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## **THE UNITED STATES AND WORLD COTTON OUTLOOK**

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### **Introduction**

The 2003/04 marketing year marks the second consecutive season of declining world stocks and the first time since 1994/95 that world supplies have been unusually tight. As a result, the A-index has averaged nearly 71 cents per pound for the period August 2003-January 2004, compared with the recent 10-year average of 67 cents. The current high prices are likely to result in significant increases in production in 2004/05, but demand is also expected to rise as supplies expand and the world textile economy continues to grow. World stocks are projected to recover to more normal levels by the end of 2004/05.

### **World Cotton Situation, 2003/04**

#### **World Cotton Production, 2003/04**

World production rose 4 million bales from the year before in 2003/04, but production in a number of countries was below potential in part due to weather. World cotton production in 2003/04 was 5 percent higher than in 2002/03, largely in response to a 30-percent increase in cotton prices during 2002/03. Since 1987/88, world production has on average increased about two-thirds as much as prices have risen during the preceding year, which would have meant about a 20-percent increase in production. One difference with previous years is that corn and soybean prices in 2002/03 rose faster than they have during previous times that cotton prices rose, but not enough to account for all of shortfall in anticipated production. Favorable weather in the United States, India, and West Africa's Franc Zone boosted production, but output suffered in China, Pakistan, Australia, and Uzbekistan, limiting the increase in world cotton output.

The largest weather shock suffered by world cotton production in 2003/04 occurred in China. China's National Bureau of Statistics recently reportedly confirmed its earlier estimate of cotton output, about 22.4 million bales. This suggests yields fell about 19 percent compared with a year earlier, corresponding to this year's unprecedented late-season rainfall in China's prime eastern growing regions. Area planted to cotton in China rose substantially in 2003/04 as declining stocks and growing textile use drove prices almost 50 percent above year-earlier levels during

the winter and early spring. Soybean prices rose as well, but not to the same degree, and other competing crops were little changed. Cotton area rose 22 percent to 5.1 million hectares, its largest percentage growth in 40 years. However, with yields lower, China's 2003/04 cotton crop actually fell slightly from the 22.6 million bales realized in 2002/03.

Australia's output was also significantly constrained by weather as a long-term drought continued through the planting of the 2003/04 crop. While Australia's 1999-01 output averaged about 3.5 million bales, the 2003/04 crop is expected to total only 1.3 million due to the depletion of reservoirs. While recent rains have enhanced yield prospects, Australia's irrigated area was substantially below average since reservoirs in the main cotton areas of Queensland and New South Wales were largely depleted at planting.

Uzbekistan's output fell 400,000 bales from the year before in 2003/04 in large part due to a cool, late spring. Although weather improved later in the season, the crop's poor start and reduced area limited output to 4.2 million bales, the lowest in recent memory.

In contrast, India's weather was unusually favorable in 2003/04 as India received its best monsoon in a decade. Farmers also saw an increase in cotton prices during the previous year, and area planted to cotton rebounded 11 percent from 2002/03's unusually low level. Yields also rose, to their second highest ever, and India's crop rose 2.1 million bales. Yields were also boosted by an increase in area devoted to Bt cotton and increased irrigation in Gujarat as water from the Narmada River's Sardar Sarovar Dam became available. Bt cotton only accounted for a few hundred thousand hectares out of India's 8.4 million, but probably added slightly to the national average yield.

West Africa's Franc Zone also planted cotton under favorable moisture conditions. Prices in local currency terms were also higher than the year before, despite the strengthening of the CFA Franc. Real exchange rates in the region rose as the CFA Franc's link with the Euro forced nominal rates to rise in tandem with the strengthening Euro. With favorable prices and weather, cotton area rose 7 percent to a new record. Favorable precipitation enabled yields to rise to their highest level since 1997/98. Franc Zone yields have lagged in recent years as area has expanded, and while yields are above recent levels, 2003/04 yields are still estimated to be 10 percent lower than the record achieved in 1988/89.

Production is estimated to rise 1.3 million bales from the year before in Brazil, to a record 5.2 million bales. Area planted to cotton in Brazil rose one-third to nearly 1 million hectares as Brazilian farmers took advantage of a second year of rising prices in 2003/04. Both cotton and soybean area rose as Brazil's total cropland continued to expand in the Center-West. Brazil's soybean area rose nearly 3 million hectares, while corn area was virtually unchanged.

## World Cotton Consumption, 2003/04

World cotton consumption is forecast at 97.2 million bales for 2003/04, down 1 percent from the record 98.1 million bales in the preceding year. Consumption is being limited by tight supplies and rising prices for cotton. China's consumption is rising 1.0 million bales to an estimated 30.5 million bales this season, or 31 percent of the world's total. China's mills are benefiting from the liberalization of world textile trade and rising demand by Chinese consumers. The rise in consumption in China nearly offsets the 1.1-million-bale decline forecast for the United States.

Cotton consumption outside China and the United States is expected to decline by nearly 800,000 bales, or one percent from the previous year. Significant increases in consumption are expected only in Brazil (+250,000), Pakistan (+200,000) and Bangladesh (+125,000 bales). Slightly higher consumption is also forecast for some less-developed central and south Asian countries, including Uzbekistan, Thailand, and Vietnam. In the developed economies of Asia and Europe, cotton use is below last season. Use is estimated 440,000 bales lower this year in the EU and down about 150,000 bales each in Japan and South Korea. Turkey's use is estimated 300,000 bales lower and Russia's 200,000 bales lower. India and Indonesia are each expected to cut consumption by 100,000 bales. Mexican cotton consumption is flat, due to the strength of the peso and to the erosion of Mexico's trade advantages under NAFTA, as U.S. textile quotas are liberalized for other countries.

## The Impact of China on World Trade

Since 1999/2000, China has moved to liberalize its cotton distribution system by eliminating procurement prices, disposing of surplus stocks and--since joining the WTO in January 2001--placing fewer restrictions on cotton imports. WTO membership has also spurred growth in China's cotton consumption, which now constitutes over 30 percent of world consumption.

Developments in China drove the sharp increase in world cotton prices that occurred during the first half of the 2003/04 marketing year. In the context of very limited beginning stocks, the failure of the cotton crop in the North China Plain forced China's mills onto the world market to make up the shortfall. China's cotton imports are forecast at a record 7.0 million bales this season, more than double last year's level and over 20 percent of total world imports. Even at this level of imports, internal Chinese cotton prices remain well above world prices.

China's substantial share of world production and consumption, combined with uncertainties about government policies and economic data, have added to the volatility of world prices this season. Widespread reports of crop damage due to heavy rain resulted in production estimates ranging from 20-23.5 million bales last fall, but the government of China did not release a point estimate until late January. At the same time, import licenses allocating China's TRQ under the WTO were not adequate to cover import demand late in calendar 2003; there is evidence to

suggest that supplemental licenses were issued as early as October, but they were not confirmed officially until December. In this environment, the market has had difficulty anticipating China's import demand, and prices have tended to rise and fall in response to confirmed Chinese purchases.

### World Ending Stocks and Prices

Notwithstanding the combination of higher world production and lower consumption world stocks are forecast down 11 percent to just under 32.5 million bales, the lowest level since 1994/95. The stocks-to-use ratio of 33 percent is the lowest since 1993/94. The growing tightness in world supplies is affecting both producing and consuming countries, as available supplies are drawn out of net exporting countries while importing countries reduce stocks held at mills. China and the United States account for just over half of the world's stock reduction; foreign countries outside of China account for the remainder of the 4.3-million-bale reduction. Diminished supplies are reflected in the rising A-index, which has averaged 71 cents per pound through the end of January, more than 15 cents above the average for the 2002/03 season.

### **U.S. Cotton Situation, 2003/04**

#### Area and Production

As planting time approached for the 2003 crop, U.S. cotton futures prices rose significantly from the low levels seen the previous year. Although futures prices for competing crops—like corn and soybeans—also rose, cotton became more attractive than other alternatives. In fact, farmers' planting intentions indicated that cotton area would rise 2 percent in 2003 to nearly 14.3 million acres.

However, unfavorable springtime weather forced some producers to plant less than they intended. As a result, only 13.5 million acres of cotton were planted this season, 3 percent below 2002 and well below the 5-year average of 14.7 million acres. The 2003 area was also the smallest since 1998. Upland cotton area in 2003 totaled 13.3 million acres, 410,000 lower than in 2002. Upland area declined across much of the Cotton Belt, with slight gains seen in the West region. Meanwhile, extra-long staple (ELS) cotton area fell about 27 percent to 179,100 acres, compared with 243,900 acres a year earlier. The decline in ELS area was largely attributable to California, where 60,000 acres moved out of ELS production as beginning stocks were at a relatively high level.

