europe (NE) Index approached 50 cents by the end of April (Exhibit 57). The “A” (NE) lost 6 cents by mid-June before strengthening to just under 60 cents in late October. During the remainder of 2005, the “A” (NE) Index continued to track closely with the US spot price value. By mid-January 2006, the “A” (NE) was approximately 59 cents/lb. Thus far through the 2005 marketing season, the “A” (NE) Index has averaged about 56 cents/lb., up from 54 cents/lb. the previous year.

### ***ELS Prices***

Strong export demand and declining stocks pushed ELS cotton prices sharply higher in the spring of 2005. In March 2005, the 3-44 spot price reported by USDA hit \$1.35 per pound (Exhibit 58). USDA held prices at that level through September, essentially reflecting the fact that insufficient volume was being traded in the spot market to warrant an adjustment in the value. As the harvest of

the 2005 crop progressed, prices softened, falling to \$1.05 in November.

## **Cottonseed Situation**

### ***Cottonseed Supply***

USDA estimates 2005 cottonseed production at a record high of 8.50 million tons, up from 8.24 million the previous year (Exhibit 59). A regional breakdown of production shows that the Southwest produced 3.21 million tons or about 38% of the total, the largest of any region (Exhibit 60). This was followed by the Mid-South with estimated production of 2.68 million tons for a 31% share. The Southeast produced 1.74 million tons, or 20% of total production, and the West accounted for 874 thousand tons, 10% of the total. Summing production, imports of 25 thousand tons and beginning stocks of 592 thousand tons, total cottonseed supply for 2005 is an estimated 9.12 million tons (Exhibit 61).

### ***Disappearance and Stock Levels***

USDA's latest estimate places disappearance at 8.48 million tons, up 406 thousand tons from the previous year (Exhibit 62). Crush is estimated at 3.08 million tons, up 152 thousand tons from 2004. Use of the whole seed for feed purposes continues to be the dominant category with total feed and seed use estimated at 4.98 million tons. Estimated exports of 424 thousand tons are 45 thousand above the 2004 level.

The record level of cottonseed supplies will lead to an increase in stocks during the 2005 marketing year, marking the third consecutive year of increasing stocks. Ending stocks are estimated at 640 thousand tons, up 48 thousand from the previous year and the highest level in recent history (Exhibit 63).

## **Cotton Farm Program**

The 2006 cotton crop falls under the farm legislation adopted in 2002. This legislation, titled the "Farm Security and Rural Investment Act of 2002 (FSRIA)," replaced the 1996 FAIR Act. The duration of FSRIA is the 2002 through 2007 crop years. Since its passage, the current farm bill has come under repeated attacks on both the domestic and international fronts. These include the challenge of the cotton program by Brazil under the WTO; the cotton-specific language in the WTO Framework Agreement; continued dissatisfaction on the part of Senator Grassley with payment limitation policy; and budget reconciliation activities by Congress.

Throughout 2005, Congress debated a Budget Reconciliation package that would impact the farm program provisions applying to the 2006 crop. The measures affecting upland cotton are the repeal of the Step 2 program beginning August 1, 2006 and reductions in the percentage of advanced direct payment for both the 2006 and 2007 crops. Both the House and Senate passed versions of the package before they recessed in December. However, during the Senate debate, there was a change in technical language related to Medicare that requires the House to re-vote on the package when they return in late January or early February. It is assumed that the House will pass the revised package and the legislation will be signed by the President. As a result, the provisions of the package are included in the outlook.

To a large extent, FSRIA builds upon the FAIR Act, maintaining many of the provisions of the previous legislation but adding a counter-cyclical payment program. The counter-cyclical payments



are designed to provide additional support in times of low market prices. FSRIA also provided options for producers to update program acres and yields, as well as establishing soybeans and minor oilseeds as program crops.

### ***Base Loan Rates, Marketing Loans and LDP's***

The base loan rate for upland cotton is set at 52.00 cents/lb. (See table on page 20). Local (warehouse) rates will differ from the base loan rate by approximately the transportation cost relative to the Southeast mill district. The base loan rate for ELS cotton is 79.77 cents/lb. Non-recourse loans will be available for all loan commodities produced on farm, whether or not base acreage and yield are established for the specific crop. Loans are for nine months from the first day of the month following entry. Upland cotton loans may be repaid at the lower of the adjusted world price or the loan rate plus interest and storage. ELS loans will be repaid at the loan rate plus interest and storage. Non-recourse loans will be made available to producers for co-mingled commodities in unlicensed storage facilities if redeemed immediately.

Marketing loan gains (MLG) will continue to be payable as the difference between the base loan rate and the adjusted world price (AWP) when the former exceeds the latter. For eligible producers that agree to forego placing upland cotton in CCC loan, the marketing loan gain is available as a loan deficiency payment (LDP). As of January 20, 2006, the AWP stood at 43.58 cents/lb, giving an LDP of 8.42 cents.

### ***Direct Payments***

For upland cotton, the direct payment under FSRIA is equal to 6.67 cents/lb. (See table on page 20). There is no direct

payment available for ELS production. Direct payments are paid on 85% of an eligible producer's base production (base acres times program yield) and decoupled from contemporaneous production decisions. Producers may make a one time election to establish (update) base acres, as discussed below. The payment yield for direct payments, however, will be equal to the 2002 AMTA payment yield (or its equivalent) for traditional program crops. For oilseeds, the payment yield for an individual producer will be established as: (1998-2001 average yield) times [(national average yield for 1981-1985) divided by (national average yield for 1998-2001)]. The ratio of the 1981-1985 and 1998-2001 average yields is about 78%; this factor is used to adjust oilseed payment yields such that they are comparable to payment yields for traditional program crops.

### ***Target Prices***

For upland cotton, the target price for the duration of FSRIA is 72.40 cents/lb. For wheat and feed grains, the target price for 2004-2007 is slightly higher than that for 2002-2003. And, there is no target price for ELS cotton.

These target prices are used in the calculation of counter-cyclical payments. The counter-cyclical payment rate is determined as: (target price) minus (direct payment) minus (greater of 12-month marketing year average price or loan rate). When the sum of the direct payment and the marketing year average price exceeds the target price, the corresponding counter-cyclical payment is zero. Counter-cyclical payments are decoupled from production, as are the direct payments. However, a producer can choose to update both base acres and program yields for determination of the

counter-cyclical payments. (See table on page 20)

### **Base Acres and Program Yields**

FSRIA allowed producers to make a one time election to establish base acreage of program crops. Their choices are as follows:

1. Establish base by using acreage on which the 2002 AMTA payments were calculated and adding average acreage planted to oilseeds for 1998-2001 (some limits apply); or
2. Update all base acres using average 1998-2001 planted and prevented planted acreage.

If a producer does not make a choice, then the Secretary of Agriculture used the 2002 AMTA payment acres and added oilseeds. The sum of covered commodity base acres, base acres for peanuts and acreage enrolled in CRP, WRP or other conservation programs which restrict or prohibit production, cannot exceed actual cropland on farm with an exception for double-cropping.

As noted above, the FSRIA yield for direct payments equals the 2002 AMTA payment yield or its equivalent. However, producers were allowed to update payment yields for counter-cyclical payments if they so choose, provided they choose also to update base acres (option 2 above). Their options for updating program yields are as follows:

1. 2002 AMTA payment yield or equivalent; or
2. 2002 AMTA payment yield plus 70% of difference between 2002 payment yield and 1998-2001 average yield/planted acre; or
3. 93.5% of 1998-2001 average yield/planted acre.

If payment yields are updated using option (2) or (3), years with "zero"

planted acreage are excluded and 75% of the county average yield is inserted for any year when average yield/planted acreage is less than 75% of county average. A producer can select only one method for determining program yields, which will apply to all crops on a farm.

### **Base and Yield Enrollment**

While the base and yield update elections were a one-time event, producers must re-enroll in the farm program on an annual basis. For the U.S., the enrolled base for upland cotton for 2004 is 18.71 million acres, up from 16.22 million acres enrolled under the previous farm bill (See table on page 21). The Southeast region showed the largest increase in acreage with enrolled acres going from 2.44 million acres under the FAIR Act to 3.74 million acres under the current farm bill. Enrolled acreage in the Mid-South stands at 5.17 million acres, up from 4.72 million under the FAIR Act, while the Southwest has 8.03 million acres of enrolled base. The West is the only production region to show a decline in enrolled base (1.76 million acres, down from 1.84 million). The regional numbers are the result of declines in California being larger than gains in Arizona and New Mexico.

The national average program yield for direct payments is 601 pounds/acre, while the payment yield for counter-cyclical payments is 636 pounds. The ability to update yields allowed the Southeast to obtain counter-cyclical payment yields that are 8% above their direct payment yield. Yield gains in the Mid-South, Southwest, and West are 5%, 7%, and 3%, respectively.

### ***Producer Agreement Requirements for Payments***

For a producer to be eligible for payments, they must:

1. Comply with conservation requirements;
2. Comply with planting flexibility requirements;
3. Maintain land in an agricultural or conserving use;
4. Submit annual acreage reports.

### ***Payment Limitations***

Payment limitations were modified under FSRJA. For direct payments, the limit is \$40,000 per person; for counter-cyclical payments, \$65,000 per person; and for marketing loan gain/loan deficiency payments, \$75,000 per person. There are separate limits for peanuts. The 3-entity, spouse eligibility and actively engaged rules are unchanged from the FAIR Act. Also, marketing certificates will continue to be available for loan redemptions. Payments are subject to a means test, however. Entities (excluding general partnerships and joint ventures) with 3-year average adjusted gross income in excess of \$2.5 million are ineligible for all programs if less than 75% of this income is derived from farming, ranching or forestry activities. Also, FSRJA created a commission to review the effect of payment limitations, and their report was released in 2003.

### ***Cotton Competitiveness Provisions***

The 2002 FSRJA continued the 3-Step competitiveness provisions for upland cotton, which was originally written into law under the 1990 FACT Act with various modifications over the years. Step 1 gives the Secretary of Agriculture the discretionary authority to adjust the loan repayment rate (i.e. the adjusted

world price) when the 5-day average of the lowest U.S. quote in Northern Europe (USNE) exceeds the 5-day average of the 5 lowest-priced quotes in Northern Europe (NE). In addition, the AWP must also be less than 115% of the base loan rate in order to make the adjustment. The Secretary has rarely exercised their authority to make the Step 1 adjustment.

For the 2002 through 2005 crops, the Step 2 provision makes payments to eligible domestic users and exporters of U.S. cotton when certain price conditions are met. First, the USNE price must exceed the NE price for 4 consecutive weeks. Second, the AWP must be less than or equal to 134% of the base loan rate. If both conditions are met, then the value of the payment is the difference in the fourth week of the 4-week period between the USNE and the NE. For the 2006 marketing year, the Step 2 provision is assumed to expire based on the pending Budget Reconciliation package.

Finally, Step 3 establishes a special import quota when certain price and market conditions are met. If, for a consecutive 4-week period, the USNE price, adjusted by the value of any Step 2 payment rate in effect in the previous week, exceeds the NE price, a Step 3 import quota equal to 1 week's consumption of upland cotton by domestic mills is established. Starting August 1, 2006, the USNE price, adjusted by the value of any Step 2 payment rate in effect in the previous week, must exceed the NE price by more than 1.25 cents in order to trigger a Step 3 quota. In addition, if the upland cotton stocks-to-use ratio is less than 16%, the USNE price shall not be adjusted for the value of any Step 2 payment in effect.

Cotton must be purchased not later than 90 days, and entered into the U.S. not later than 180 days, from the date the quota is announced. The quantity of cotton entered into the U.S. during any marketing year under Step 3 quotas may not exceed the equivalent of 5 weeks of consumption by domestic mills, or approximately 600,000 thousand bales.

industry's efforts to build foreign demand for U.S. cotton and cotton products.

Since this outlook assumes that there will be no Step 2 payment in effect beginning August 1, 2006, then Step 3 quotas will trigger when the USNE price exceeds the NE price by more than 1.25 cents for 4 consecutive weeks. Historical price relationships suggest that it is likely that Step 3 quotas will be triggered on a frequent basis.

Competitiveness payments are also made to eligible domestic users and exporters of American Pima cotton. In 2005, USDA, with the support of cotton industry officials, changed the determination of the payment to reflect 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. If the APFE quote exceeds the LFQ for 4 consecutive weeks and the LFQ is less than 134% of the base loan rate, then the payment rate equals the difference between the APFE and the LFQ in the fourth week of the 4-week period.

### ***Export Promotion***

The funding for the Market Access Program (MAP) was set at \$140 million in fiscal year 2004. Funding for the Foreign Market Development (FMD) program was increased from \$27.5 million to \$35 million/year. These two programs have been vital to the

## Loan Rates, Direct Payments and Target Prices

	Loan Rates		Direct Payment <sup>1/</sup>	Target Price <sup>2/</sup>	
	2002-03	2004-07	2002-07	2002-03	2004-07
Upland Cotton (lb.)	0.520	0.520	0.0667	0.724	0.724
ELS Cotton (lb.)	0.7977	0.7977	N/A	N/A	N/A
Corn (bu.)	1.98	1.95	0.28	2.60	2.63
Sorghum (bu.)	1.98	1.95	0.35	2.54	2.57
Barley (bu.)	1.88	1.85	0.24	2.21	2.24
Oats (bu.)	1.35	1.33	0.024	1.40	1.44
Wheat (bu.)	2.80	2.75	0.52	3.86	3.92
Soybeans (bu.)	5.00	5.00	0.44	5.80	5.80
Min. Oilseeds (lb.)	0.096	0.093	0.008	0.098	0.101
Rice (cwt.)	6.50	6.50	2.35	10.50	10.50
Peanuts (ton) <sup>3/</sup>	355.00	355.00	36.00	495.00	495.00

<sup>1/</sup> Direct payments are decoupled from production and price;

<sup>2/</sup> Target price (counter-cyclical) payments are decoupled from production;

<sup>3/</sup> Peanut program also authorizes quota buyout of 11 cents/lb. for 5 years.

## Upland Cotton Base and Yield Enrollment

	FAIR Act	FSRIA 2004	Program Yields (Pounds)	
	Enrolled Acres	Enrolled Acres	Direct	Counter-Cyclical
<b>SOUTHEAST</b>	<b>2,443,958</b>	<b>3,741,142</b>	<b>651</b>	<b>701</b>
Alabama	568,113	713,997	674	695
Florida	79,895	120,850	691	708
Georgia	959,614	1,536,608	688	717
North Carolina	538,145	895,949	563	676
South Carolina	245,609	367,625	691	703
Virginia	52,581	106,113	510	706
<b>MIDSOUTH</b>	<b>4,716,581</b>	<b>5,171,434</b>	<b>673</b>	<b>707</b>
Arkansas	1,059,796	1,166,935	618	687
Louisiana	1,053,541	1,093,529	729	735
Mississippi	1,534,263	1,705,915	764	778
Missouri	381,352	441,319	548	621
Tennessee	687,629	763,736	544	586
<b>SOUTHWEST</b>	<b>7,219,802</b>	<b>8,034,845</b>	<b>427</b>	<b>456</b>
Kansas	1,656	20,115	362	405
Oklahoma	559,322	598,061	388	401
Texas	6,658,824	7,416,669	430	461
<b>WEST</b>	<b>1,836,393</b>	<b>1,760,918</b>	<b>1,082</b>	<b>1,112</b>
Arizona	447,772	473,713	1,237	1,258
California	1,291,407	1,172,765	1,068	1,095
New Mexico	97,215	114,440	591	677
<b>TOTAL U.S. <sup>1/</sup></b>	<b>16,216,955</b>	<b>18,708,568</b>	<b>601</b>	<b>636</b>

<sup>1/</sup> Includes acreage for Kentucky, Maryland, and Nebraska.

## **2006 Planting Intentions**

### ***Farm Bill***

For assessing acreage intentions, full planting flexibility is maintained under FSRIA (with the exception of planting certain fruits and vegetables on program acres); hence, market forces will continue to drive most acreage decisions.

### ***Price Prospects***

Both U.S. and world cotton prices have strengthened modestly over the past year. Beginning calendar 2005 at 48.75 cents/lb., the “A” (NE) Index generally moved in a sideways pattern during the first half of the year before climbing to 60 cents in mid-October (Exhibit 64). The “A” (NE) Index gave back some of those gains and closed the year at 47.35 cents. Likewise, New York contract values have followed a similar pattern. The nearby NY futures contract on January 3, 2005 closed at 44.12 cents/lb. As calendar 2006 began, the nearby contract was trading at 55.24 cents/lb., an increase of 11 cents.

December 2006 NYBOT futures have traded at significantly higher values than the December 2005 contract at comparable points in their history (Exhibit 65). Over the August 1 through mid-January period for each contract, in fact, December 2006 has averaged 6 cents/lb. higher than the December 2005 contract.

Between mid-May and mid-July, corn prices rallied by 50 cents/bu., with the December 2005 contract peaking at \$2.70 on July 18, 2005 (Exhibit 66). A primary factor behind the higher prices was yield concerns due to hot, dry weather in portions of the Corn Belt. However, after that point, corn prices started a steady

decline, and the December 2005 contract expired at \$1.94. The decline can be attributed to a crop that was larger than originally thought. In addition, transportation problems caused by hurricane damage to the port of New Orleans limited export ability, and pressured prices lower. For the 2005 crop, the lower prices have led to significant marketing loan gains. As of mid-January 2006, the December contract is trading about 15 cents higher than the comparable contract from 2005.

Soybean prices exhibited a similar pattern as corn, with a significant rally in late spring and early summer. Between April and June, the November 2005 contract increased by more than \$1.50/bu., peaking at \$7.66 on June 24 (Exhibit 67). Prices softened in the latter half of 2005, bottoming at \$5.56 in mid-October. While nearby futures dropped sharply, the November 2006 contract has moved largely sideways in recent months. In mid-January, the November 2006 contract traded at \$6.00/bu., approximately 50 cents above the year-ago levels of the 2005 contract.

As growers consider their 2006 planting decisions, they are comparing prices for cotton, corn, soybeans and other regional crops. In particular, peanuts compete with cotton for acreage in the Southeast. Currently, peanut prices are 10 to 15% below last year's level. Growers will also be influenced by the significant increase in input costs, particularly fuel and fertilizer. While final acreage decisions will consider expected returns of cotton and competing crops, farmers must also take into account agronomic considerations such as crop rotation.

## **2006 U.S. Cotton Acreage Intentions**

In mid-December 2005, the NCC mailed out its annual early season planting intentions survey. Respondents are asked to give their plantings of cotton, corn, soybeans, wheat, and other crops for 2005 and intended acreage for 2006. The response rate on the latest survey was about 11%, comparable to the typical return rate. 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.

Beginning with the Southeast, survey results indicate a 3.3% increase in the region's upland area to 3.13 million acres (See table on page 25). All states except Alabama indicate increased acreage in 2006. At 548 thousand acres, Alabama's acreage is down by less than 1% as survey results show a slight shift into corn and soybeans. In percentage terms, Florida's intentions of 104 thousand acres are 21.3% above last year as acres are moving from peanuts into cotton. Growers in Georgia intend to plant 1.27 million acres, an increase of 4.3% from the 2005 level. Again, the new acres appear to be coming from peanuts. Virginia is expected to plant 97 thousand acres, an increase of 4%, while North Carolina's cotton acreage is 3% higher at 840 thousand acres. The survey indicates that growers in South Carolina will plant 268 thousand acres of cotton, an increase of just 0.8%.

In the Mid-South, survey results show that all states intend to increase cotton area for 2006. Growers in the region intend to plant 4.19 million acres, an

increase of 6.2% from the previous year. In all states in the region, survey results indicate a shift out of corn and the 'Other Crops' category, which is likely rice. The sharp increase in fertilizer prices are causing growers to shift away from nitrogen-intensive crops such as corn and rice, and some of those acres are moving into cotton. In addition, favorable cotton yields over the past two years have boosted expectations on cotton returns. The largest increase is in Mississippi (+7.8%) with plantings of 1.30 million acres. Louisiana (+6.9%) and Missouri (+5.4%) also show sizable increases with plantings of 652 thousand and 464 thousand acres, respectively. Slightly smaller increases are expected in Tennessee (+4.9%) and Arkansas (+4.8%).

Survey results indicate that growers in the Southwest intend to increase upland area by a modest 0.3% to 6.25 million acres in 2006. Growers in Kansas responded with increased plantings of 104 thousand acres (+39.9%). Survey results for Oklahoma suggest growers will also expand acreage by 4.0%. However, the intended acreage of 265 thousand acres is still below levels seen in 2000 and 2001. In Texas, total cotton acres are slightly below 2005 at 5.88 million acres.

All states in the West region show significant declines in upland, with the region as a whole down 23% to 551 thousand acres. In California, intended area of 324 thousand acres represents a 24.7% decrease from the previous year. Survey results indicate a shift into ELS cotton and specialty crops. Growers in Arizona intend to decrease upland area by 20.4% to 183 thousand acres. New



Mexico growers indicate a drop of 20.7% to 44 thousand acres.

Summing across the 4 regions gives intended 2006 upland cotton area of 14.12 million acres, 1.4% higher than 2005.

Survey results indicate that U.S. cotton growers intend to increase ELS plantings 15.2% to 312 thousand acres in 2006. In California, intended ELS area of 254 thousand acres represents a 10.6% increase from the previous year. An increase of 62.4% is indicated by Arizona growers, bringing acreage to 6,700 acres. Growers in New Mexico intend to increase ELS plantings by 21.2% to about 14,000 acres while a 47.8% increase to 37,000 acres is indicated for Texas.

Bringing together the upland and ELS cotton intentions shows U.S. all-cotton plantings in 2006 of 14.44 million acres, 1.7% higher than the previous year. (See table on page 25 and Exhibit 68)

### ***2006 U.S. Cotton and Cottonseed Supply***

In 2004 and 2005, generally favorable weather conditions led to below-normal abandonment and record or near-record yields. However, it is also recognized that weather is not the sole factor underlying the improved yields. As previously discussed, new higher-yielding varieties and the success of boll weevil eradication have contributed as well. For the economic outlook, the assumption of normal or average weather conditions is assumed, which suggests that we will not see a repeat of the record yields of the past two years. In addition, it is also likely that abandonment will increase to levels in line with historical averages. In

addition, the yield estimates and abandonment also take into consideration the dry conditions prevailing in the Southwest.

Assuming an average abandonment across the Cotton Belt of 9.3%, harvested area would be approximately 13.09 million acres (Exhibit 69). For all states except Texas and Oklahoma, yields are set at the average level observed in 2003 through 2005. For Texas and Oklahoma, yields are adjusted down from the 3-year average to reflect the current dry conditions. Applying each state's yield to its 2006 projected harvested acres generates a crop size of 21.41 million bales, with 20.59 million bales of upland cotton and 827 thousand bales of ELS cotton. After the experiences of the past two years, we know that with this level of acreage, there is upside potential in production. However, weather problems could also push the crop to the 17 to 18-million bale range.

Using the point estimate of projected yields, upland production by region is: Southeast = 4.98 million bales; Mid-South = 8.10 million bales; Southwest = 6.03 million bales; and West = 1.48 million bales. Combining projected production with expected beginning stocks of 6.90 million bales gives a total U.S. supply of 28.35 million bales (Exhibit 70). This is a decline of almost 1 million bales from the 2005 level.

For cottonseed, multiplying the point estimate of lint production by an average lint-seed ratio generates expected production of 7.66 million tons. With 640 thousand tons in beginning stocks and assuming imports of 10 thousand tons, 2006 cottonseed supply totals 8.31 million tons (Exhibit 71).

## Prospective 2006 U.S. Cotton Acreage

	2005 Actual (Thou.) 1/	2006 Intended (Thou.) 2/	Percent Change
<b>SOUTHEAST</b>	<b>3,030</b>	<b>3,129</b>	<b>3.3%</b>
Alabama	550	548	-0.4%
Florida	86	104	21.3%
Georgia	1,220	1,272	4.3%
North Carolina	815	840	3.0%
South Carolina	266	268	0.8%
Virginia	93	97	4.0%
<b>MID-SOUTH</b>	<b>3,950</b>	<b>4,193</b>	<b>6.2%</b>
Arkansas	1,050	1,101	4.8%
Louisiana	610	652	6.9%
Mississippi	1,210	1,304	7.8%
Missouri	440	464	5.4%
Tennessee	640	672	4.9%
<b>SOUTHWEST</b>	<b>6,229</b>	<b>6,250</b>	<b>0.3%</b>
Kansas	74	104	39.9%
Oklahoma	255	265	4.0%
Texas	5,900	5,881	-0.3%
<b>WEST</b>	<b>716</b>	<b>551</b>	<b>-23.0%</b>
Arizona	230	183	-20.4%
California	430	324	-24.7%
New Mexico	56	44	-20.7%
<b>TOTAL UPLAND</b>	<b>13,925</b>	<b>14,123</b>	<b>1.4%</b>
<b>TOTAL ELS</b>	<b>270</b>	<b>312</b>	<b>15.2%</b>
Arizona	4	7	62.4%
California	230	254	10.6%
New Mexico	12	14	21.2%
Texas	25	37	47.8%
<b>ALL COTTON</b>	<b>14,195</b>	<b>14,435</b>	<b>1.7%</b>

## U.S. Market

### U.S. Textile Industry

The biggest issue for the U.S. textile industry in 2005 was the removal of quotas for WTO member countries on January 1, 2005. Due to this, the year was characterized by more plant closings, job losses, and continued pressure from increasing imports, particularly from China. According to the National Council of Textile Organizations (NCTO), approximately 31 textile mills closed in 2005. Over 360 textile mills have closed since the beginning of the Asian financial crisis in 1997. Preliminary data from the U.S. Bureau of Labor Statistics indicate that textile industry employment in 2005 fell by over 40,000 workers as opposed to a loss of approximately 52,000 workers in 2004. These figures represent employment in all three sectors of the U.S. textile industry - textile mills, textile products mills, and apparel mills.

### Mill Use

Mill use of cotton declined for the eighth consecutive year in calendar 2005 and is estimated at 6.10 million bales, 2.3% below the amount consumed in 2004 and 10.5% below the 6.81 million bales consumed in 2003 (Exhibit 72). The decline in mill use can be attributed to another year of record cotton textile imports. For calendar 2006, NCC forecasts domestic mill use of cotton at 5.83 million bales. The latest USDA estimate for mill use in the 2005 crop year is 6.00 million bales (Exhibit 73). NCC forecasts domestic mill use of cotton at 5.77 million bales for the 2006 crop year.

Consider that by Department of Commerce accounting methods there are generally 261 effective working days in a

calendar year. Hence, a 1,000 bale reduction in daily mill use equates to a reduction of 261 thousand bales in annual mill use (Exhibit 74). By extension, a 4,000 bale reduction in daily mill use implies annual reductions greater than 1 million bales.

Average daily mill use declined in the second half of 2005. In January 2005, average daily mill use was 26,027 bales. By November 2005, average daily mill use had declined 3,655 bales to 22,372, a 953,955 bale decline for calendar 2005.

Despite foreign competition and rising petroleum costs, U.S. mill consumption of manmade fibers increased slightly in 2005. NCC estimates mill use of manmade fibers at 20.10 million bales for 2005, an increase of 2.0% from 2004 (Exhibit 75). Manmade fiber mill use is projected to increase to 20.30 million bales in calendar 2006.

While reliable mill use and trade data are available for 2005, the most recent annual data for U.S. production of apparel and home furnishings are obtained from NCC's annual publication *Cotton Counts Its Customers*. The latest edition of this publication contains production data through 2004. The 2006 edition, containing annual data for 2003, 2004 and 2005, is scheduled to be released in late 2006.

The 2005 edition of *Cotton Counts Its Customers* shows that the apparel industry continues to be hard hit by increasing imports. Total apparel production in 2004 fell to 4.8 million bale equivalents, 14.6% below the 2003 production figure of 5.6 million bales

(Exhibit 76). While all apparel segments experienced a decline in production, Children's apparel experienced the largest decline, dropping 17.6% in 2004. Men's and boys' apparel saw the second largest decline (-15.0%) followed by women's, misses', and juniors' with a 12.8% drop in 2004. Cotton's share of production also experienced a decline from the previous year, falling 2% to 63% in 2004. Production of cotton apparel fell 17.6% in 2004 to 3.00 million bales (Exhibit 77).

Production of home furnishings, excluding carpeting, in the U.S. also decreased in 2004. The latest available estimates indicate that total production, excluding carpeting, was down 16.3% to 4.00 million bales from 4.77 million bales in 2003 (Exhibit 78). The share of cotton in home furnishings, excluding carpeting, increased slightly in 2004 to 43.3%. Total cotton consumed in home furnishings, excluding carpeting, for 2004 was 2.27 million bales.

### ***Net Domestic Consumption***

Net domestic consumption is another measure of the U.S. retail market's size. It measures both cotton spun in the U.S. (mill use) and cotton consumed through textile imports. Total fiber consumption in 2005 is estimated to be 53.77 million bale equivalents (Exhibit 79). Cotton's share of net domestic consumption increased 0.8% this past year to 42.8%, placing 2005 net domestic consumption of cotton at 23.02 million bales. As for 2006, NCC projects that net domestic consumption of all fibers to increase to 55.43 million bales. Cotton's share of net domestic consumption is projected to remain unchanged at 42.8%, putting net domestic consumption of cotton at 23.74 million bales.

All of the increase in net domestic consumption for 2005 was due to the increase in imported goods, especially imports of textiles from China. Imported cotton textiles grew from 19.84 million bale equivalents in 2004 to an estimated 21.83 million in 2005 (Exhibit 80). For the years 1993 through 1996, imports of textile and apparel products grew at an average rate of 6.9%. For the 4 year period following the Asian financial crisis (1997 through 2000), imports of textile and apparel products grew at an average rate of 16.1%.

Subtracting exports of U.S. cotton textile products from annual mill use provides an estimate of retail consumption of domestically produced products (Exhibit 81). In 2005, retail consumption of domestic cotton is estimated to have decreased 12.3% to 1.20 million bale equivalents. This increases the share of imported cotton consumed in the U.S. to 94.8% from 93.6% the previous year. For 2006, the retail consumption of domestic cotton is projected to fall to 910 thousand bales.

### **Textile Trade**

Increasing imports over the past several years have devastated the U.S. textile and apparel industries and calendar year 2005 was no exception (Exhibit 82). Imports of cotton goods in 2005 are estimated to have grown by 10.0% to 21.83 million bale equivalents. In calendar 2006, NCC projects cotton textile imports to increase to 22.83 million bales.

When looking at 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 it appears by just looking at gross imports and exports. NCC analysts estimate that 33.8% of all cotton goods imported in 2005 contained U.S. cotton. This is a 3.8% decrease over the previous year. In bale equivalents, these imported cotton goods contained 7.38 million bales of U.S. cotton (Exhibit 83). This is due, in large part, to our trading partners in NAFTA and the CBI.

### ***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 (Exhibit 84). Cotton apparel imports are estimated at 16.22 million bale equivalents for 2005, up 12.3% from 2004. Imports of cotton home furnishings (including floor coverings) increased 24.2% in 2005 to an estimated 3.27 million bale equivalents. Cotton yarn, thread and fabric imports decreased 9.3% in 2005 to an estimated 2.36 million bales.

Once again, countries in NAFTA and CBI represented significant sources of imported cotton goods in 2005 (Exhibit 85). Imports from Mexico in 2005 are estimated at 2.25 million bales, down approximately 10.8% from the previous year (Exhibit 86). This marks the fifth straight year in which imports from Mexico have declined. Imports of cotton goods from Canada also decreased to an estimated 411 thousand bales in 2005, down 21.2% from the previous year (Exhibit 87). Imported cotton goods from CBI for the year are estimated at 3.75 million bale equivalents (Exhibit 88), up 2.9% 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 2005 were 3.40 million, or 91.4% of the cotton good imports from CBI. Combined, imports from NAFTA and CBI countries decreased 4.2% and accounted for 29.4% of total U.S. cotton product imports in 2005.

Other top sources of imported cotton goods in 2005 were China, Pakistan, India, Hong Kong, Bangladesh, Vietnam, and Turkey. For the fourth consecutive year, China was the source of one of the largest percentage increases in cotton textile imports into the U.S. (Exhibit 89). Total cotton product imports from China increased to an estimated 4.35 million bale equivalents in 2005, up 100.4% from 2004, 406.5% from 2001 and 428.5% from 1997. China's share of imported cotton goods in the U.S. market increased from 10.9% in 2004 to 19.9% in 2005. Imports of cotton products from Pakistan are estimated at 2.0 million bale equivalents in 2005, an increase of 299 thousand bales. Since 1997, Pakistan imports have increased 198.2%. Pakistan also increased its share of imported cotton goods in the U.S. market last year to 9.2%. Imports from India are estimated at 1.3 million bale equivalents for 2005. This is a 19.6% increase from last year and an 85.2% increase from 1997. India now accounts for 6.2% of all U.S. cotton product imports. Imports from Hong Kong in 2005 are estimated at 546 thousand bale equivalents, down 14.3% from 1997 imports. Hong Kong's share of imported goods in the U.S. declined to 2.5% in 2005. Imports from Bangladesh in 2005 were up 110.3% from 1997 to 788 thousand bale equivalents. Bangladesh accounted for an estimated

3.6% of all cotton goods imported into the U.S. in 2005.

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 based on bale equivalents will not necessarily show the same trend as total imports expressed in SME. NCC expresses imports in bale equivalents whenever possible, but the measurement of SME best represents product categories imported from individual countries.

#### **Mexico**

Although declining among individual countries, Mexico was once again one of the largest shippers of cotton goods to the U.S. in 2005. Cotton trousers, by far, remained the largest category of imported cotton goods from Mexico. Trousers accounted for 35.1% of all cotton product imports from Mexico based on square meter equivalents (Exhibit 90). Knit cotton shirts were the next largest category of imports, accounting for 19.5%, followed by combed yarn (7.5%) and cotton hosiery (5.9%).

#### **Canada**

U.S. cotton imports from Canada decreased for the third consecutive year in 2005. The largest category of imports from Canada in 2005 was carded yarn, which accounted for 22.3% of total square meter equivalents of cotton product imports from Canada (Exhibit 91). The next largest category was combed yarn with 8.9% of total imports, followed by “other cotton manufactures” at 5.0% and underwear at 4.7%. The U.S.

Customs Service category “other cotton manufactures” includes items such as tablecloths, napkins, dishtowels and pillow covers.

#### **CBI**

Continuing the trend seen over the past few years, CBI countries shipped more cotton goods to the U.S. than did Mexico in 2005. The largest category of imported cotton goods from the region was underwear, accounting for 43.0% of total imports, based on SME (Exhibit 92). Almost 95% of the cotton underwear imports from CBI came from the CAFTA-DR countries. The second largest category, knit shirts, accounted for 28.4% of imports, followed by trousers (13.6%) and cotton hosiery (5.9%). Of these imports, 90.6% of the cotton knit shirts, 97.7% of the cotton trousers and almost 100.0% of the cotton hosiery were from the CAFTA-DR countries.

#### **AGOA**

Over the past year, total cotton apparel product imports from the AGOA (African Growth and Opportunity Act) region have decreased by 16.5% to an estimated 269.7 million SMEs (Exhibit 93). However during the past year, the percentage of U.S. cotton apparel imports from the AGOA region receiving preferential treatment under the act increased from 91.1% to 96.5%.

#### **Pakistan**

The largest category of imported goods from Pakistan in 2005 was “other cotton manufactures” (Exhibit 94). This category accounted for 31.1% of all cotton product imports from Pakistan based on SME. The second largest category imported from Pakistan was cotton sheets with 11.2% of total imports,

followed by bedspreads and quilts (8.3%) and carded yarn (7.1%).

### **China**

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 imports from China in 2005 was “other cotton manufactures”, which accounted for 30.8% of all cotton product imports from that country (Exhibit 95). This category grew by 479.5% when compared to calendar year 2001. Nightwear was the second largest category of cotton imports from China in 2005, comprising 7.1% of total cotton product imports from that country. “Other cotton apparel” – which includes items such as jumpers, bodysuits, overalls, and swimwear – accounted for 6.6% of U.S. cotton textile and apparel imports from China in 2005. Cotton coats was the fourth largest category and accounted for 6.4% of cotton product imports.

### **India**

As was the case with Pakistan and China, the largest category of imported cotton goods from India in 2005 was the category of “other cotton manufactures” (Exhibit 96). When based on SME, this category represented 42.1% of all cotton goods imported from India. The next largest category was woven shirts (9.8%), followed by cotton sheets (6.6%), and cotton underwear (4.7%).

### **Hong Kong**

While still a significant source of imported cotton goods, Hong Kong’s share of U.S. imports has been declining over the past several years. The largest category of imported cotton goods from Hong Kong in 2005 was trousers (Exhibit 97). When looking at SME, cotton

trousers accounted for 26.4% of all cotton products imported. The second largest category was woven shirts with 17.6% of imports, followed by sweaters (16.7%) and knit shirts (12.7%).

### **Bangladesh**

Based on SME, the largest category of cotton goods imported from Bangladesh in 2005 (21.2%) was woven shirts (Exhibit 98). The second largest category in 2005 was trousers (15.5%). Cotton underwear was the third largest category in 2005, representing 14.3% of total cotton goods imported from Bangladesh, followed by nightwear at 10.7%.

### **Vietnam**

Another country which has emerged as a more significant supplier of cotton product imports is Vietnam (Exhibit 99). Although growth was negative for 2005 when compared to 2004, U.S. cotton product imports from Vietnam have increased by 1,414.1% based on SME since 2001. In 2001, the U.S. imported 24.4 million SME of cotton goods from Vietnam. This number increased to an estimated 368.6 million SME in 2005. The largest category of imported cotton goods from Vietnam in 2005 was trousers. Based on SME, this category represented 27.8% of all cotton goods imported from Vietnam. The next largest category was knit shirts (19.3%), followed by woven shirts (11.9%), and dresses (9.1%).

### **Turkey**

Cotton product imports from Turkey continued their recent downward trend. Based on SME, the largest category of cotton goods imported from Turkey in 2005 was “other cotton manufactures”, which accounted for 13.7% (Exhibit 100). The second largest category in

2005 was underwear (9.3%), followed by trousers (8.5%), and cotton sheets (8.0%).

### ***U.S. Cotton Product Exports***

For the fourth consecutive year, exports of U.S. cotton textile and apparel products experienced a modest increase in 2005 (Exhibit 101). Exports grew by 0.4% in 2005 to an estimated 4.90 million bale equivalents. This increase is due mostly to an increase in cotton yarn, thread, and fabric exports (Exhibit 102). Exports of cotton yarn, thread and fabric are estimated to have increased by 8.5% in 2005 to 3.70 million bale equivalents. Exports of home furnishings (including floor coverings) increased by 2.3% over the previous year to an estimated 150 thousand bale equivalents. Exports of apparel decreased by 20.7% to 1.05 million bales equivalents over the previous year. For 2006, NCC projects U.S. cotton textile exports to increase modestly to 4.92 million bales.

The top customers of exported U.S. cotton textiles and apparel in 2005 were once again the NAFTA and CBI countries (Exhibit 103). Exports to the NAFTA countries last year totaled an estimated 1.90 million bales, down 1.5% from the previous year. Exports to the area accounted for 38.7% of all U.S. cotton product exports. Exports to Mexico decreased to an estimated 1.43 million bale equivalents from 1.50 million in 2004. However, exports of cotton products to Canada increased by an estimated 7.7% to 473 thousand bale equivalents for 2005.

U.S. exports to the CBI countries have grown over the last four years. In 2005, exports increased 1.1%, totaling 2.64 million bale equivalents or 53.9% of all

U.S. cotton exports. This is 21.9% higher than 2002 exports and 48.0% higher than 2001 cotton product exports to CBI. Almost 96.0% of the cotton products exported to CBI went to the CAFTA-DR countries.

Exports to Colombia were an estimated 70,000 bale equivalents in 2005, 1.4% of all U.S. exports. Estimated exports to Japan in 2005 totaled 40,000 bale equivalents or 0.8% of all exports. Exports to Hong Kong and the U.K. were 20,000 bales, each, followed by Belgium with 10,000 bales. Exports to China in 2005 totaled an estimated 20,000 bale equivalents. The remaining 3.8%, or 180 thousand bales, of U.S. cotton textile and apparel exports were shipped to all other customers of U.S. cotton goods.

### ***Other Textile Trade Issues***

Regional trade preference agreements are vital to the U.S. textile industry's ability to compete since the removal of quotas for all WTO member countries on January 1, 2005. The Bush Administration has completed free trade agreements with thirteen countries including the countries of the CAFTA-DR, Bahrain, and Peru, among others. Furthermore, the administration signed a broad agreement with China on Chinese textile imports into the United States. In December 2005, a WTO ministerial meeting in Hong Kong produced a text on the latest negotiations in the Doha Round of talks. The text discards the concept of a single undertaking in agriculture by isolating cotton for special, discriminatory treatment. Cotton is listed in a sub-section of the agricultural text and is singled out for special treatment. Three specific actions or objectives are listed for cotton. All forms of export subsidies for cotton will be eliminated by



developed countries in 2006. On market access, developed countries will give duty and quota free access for cotton exports from least-developed countries (LDCs) starting from the commencement of the implementation period. Finally, members agree that the objective is that, as an outcome for the negotiations, trade distorting domestic subsidies for cotton production be reduced more ambitiously than under whatever general formula is agreed and that it should be implemented over a shorter period of time than generally applicable. The trade ministers have set a date of April 30 to finalize modalities and July 1 for tabling schedules. However, recent statements by WTO officials acknowledge the ambition of and potential difficulty of meeting this timeline.

### **China**

In late 2001, China officially became a member of the WTO. The textile portion of the China agreement subjected the U.S. textile industry to increased competition from imported textiles, as it called for quotas on Chinese textile imports to be phased out within 5 years. China has made full use of WTO provisions to increase their textile imports to the U.S. Since 2001, U.S. cotton product imports from China have increased by more than 400%.

A China-specific safeguard allows the U.S. and other WTO member countries that believe imports of Chinese-origin textile and apparel products are, due to market disruption, threatening to impede the orderly development of trade in these products to request consultations with China with a view to easing or avoiding such market disruption. Upon receipt of the request, imports from China may be restricted to a level no greater than 7.5%

(6% for wool product categories) above the amount entered during the first 12 months of the most recent 14 months preceding the request for consultations. The import quotas may last up to one year. China-specific safeguard petitions are filed with CITA.

Due to the tremendous rise in Chinese textile exports to the U.S., safeguards have been enacted numerous times since 2003. In 2003, safeguards were enacted on knit fabric, cotton/MMF brassieres, and cotton/MMF dressing gowns. In 2004, safeguards were enacted on cotton, wool, and MMF socks. In April 2005, the U.S. government self-initiated safeguards on cotton knit shirts and blouses, cotton trousers, and cotton/MMF underwear. The safeguards on these categories were enacted in May 2005. Also in May 2005, safeguards were enacted on combed cotton yarn, men's and boys' cotton/MMF woven shirts, MMF knit shirts, and MMF trousers. In September 2005, safeguards were enacted on cotton/MMF brassieres, and other synthetic filament fabric. On November 1, 2005, the Office of the U.S. Trade Representative and the People's Republic of China Ministry of Commerce signed an agreement on Chinese sock imports. The agreement put in place a new quota that expired December 31, 2005 of slightly more than 10 million dozen pairs on imports of Chinese cotton, wool and man-made fiber socks. The quotas that were established under the sock safeguard enacted in 2004 had expired on October 28, 2005.

On November 8, 2005, the U.S. and China signed a broad agreement on Chinese textile imports into the U.S. The agreement went into effect on January 1, 2006 and ends on December 31, 2008

and places quotas on a broader range of textile and apparel products (34) than were subjected to China safeguards (19). The quotas established under the agreement compare favorably to quotas that would have been imposed if China textile safeguards were invoked. Over the life of the agreement, China can export 3.2% more of the covered products to the U.S. than if the safeguards were invoked on all of the covered products for all three years. In general, U.S. imports of Chinese goods covered by the agreement are allowed to grow by 10 to 12.5% in 2006, 12.5% in 2007, and 15 to 16% in 2008, depending on the item. Furthermore, in 2006, the agreement imposes tighter limits on U.S. imports from China of “core” apparel products. The “core” apparel products are cotton knit shirts, MMF knit shirts, woven shirts, cotton trousers, MMF trousers, brassieres, and underwear. Other items covered by the agreement include combed cotton yarn, cotton towels, glass fiber fabric, knit fabric, polyester filament fabric, special purpose fabric, synthetic filament fabric and thread, sweaters, socks/baby socks, swimwear, and blinds.

As part of the agreement, the U.S. promised to exercise restraint in the future use of safeguards on products that are not covered by the agreement. The agreement also contains mechanisms to allow U.S. importers and the Chinese government to manage quotas to avoid overshipments. For example, China will manage its exports with a visa system and can borrow small amounts of quota from future years to cover overshipments.

NCC estimates that cotton imports from China for the categories covered in the agreement were slightly over 1.52 million

bale equivalents in calendar 2005 (Exhibit 104), an increase of 204.6% from 2004. With the agreement, NCC estimates that by 2008, imports from China for the same categories will increase to 2.11 million bale equivalents. Assuming annual growth rates equal to the average growth rates for total U.S. imports for these categories from the years 2000 to 2005, China’s market share of total imports for these categories will be 13.7% in 2008 with the agreement in place. Without the agreement, China’s share of the U.S. market would be expected to increase sharply. For the 34 categories, each market share increase of 10 percentage points translates into 1.2 to 1.5 million bales of additional cotton. If China were to achieve an average market share of 40% across the 34 categories as compared to the current level of approximately 13%, then the additional market share translates into 4.04 million bales above current imports from China. An average market share of 60% means an additional 7.12 million bales above current levels.

### AGOA

On July 13, 2004, President Bush signed legislation which extended AGOA from its planned expiration date of 2008 to 2015. Other key provisions of the legislation included the extension of authority for the use of third country fabrics from September 2004 to September 2007. Rules-of-origin provisions were amended to allow non-AGOA produced collars and cuffs for apparel import categories. The “folklore” provision was expanded to allow ethnic fabrics that are made on machines to qualify for AGOA duty-free treatment. The legislation also includes provisions for the development of sustainable infrastructure and technical assistance,

including the assignment of 20 people to sub-Saharan Africa to assist and advise them on sanitary and phyto-sanitary standards to meet requirements for the U.S. market.

The AGOA legislation requires an annual determination to see 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 protection of workers' rights. In 2005, Burundi became an AGOA beneficiary country and Mauritania was removed from the list of eligible countries. There are now 37 countries that are eligible for economic and trade benefits under AGOA.

### **CAFTA-DR**

In the spring of 2004, the Central America Free Trade Agreement (CAFTA) was signed. At that time, the Central American countries included in the agreement were Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua. By August 2004, the Dominican Republic was included in the agreement and the agreement became known as the Central America – Dominican Republic Free Trade Agreement (CAFTA-DR). All of the CAFTA-DR signatories have ratified the agreement except Costa Rica. The U.S. Senate passed implementing legislation for CAFTA-DR in June 2005. The House of Representatives passed the legislation in July 2005 and it was signed by the President in August 2005. The initial target date agreed to by all signatories for the agreement to go into force was January 1, 2006. In December 2005, U.S. officials announced that implementation would begin on a rolling basis as soon as

the participating countries meet their internal approvals. Under the rolling admissions process, entry into force would occur on the first day of the month with a country that the U.S. Trade Representative determines is ready by the middle of the preceding month.

According to the provisions of the CAFTA agreement, textiles and apparel will be duty-free and quota-free immediately if they meet the agreement's yarn-forward rule of origin. This means that only apparel using yarn and fabric from the U.S., Central America and the Dominican Republic qualifies for duty-free benefits. The agreement's benefits for textiles and apparel will be retroactive to January 1, 2004.

The textile provisions also include a number of avenues for 3<sup>rd</sup>-country participation, including 'cumulation', Tariff Preference Levels (TPLs) which authorize the use of a specified quantity of 3<sup>rd</sup> country components, a fabric-forward rule of origin for certain products and allowances for 'single transformation' for a number of others. 'Single transformation' means only one manufacturing step has to be taken in a country in order for products made from components sourced from anywhere to qualify for benefits.

Cumulation is a concept that brings countries that are not signatories to an agreement into the agreement provided they are signatories to another trade agreement. The signatories of CAFTA-DR agreed to cumulation with Mexico and Canada for woven apparel. This allows a limited amount of inputs from Mexico and Canada to be used in Central American/Dominican apparel that will still qualify for duty-free benefits in the

U.S. Cumulation under CAFTA-DR is subject to an annual cap of 100 million SME. This cap can grow to 200 million SME, but the growth is tied to an increase in CAFTA-DR trade. Under the overall cap of 100 million SME, there is a 1 million SME cap on wool, 20 million SME cap on blue denim, and 45 million SME cap on cotton and man-made bottom weights. Mexico and Canada must provide reciprocal benefits to U.S. and Central American textile and apparel exports. Canada and Mexico must also agree to strengthen Customs enforcement measures.

CAFTA-DR provides Nicaragua with a TPL of 100 million SME which phases out over 10 years. CAFTA-DR does not contain TPLs for Costa Rica, El Salvador, Honduras, and Guatemala.

CAFTA-DR contains a special textile safeguard which allows the U.S. to impose tariffs on certain goods when injury occurs due to import surges. The agreement also contains a new short supply process that includes tighter timelines than in earlier short supply processes, allows items to be deemed in partial short supply, and provides for items to be added to and removed from the short supply list.

#### Andean

Negotiations on a trade agreement between the U.S., Colombia, Ecuador, and Peru (Bolivia is thus far participating as an observer) continued throughout 2005. The last round of talks occurred in November 2005, but failed to develop a comprehensive agreement. However, Peru decided to continue negotiations and a free trade agreement was concluded between the U.S. and Peru in December 2005. Negotiations with

Columbia and Ecuador are expected to resume in early 2006.

President Bush notified Congress of his intention to enter into a free trade agreement with Peru in January 2006. Congress has 90 days after notification to review the agreement before it is signed.

Under the U.S. – Peruvian agreement, 80% of U.S. consumer and industrial product exports and two-thirds of U.S. agricultural exports to Peru will be duty-free immediately. The textile and apparel provisions are based on the yarn-forward rule of origin. There are no provisions for TPLs or exceptions to the requirement that qualifying products contain components manufactured in the U.S. or Peru. As in NAFTA, a list of components not manufactured in either country has been developed and only those products may be sourced from a third country.