U.S. 2003 cotton harvested acreage also declined from a year ago. In 2003, harvested area was approximately 12.1 million acres, 3 percent below 2002 and the second lowest in a decade. The national abandonment rate was 11 percent or 1.4 million acres for 2003, similar to the previous season.

U.S. cotton production in 2003/04 is estimated at 18.2 million bales, 1 million above 2002/03 as a record national yield was achieved despite unfavorable early-season growing conditions. The U.S. yield is estimated at 725 pounds per harvested acre, 60 pounds (9 percent) above last season's yield and 17 pounds above the previous record set in 1994/95. Upland production is currently estimated at 17.8 million bales with a record average yield of 719 pounds per harvested acre. Meanwhile, the ELS crop is projected at only 429,000 bales, about 250,000 bales (37 percent) below the 2002 crop. Along with the ELS area decline, a yield decrease from last season's record produced the smallest ELS crop in 3 seasons.

Compared with last season, 2003/04 upland cotton production was higher in the Southeast and Delta regions while lower in the Southwest and West regions. In the Southeast, the cotton crop is estimated at 4.6 million bales, a rebound from 2002/03's 9-year low. Output in the region this season is tied for the second largest crop since the 1937 season. In the Delta, 2003/04 production is estimated at 6.5 million bales, 1 million above the 5-year average despite planted area being the lowest in 5 years. A record yield of 900 pounds per harvested acre helped boost the Delta crop.

In contrast, the Southwest region could not duplicate the record yield experienced in 2002/03 that produced one of the largest crops in the last 20 years. The current upland estimate for the Southwest places the crop near the 5-year average of 4.6 million bales, as both harvested area and yield are lower than in 2002/03. In the West region, upland area rose for the first time in 3 years. However, 2003/04 upland production is estimated at only 2.1 million bales, the lowest in 5 years as a less than ideal start related to El Nino developed—particularly in California. Excellent growing conditions during the remainder of the season kept yields from falling significantly, however; upland yields in the region reached 1,281 pounds per harvested acre. Similarly, ELS yields were also lower in the region. And with significantly lower area, ELS production was reduced dramatically. California continues to dominate ELS production and accounted for close to 90 percent of the ELS crop once again in 2003/04.

#### Domestic mill use

Domestic mill use is forecast at 6.2 million bales for 2003/04, down 15 percent from last season. Monthly rates of domestic mill use fell sharply in the summer and fall of 2003, responding to growth in textile imports of about 15 percent for the first half of the calendar year. Mill use has stabilized more recently as textile import growth has weakened; this weakness is likely due to seasonal patterns and the weaker U.S. dollar. However, textile inventories remain at average to above-average levels relative to shipments, limiting prospects for a sustained recovery.

Retail use of cotton, as measured by domestic mill use plus net textile trade, will rise again in 2003/04 following last season's sharp post-recession rebound, reaching 21.5-22.0-million-bale

equivalents. U.S. consumers continue to support world demand for cotton. On a per capita basis, U.S. cotton consumption reached an estimated 34.9 pounds in calendar 2003, up slightly from the preceding year.

### Exports and Ending Stocks

USDA is forecasting total 2003/04 exports at a new record of 13.2 million bales, up 11 percent from last year's record of 11.9 million bales. Exports are supported by a U.S. exportable supply that is the second largest in 35 years and a tight foreign supply-demand situation. Shipments in the first half of the season have been ahead of last year's pattern, and cumulative exports reached about 5.0 million bales by the end of January, 600,000 bales ahead of last year, and on track to meet the forecast. Weekly exports will have to be quite strong, averaging above 310,000 bales per week for the second half of the season, to achieve the forecast total of 13.2 million. However, foreign demand is robust due especially to strong import demand in China; at the same time, low exportable supplies in Australia and Central Asia will restrict competition.

U.S. upland cotton exports of 12.7 million bales are expected to be higher than last season. However, due to tight domestic supplies, ELS cotton exports are estimated to decline by 17 percent from the previous year's record level to 525,000 bales. Favorable ELS prices relative to upland cotton have resulted in some substitution of ELS for high-grade upland cotton in foreign markets.

U.S. ending stocks are forecast at 4.25 million bales this season, 21 percent below 2002/03. At this stock level, the U.S. would hold about 13 percent of global stocks, lower than the previous 3 seasons, but one and a half times the level of the late 1990s. However, the U.S. stocks-to-use ratio would decline from last season's 28.1 percent to the lowest in 6 years at 21.9 percent for 2003/04. Upland stocks are estimated at 4.1 million bales, while ELS stocks are expected to be below 110,000 bales.

### Farm Income

Gross cotton farm income from the 2003 crop is forecast about even with 2002 at \$7.0 billion. However, gross market receipts are sharply higher due to a combination of increased production and higher prices. Market income is expected to rise 51 percent to \$6.2 billion, while income from the government farm program is likely to fall more than 70 percent to approximately \$800 million. Relative to variable costs, 2003 total net returns and net returns/acre will rise slightly.

## **World and U.S. Outlook for 2004/05**

Projections for the 2004/05 marketing year are highly uncertain, due to the unpredictability of weather and the complex economic factors that affect supply and demand. USDA's projections are based on normal weather conditions and an assumption of current policy.

World production for 2004/05 is forecast at 103.0 million bales, an 11.0-percent increase from the current season. With U.S. production about unchanged, foreign cotton production, including an increase of 6.6 million bales in China, accounts for virtually all of the global increase. World consumption is forecast to rise nearly 2 percent to 99.0 million bales with all of the gain forecast to occur in foreign countries. World stocks are forecast to rise more than 4.0 million bales, with the U.S. accounting for up to one-fourth of the increase.

### **World Cotton Outlook**

#### **Production**

World cotton production is forecast to rise 11 percent from the year before in 2004/05, up almost 10 million bales to 103 million, exceeding consumption for the first time since 1998/99. With the A-Index in January 2004 34 percent higher than in 2003, farmers' price expectations are accordingly higher. Competing crop prices are also higher, particularly soybeans, which will likely limit the global increase in cotton production, but a record crop is expected nonetheless, 4.5 million bales above the previous high in 2001/02. World cotton production will also be boosted by a return to more normal weather in China and Australia.

Foreign producers are expected to account for the entire increase, led by China. Broadly speaking, cotton and competing crop price movements in China have corresponded to world price changes. China's cotton prices rose more than world prices during this marketing year to date, but competing crop prices have put in their strongest performance in a number of years as well. Area planted to cotton will undoubtedly increase, but the degree of cotton area response to cotton price changes will probably be less than what has been observed in recent years. Since 2000, China's cotton area has changed at about one-half the rate of domestic cotton price changes, which would correspond to a second year of area rising more than 20 percent.

However, several factors suggest that China's area will rise by a smaller amount. First is rebounding competing crop prices, which in January 2004 averaged more than 20 percent above year-earlier levels. In January 2003 they were only 12 percent higher. Next is the stated intention of the Production and Construction Corp to restrain area expansion in Xinjiang, China's largest cotton growing province. Finally, farmers in regions hard hit by 2003/04's weather may be reluctant to risk expanding area, particularly given their reduced resources after losing a substantial portion of the 2003/04 crop. Thus, China's total cotton area is likely to increase



about 10 percent and remain well below the record levels seen in the early 1990s. With normal weather, yields should rebound substantially, and production could be about 7 million bales higher at 29 million bales.

The next largest expected increase in 2004/05 cotton output is foreseen for Australia. Rainfall patterns have returned to normal levels in recent months, improving prospects for a recovery in reservoir levels and a return to a more normal level of irrigated plantings. Assuming normal rainfall through 2004/05, Australia's cotton crop could nearly double to 2.5 million bales.

Pakistan's output could rise about 900,000 bales in 2004/05 as yields recover from 2003, which were the lowest in 5 years. Cotton prices in Pakistan have risen substantially, and returns to sugar cane have been poor the last 2 years, suggesting that area planted to cotton could increase. Similarly, improving yields could lead to higher cotton output in Uzbekistan, while more normal weather suggests lower yields and output for West Africa's Franc Zone.

India's domestic cotton crop prices have also roughly tracked world prices, but, unlike China, cotton price gains have lagged those on the world market, and India's 2004/05 cotton crop is expected to shrink from the year before. Domestic cotton prices have averaged about 20 percent higher than the year before during farmers' cotton marketing period, and years of sustained exports have led to higher wheat and rice prices this year as well. In addition to competing crop prices, gains are likely to be constrained by the return to normal weather. The outstanding monsoon in 2003 permitted Indian farmers to expand area substantially more than normal, and a return to normal weather would partly offset the impact of improved prices. While area could increase slightly from the year before in 2004/05, yields will almost certainly decline, suggesting that output could fall as well, despite slightly higher area.