#### FTAA

One of President's Bush's goals has been to form a 34-nation NAFTA type Western Hemisphere trade area stretching from Alaska to Argentina – a Free Trade Area of the Americas (FTAA). This is obviously a far more complex integration of trading economies than NAFTA. For cotton in particular, the nature of any trade agreement with Brazil must be carefully considered. Brazil has a large and diverse textile industry, and Brazil's capacity to increase agricultural production appears to be substantial.

However, progress on an FTAA has been slow. Vice Ministers met in February 2004 to develop the so called "common set" of obligations, but work was not completed. The U.S. and 13 other countries, including all our current and prospective bilateral free trade area

partners, made a unified proposal at the February 2004 meeting that would provide for basic commitments on export credits and food aid, as well as a “neutralization mechanism” to offset the effects of domestic support. In order to break this impasse, the co-chairs were asked to make a proposal on the next steps.

The entire FTAA negotiations were scheduled to be completed by January 2005. That deadline was not met. At the November 2005 Summit of the Americas in Argentina, every regional nation except Venezuela agreed on the importance of continuing work toward establishing an FTAA. However, the countries of the South American Common Market, or Mercosur, have indicated that the issue of agricultural subsidies must be resolved before they agree to an FTAA.

### **Bahrain**

In 2004, the President announced plans to sign a free trade agreement with Bahrain. The U.S. – Bahrain Free Trade Agreement was approved by Congress in December 2005 and President Bush signed the agreement in January 2006. This agreement contains a yarn-forward rule of origin. Free trade agreements with Israel and Jordan allow for the use of unlimited 3<sup>rd</sup> country yarns and fabric in apparel eligible for duty-free treatment. The agreement also contains a TPL for the use of yarn and fabric from a non-party. The TPL is set at a level of 65 million SME for the first 10 years. The agreement also allows either signatory to re-impose Most Favored Nation tariffs if imports from the other signatory damage domestic production. The U.S. –Bahrain Free Trade agreement is a step towards furthering the Administration’s goal of

creating a Middle East Free Trade Area by 2013.

### **Morocco**

The U.S. – Morocco Free Trade Agreement was signed by President Bush in June 2004 and passed by Congress. The agreement took effect on January 1, 2006. The agreement provides for a temporary transitional TPL for the first 10 years allowing non-originating yarns or fabric to be traded at the preferential tariff rate. The TPL is set at 30 million SMEs for the first four years of the agreement, and then declines by 14% per year over the remaining six years. Yarn and fibers present in less than 7% by weight of a textile article are disregarded as *de minimis*, except in the case of elastomeric yarn. The agreement also contains a provision which permits the use of Sub-Saharan African cotton in the production of certain yarns and fabrics, without disqualifying those goods from preferential treatment, up to an annual level of 1 million kilograms.

The agreement also includes a special textile safeguard mechanism that permits either party to re-instate duties for a limited period of time if imports from the other party cause serious damage, or actual threat thereof, to domestic production. The special textile safeguard mechanism is available for ten years after tariffs have been eliminated.

### **Oman**

The U.S. and Oman completed negotiations on a free-trade agreement in October 2005. The agreement provides full reciprocal market access for U.S. textile and apparel producers. The U.S. and Oman will eliminate tariffs on the same schedule on a product-by-product basis. For the majority of products, tariffs

will be eliminated either immediately or in 5 years. The agreement contains a yarn-forward rule of origin which requires textile and apparel products to contain U.S. or Omani yarn and fabric in order to qualify for duty-free treatment. However, the agreement also provides, on a temporary basis, duty-free treatment for limited quantities of textile and apparel products that do not meet this requirement.

### **Looking Ahead**

In 2005, the U.S. continued negotiations toward free trade agreements with both Thailand and Panama. Talks with those countries are expected to continue in 2006. Negotiations are also under way with Colombia, Ecuador, the United Arab Emirates, and the five nations of the Southern African Customs Union (Botswana, Lesotho, Namibia, South Africa and Swaziland).

# World Market Situation

## World Production

World cotton prices, as measured by Cotlook Ltd.'s "A" (NE) Index, fluctuated between 48.75 cents per pound and 60.00 cents during the course of calendar 2005. Unlike 2004, cotton prices increased slightly during the final months of 2005. Between September 1<sup>st</sup> and December 31<sup>st</sup>, the "A" (NE) Index increased 4.20 cents per pound from 53.15 cents per pound to 57.35 cents per pound. Likewise, similar movements have been seen in the New York futures and the U.S. spot market.

The current price situation, in large part, is due to the fact that, globally, we have seen two consecutive large cotton crops. Current estimates place world cotton production at 114.04 million bales (Exhibit 105). Although down from the crop in 2004, the current crop is a direct result of many factors including favorable growing conditions, improved planting and harvesting techniques, and improvement in cotton seed varieties. China remains a leading producer while Uzbekistan and India also enjoyed favorable growing conditions. The United States is projected to produce a record crop of 23.72 million bales.

In 2004, world production not only kept pace with demand, but it far exceeded world consumption. This is not the case in the 2005 marketing year. The most recent estimates place world consumption at 116.74 million bales. With production estimates at 114.04, world consumption is projected to exceed production by more than 2.71 million bales.

## Production Climate

On January 4, 2005, the "A" (NE) Index was 48.75 cents per pound. At the end of the year, the "A" (NE) had gained almost 9 cents to 57.35 cents per pound (Exhibit 106). For the current marketing year to date, the "A" (NE) has averaged 56.36 cents per pound.

## China

China remains the largest cotton producer with a 2005 crop of 26.18 million bales, according to the latest estimates from China's National Bureau of Statistics (Exhibit 107). This year's crop is roughly 2.82 million bales lower than last season's crop. The lower production number is a direct result of reduced acreage as growers responded to weaker prices in the spring of 2005. The Government of China (GOC) made note of the declining trend in cotton production in late 2004 and the early part of 2005 and issued a statement that encouraged farmers to maintain a stable cotton production base. However, cotton farmers, particularly those in the Yellow River and the Yangtze River regions, paid little heed to these government advisories and planted more profitable crops, primarily grain.

In general, Chinese production policy remains unchanged. The Ministry of Agriculture (MOA) encourages steady cotton production based on its Regional Plan for Agricultural Products announced in February 2003. The plan identified three major cotton regions with the greatest growth potential and designated them as primary cotton producing regions. They are: 1.) the Yellow River Basin; 2.) the Yangtze River basin; and 3.) the Northwest region, including

Xinjiang. However, MOA's ability to really affect the farmer's planting decision is limited because producers pay little heed to MOA's policy objectives unless they are compensated. Given China's very limited arable land, if forced to choose between subsidizing cotton and grain production, the Government of China is likely to subsidize or otherwise support grain so it can feed the population. Farmers, especially those in the Yellow River region are expected to adjust their crop mix according to which commodity pays best. In fact, the annual swing in cotton area ranged from 11 to 22% over the past five years. Therefore, the Chinese government has its work cut out for itself if it expects to maintain a stable cotton production area.

In a recent press release, the MOA stated that the People's Republic of China will seek to boost 2006 cotton production to meet growing domestic demand. MOA estimated there will be 13.17 million acres (up 3.5%) of cotton planted in 2006, leading to a 27.56 million bale crop (up 5.3%). While consistent with China's goal of satisfying at least 70% of China's domestic demand with Chinese cotton, these projections fall short of previous estimates made by Chinese sources and current market expectations.

Some industry experts believe that China could expand cotton area by as much as 10% over last year or 13.86 million acres of cotton. These expectations are based on relatively higher cotton prices and current plantings of winter wheat. However, accompanying higher cotton prices are higher production costs.

Prices for agricultural inputs are reported to have increased 26.5% in 2004. Increased prices for fertilizer and seeds

were said to account for 10% of this total increase. Given the recent rise in petroleum prices and associated products, input costs will likely continue to rise into 2006.

This economic outlook estimates China's 2006 cotton area at 13.40 million acres, an increase of 6.4% from 2005. This expansion takes into account relative crop prices, winter wheat plantings and increased production costs. Assuming trend yields, China would remain the world's largest cotton producer with a projected 2006 crop of 27.92 million bales.

### India

India is heading toward a bumper crop for the third consecutive year. The latest estimates by USDA have India producing 18.60 million bales for the 2005 crop year (Exhibit 108). Adequate and well-distributed monsoon rains from June through August established excellent planting conditions. Planting in the northern states of Punjab, Haryana, and Rajasthan was completed on schedule by the end of May. Cotton planting in rain-fed central and southern India was almost complete by the third week of August. Early reports had gains in cotton area in Gujarat, Punjab, Rajasthan and Madhya Pradesh. The gains in those states were partially offset by lower cotton plantings in Maharashtra, Haryana and Andhra Pradesh.

In 2005, the Government of India approved 14 new Bt cotton hybrids for different regions, in addition to the four approved in 2002 and 2004 for commercial cultivation in the six central and southern states. The approval of Bt hybrids for the highly bollworm-prone northern region, although much delayed,



should greatly benefit the cotton farmers in this region. The approval for the new varieties ranges from two to three years, depending on the variety. In addition to the approved varieties, there are some fifty unapproved Bt cotton varieties, illegally bred and marketed by farmers and seed companies, which are offered at a hefty discount over the approved varieties. Although precise figures are not available, market sources report the continued increase in planting of new improved hybrids and Bt varieties at the cost of traditional lower yielding varieties. Consequently, cotton yield prospects for the 2005 crop were much improved. In 2002, India had yields of 269 pounds per acre. In 2005, yields are estimated to be roughly 406 pounds per planted acre, an increase of more than 135 pounds.

In India, cotton is predominantly a monsoon season crop planted during April through September and harvested in the fall and winter. Area planted to cotton is largely influenced by price relationships with competing crops: paddy rice/fodder crops in the north, coarse grains/pulses/sugarcane in central India, and paddy rice/tobacco/chilies in the south.

The Government of India (GOI) also plays a role in the producer's planting decisions. The GOI establishes minimum support prices (MSP) for cotton at the start of each marketing season. The Cotton Corporation of India (CCI), a government organization, is responsible for implementing the support operation in all states. Typically, market prices remain well above the MSP, and CCI operations are generally limited to commercial purchases and sales.

There are several government agencies and research institutions besides the CCI that are engaged in seed distribution, crop surveillance, integrated pest management, and extension activities for cotton. The Government of India's Cotton Technology Mission also supports activities aimed at improving cotton yields, reducing cultivation costs and improving quality through modernization of existing facilities. Since cotton continues to be competitive with alternative crops and the Indian weaving industry continues to rely on domestic production, India's cotton production is forecast at 18.97 million bales in 2006. This is 369,000 more bales than 2005 and still well above their 5-year average of 14.90 million bales.

### **Uzbekistan**

Cotton has traditionally been the primary cash crop in Uzbekistan. It is a significant source of employment and foreign exchange. However, Uzbekistan has not been able to reach its cotton production target for the past several years for a number of reasons, including weather, inadequate production incentives, i.e. prices, inadequate and low-quality inputs and deteriorating infrastructure, especially irrigation. Not to mention, the lack of a free market.

Despite almost 15 years of independence, the government of Uzbekistan still maintains tight control over all aspects of production including planted area, production targets, prices, inputs, procurement and marketing. Uzbekistan is planning to increase area sown with faster maturing varieties. During the last three years, the government initiated a major program to reform the cotton sector, aimed mainly at improving fiber quality. The reforms are focused on three

areas. First, inferior cotton varieties, particularly those with a high micronaire, are to be replaced with better varieties. In connection with this, the government established a new State Inspection Service on March 31, 2005, which will control production and utilization of cottonseed. Second, the government is seeking to modernize ginning plants by attracting foreign investment. Currently, more than 80% of the nation's ginning equipment dates to the Soviet Era and needs to be replaced. Third, in December 2002, the government adopted a decree that allows farmers to sell up to 50% of their cotton output either domestically or abroad. However, as of today, there still is no concrete mechanism developed to allow this process to begin, thereby allowing the government to keep a monopoly on cotton marketing.

The cotton ginning industry is one area of the country's economy where new investments are needed but have not been made despite the government's efforts. The main reason seems to be the government's poor and inadequate policy in guaranteeing the investors' rights. Currently, there are only 2 investors in the ginning industry. One is the Central Asian Seed Company (USA) and Dagrís (France). Each company built a ginning plant and is involved in cottonseed as well as lint production.

Despite the importance of cotton to Uzbekistan's economy, production in 2006 is expected to fall to approximately 5.27 million bales (Exhibit 109), 330,000 bales less than the previous year.

### **Pakistan**

Cotton is the backbone of Pakistan's economy and the government continues to rely heavily on cotton production as a

major source of employment and foreign exchange. USDA currently projects Pakistan production at 9.75 million bales for 2005, down 1.55 million bales from the 2004 estimate (Exhibit 110).

Pakistan's 2005 crop did not start off well, due, in part, to above normal winter and spring rains that collectively increased surface and ground water. Moreover, cooler and cloudy weather with intermittent rains slowed the planting campaign, especially in the Sindh province. Similarly, the Punjab province experienced land preparation and planting delays of 15 to 21 days. This was especially true in areas where rains disrupted and delayed the harvest and threshing of the wheat crop. In addition, the market did not have the capacity to supply significant volumes of certified seed for replanting. A third factor affecting the 2005 crop was above normal pest infestation due to the moist weather in areas where most farmers are not fully equipped to use quality pesticides and other inputs.

Yields were also off in 2005. Favorable growing conditions that lasted throughout the 2004 growing season pushed yields to record highs. Yields increased from 487 pounds per acre in 2003 to 688 pounds per acre in 2004, an increase of 211 pounds. For 2005, yields will drop to roughly 601 pounds per acre, a decline of 87 pounds per acre.

With better growing conditions and a slight rebound in yields, Pakistani production should increase in 2006 to roughly 10.20 million bales.

### **Turkey**

Between 2000 and 2004, Turkey has produced an average of 4.00 million

bales. For 2005, USDA estimates production at 3.55 million bales (Exhibit 111).

Most of Turkey's cotton is planted between mid-March and mid-May and harvested from mid-August through November. The majority of Turkey's cotton is grown in three main regions: the Aegean region, Cukurova, and Southeastern Anatolia. Smaller amounts of cotton are also grown in Antalya and Antakya. Aegean cotton generally is considered to be the best quality and is preferred by the local textile industry. Aegean cotton is longer than cotton from Cukurova and other regions.

Virtually all of Turkey's cotton is handpicked. The high cost of labor, estimated at about 40.0% of total production costs, continues to be an obstacle. As a result, farmers are either shifting to less labor-intensive crops or searching for ways to shift to machine harvesting. However, the size of an average cotton farm in Turkey renders modern harvesting machines impractical due to their high cost. Nevertheless, farmers and coops believe machine picking is the only way to stay competitive. Former Soviet Union era tractor-pulled cotton picking machines are also being used in increasing numbers. As a result of the increased utilization of machinery, the amount of machine-picked cotton in Turkey is expected to reach about 5% of total production.

About one-third of the Turkish population lives in rural areas and earns the bulk of its income from farming. Therefore, agriculture and rural development are still top priorities for the government. The massive investments in

the Southeastern Anatolian Project (GAP) are probably the best example of this policy. The farmers' cooperatives, TARIS, Cukobirlik and Antbirlik have historically provided their members with low-cost loans, seed and fertilizer and are supposed to buy members' cotton at announced prices. However, since the last economic crisis in 2000 and as a part of the IMF economic reform program, they became more independent and are not permitted to operate at a loss, which is necessitating funds from the treasury. TARIS, located in the Aegean region, continues to play an important role in the buying and selling of cotton. The role of Cukobirlik in the Cukurova region, however, has been declining.

The aim of the government is to keep cotton and cotton products within the economy and support production. For 2006, cotton area is forecast to increase as machine picking expands and prices for alternative crops such as corn and wheat decline. Cotton production in 2006 is projected at 3.93 million bales.

### Australia

Australia's crop was 3.00 million bales in 2004. Production in 2005 is estimated at 2.60 million bales (Exhibit 112). The 2004 cotton season saw a return to more normal rainfall, with most cotton areas experiencing average to above average precipitation levels for the first half of the season and average to below average in the second half. These relatively favorable conditions allowed cotton area to expand significantly from the severely constricted levels experienced during the drought years of 2002 and 2003. Furthermore, irrigation water reserves have rebounded from historical lows, but still remain below normal levels. About 90.0% of Australia's cotton crop is

typically irrigated. Despite the general return to more normal weather conditions in 2004, drier than average conditions characterized the months of March and April 2005, with national meteorological data showing most of Australia's principal cropping areas experiencing well below average rainfall over this period.

Despite the improvement in water levels, adequate irrigation remains a concern for Australian producers. As water supplies begin to build in Australia, production levels should begin to climb back to normal levels but may not return to the levels of the late 1990's. For 2006, a crop of 2.99 million bales is projected based on increased area and slightly improved yields.

### **Brazil**

USDA estimates that production for the 2005 marketing year will be 4.75 million bales (Exhibit 113). This is down 1.15 million bales from the 2004 crop year estimate.

Longer term, Brazil has the potential to expand its presence in the world cotton market. Some estimates suggest that Brazil could bring 250 million acres of new land into crop production, that's roughly equivalent to what the United States has in production of the major row crops. Also, the new areas coming into cotton production are high yielding. It's clear that expansion of agricultural production is a priority for Brazil's government, as evidenced by the recent increases in government support. A recent United States Department of Agriculture report estimates that \$13 billion in government support is now provided through credit and investment programs.

Brazil's per pound costs of production have traditionally been one of the lowest, but the recent strengthening of their currency has increased the costs of imported inputs and also reduced their competitiveness in world markets. Current expectations call for a drop in both production and exports in the short term. However, longer term, Brazil still must be viewed as a country with the potential to increase production and exports, assuming they address some longstanding transportation issues.

With continued government support and expected improvement in world prices, Brazil's cotton area will grow in 2006, increasing production. For 2006, harvested area will increase 219,000 acres to 2.44 million acres. Along with this increase in acres will be an increase in production to roughly 5.33 million bales.

### **West Africa**

The old French colonial region continues to play a significant role in the world cotton market. The cotton producing countries of West Africa have gone from producing less than a million bales in the early 1980's to producing between 3.00 and 5.00 million bales over the last few years. The latest estimates have West Africa producing 4.96 million bales in 2005 (Exhibit 114). With the increase in cotton production over the past few years, West Africa now produces enough cotton to measurably affect the cotton export market, since virtually all of its production is sold abroad.

The world cotton industry is well aware of West Africa's claims of economic injury caused by the presence of the U.S. cotton program. However, their potential for growth is not determined by the U.S.

cotton program, but instead, it will depend on whether or not they can address a number of internal issues related to their production, ginning and distribution systems.

To get a better understanding of the challenges facing West African cotton growers, one simply has to look at their recent yield trends. During the past decade, average yields in West Africa have remained flat, while the average across all other countries has increased by 150 pounds per acre. Or to look at it another way, at a world price of 60.00 cents per pound, an average acre of cotton outside of West Africa would generate \$90.00 more in revenue due to yield growth (150 pounds times \$0.60) over the past decade as compared to no change in the revenue from an acre in West Africa. Looking forward, West Africa's potential growth depends on correcting the imbalances that harm their competitive position. For 2006, a modest increase in acreage is expected. However, average yield assumptions more than offset the higher area and production is projected to fall to 4.89 million bales.

### ***Production Outlook***

Current estimates place world production at 114.04 million bales for 2005, 6.34 million bales off of the record high levels in 2004. For the 2006 crop year, production should rebound to roughly 116.16 million bales, with China accounting for the vast majority of the increase. If the world projections are met, that will be an increase of 2.13 million bales over last year but still well behind the record highs seen in 2004 (Exhibit 115).

## **World Consumption**

The competition from man-made fiber is ever increasing. According to PCI, the use of polyester has surpassed cotton, and for 2003, retail consumption topped 103 million bales. This is over 4.00 million bales above their estimate of the retail consumption of cotton. Just 10 years ago, cotton held a 25.00 million bale advantage over polyester. For 2004, PCI estimates polyester consumption to rise to over 112.00 million bales (Exhibit 116).

### ***Consumption Climate***

World cotton mill use was 108.65 million bales in 2004. For 2005, world consumption is projected to increase by 8.10 million bales to an estimated 116.74 million bales (Exhibit 117).

The sharp increase in world consumption since 2001 can be attributed to an improved worldwide economy. Current estimates put world real GDP growth at 4.30% in 2005 and 2006.

Shifting to the U.S., the overall prospects for the general economy remain positive. Although expectations for 2006 are not as strong as 2005, the economy is still projected to grow by 3.30%.

### **China**

Once again, China accounted for much of the world's 8.10 million bale increase in consumption in the 2005 crop year. China's consumption grew 6.00 million bales, and China now accounts for 38.1% of the world's mill use of cotton. Between 1980 and 1998, China's share of world cotton consumption fluctuated between 22.0 and 25.0%. However, in 1999, China's mill use began surging while the rest of the world grew only slightly. China's share of world cotton

use rose for the seventh consecutive year in 2005 as China's share of world textile and apparel exports rose and domestic demand for textiles in China also increased. For 2005, estimates place China's mill use at 44.50 million bales (Exhibit 118).

With China expected to be the big winner in the post-quota environment, it is expected that the trend will continue in the coming years. For the 2006 crop year, China's consumption is projected to approach 46.99 million bales. Growth could be tempered by internal cotton prices that are above those of manmade fibers. In addition, the recent China-U.S. textile agreement could limit growth, but the overall impact on their mill use is expected to be modest.

### **India**

India's mill consumption increased in 2005 to 17.00 million bales (Exhibit 119). This is up 2.20 million bales from the 2004 estimate. To keep pace with increasing demand for clothing from a growing domestic population, the textile industry is forecast to grow by 5.0 to 6.0% in 2005. India's textile industry includes both the organized sector (large-scale spinning units and composite mills) and the unorganized sector (small-scale spinning units, power looms, handlooms, and hosiery units). More than 95.0% of the yarn is produced in the organized sector. The weaving industry is mainly supplied by the unorganized sector with power looms accounting for 60.0%, handlooms for 18.0%, and hosiery units for 17.0% of total cloth production.

Cotton's share in total textile usage in 2004 was in part fueled by higher prices of manmade fibers (MMF) due to strong petroleum and petroleum product prices.

Market sources report that low-priced cotton caused mills to change their cotton/polyester blend from 55:45 to 60:40. However, polyester and poly-blends remain popular in India due to their durability and ease in washing and maintenance under tropical conditions. Consequently, future growth in cotton usage is likely to be determined by relative prices of cotton versus manmade fibers.

India is poised to benefit in the current post-quota environment. As a result, India's mill consumption is expected to increase in 2006 to 18.13 million bales.

### **Pakistan**

Little growth was seen in Pakistan's consumption numbers between 1991 and 1998. During those years, Pakistan averaged 6.90 million bales of consumption. However, cotton mill use increased sharply in 1999 in response to aggressive export pricing of cotton yarn (Exhibit 120). Consumption continues to climb in 2005. The latest USDA estimates have Pakistan mill use at 11.75 million bales, up 1.00 million bales from 2004. The increase in consumption continues to be driven by export-oriented production.

The spinning and weaving industries are investing in new equipment as well as renovating existing equipment. Industry sources generally report that the textile industry is seeking to improve quality as well as to diversify production to include more value-added products, rather than to rely mainly on lower-value yarn exports. With continued investment in the spinning and weaving industries, Pakistan's mill consumption will likely continue its upward trend in 2006 with

consumption projected at 12.23 million bales.

### **Turkey**

Much of the growth in Turkish mill use has been to supply a textile export business that expanded rapidly throughout the 1990's. In 2005, Turkish mill use increased to 7.05 million bales (Exhibit 121).

The textile industry is one of the most important and dynamic sectors in the Turkish economy, accounting for 7.0% of GNP, 11.0% of industrial employment and 29.0% of total exports. However, the Turkish textile industry is facing increasing competition from China and Southeast Asian countries (India, Pakistan, and Bangladesh) in export markets. It is reported that Turkish textile exports to the U.S. are stagnating due to increased competition from these countries. The worldwide free flow of textile products starting in 2005 is a real concern for Turkish mills since costs of production, including electricity and labor, are higher in Turkey compared to newly emerging textile-producing countries. Turkish mills are continuing to invest either to increase capacity and improve their scale of economies or to integrate to increase value of their products in order to remain competitive. It is also reported that acquisitions and mergers are taking place in the sector and some mills are buying smaller ones to increase their scale. The future of Turkey's textile industry will depend on how well Turkish mills adjust to post-quota market conditions. If Turkey can maintain a strong presence in the textile export market, mill use should climb to 7.11 million bales in 2006.

### **Brazil**

The latest USDA estimate for Brazilian mill use is 4.00 million bales, down 200 thousand bales from crop year 2004 (Exhibit 122). The growth in Brazil's textile exports has slowed due to competition from China and the strengthening of Brazil's currency relative to the U.S. dollar.

High prices for polyester, which is derived from petroleum, have supported cotton demand, but further declines are expected in the face of increased competition from China. The recent pressure coming from China's textile exports has some textile industry officials calling for the use of safeguards.

For 2006, Brazilian cotton consumption is forecasts to fall to 3.91 million bales.

### **Mexico**

Mexico's mill use is sustained by the North American Free Trade Agreement. The textile industry continues to purchase the majority of their cotton needs from the United States. For 2005, Mexico is projected to consume 2.00 million bales of cotton (Exhibit 123). This is down 100,000 bales from 2004. However, mill consumption in Mexico should fall slightly in 2006 to 1.94 million bales. Since the U.S. retail market is the primary destination of Mexico's textile exports, the surge of imported textile products from Asia into the U.S. market is having a negative impact on Mexico's spinning and processing sectors.

### **Indonesia**

Indonesian mill use increased in 2005 to 2.30 million bales (Exhibit 124). Like most business sectors in Indonesia, which are struggling in the uncertain business

climate, many textile companies faced “ups and downs” during the past year. In general, the past year was not a good year, particularly for the least productive operators in the Indonesian textile sector. Some mills had to shut down their operations and some had to significantly reduce their capacity utilization. With a total capacity of 7.5 million spindles, Indonesian textile mills are now running at 80.0% of capacity. Competition among textile exporting nations, especially with China, and also smuggling of imported textile products, has hurt the industry.

Furthermore, the weakening of Indonesian consumers’ purchasing power has limited domestic demand growth. Nevertheless, most mills have been successful in finding ways to survive and to compete, especially export-oriented companies. Some mills changed their strategy from operating in all sectors (integrated spinners/weavers/garment fabricators), to focusing on one or two sectors and outsourcing their other needs. Some are concentrating in high-end markets and looking for new markets abroad instead of attempting to compete on a price basis with China, India and Pakistan. Spinners continue to keep inventory at a minimum level; in general, they have one or two months of cotton in stock. Most mills are currently not able to plan much in advance for their cotton use and purchases.

If Indonesia’s political and economic situation can remain somewhat stable, mill use should remain relatively stable at 2.32 million bales for the 2006 crop year.

### ***Consumption Outlook***

Solid economic conditions should continue to stimulate increases in world consumption. Assuming global

consumption of 116.74 million bales for the 2005 marketing year, further growth in 2006 would push world mill use up to 119.54 million bales (Exhibit 125). China is expected to continue to be the primary growth region and will expand their share of world cotton consumption.

### **World Trade**

In 2005, world trade in raw cotton grew slightly to an estimated 35.0% of expected world mill use (Exhibit 126).

### ***Trade Climate***

Current estimates put 2005 crop year raw cotton exports at 41.44 million bales (Exhibit 127), up 6.74 million bales from the previous crop year. With another large world crop, availability of all grades of cotton should not be a major issue.

### **United States**

The growth in foreign mill use and the reduced foreign crop has increased the gap between production and consumption outside of the U.S., making the export environment more favorable. USDA estimates U.S. exports of raw cotton at 16.40 million bales for the 2005 marketing year (Exhibit 128).

The reliance of the U.S. cotton market on exports has increased dramatically over the past decade as the domestic textile industry has contracted. The shift to exports became evident in 2001 as contributions of exports exceeded domestic mill use. While exports contributed about 68.0% of total use in the 2004 marketing year, USDA is estimating that exports will constitute roughly 73.0% of total use for the 2005 crop.

Customers for U.S. exports have changed some in recent years. While Mexico



remains one of the top customers, China, Turkey, and Indonesia have emerged as significant buyers (Exhibit 129).

### **Uzbekistan**

After several years of decline, Uzbekistan's cotton exports have recovered in each of the past two years (Exhibit 130). In fact, 2003 export estimates marked the lowest export level during the past decade, a direct result of low production. However, exports rebounded by 1.35 million bales in 2004, and for 2005, exports are estimated at 4.45 million bales, up 500,000 bales from 2004.

The Government of Uzbekistan continues control of both state-order cotton and over-quota free cotton through the trading companies associated with the Agency for Foreign Economic Relations (AFER). AFER coordinates sales, export prices and shipments of all cotton. Russia remains the traditional buyer, but additional attention is being given to markets in Asia. For 2006, Uzbekistan is projected to export 4.49 million bales.

### **China**

In 1998 through 2000, China was a net exporter of cotton in an attempt to reduce burdensome stock levels (Exhibit 131). However, their trade position changed to one of a net importer in 2001. With the smaller crop in 2005, China's imports surged as mill consumption continued to grow.

Imports for 2005 are forecast at 16.50 million bales, up 10.11 million bales from the previous year. Origins of Chinese imports have remained relatively unchanged for the past few years, with the United States and Uzbekistan as the top suppliers. With purchases of 5

million bales in the first five months of this marketing year, China is on pace to be the largest consumer of U.S. cotton. It is likely that the U.S. will sell China seven to eight million bales of the 2005 crop.

However, there are still issues with access to China's market. A continuing concern is their allocation of a portion of their quota based on the condition of export of their textile product. In addition, China imposes a variable levy on all imports above the initial quota of 4.00 million bales, in effect raising the cotton price relative to manmade fibers. Based on this variable levy, over-quota cotton for 2006 will be charged between 5.0% and 40.0% duty rate according to CIF value.

With continued demand from their textile sector, China should continue to be a net importer for the foreseeable future. Imports are projected at 16.67 million bales in 2006.

### **Australia**

Australia's commitment to export cotton is formidable. Australia exports virtually all of their domestic production (Exhibit 132). The bulk of exports are destined for Asian markets. Recently, the primary cotton markets for Australia have been Indonesia, China, South Korea, Thailand, Japan and Pakistan. Vietnam is a country that Australia views as an emerging market for Australian cotton. Relatively small quantities of Australian cotton are exported to Europe.

In 2005, exports rebounded to 2.95 million bales. If production increases in 2006, exports should remain steady at 2.91 million bales.

### **West Africa**

West Africa has increased cotton production in recent years in the hopes of building its export business. USDA estimates that the region's exports will be 4.72 million bales in 2005 (Exhibit 133). Cotton exports from this region will increase slightly to 4.73 million bales in 2006 provided weather does not adversely affect the region's production.

### **India**

India's growth in production has allowed them to emerge as an exporter of raw fiber (Exhibit 134). With a crop in excess of 18.50 million bales in 2005, India will be a net exporter of 1.00 million bales.

Despite comfortable domestic supplies, India will continue to augment its requirements for ELS and long-staple quality cotton through imports. Most importing mills are willing to pay a premium of 5 to 8% for foreign cotton due to its higher quality (less trash, uniform lots, higher ginning outturn), better credit terms (3 to 6 months versus 15 to 30 days for local cotton), and a staggered delivery over longer periods at the contracted price. Indian mills importing U.S. Pima and U.S. upland cotton have been appreciative of its quality and consistency compared to cottons from other origins. Trade servicing missions by Cotton Council International and SUPIMA have led to better appreciation for U.S. cotton by Indian mills, with the result that the United States has emerged as the leading supplier of cotton to India over the past few years. However, in order to counter Egypt, West Africa, the Commonwealth of Independent States (CIS) countries and Australia, all of whom enjoy freight advantages and shorter delivery periods due to their geographic proximity to

India, the U.S. cotton prices must remain competitive.

In 2006, imports are expected to remain stable at 800 thousand bales while exports are estimated to increase 410,000 bales to 2.27 million bales. This leaves India as a net exporter of 1.47 million bales.

### **Pakistan**

Pakistan is forecast to be a net cotton importer during 2005 (Exhibit 135). The latest USDA estimate for Pakistani imports is 1.70 million bales.

In a few short years, Pakistan has emerged as a major importer of ELS cotton, particularly U.S. Pima. Progressive firms are focused on producing higher-count yarns and better quality fabrics for the export market and for specialized products demanded in the domestic market. As a result, Pakistani textile firms will continue to turn to quality inputs such as U.S. Pima cotton. For 2006, Pakistani imports should grow to 2.33 million bales.

### **Trade Outlook**

World cotton trade continues to depend on the potential for increasing world demand for cotton textile products. We are seeing a transfer of textile trade from developed countries to developing countries. Assuming China remains a large net importer, world cotton trade is forecast at 41.25 million bales (Exhibit 136). Once again, China will be the key in 2006-2007.

For 2006, U.S. raw cotton exports are expected to fall from 2005 levels but still remain strong relative to historical levels. In part, the decline can be attributed to the loss of the Step 2 program. With

world trade virtually unchanged from 2005 and exports down, U.S. market share is expected to fall slightly, down to 38.4% (Exhibit 137).

### **World Stocks**

World stocks on July 31, 2006 are expected to total 50.95 million bales (Exhibit 138). This will be 660,000 bales lower than year-earlier levels. Cotton stocks in the U.S. are projected to rise to

6.90 million bales by the end of the current marketing year. This is 1.36 million bales more than 2004 crop levels.

For the 2006 crop, normal weather and average yields should produce a world crop smaller than expected consumption. Under this scenario, world stocks could fall by up to 2.00 million bales by July 2007. Again, this outcome largely depends on weather.

## Conclusion

Both the current market situation and the outlook for 2006 are shaped by a number of uncertainties and challenges. While the following discussion is not exhaustive, it attempts to highlight a few key issues that will impact the economic health of all segments of the U.S. cotton industry.

During 2005, the cotton industry was confronted by sharply higher energy costs. In particular, prices of diesel fuel and natural gas increased substantially in the wake of Hurricane Katrina. Although prices have retreated from peak levels, current prices are still well above year-ago levels. Based on current projections for energy prices, the average costs of producing the 2006 crop will exceed that of 2005. Some estimates suggest that the costs could be 3 to 5 cents per pound above last year, and as much as 7 cents above 2004 levels.

U.S. farm programs, and in particular, the U.S. cotton program, will continue to be a focal point of policy debates during 2006. Within the World Trade Organization (WTO), Brazil could revive compliance and arbitration proceedings related to the case in which a panel concluded that various parts of the U.S. cotton program violated U.S. international trade commitments. In addition, the WTO has outlined an aggressive timetable for negotiations under the Doha Round. The ministerial text approved in Hong Kong further singles out cotton for treatment separate from agriculture, in general.

On the domestic front, debate on the next farm bill began as USDA conducted listening sessions in approximately 40 states during 2005. Debate is expected to

intensify in 2006 with the possibility of Congressional hearings later in the year. Congress is also completing work on a Budget Reconciliation package that terminates cotton's Step 2 program beginning August 1, 2006.

While possible policy changes stemming from the current debate would not take effect until after the timeframe of this outlook, the current uncertainty surrounding U.S. farm policy only adds to the risk associated with making the long-term investments necessary to remain competitive. The obvious short-term exception to changes in U.S. policy is the pending loss of Step 2 at the conclusion of the 2005/06 marketing year. The Step 2 provision has served the industry well since its inception in 1991 by enhancing the competitiveness of U.S. cotton and increasing overall offtake. However, as part of the pending reconciliation package and in response to the findings in the Brazil case, Step 2 is assumed to not be in effect for the 2006 crop. The loss of the program only increases the challenge of remaining competitive in the world cotton market.

We are well aware of the recent shift in the demand base of U.S. cotton. In 1997, the U.S. textile industry consumed 11.35 million bales, or 60.0% of the cotton crop. In that same year, exports stood at 7.50 million bales. Since that time, the roles have more than reversed themselves. For the current marketing year, we're on pace to export more than 16.0 million bales of raw fiber – roughly 70.0% of this year's crop – with mill use at approximately 6.0 million bales. Much of the decline in the U.S. textile industry is the direct result of

increased textile imports – primarily from Asia. Since 1995, imports of cotton textiles have roughly tripled, going from the equivalent of 8.4 million bales up to an estimated 22.0 million bales in 2005. Decomposing mill use, we see that 5.0 million bales of the yarn, thread and fabric produced by our textile industry are exported to other countries, primarily in this hemisphere, for further processing. That leaves only a small amount that is completely manufactured into a finished consumer product within the United States. Adding up fiber exports and textile exports suggests that more than 90.0% of the U.S. cotton crop enters export channels at some stage.

The economic outlook for the U.S. cotton industry is directly impacted by China. They are the largest cotton producer with about 26.2 million bales, and were as high as 29.0 million in 2004. They are the largest spinner at 44.5 million bales, and consequently, they have emerged as the largest importer with potential purchases of 16.5 million bales in the current marketing year. Also, China is on pace to be the largest consumer of U.S. cotton. Looking forward, the U.S. cotton industry's ability to export 70.0% of the crop as raw fiber will depend on significant cotton imports fueled by China's expanding textile industry. However, to protect the economic health of the U.S. textile industry, it is imperative that the products from China's textile industry are not unfairly dumped into the export market.

Globally, manmade fiber use totals 180.0 million bales. As we look at challenges facing the global cotton market, the ability to increase demand and regain market share relative to manmade fibers is paramount.

To briefly summarize the outlook for U.S. cotton, the NCC acreage survey pegged acreage at 14.44 million, up 1.7% from 2005. Increases in the Southeast and Mid-South offset declines in the West. Assuming average yields and abandonment, the U.S. crop is projected at 21.41 million bales, down from the 2005 record of 23.72 million bales (Exhibit 139).

The U.S. textile industry is expected to remain under pressure, but further losses in mill use should be mitigated by the current agreement limiting textile imports from China. For 2006/07, mill use is projected at 5.77 million bales, as compared to USDA's estimate of 6.00 million bales for 2005/06. As a result, export markets will continue to be the outlet for much of the U.S. cotton crop.

The loss of Step 2, coupled with a recovery in foreign cotton production, contributes to lower U.S. exports in 2006/07. Exports of 15.83 million bales are approximately 500 thousand bales below USDA's current 2004/05 estimate of 16.40 million bales.

Improved cotton prices relative to year-ago levels are expected to lead to additional acres planted to cotton on a global basis. Assuming normal weather conditions, the world crop is projected at 116.16 million bales in 2006 (Exhibit 140). The majority of the recovery in world production can be attributed to a 1.74 million-bale increase in China's crop. Larger crops are also forecast for India, Pakistan and Turkey.

For the 2005/06 marketing year, world cotton consumption is estimated at a record high of 116.74 million bales. Further growth is expected in 2006/07 as

overall economic performance remains positive. Fueled by growth in China, India and Pakistan, world mill use for 2006/07 is projected at 119.54 million bales. The three major spinners (China, India and Pakistan) are projected to account for 65% of total world mill use.

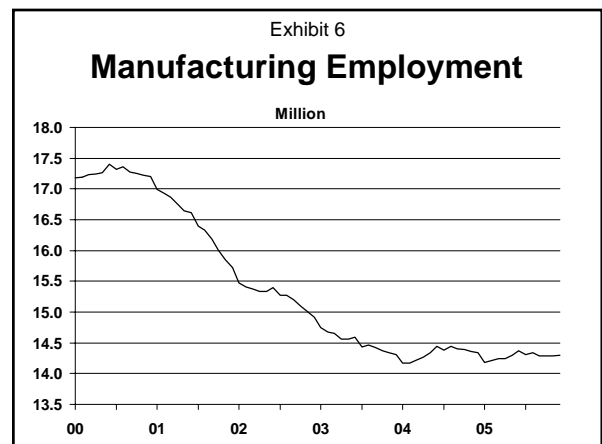
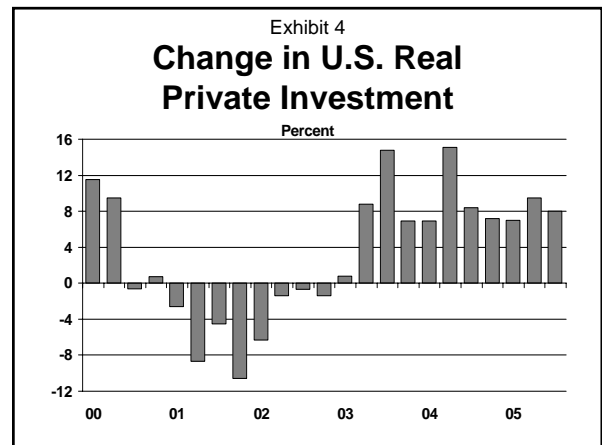
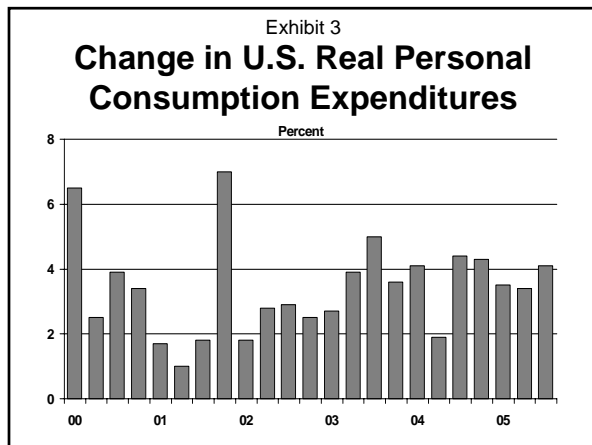
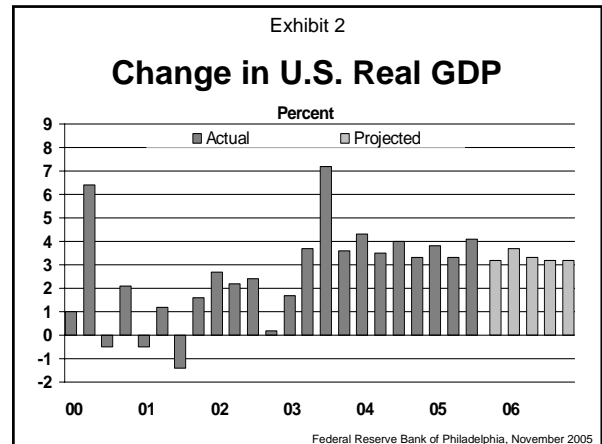
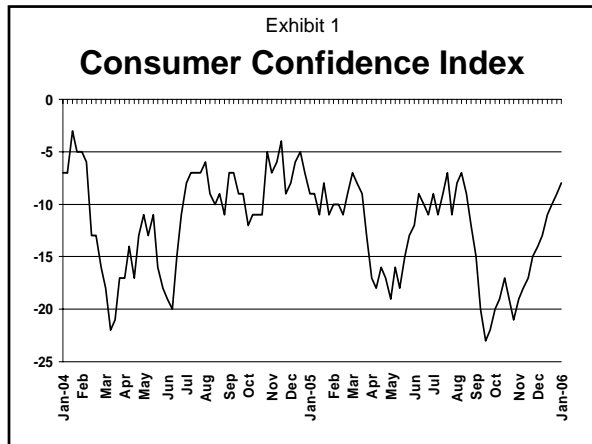
With projected consumption exceeding production, stock levels are forecast to fall during 2006/07, creating a balance sheet more supportive of prices. However, weather and yield anomalies will be a primary factor ultimately determining production and prices.

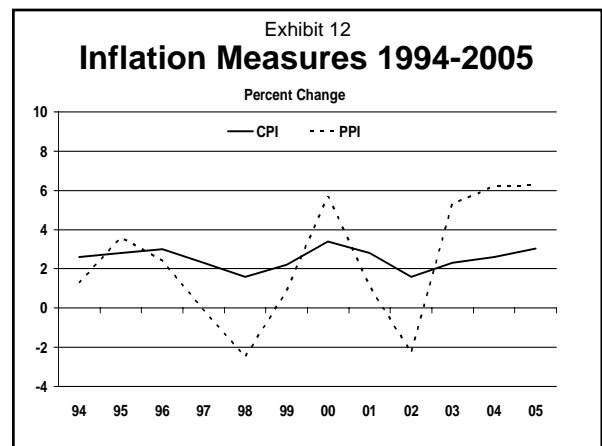
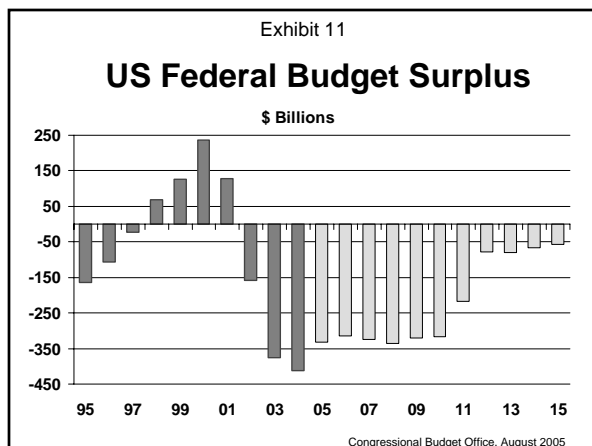
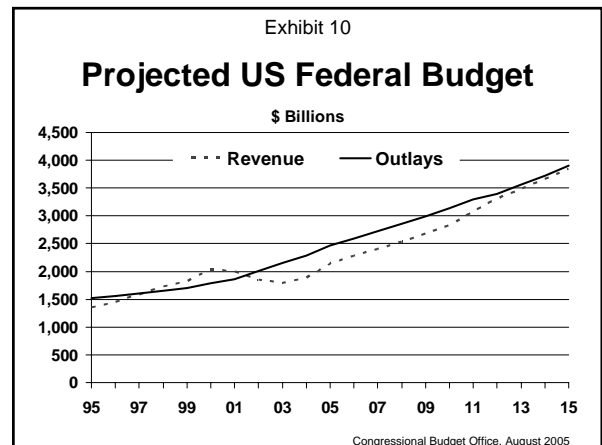
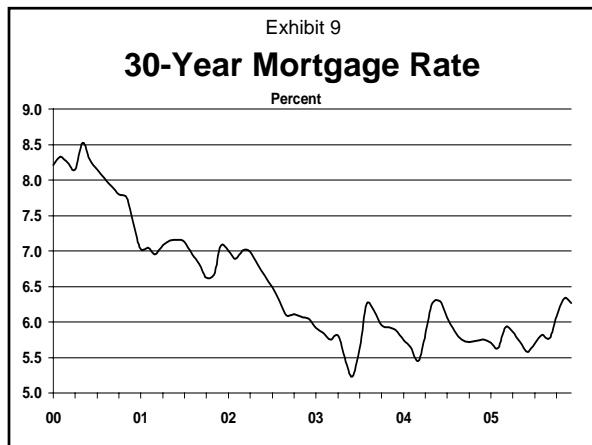
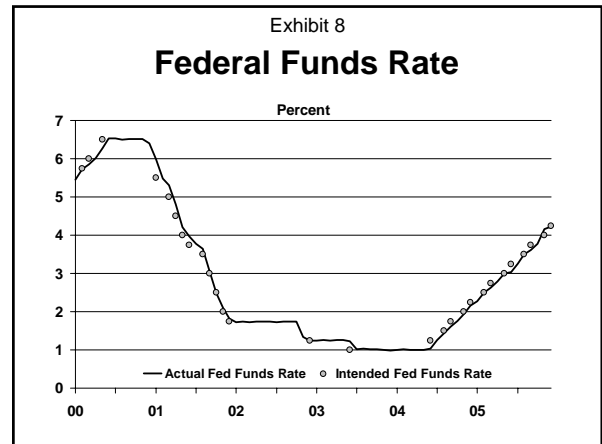
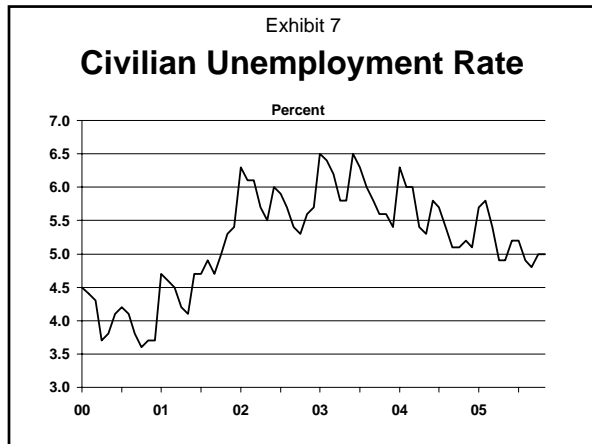
As overall demand for U.S. production relies more heavily on exports, year-to-year volatility can be expected to increase. The shift to the export market also has real implications for the storage and distribution systems. Instead of the majority of the crop moving to textile mills in the southeast in a somewhat orderly manner throughout the marketing year, much of the cotton now moves to ports such as Long Beach, Savannah, or Galveston. And, those shipments can come in bunches.

Ultimately, the U.S. cotton industry is competing in a very competitive world market. Success depends on a number of factors, some of which are external. A weak dollar, strong foreign economic growth and more open markets would be beneficial. Weather problems outside the U.S. wouldn't hurt either.