Finally, little change is foreseen for Brazil's 2004/05 cotton crop. As a Southern Hemisphere producer, Brazil was able to respond during 2003/04 to the surge in world prices during the fall and winter of 2003. Thus, recent world price increases are unlikely to affect Brazil's 2004/05 output. If world soybean prices decline from the year before during 2004/05, some of the expanded cropland in Brazil's Center-West that might otherwise have been planted in soybeans may instead go to cotton. However, much will depend on developments in cotton prices and Brazil's exchange rate during the coming year, and it currently seems unlikely that Brazil's 2004/05 cotton production will grow significantly.

### Consumption

Continued strong world economic growth through 2005 is expected to help world cotton consumption rebound in 2004/05, up to a record 99 million bales. Global Insight forecasts world GDP growth in 2004 and 2005 at about 3.6 percent, compared with an average of 1.9 percent during the preceding 3 years. Demand for cotton products should receive a further boost during

2004/05 from completion of a 10-year phase-out of textile and apparel import quotas in the United States and the European Union. Under the Agreement on Textiles and Clothing (ATC), quotas implemented under the Multifibre Arrangement (MFA) have been eased and eliminated by stages since 1995. At the end of December 2004 the last quotas will be removed, lowering the cost of importing textiles and apparel into major world markets, and helping to increase consumption.

However, with world cotton prices in January 2004 up 75 percent since January 2002, the positive impacts of growing world income and reduced trade barriers will be partly offset by increased costs for cotton. World consumption of cotton is expected to rise 1.8 percent in 2004/05, as higher cotton prices hold consumption growth to slightly above its long-run average rate.

As has been the case for the last several years, the largest consumption increase foreseen in 2004/05 is that for China. While world consumption is expected to grow about 1.8 million bales, China's consumption alone could grow by about 2 million bales. Consumption outside of China would be about unchanged in 2004/05 as falling consumption in developed countries is offset by increases in other developing countries like India and Pakistan. China's accession to the WTO in 2001 coincided with the commencement of a surge in its textile exports and cotton consumption. China's share of world textile and apparel trade nearly doubled between 1999 and 2003, up to about 25 percent. China's net exports of textiles and apparel rose by 21 percent (or \$7 billion) in 2002 and 34 percent (or \$14 billion) in 2003. China's yarn output increased 12 to 16 percent every year between 2000 and 2003. Investment, trade, and production data from late 2003 and early 2004 indicate China's textile industry is likely to continue to grow strongly during 2004. China's strong trade performance in both quota and non-quota markets through 2003 suggests that China will be a significant beneficiary of MFA liberalization in 2005. China's economy and consumer demand continues to grow strongly as well, suggesting that domestic use will also help China's textile industry increase its cotton consumption from 30.5 million bales in 2003/04 to 32.5 million in 2004/05.

## Trade

With China's consumption likely to exceed production again in 2004/05, its import demand will continue to be a main driver of world cotton trade. The consumption-production shortfall is currently forecast at 3.5 million bales; however, China is currently operating with minimal stocks and will need to rebuild in order for its mills to operate efficiently. Accordingly, China's imports are projected at about 5.0 million bales. This forecast assumes that the government of China will release sufficient import quota licenses to allow cotton to flow relatively freely. World trade is forecast at 31.0 million bales, down slightly from 2003/04, as rising production will reduce import requirements in a number of countries.

## U.S. Outlook

### Area, Production, and Supply

U.S. planted area in 2004 will once again be influenced by a number of factors, including price prospects for cotton and alternative crops, weather during planting, and crop rotation benefits.

As planting time for the 2004 crop approaches, U.S. cotton prices are stronger than a year ago, but so are prices for competing crops. The weighted upland cotton farm price has averaged 62.9 cents per pound during the first 5 months of 2003/04, well above the 2002/03 average farm price of 44.5 cents. With prices above the 52-cent loan rate, benefits from the marketing loan program have been replaced by higher market returns. Likewise, prices for competing crops—like corn, sorghum, and soybeans—are higher than their respective loan rates and suggest that expectations of market returns will likely drive planting decisions for many crops in 2004.

Last season, U.S. cotton planted area was only 13.5 million acres, as weather-related problems limited planting intentions that were projected at nearly 14.3 million acres. For 2004, the consensus within the industry is that cotton acreage will increase considerably. Earlier this month, the National Cotton Council published results from its annual acreage survey that indicated cotton area in 2004 would rise by 9.5 percent to nearly 14.8 million acres. In comparison, USDA is currently projecting that U.S. cotton acreage will range between 14.3 and 14.8 million acres in 2004. While area is projected to rise for most major field crops in 2004, last season's success for many cotton producers that resulted in the record national yield will likely provide an incentive for the additional area planted to cotton. At the end of March, USDA's National Agricultural Statistics Service will provide its first survey-based producer intentions for 2004 crop area.

With total cotton planted area expected to rise in 2004, and applying a 10-percent abandonment, harvested area is also projected to increase from the current season's 12.1 million acres and would range between 12.9 and 13.3 million acres. At the same time, however, yields are projected to decline from last season's record of 725 pounds per harvested acre, closer to the 5-year average of 667 pounds.

Based on these acreage assumptions and an average yield of 665 to 670 pounds per harvested acre, U.S. cotton production in 2004 would range between 18.0 and 18.5 million bales. The midpoint of this range is virtually unchanged from last season and the average of the previous 4 years. Coupled with the current beginning stock estimate of about 4.3 million bales, total U.S. cotton supplies next season likely would fall below 23 million bales for the first time in 4 years.

## Mill Use and Exports

Just a decade ago, the domestic textile and apparel industry was the dominant customer of U.S. cotton producers, accounting for approximately 60 percent of the total demand for U.S. cotton. More recently, however, this share has fallen as import competition from less expensive foreign cotton textile and apparel products has displaced considerable demand for U.S.-produced products. On the other hand, foreign demand for U.S. raw cotton has risen, resulting in a larger share of U.S. cotton moving overseas. Consequently, the U.S. cotton industry now faces increased global competition.

For 2004/05, USDA is projecting that both domestic mill use and exports will decline from the current 2003/04 levels. The U.S. cotton mill industry is expected to continue to face increased competition from imported products. Despite a potentially weaker dollar, the removal of quotas at the end of 2004 in connection with WTO commitments likely results in domestic mill use falling below 6 million bales for the first time in 20 years. The current projection places U.S. cotton mill use between 5.5 and 6.0 million bales for 2004/05, roughly half the level of the mid-1990s.

Although below the record export estimate of 13.2 million bales for 2003/04, U.S. exports in 2004/05 are projected to remain substantial and range between 11.5 and 12.5 million bales. While world cotton production is expected to exceed global consumption for the first time in 3 years, foreign consumption is still expected to surpass production; thus, foreign import demand will once again remain strong. With projected beginning stocks of approximately 4.3 million bales, slightly larger production, and declining mill use, the U.S. will generate another large exportable surplus to move into the overseas market. As a result, U.S. exports are likely to maintain a large trade share, although the global share is expected to decline slightly from the current season's 41 percent.

## **U.S. and Foreign Ending Stocks**

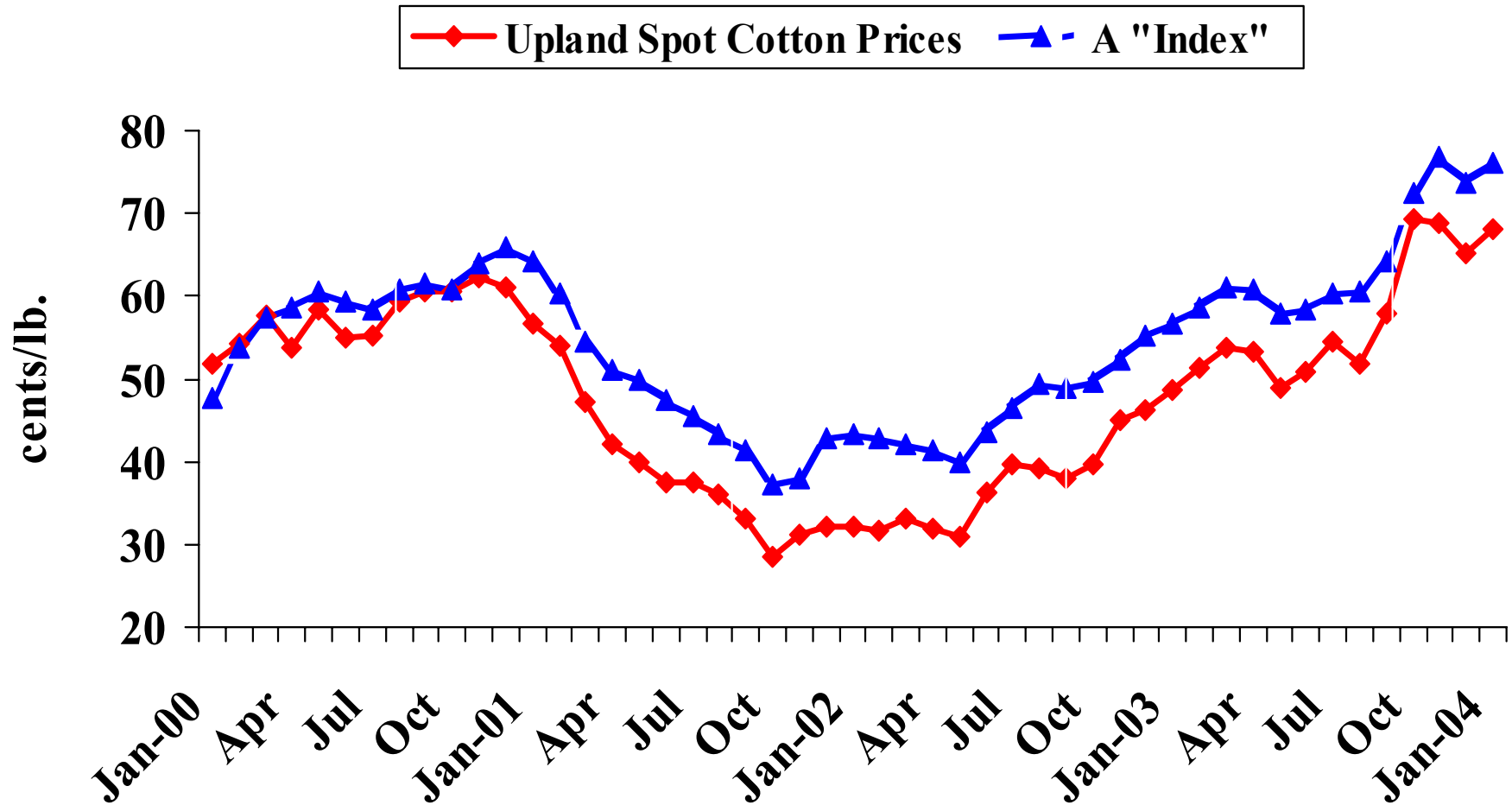
World 2004/05 ending stocks are projected to rise more than 4.0 million bales to 36.8 million bales, about even with stocks at the end of the 2002/03 season. China will need to rebuild stocks from the extremely low levels reached during 2003/04. U.S. stocks are projected to rise, ranging from this season's 4.3 million bales to 5.3 million. At these levels, the stocks-to-use ratio would rise from 2003/04's 22.0 percent and range between 25 and 29 percent. Likewise, increased production in foreign countries outside China will enable stocks to rise, but not to burdensome levels.

# **The U.S. and World Cotton Outlook**

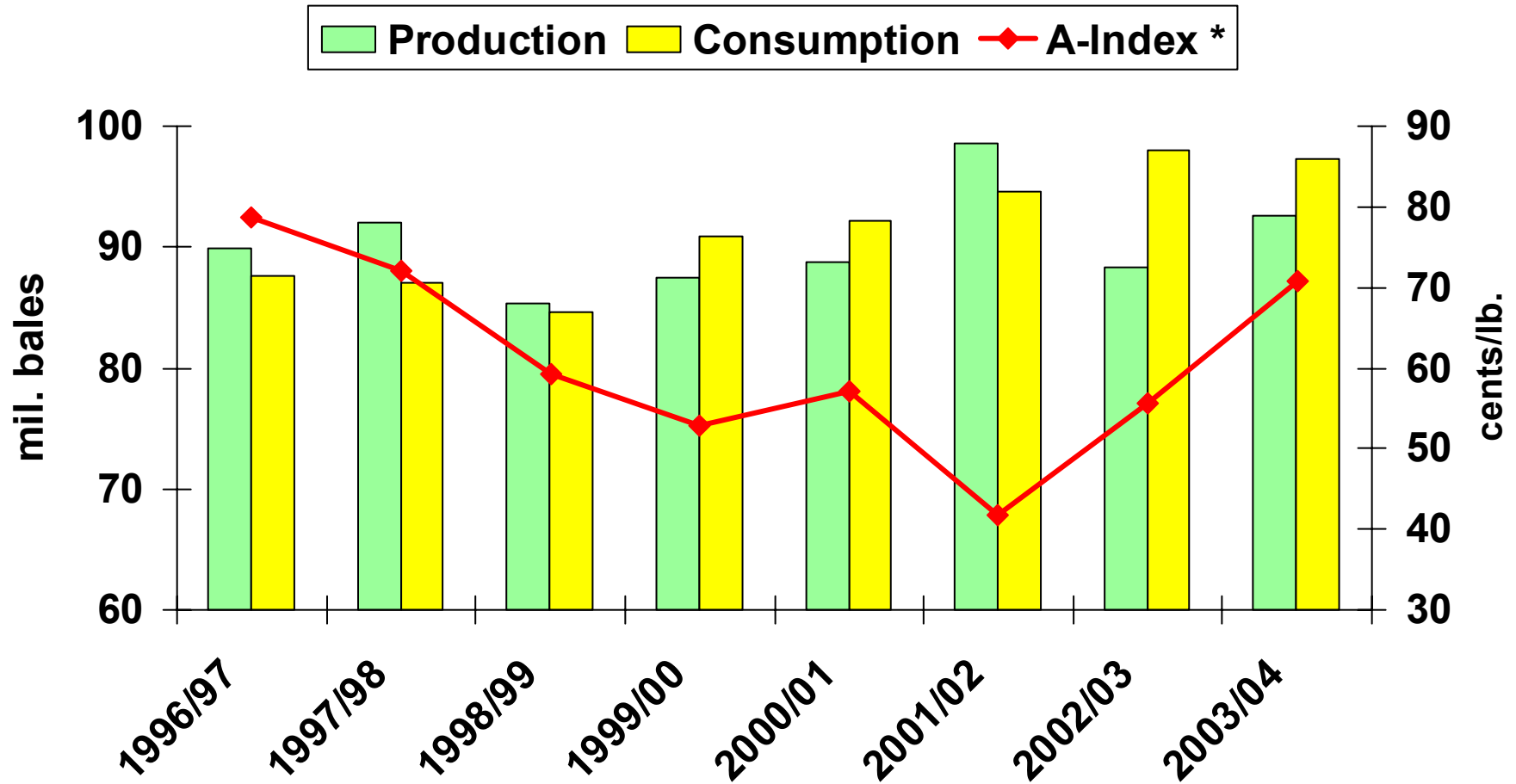
**U.S. Department of Agriculture  
Interagency Cotton Estimates Committee  
February 20, 2004**