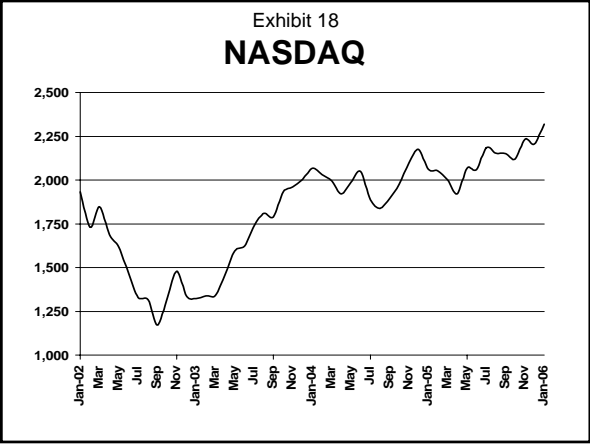
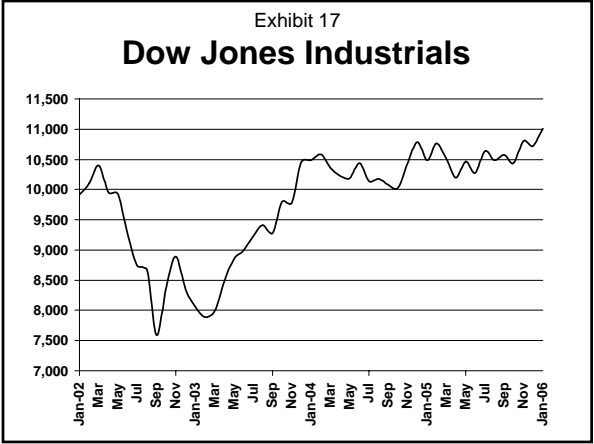
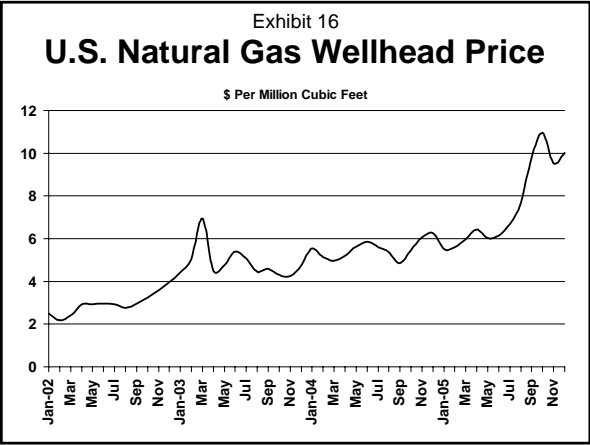
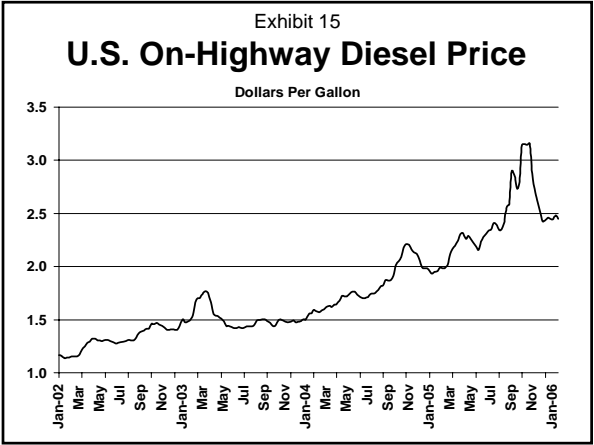
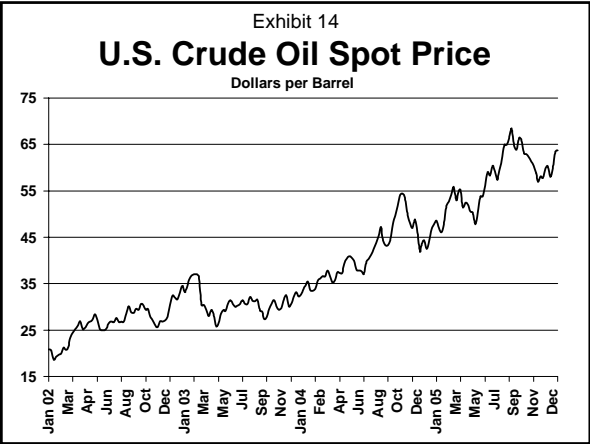
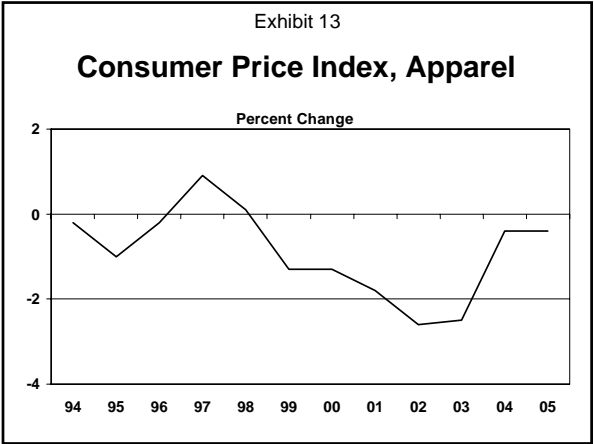
In terms of factors under the producer's control, minimizing cost is the key for commodity production. The alternative to minimizing costs in production is to differentiate our product from other products. That means not only continuing to improve quality, but maintaining that quality as the product moves from the grower to the final buyer. Advertising and promotion are essential. Cotton has seen the success and benefits of not only supplying a quality product, but promoting it as well, and these, along with maintaining an effective farm program, will be critical to future successes.

NCC economists will continue to provide accurate and in-depth economic analysis in an effort to help the industry thrive in this challenging environment.









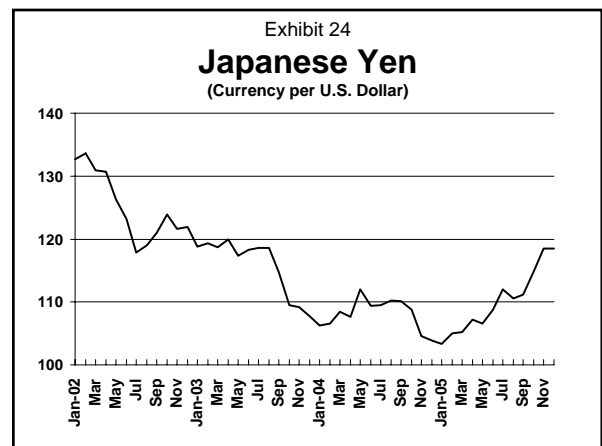
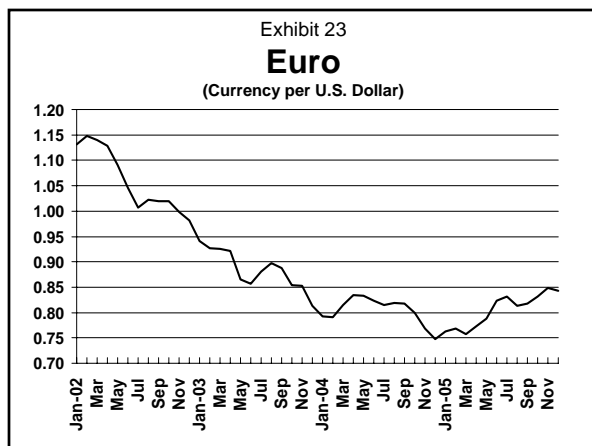
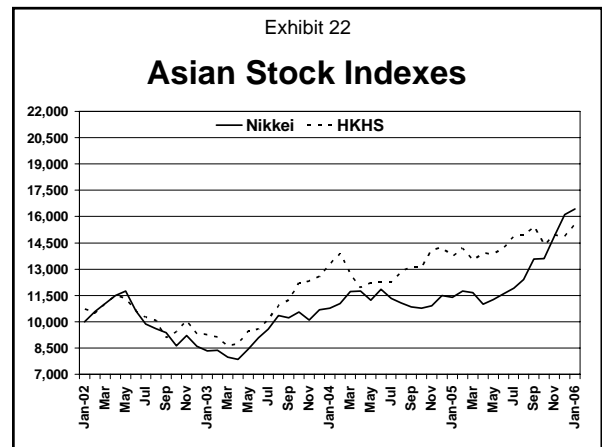
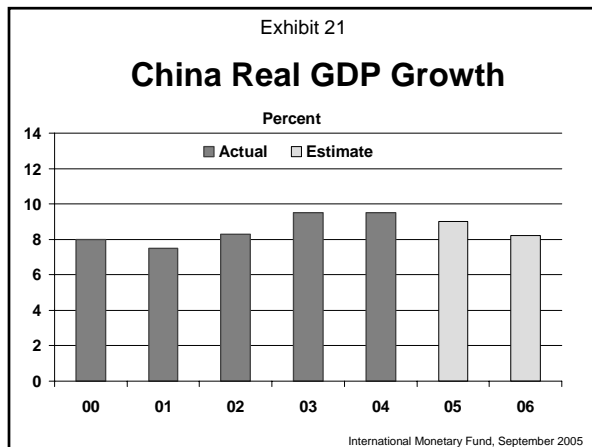
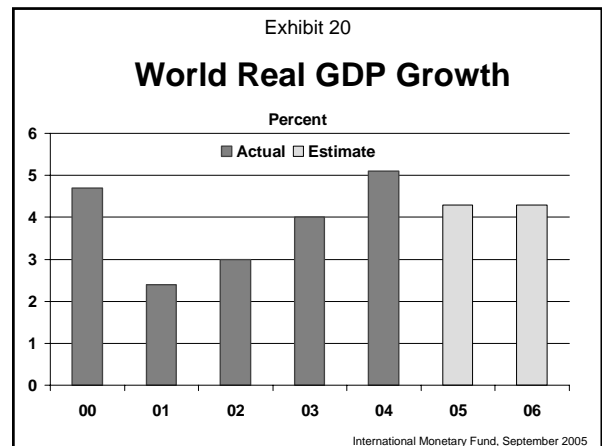
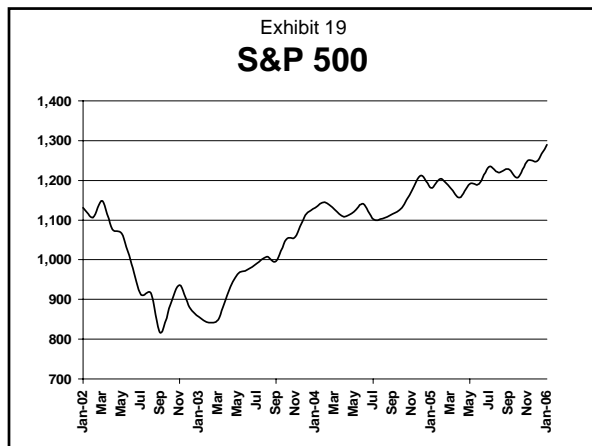


Exhibit 25  
**Brazilian Real**  
 (Currency per U.S. Dollar)

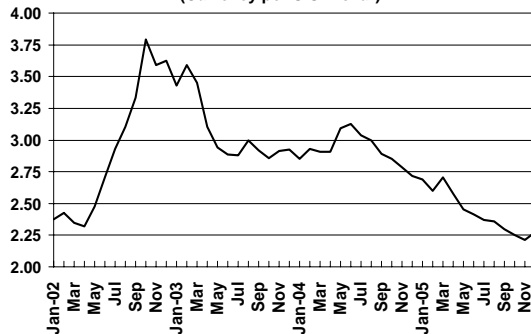


Exhibit 26  
**South Korean Won**  
 (Currency per U.S. Dollar)

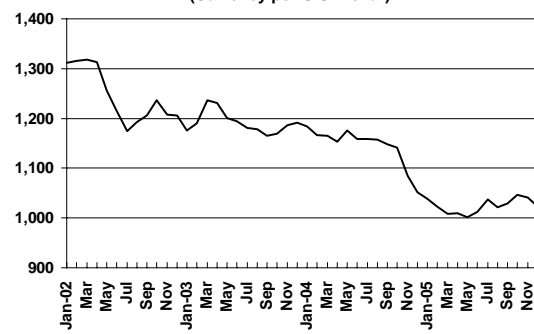


Exhibit 27  
**Indian Rupee**  
 (Currency per U.S. Dollar)

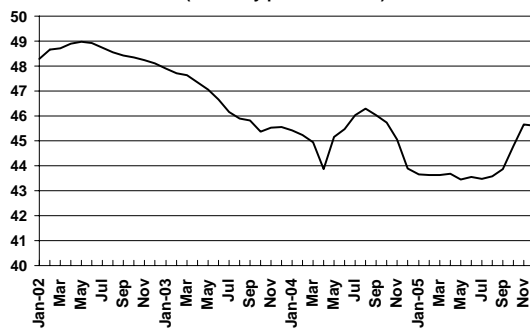


Exhibit 28  
**Indonesian Rupiah**  
 (Currency per U.S. Dollar)

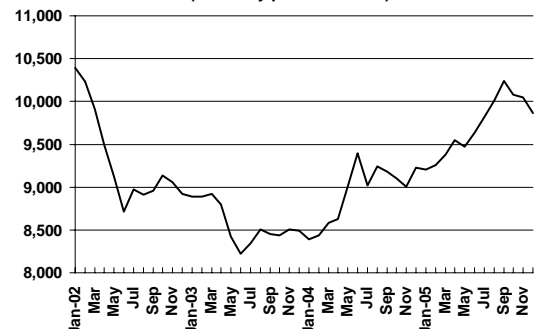


Exhibit 29  
**Pakistani Rupee**  
 (Currency per U.S. Dollar)

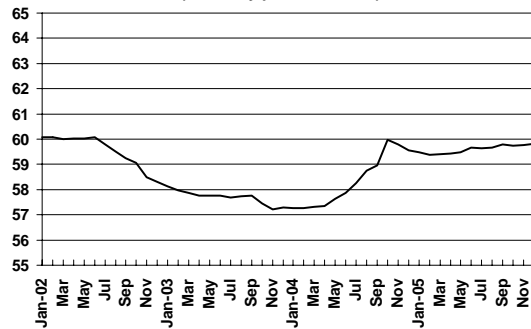
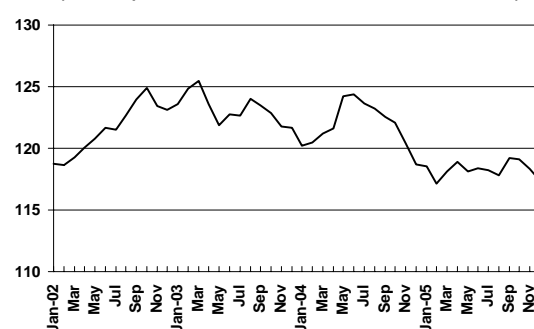
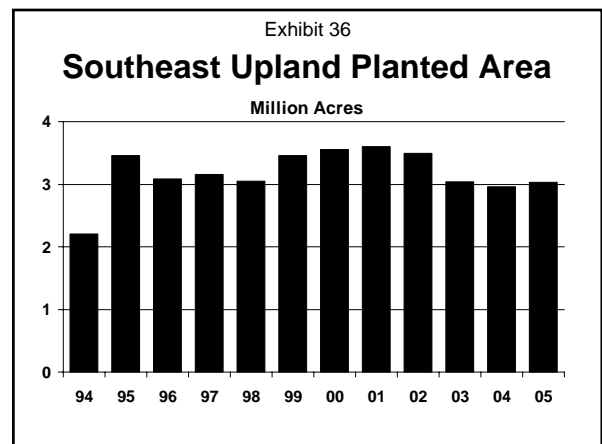
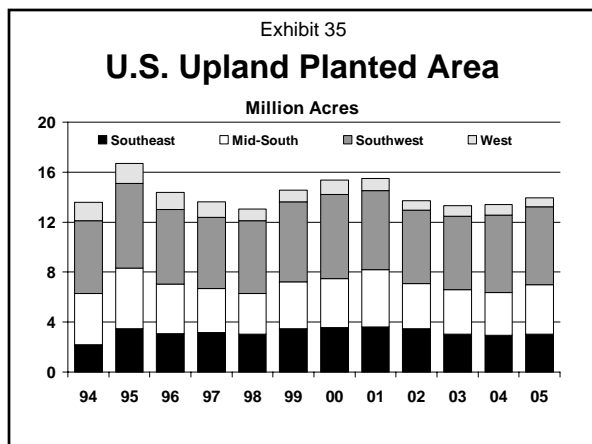
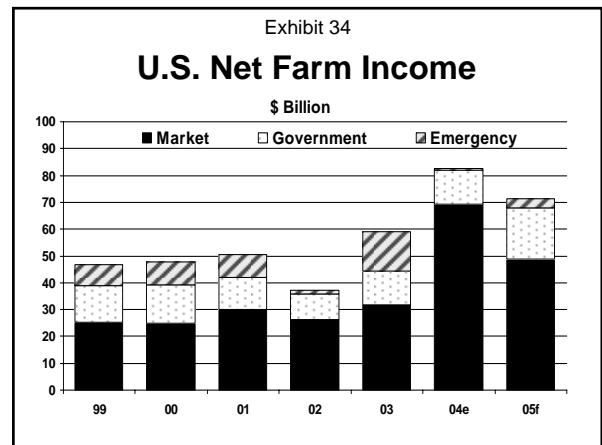
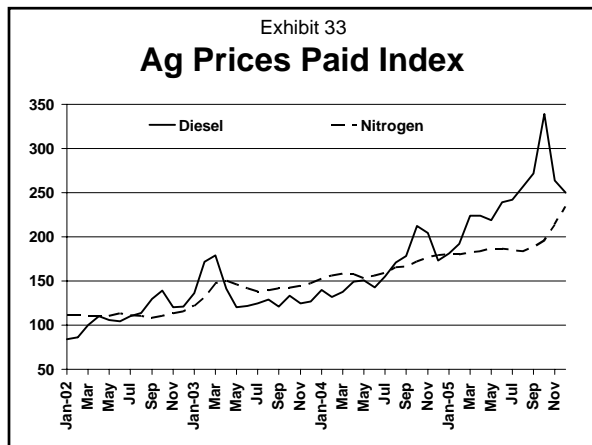
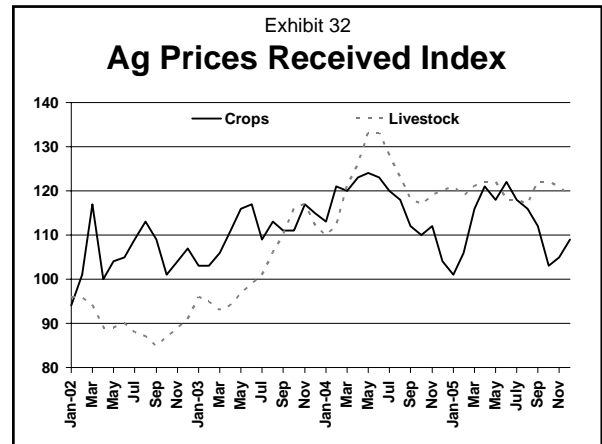
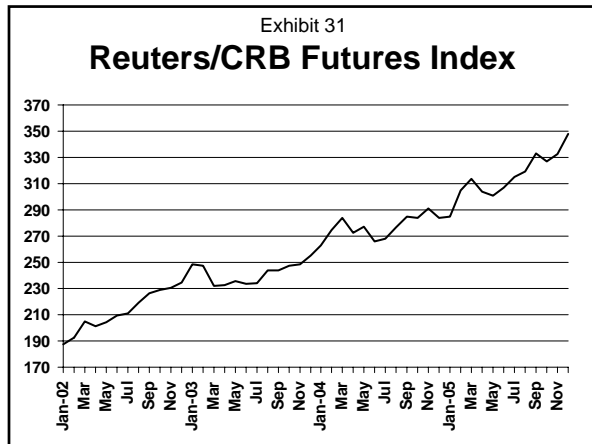


Exhibit 30  
**Real Exchange Rate Index**  
 (Other Important Trade Partners, Source - Federal Reserve)





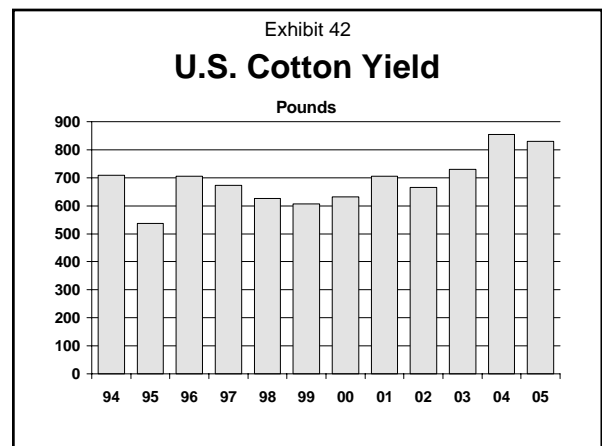
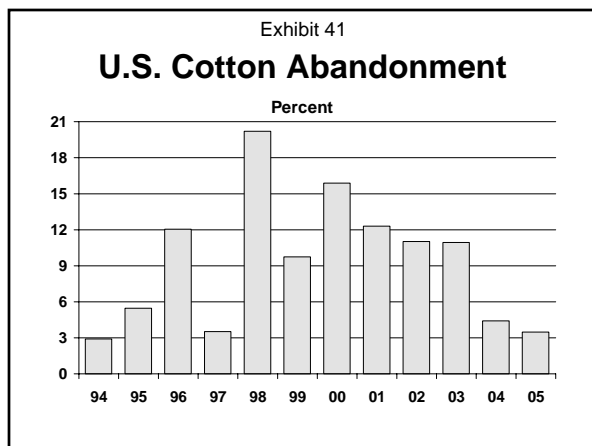
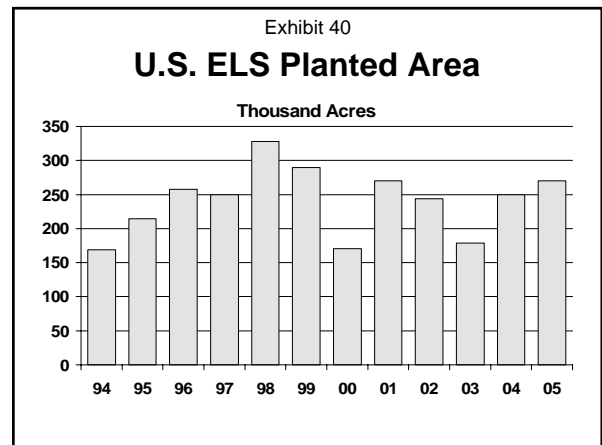
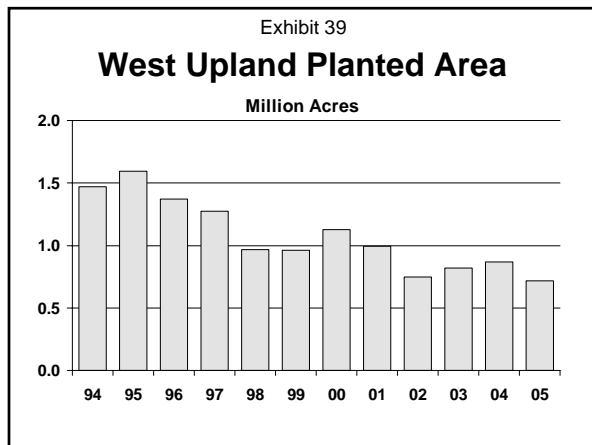
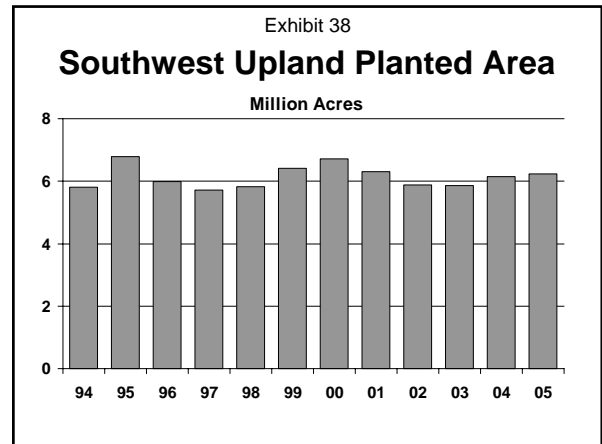
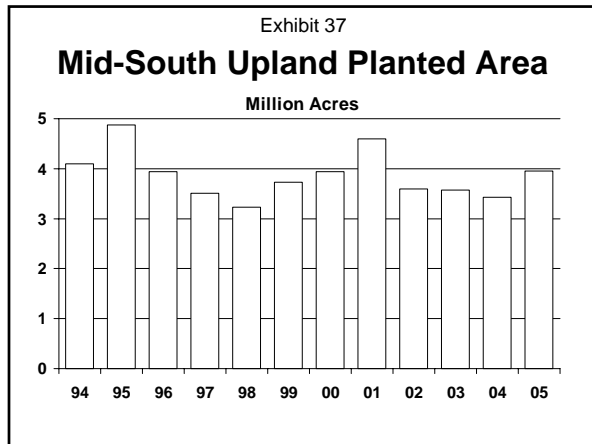


Exhibit 43

**Southeast Upland Yields**

Pounds per Harvested Acre

	2004	2005	5-Year Average
Alabama	724	749	646
Florida	601	728	547
Georgia	674	853	665
North Carolina	900	847	703
South Carolina	875	761	650
Virginia	956	965	749
<b>SOUTHEAST</b>	<b>760</b>	<b>824</b>	<b>670</b>

Exhibit 44

**Mid-South Upland Yields**

Pounds per Harvested Acre

	2004	2005	5-Year Average
Arkansas	1,114	1,011	886
Louisiana	867	896	724
Mississippi	1,024	864	811
Missouri	1,054	970	842
Tennessee	900	847	760
<b>MID-SOUTH</b>	<b>1,009</b>	<b>917</b>	<b>812</b>

Exhibit 45

**Southwest Upland Yields**

Pounds per Harvested Acre

	2004	2005	5-Year Average
Kansas	424	655	461
Oklahoma	727	730	589
Texas	694	716	532
<b>SOUTHWEST</b>	<b>692</b>	<b>716</b>	<b>533</b>

Exhibit 46

**West Upland Yields**

Pounds per Harvested Acre

	2004	2005	5-Year Average
Arizona	1,458	1,300	1,312
California	1,543	1,178	1,408
New Mexico	848	941	833
<b>WEST</b>	<b>1,467</b>	<b>1,200</b>	<b>1,345</b>

Exhibit 47

**ELS Yields**

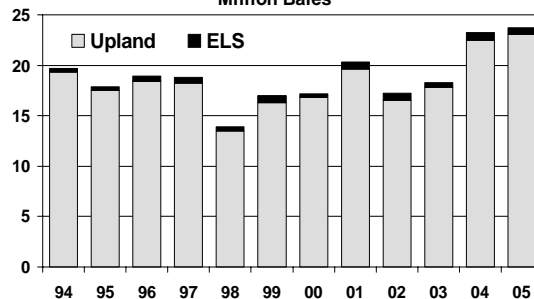
Pounds per Harvested Acre

	2004	2005	5-Year Average
Arizona	896	937	908
California	1,532	1,216	1,328
New Mexico	869	918	915
Texas	890	900	1,008
<b>U.S.</b>	<b>1,443</b>	<b>1,171</b>	<b>1,279</b>