# World and U.S. Spot Cotton Prices

## Jan 2000 to Nov 2003

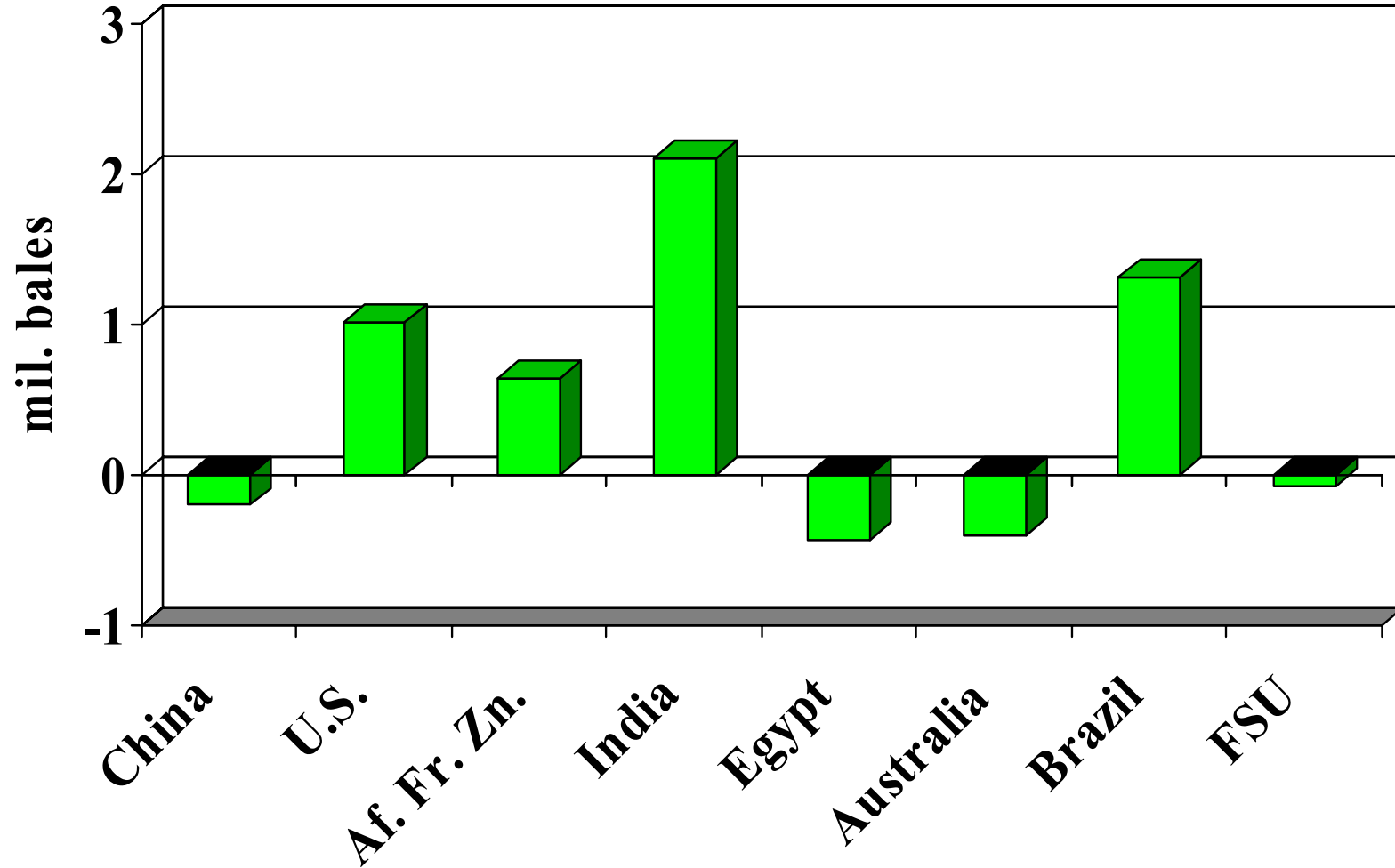


# World Production, Consumption, and Prices 1996/97 to 2003/04



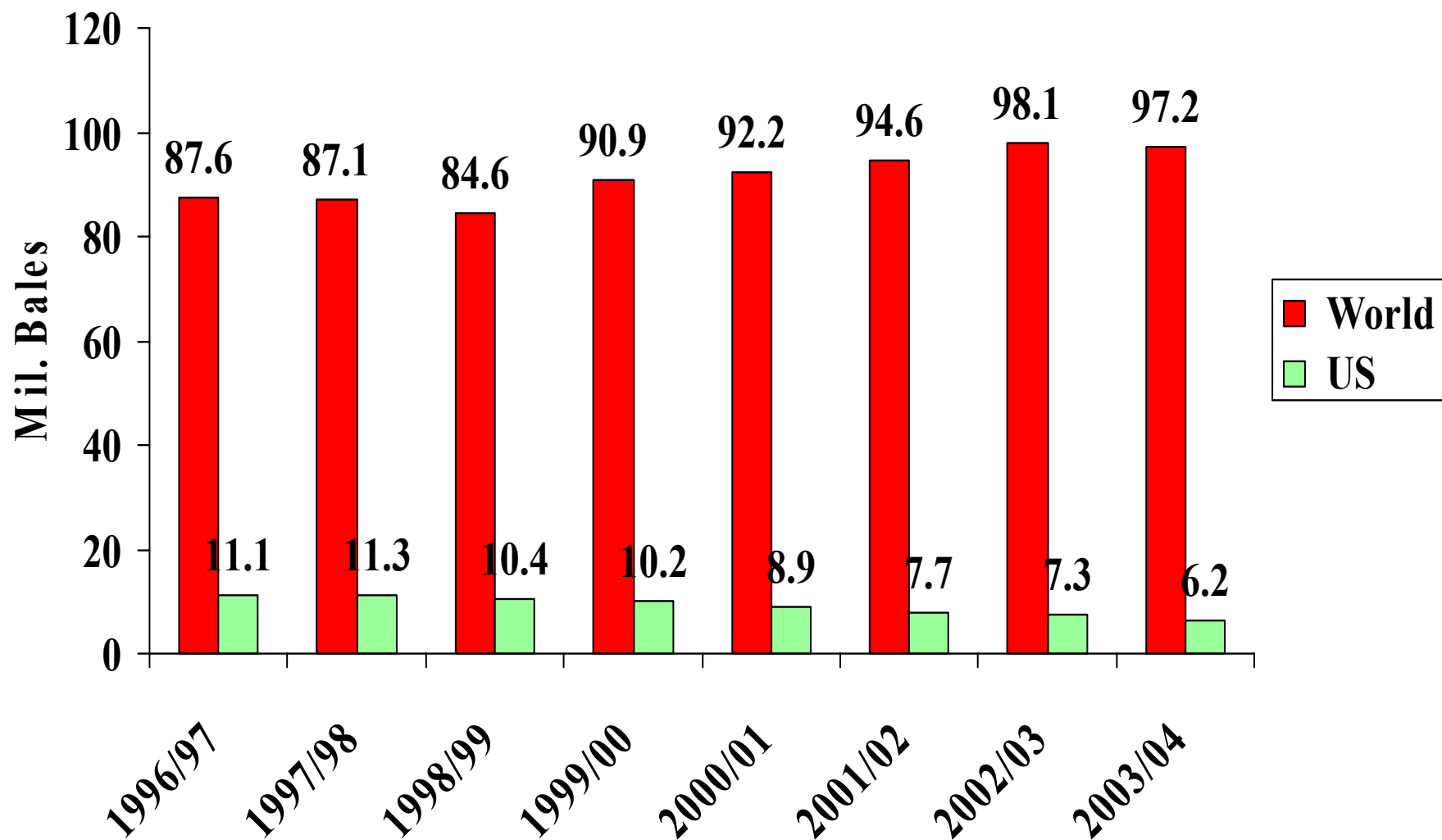
\* 2003/04 through Feb. 5 2004

# Projected Changes in World Production, 2003/04 vs. 02/03

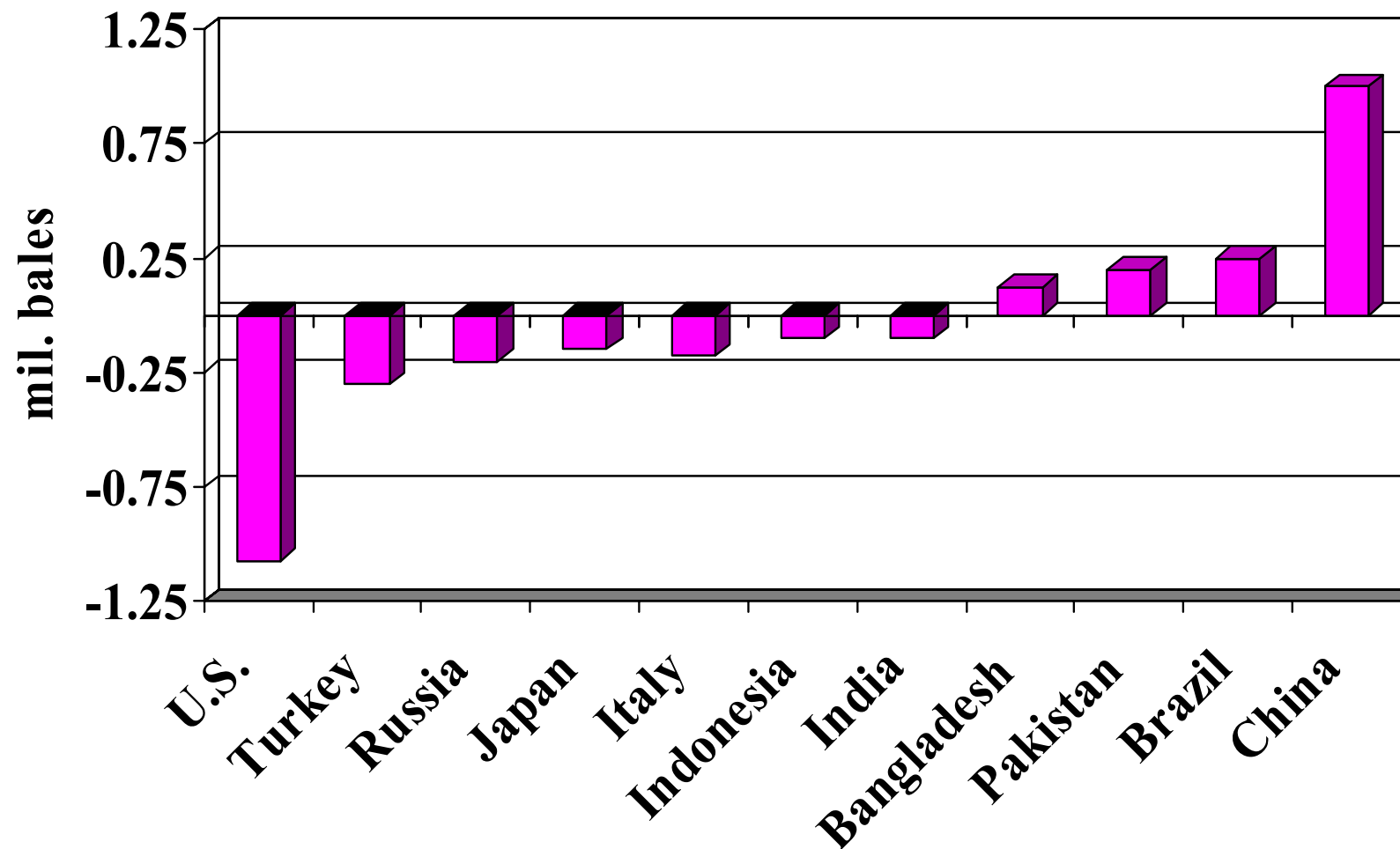




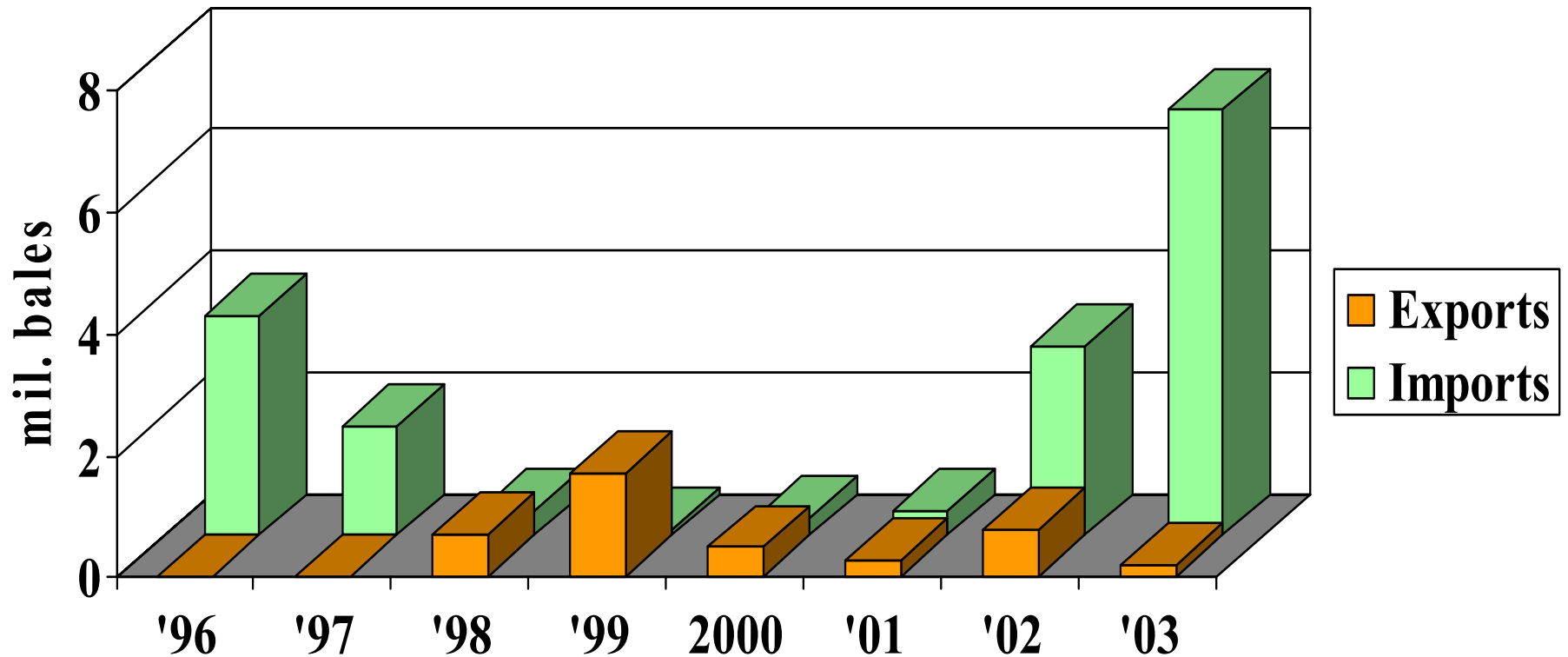
# World and U.S. Consumption, 1996/97 thru 2003/04



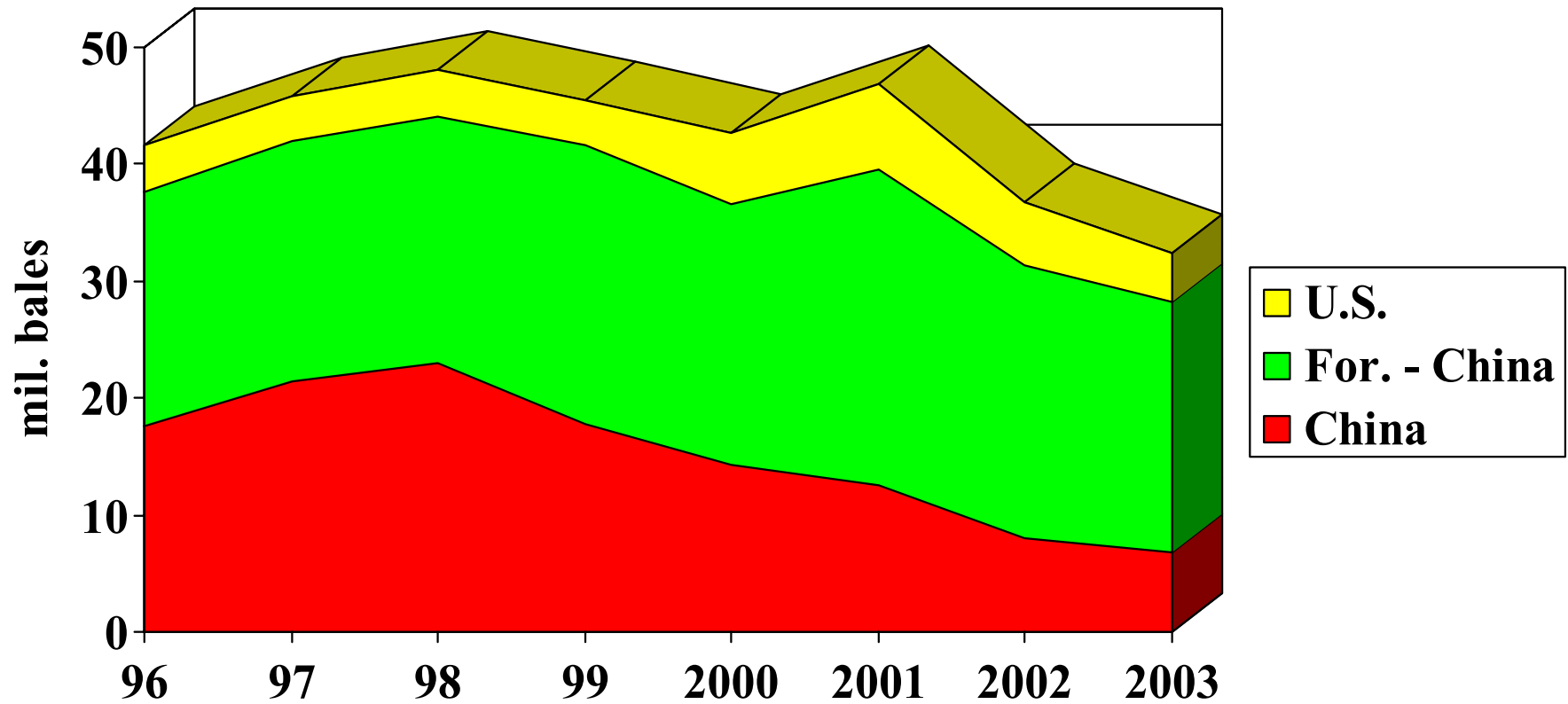
# Projected Changes in World Consumption, 2003/04 vs. 02/03