Exhibit 48

**U.S. Cotton Production**

Million Bales



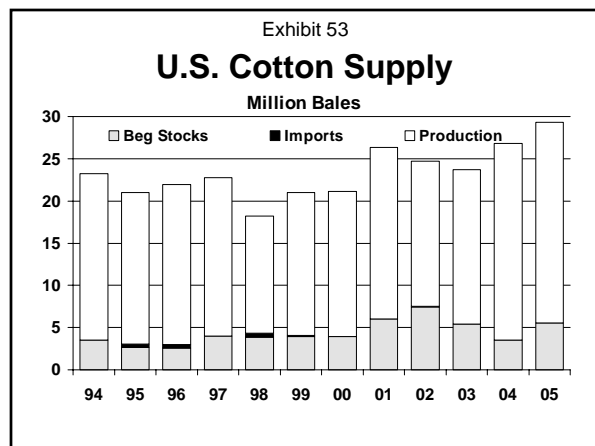
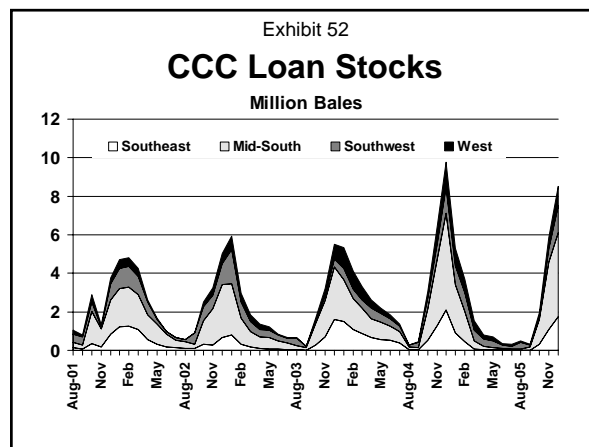
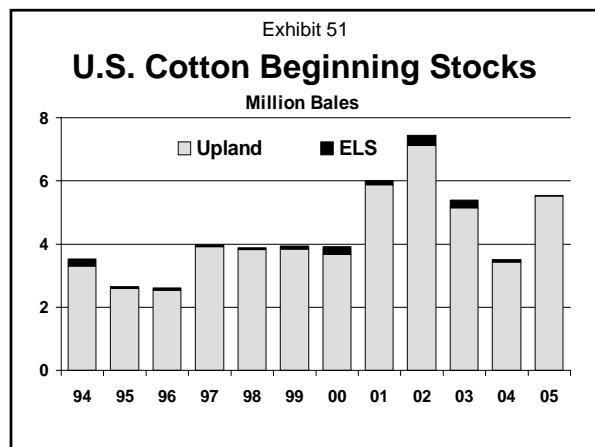
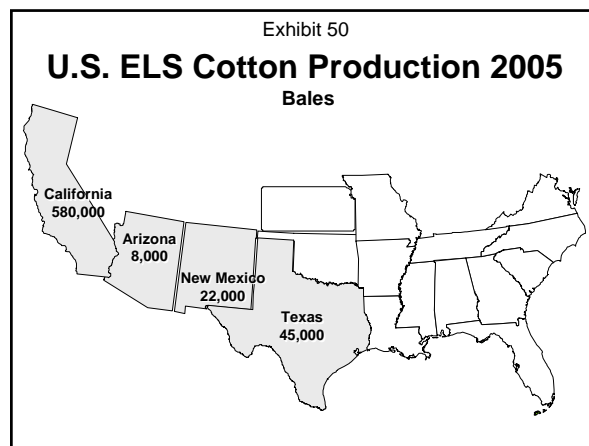
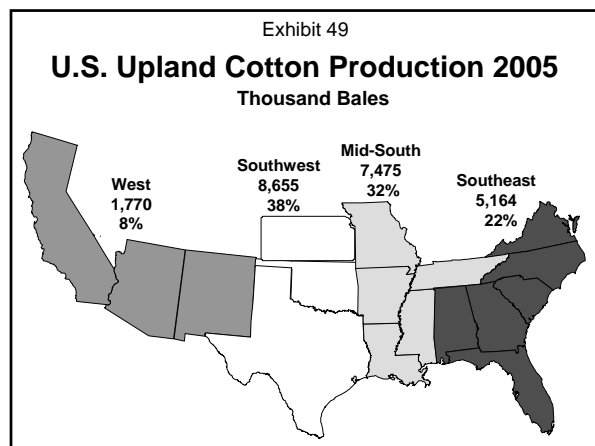


Exhibit 54

### 2005 Crop Staple and Strength

	<u>Staple</u>		<u>Strength</u>	
	<u>2005</u>	<u>5-Yr.</u>	<u>2005</u>	<u>5-Yr.</u>
Southeast	34.8	34.3	28.9	27.7
Mid-South	34.7	34.6	29.0	27.9
Southwest	34.7	33.8	29.1	28.5
West	36.7	36.2	32.2	30.0
<b>U.S.</b>	<b>34.9</b>	<b>34.7</b>	<b>29.2</b>	<b>28.6</b>

Exhibit 55

## 2005 Crop Color and Mike

	<u>%SLM+</u>		<u>Micronaire</u>	
	<u>2005</u>	<u>5-Yr.</u>	<u>2005</u>	<u>5-Yr.</u>
Southeast	78.4	83.8	44.8	44.1
Mid-South	88.1	77.0	45.7	46.3
Southwest	93.2	74.7	38.4	43.0
West	97.1	93.9	43.8	45.1
<b>U.S.</b>	<b>88.2</b>	<b>82.3</b>	<b>42.9</b>	<b>44.6</b>

Exhibit 56

## Spot 4134 Price

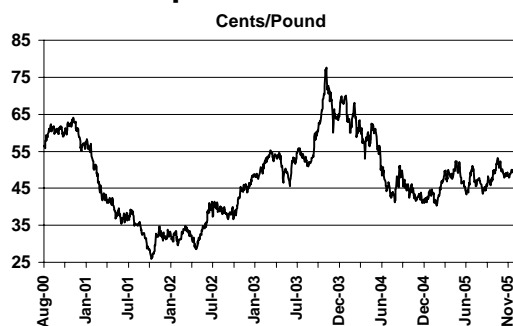


Exhibit 57

## "A" (NE) Index and Spot 4134

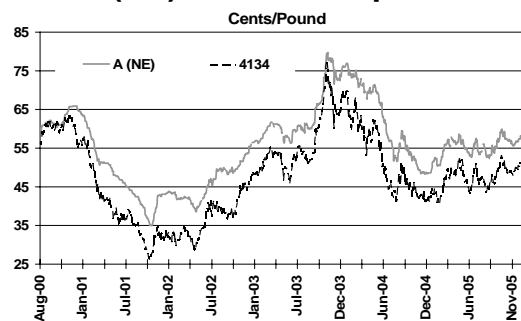


Exhibit 58

## ELS Cotton Prices

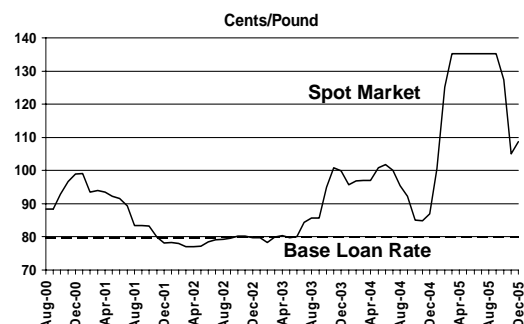


Exhibit 59

## U.S. Cottonseed Production

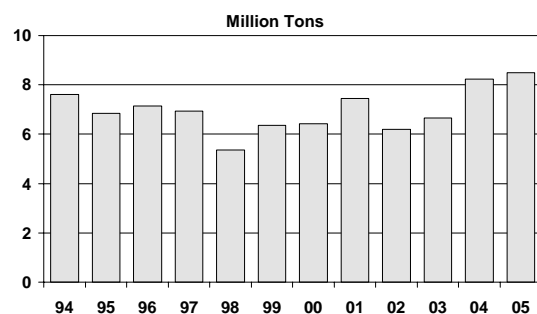
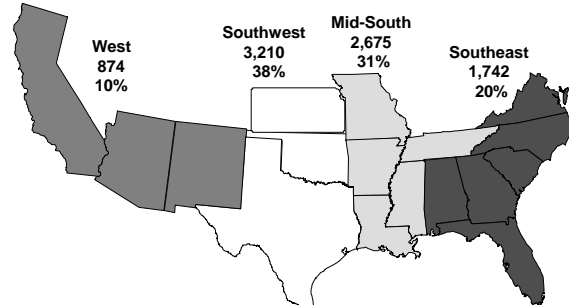


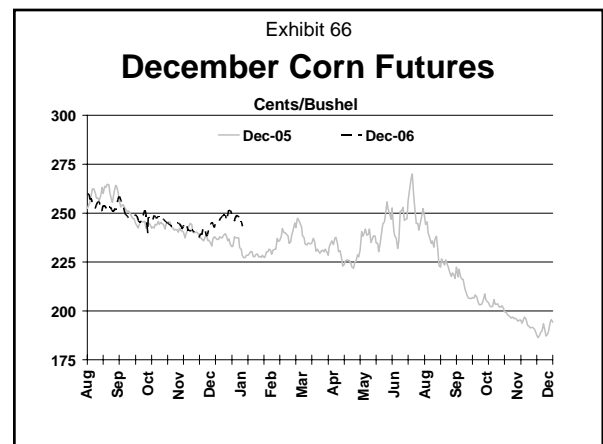
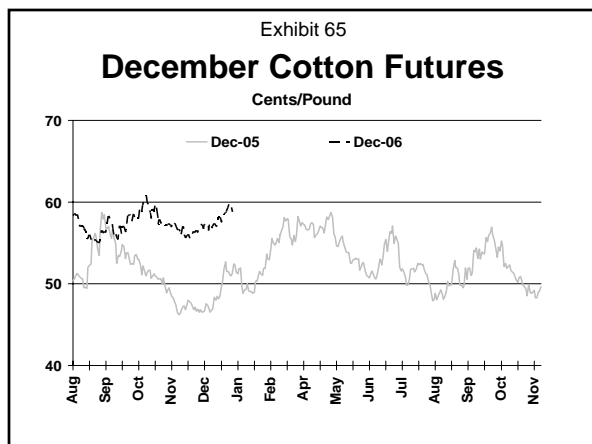
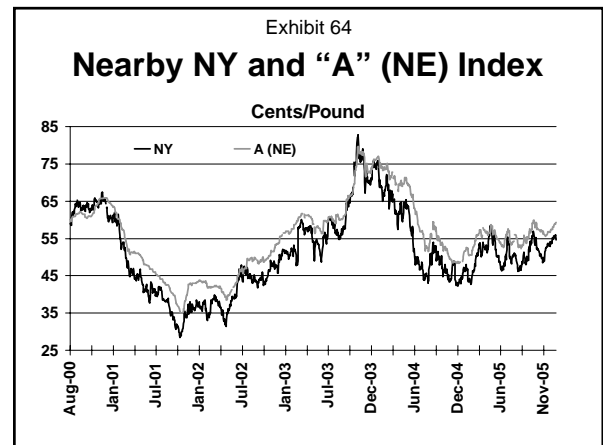
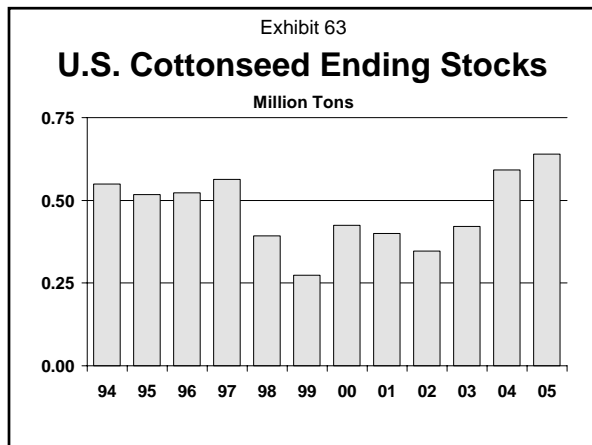
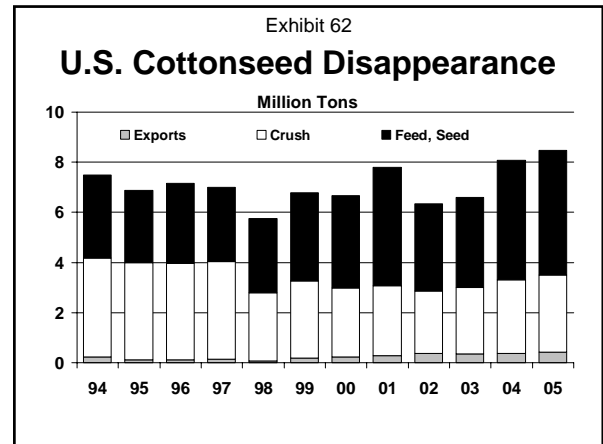
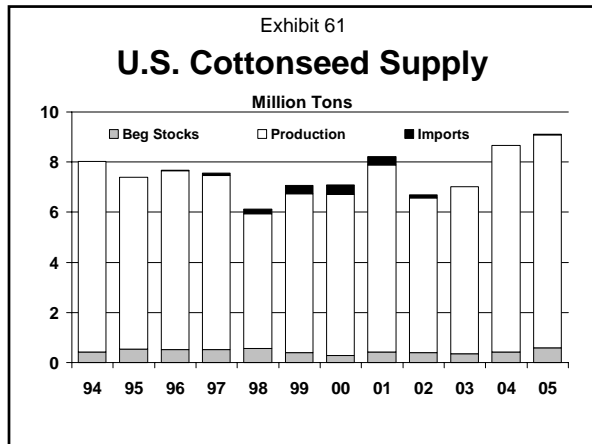
Exhibit 60

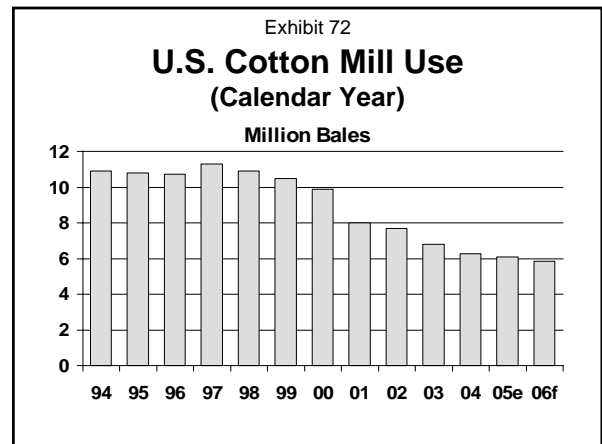
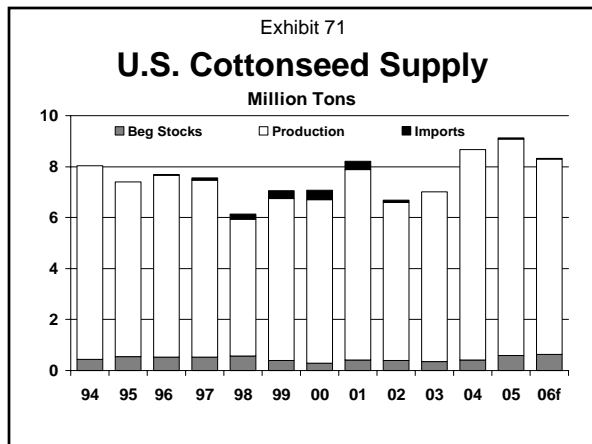
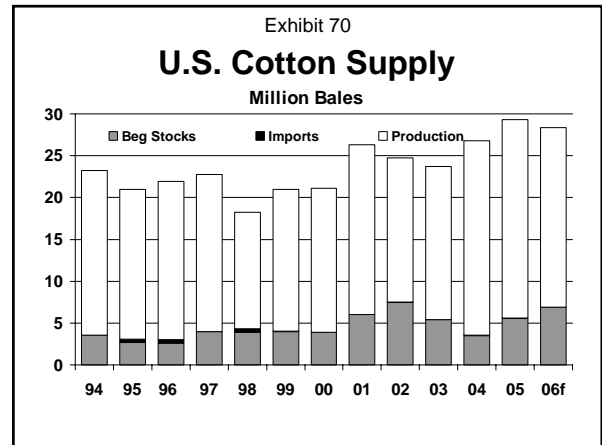
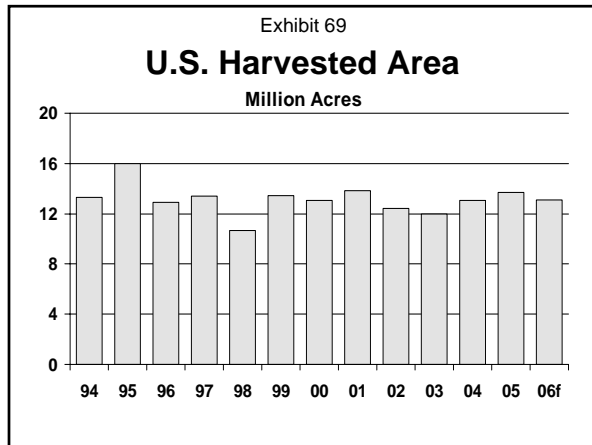
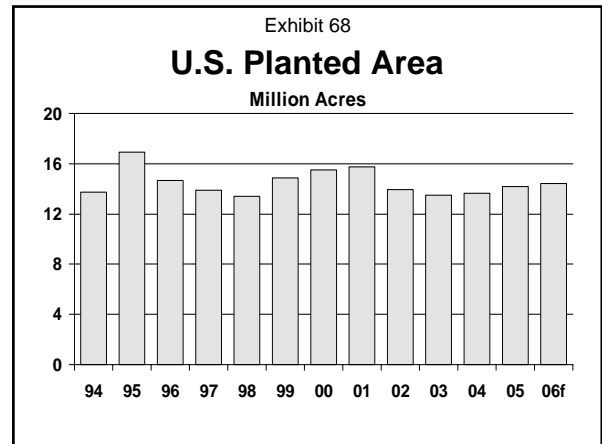
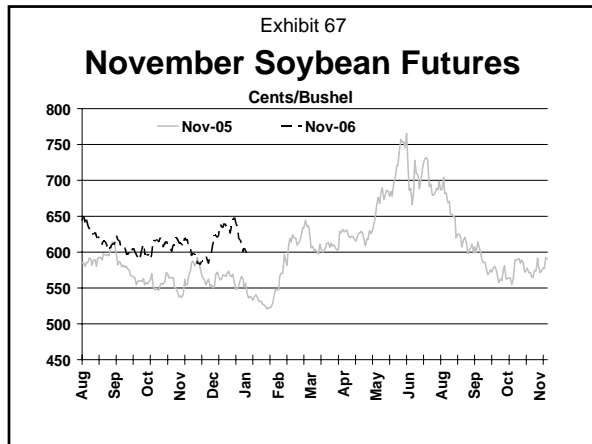
## U.S. Cottonseed Production 2005

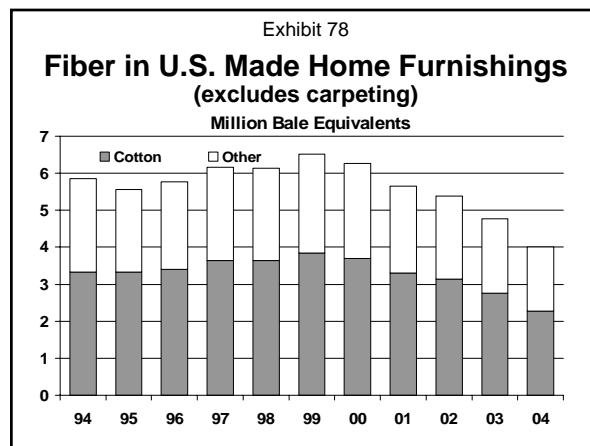
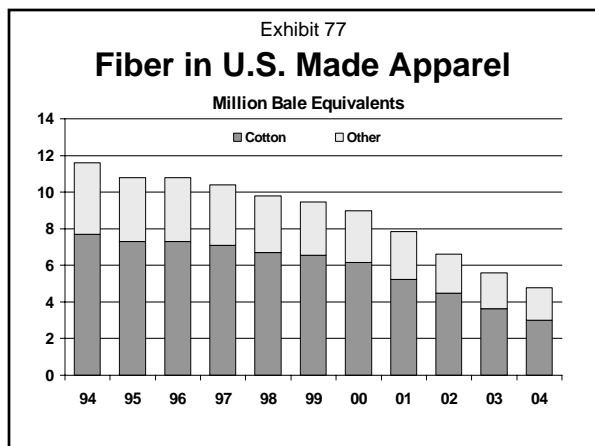
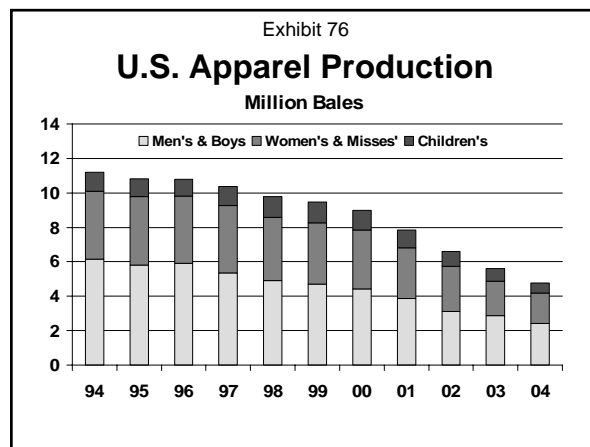
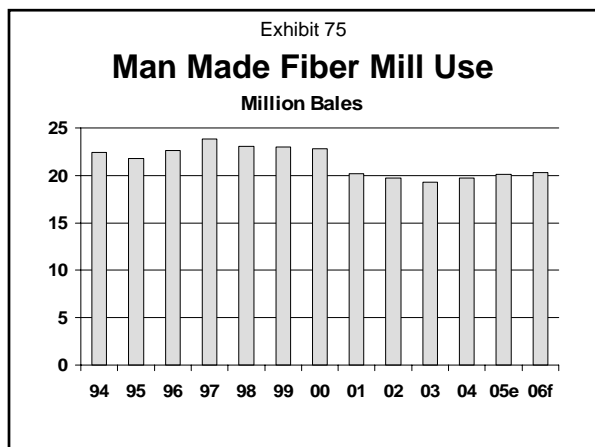
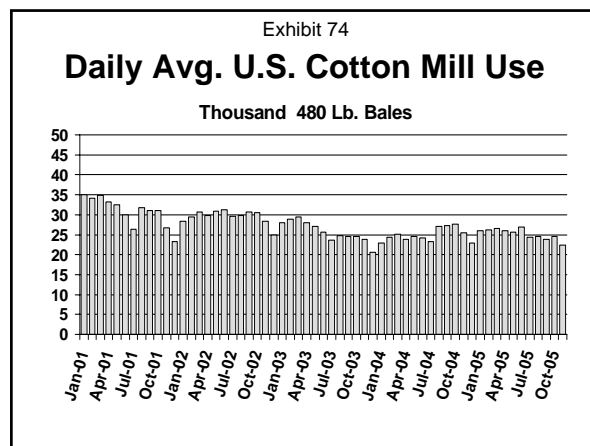
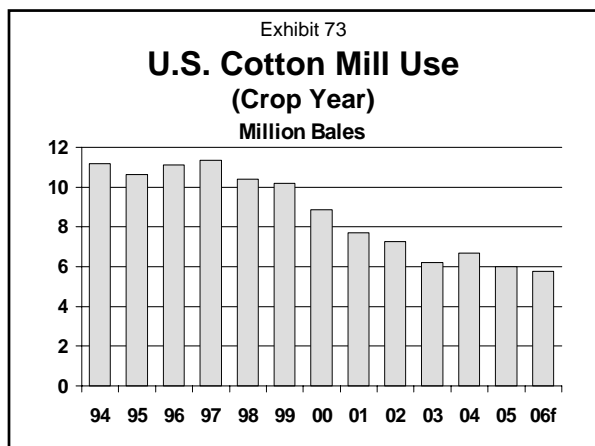
Thousand Tons