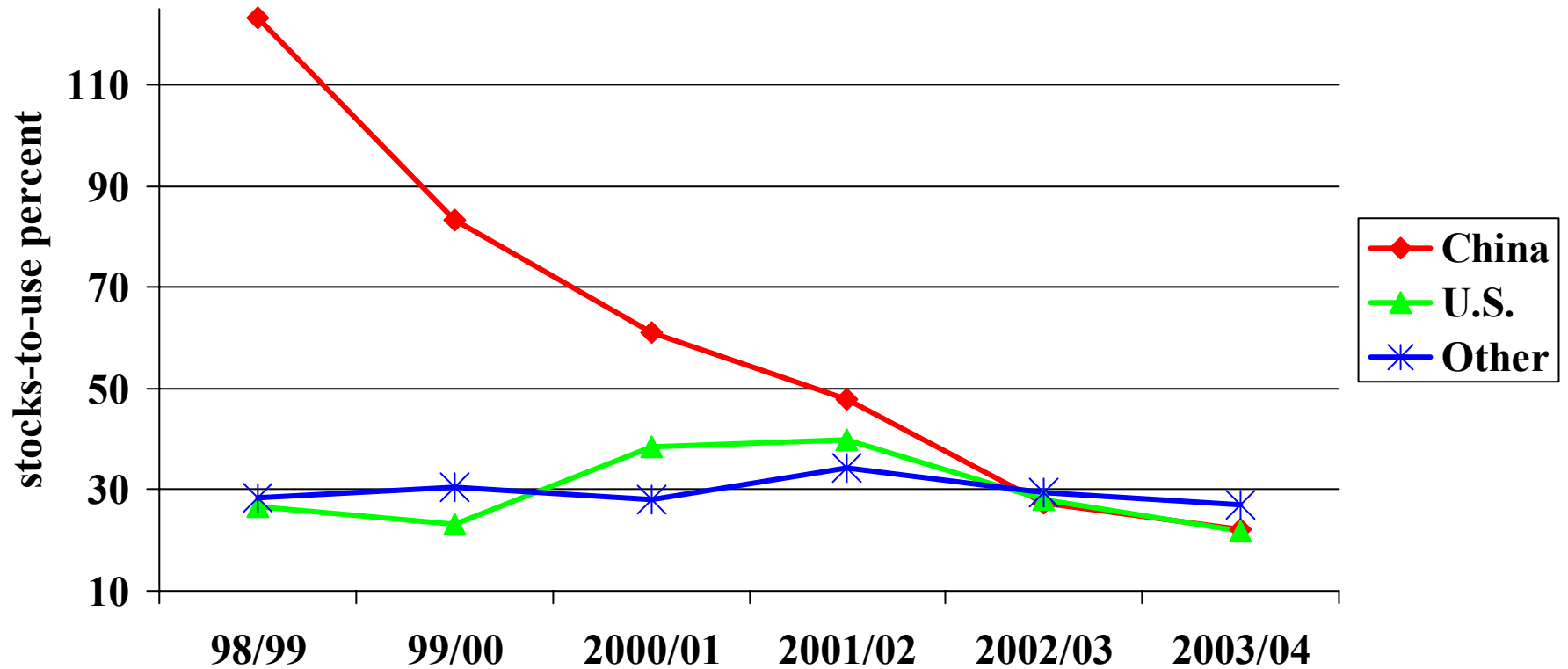
# China's Import and Export Projections through 2003/04



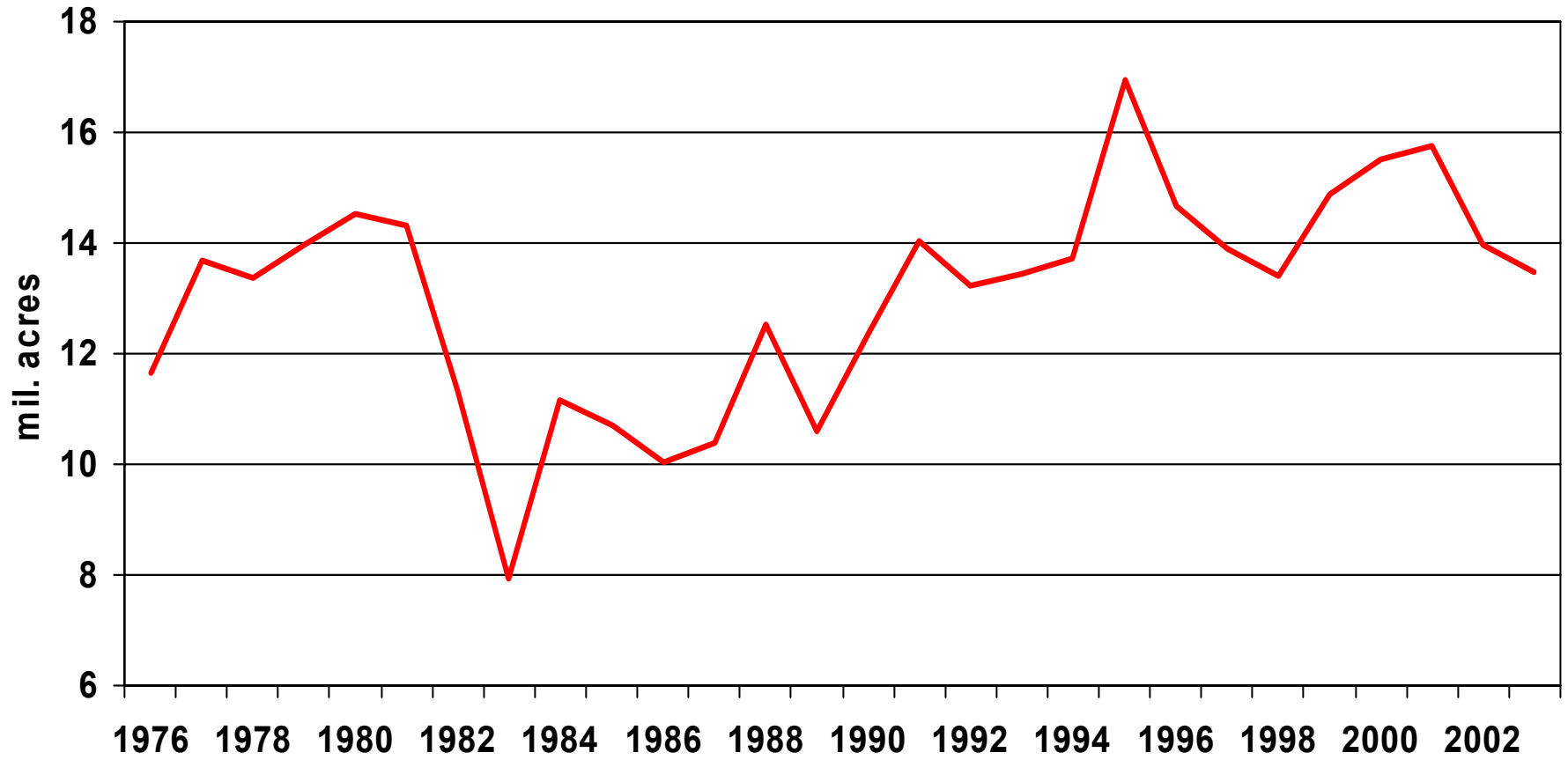
# U.S., China, and Other Foreign Stocks through 2003/04



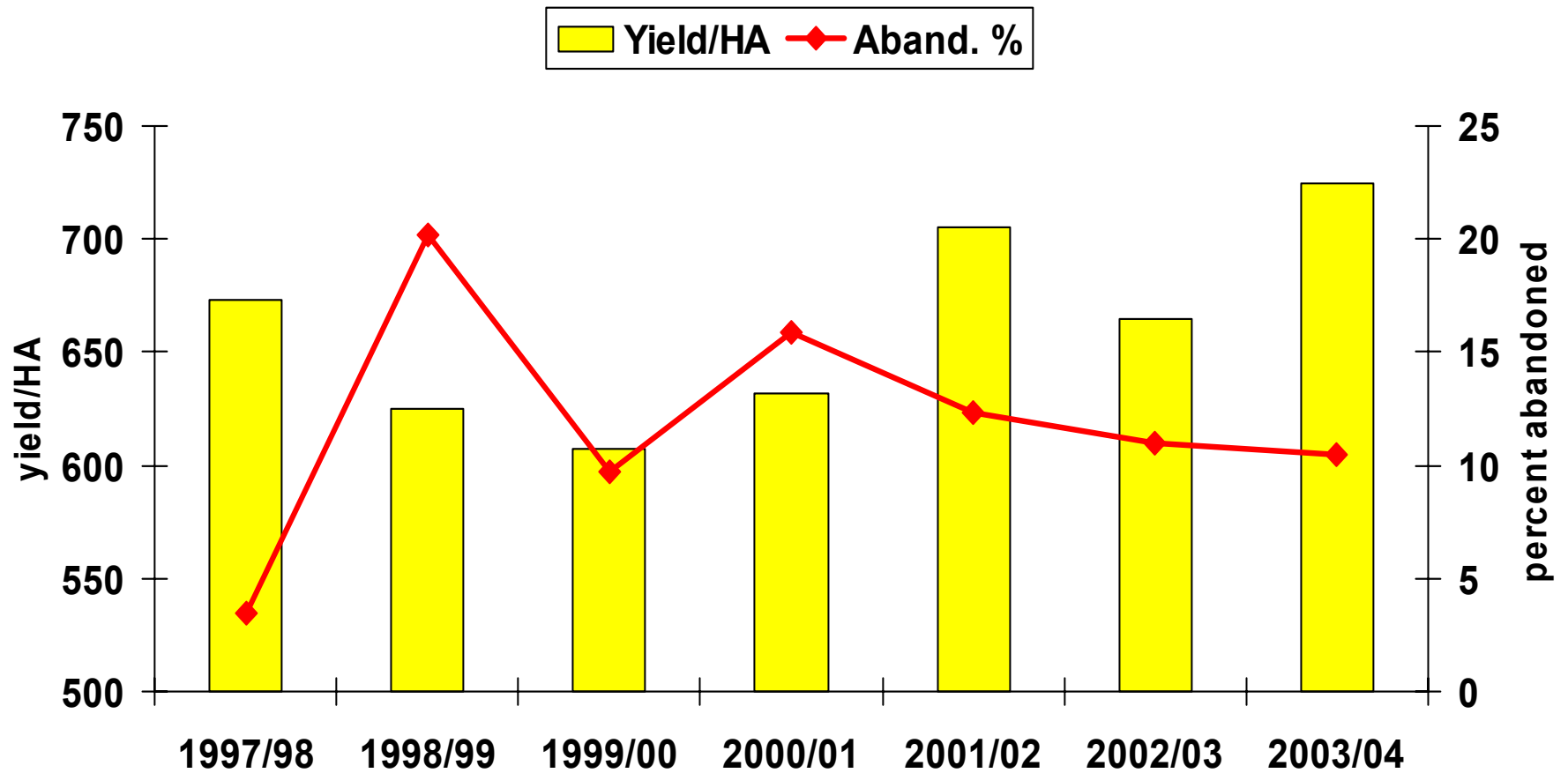
# U.S., China, and Other S/U Ratios 1997/98 to 2003/04 est.