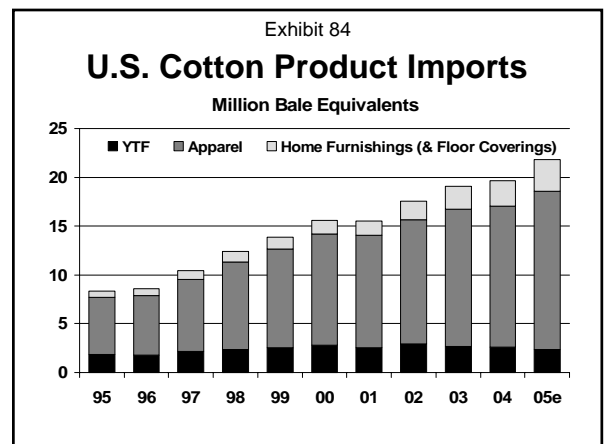
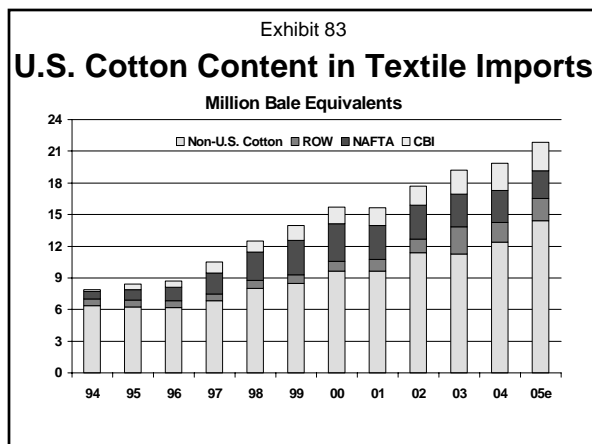
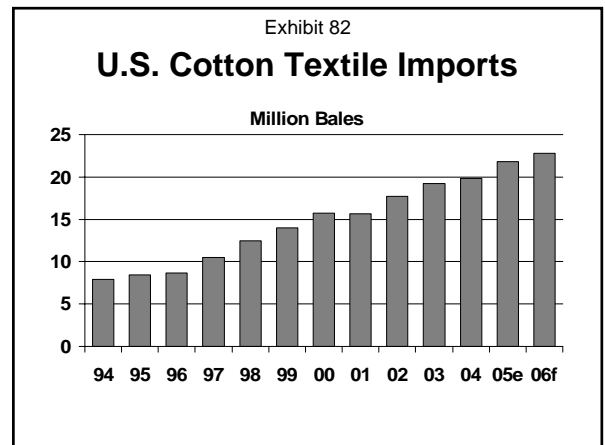
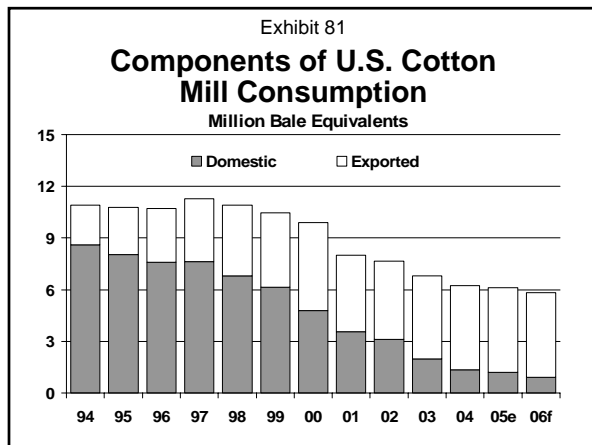
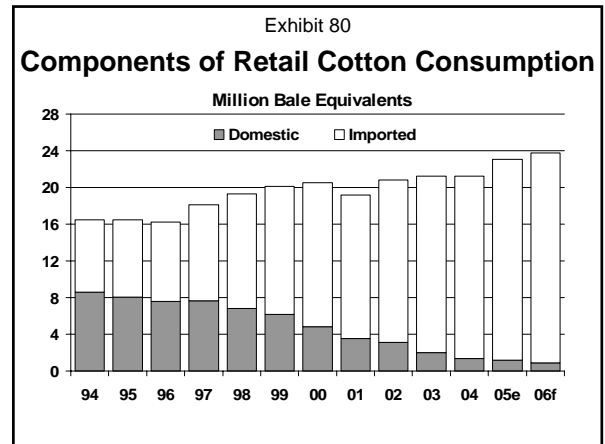
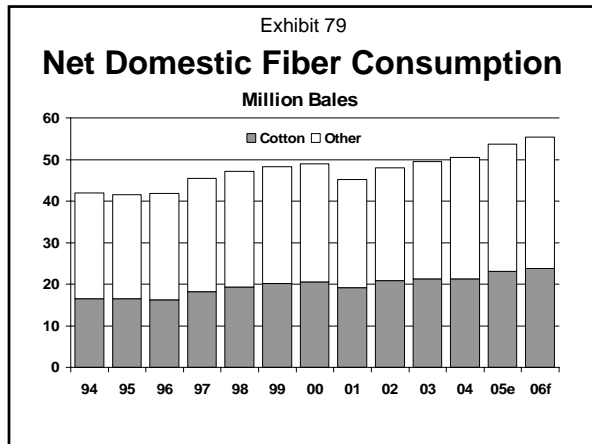


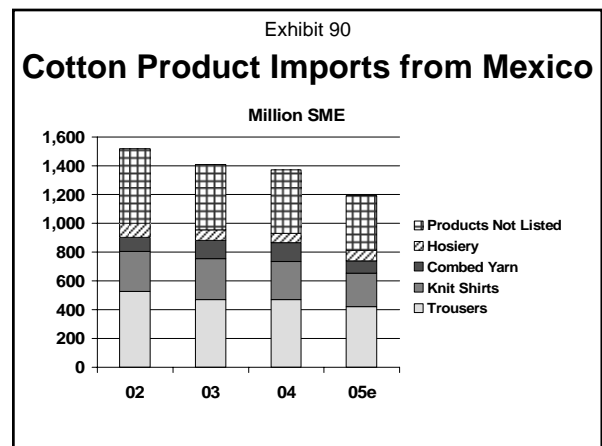
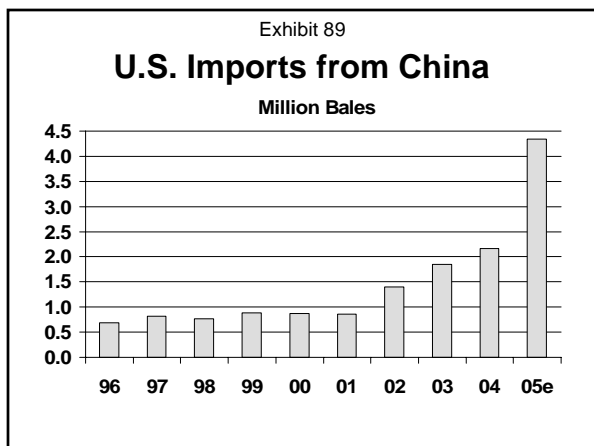
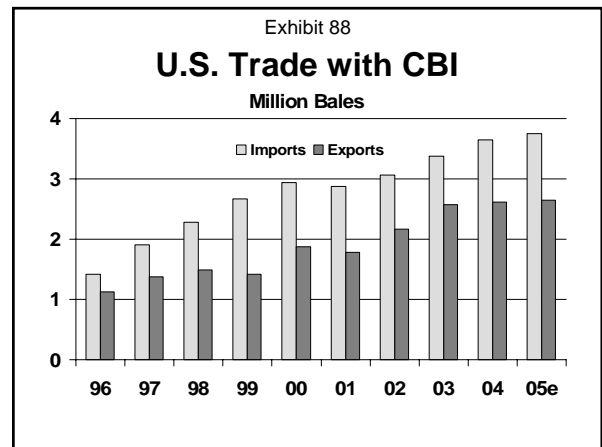
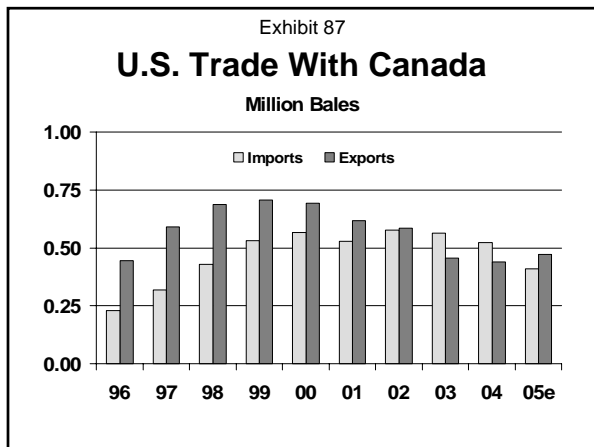
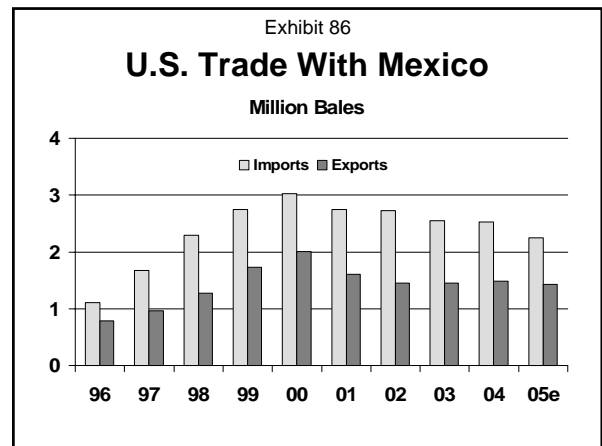
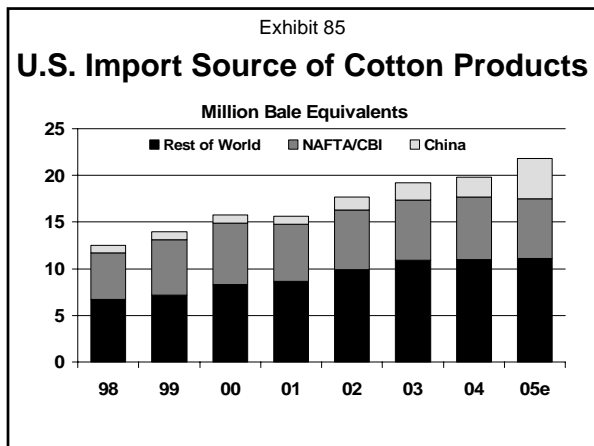


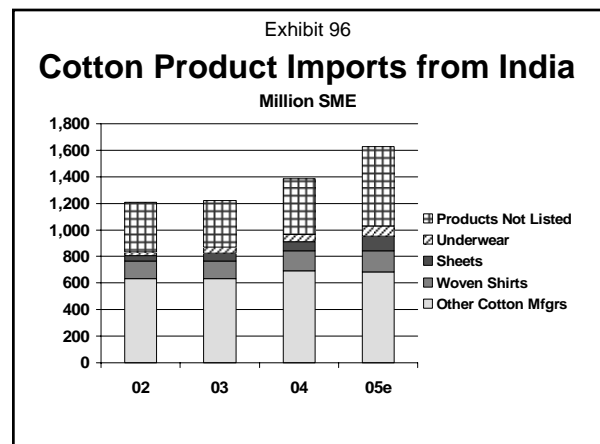
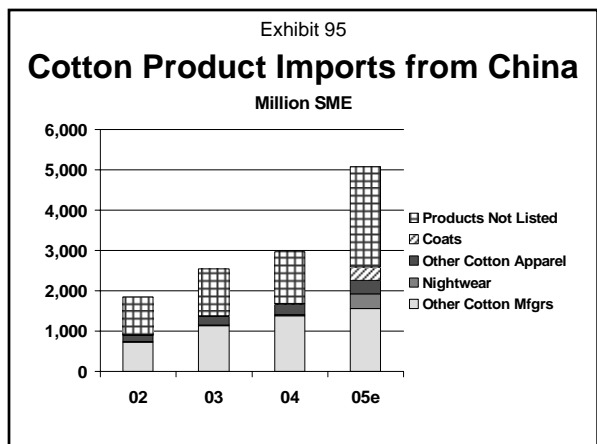
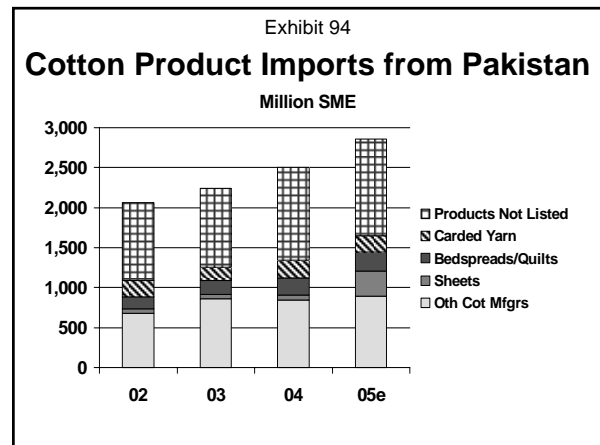
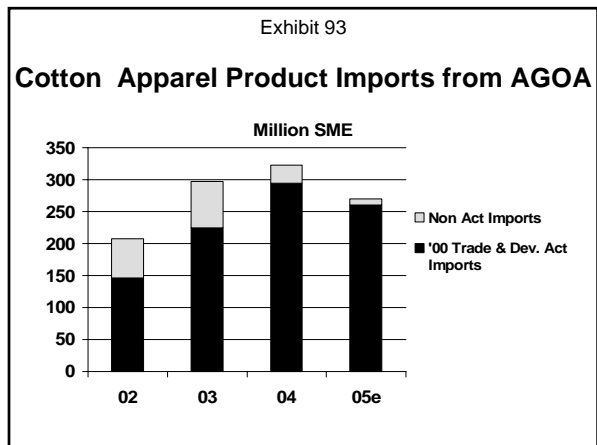
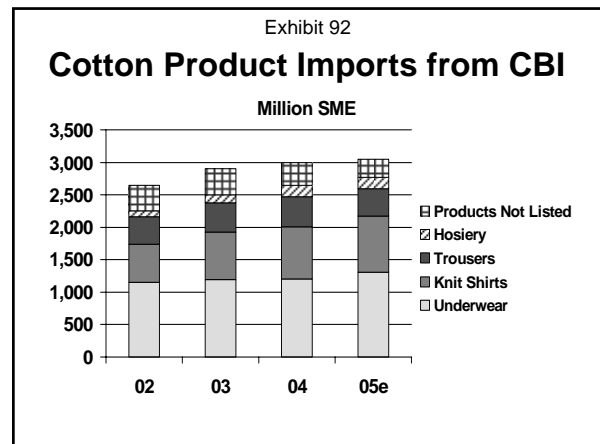
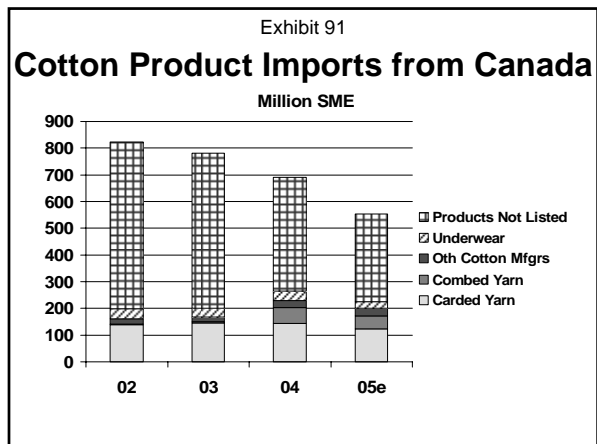


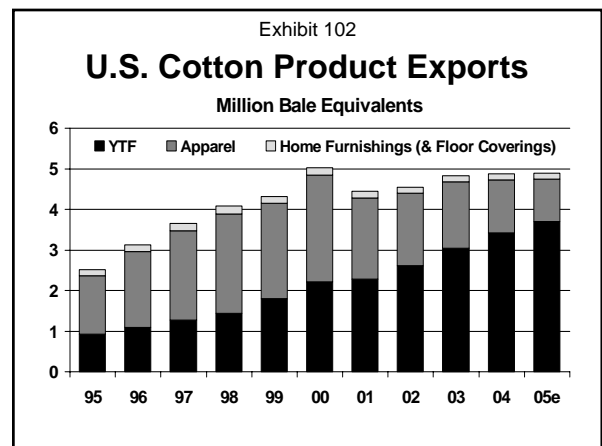
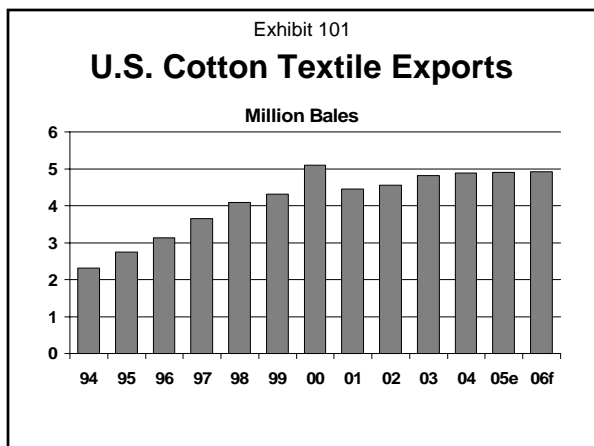
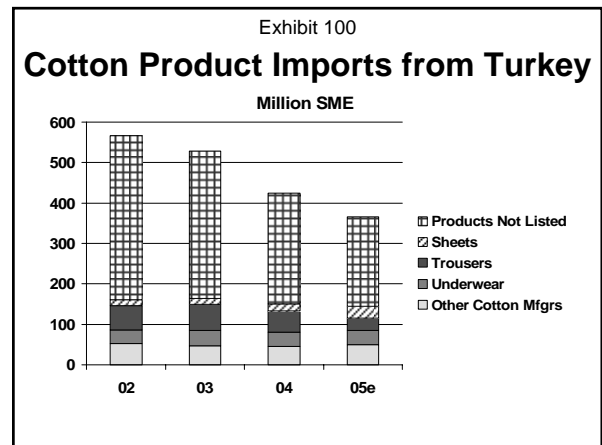
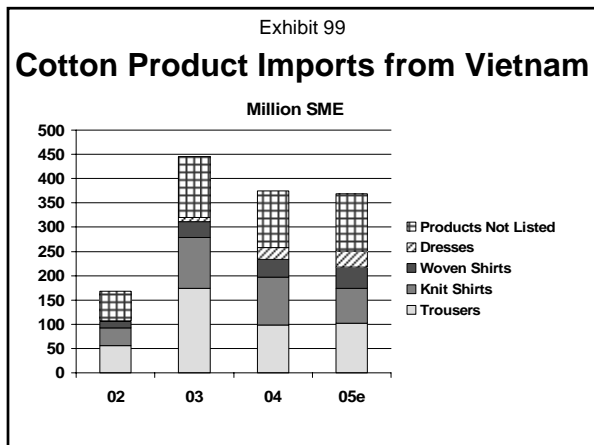
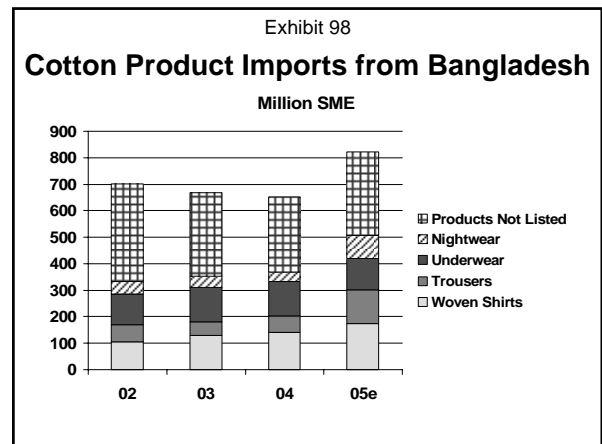
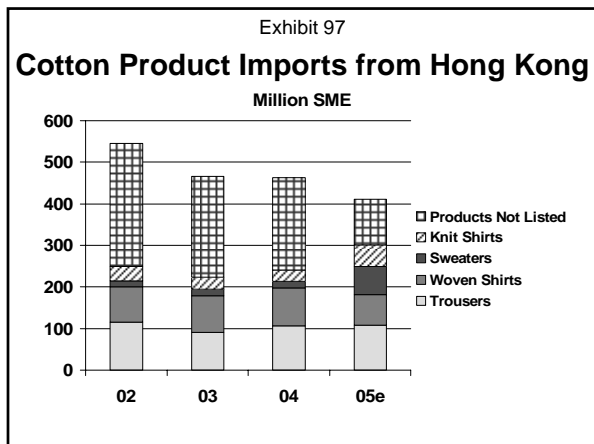


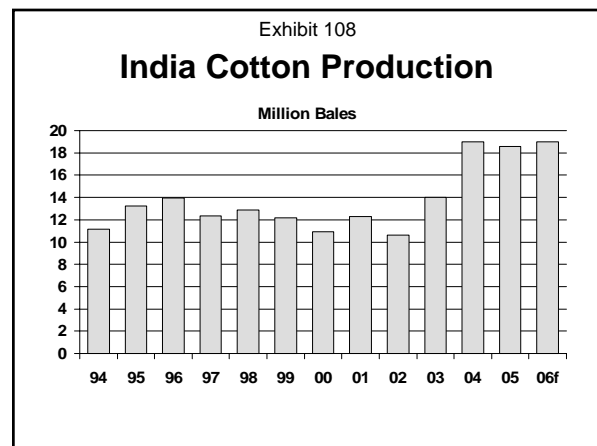
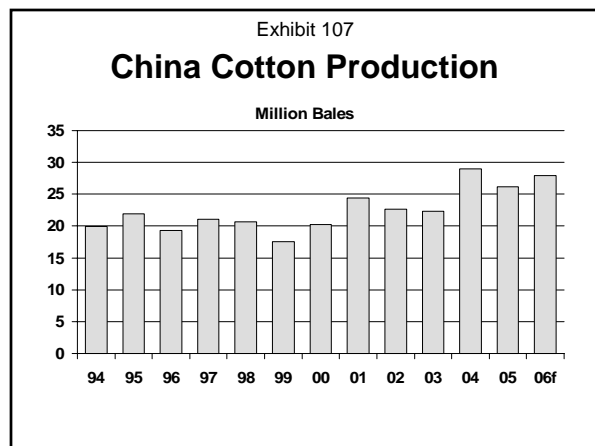
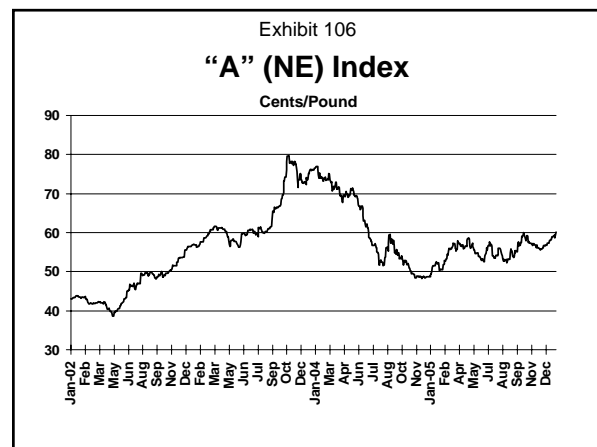
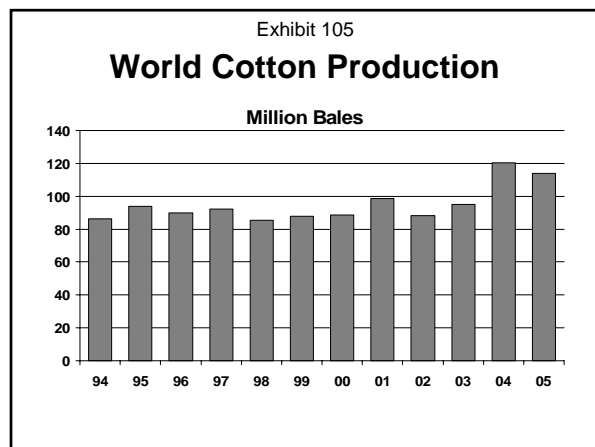
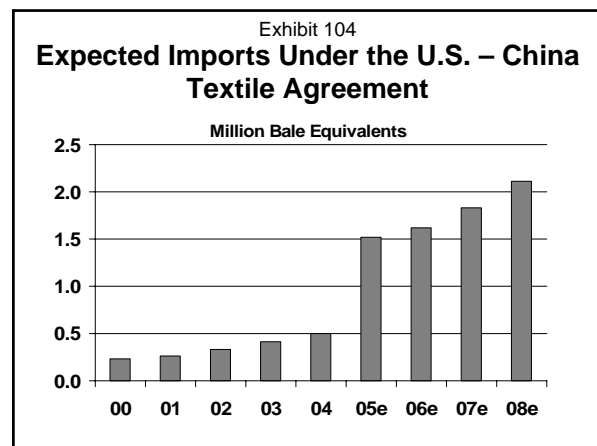
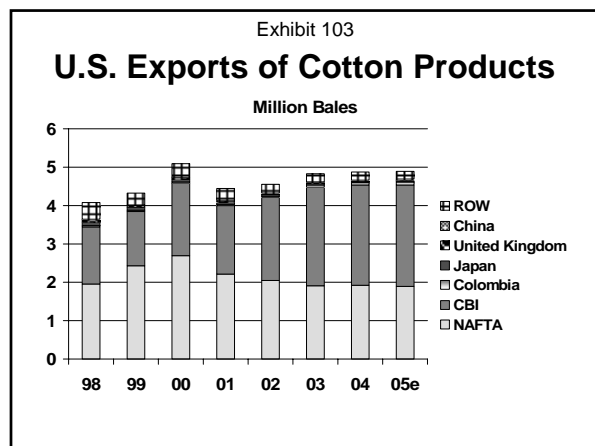




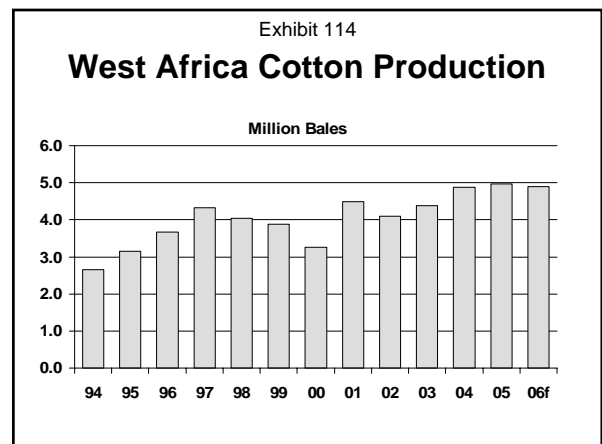
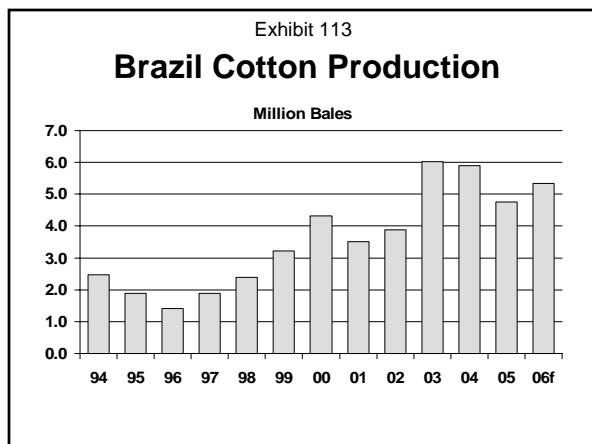
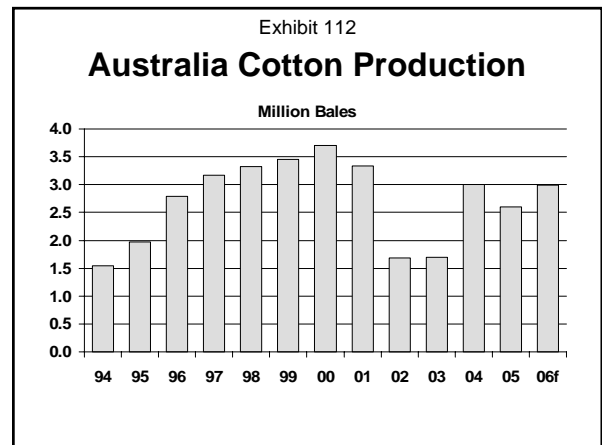
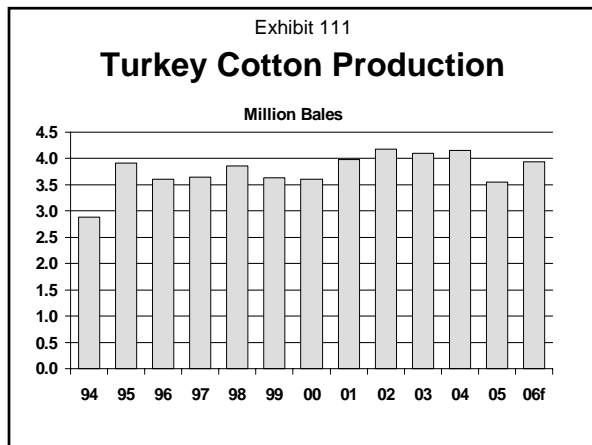
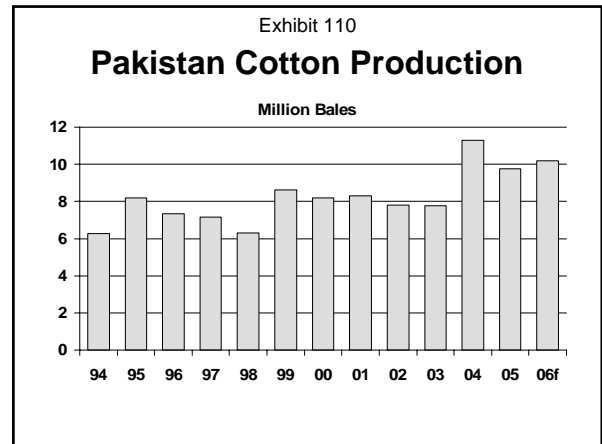
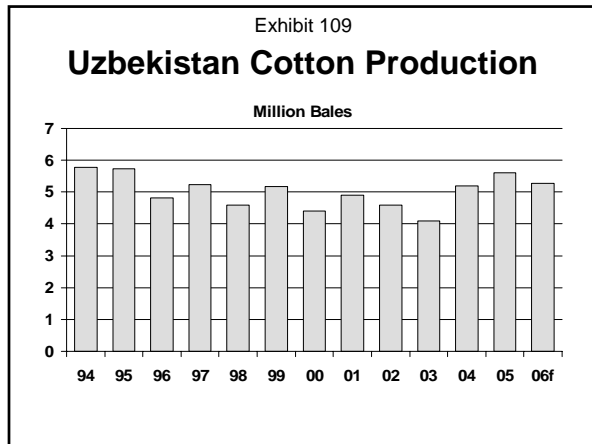


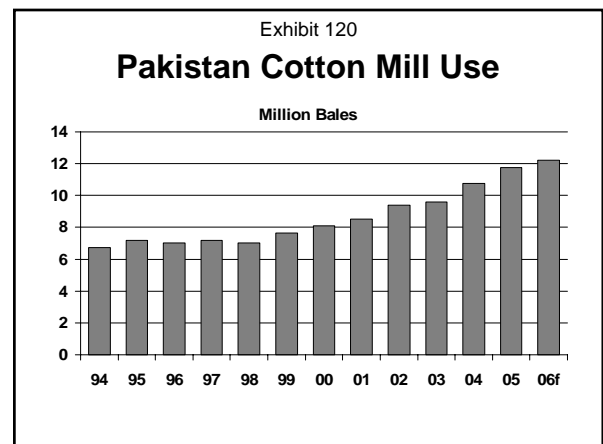
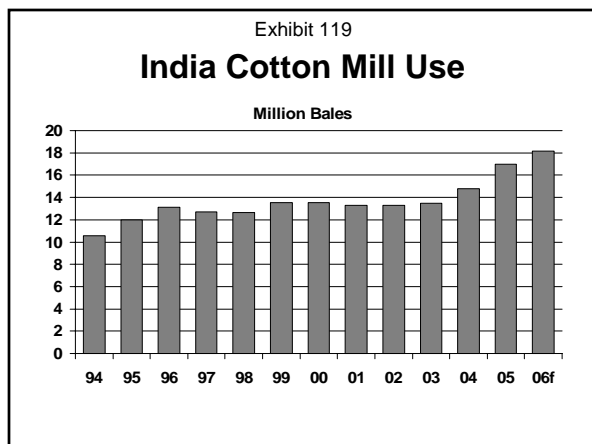
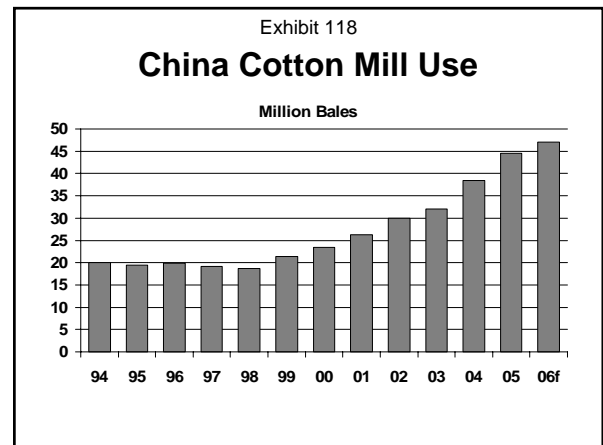
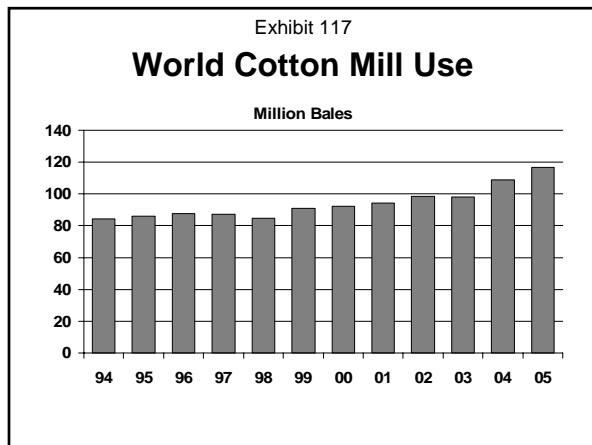
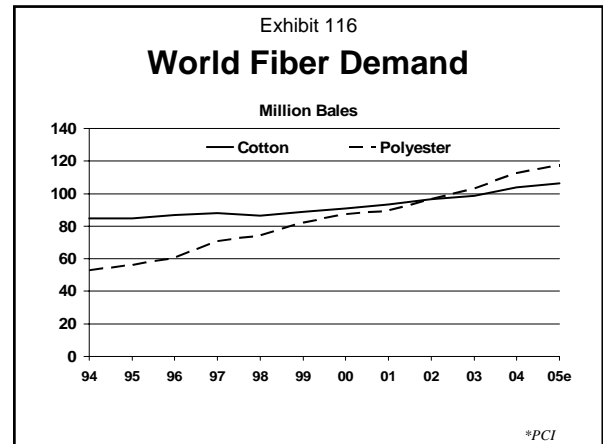
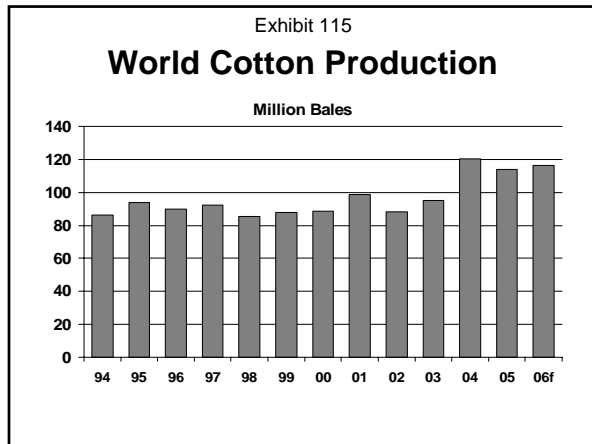


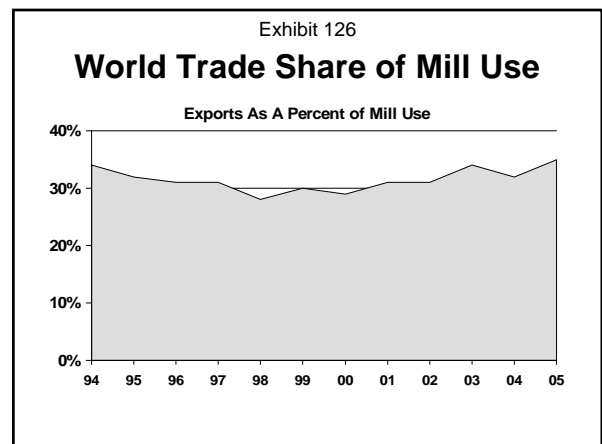
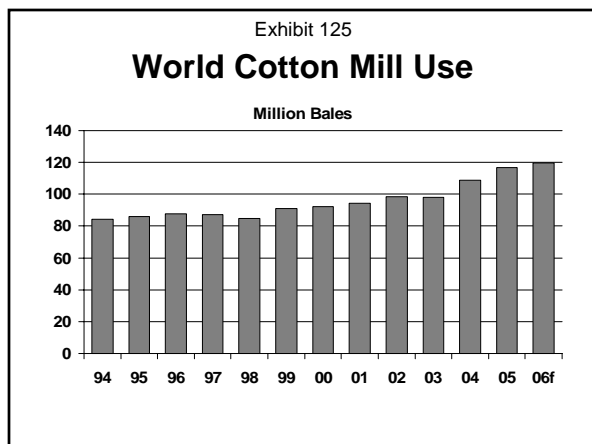
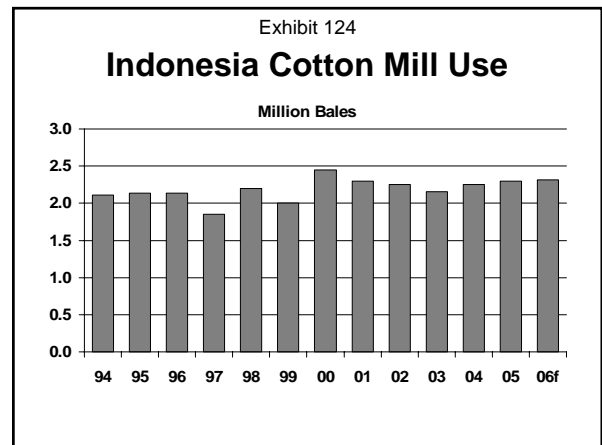
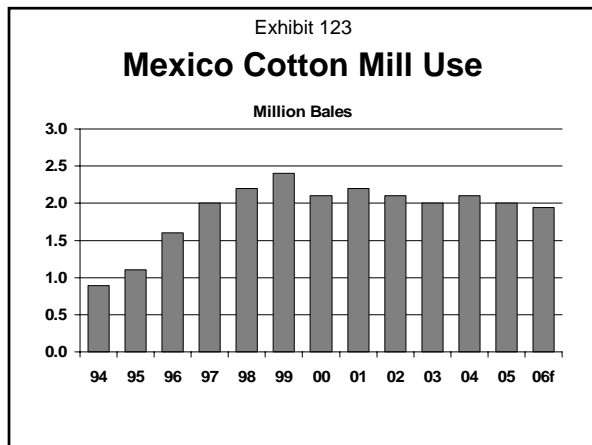
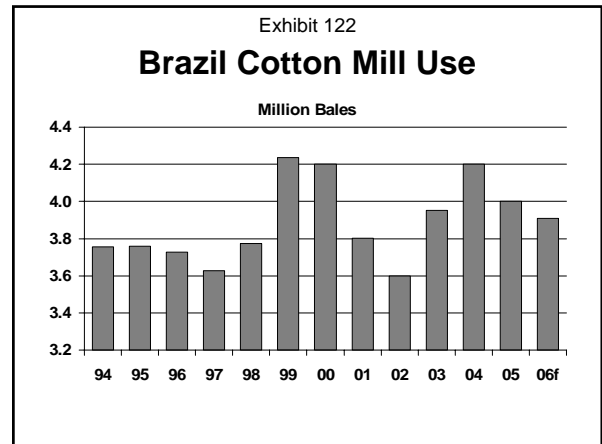
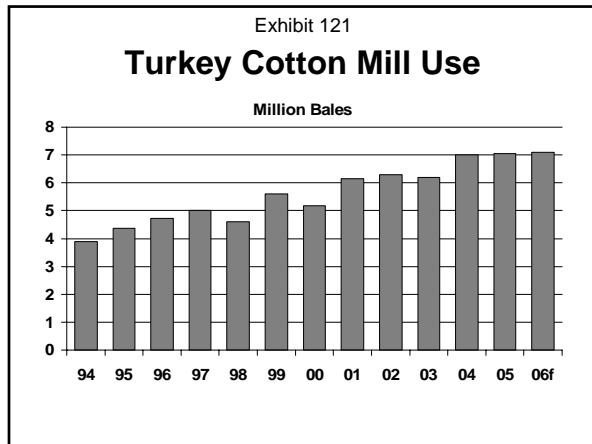












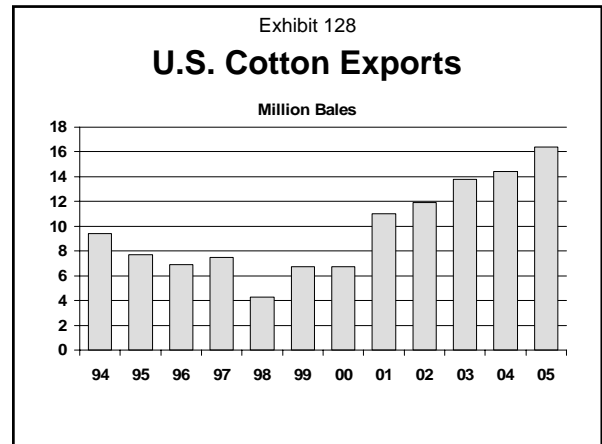
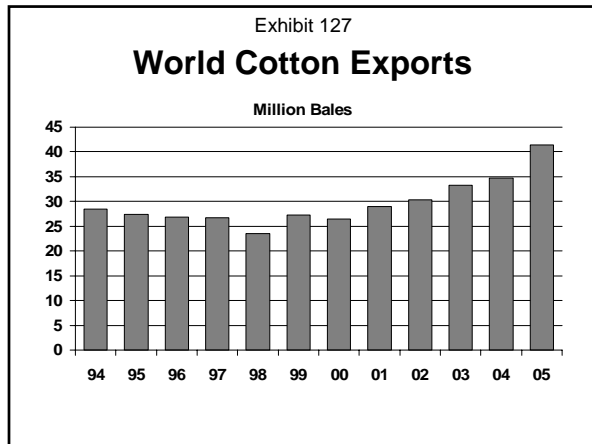
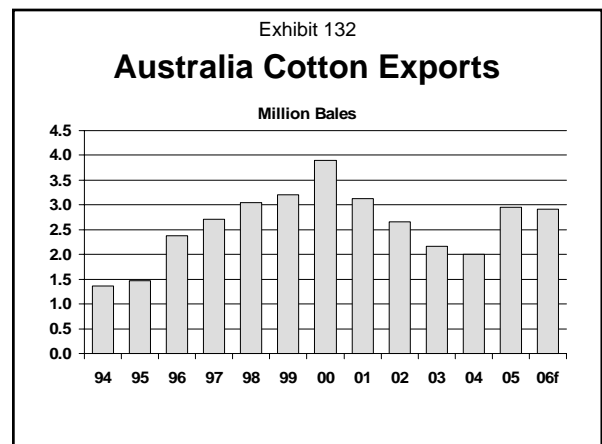
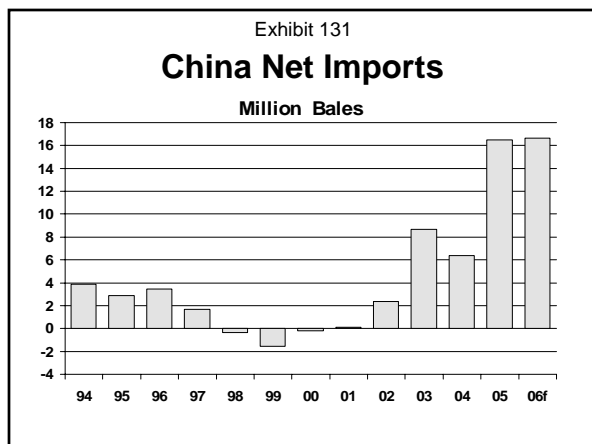
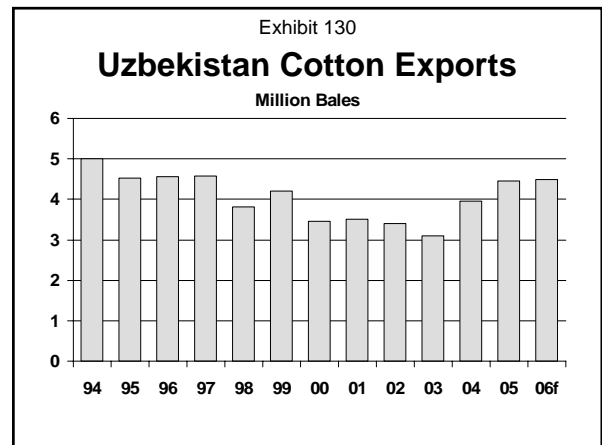


Exhibit 129

### Top U.S. Raw Cotton Export Destinations

1990		2005YTD	
Country	(000 480-Lb. Bales)	Country	(000 480-Lb. Bales)
Japan	1,538	China	5419
China	1,347	Mexico	1347
South Korea	1,185	Turkey	981
Indonesia	552	Indonesia	567
Italy	424	Korean Rep.	372
Taiwan	354	Thailand	271



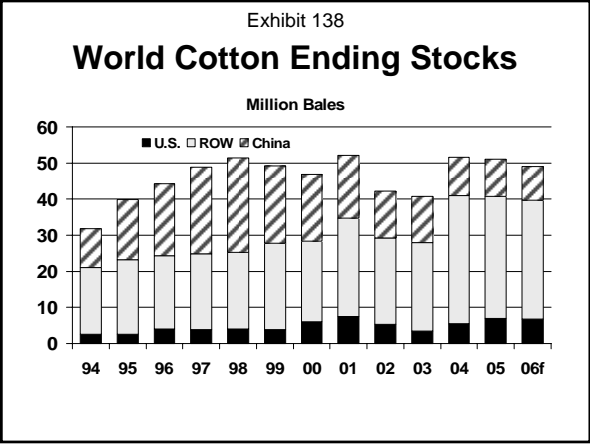
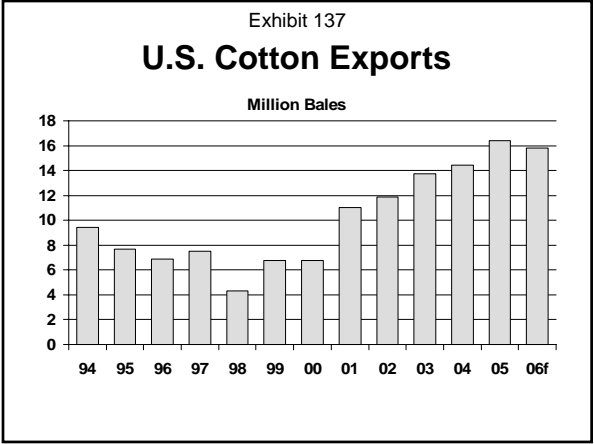
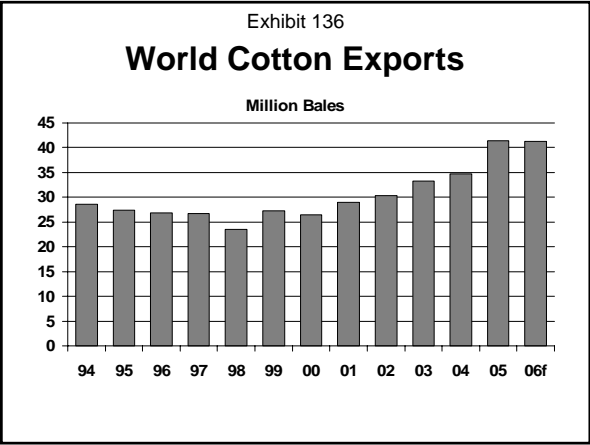
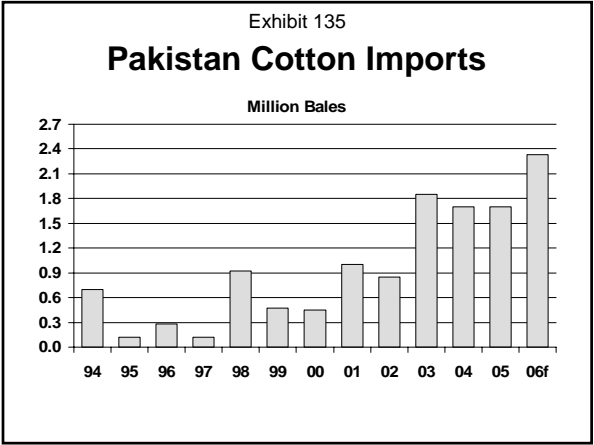
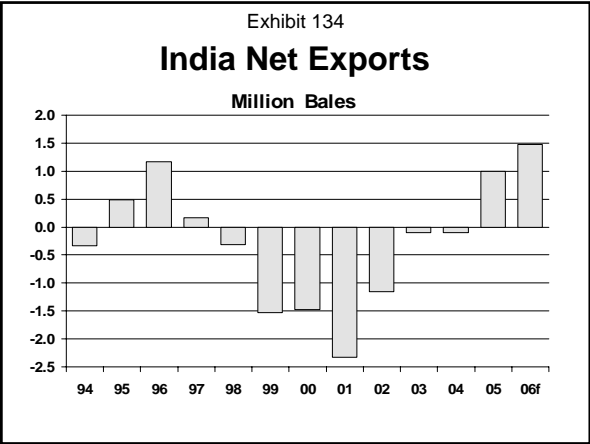
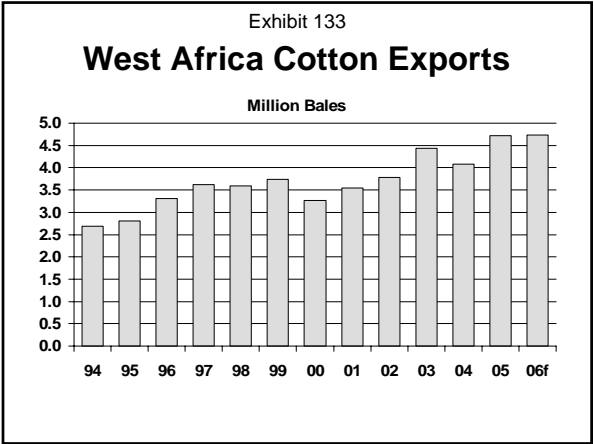


Exhibit 139

### U.S. Supply and Demand

Million Bales

	<u>2005/06</u>	<u>2006/07</u>
Beginning Stocks	5.54	6.90
Production	23.72	21.41
Imports	0.04	0.04
Total Supply	29.30	28.35
Mill Use	6.00	5.77
Exports	16.40	15.83
Total Offtake*	22.40	21.61
Ending Stocks	6.90	6.74
Stocks-to-Use Ratio	30.80%	31.19%

\*Includes unaccounted

Exhibit 140

### World Supply and Demand

Million Bales

	<u>2005/06</u>	<u>2006/07</u>
Beginning Stocks	51.62	50.95
Production	114.04	116.16
Imports	42.00	41.25
Mill Use	116.74	119.54
Exports	41.44	41.25
Ending Stocks	50.95	49.06
Stocks-to-Use Ratio	43.65%	41.04%