# U.S. Planted Area



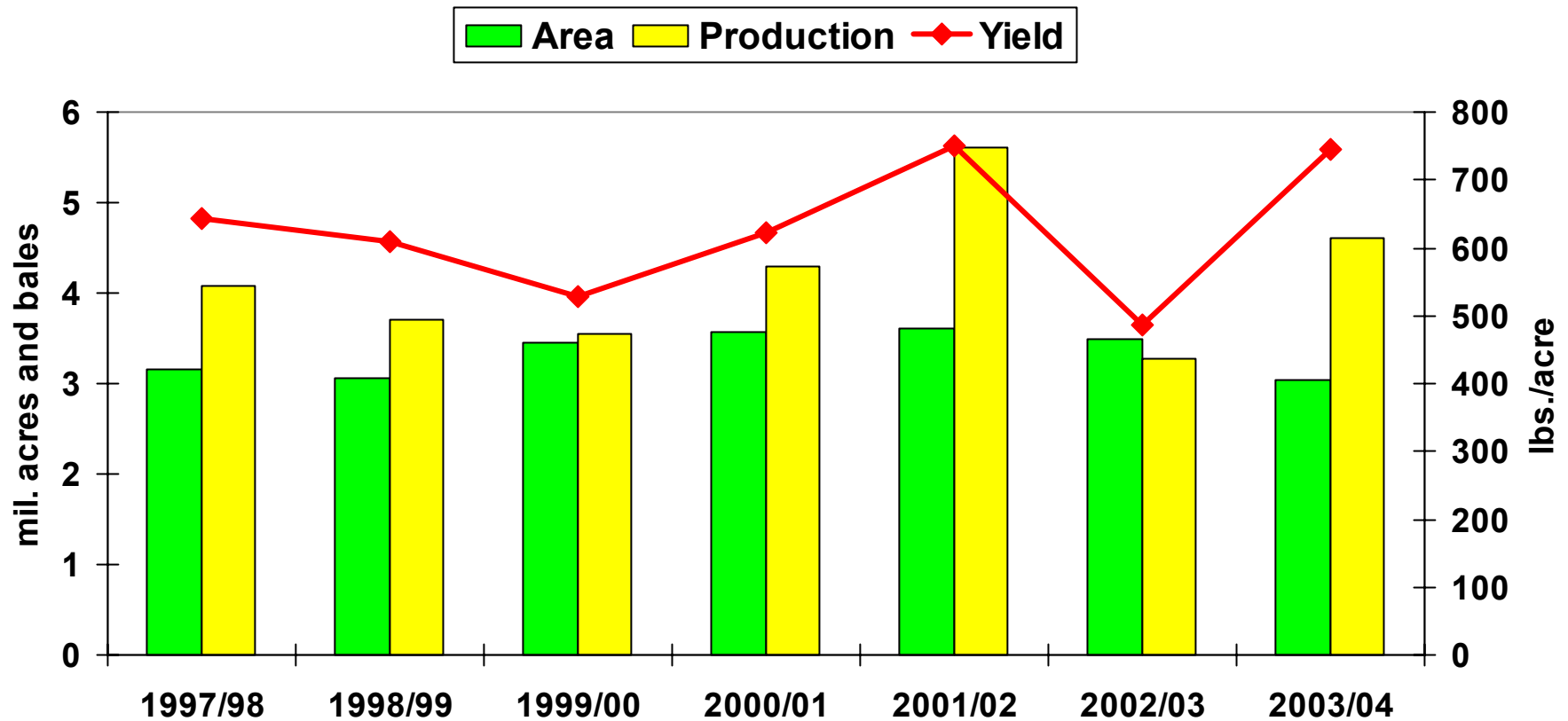
# U.S. Abandonment and Yield/Harvested Acre 1997/98 to 2003/04



# Southeast Region

## Upland Cotton Area, Production, and Yield

1997/98 to 2003/04

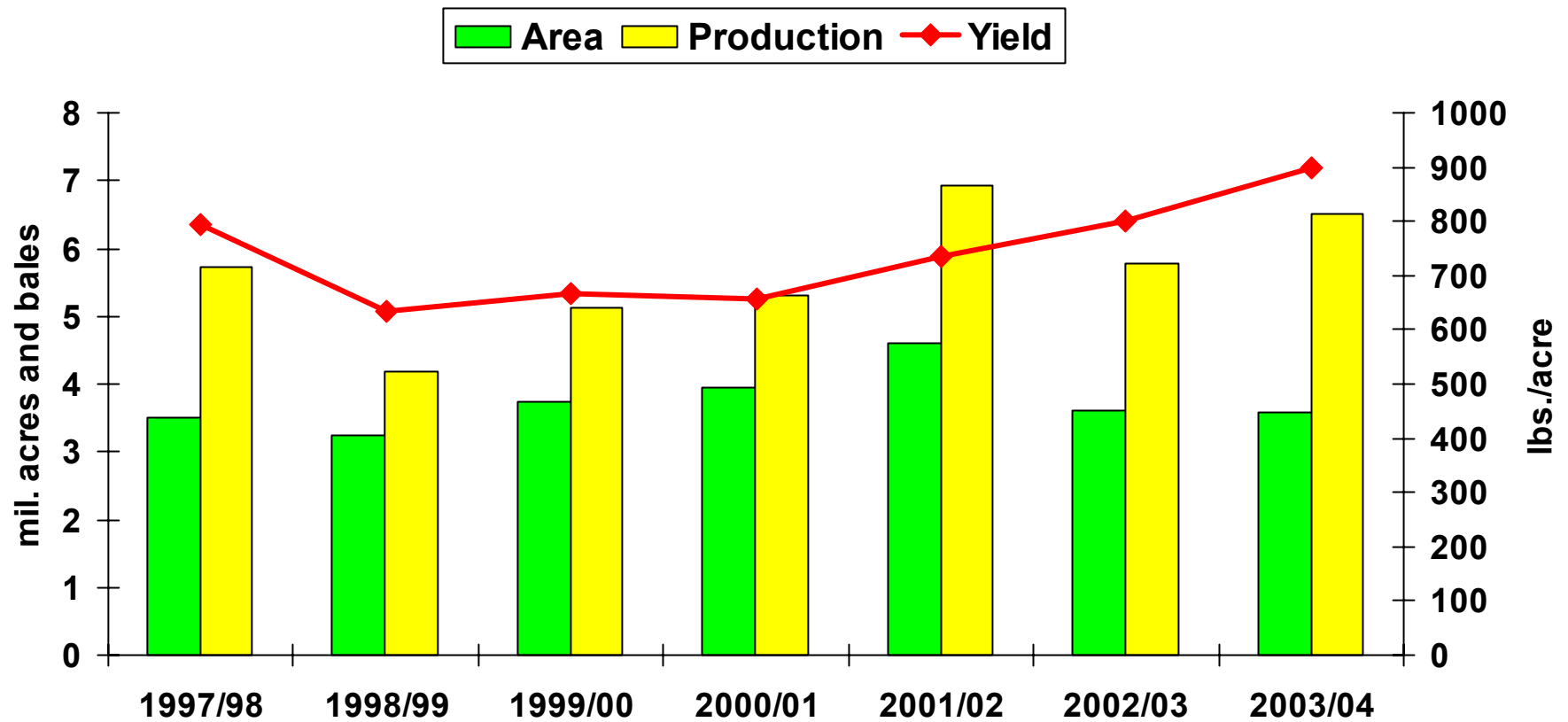




# Delta Region

## Upland Cotton Area, Production, and Yield

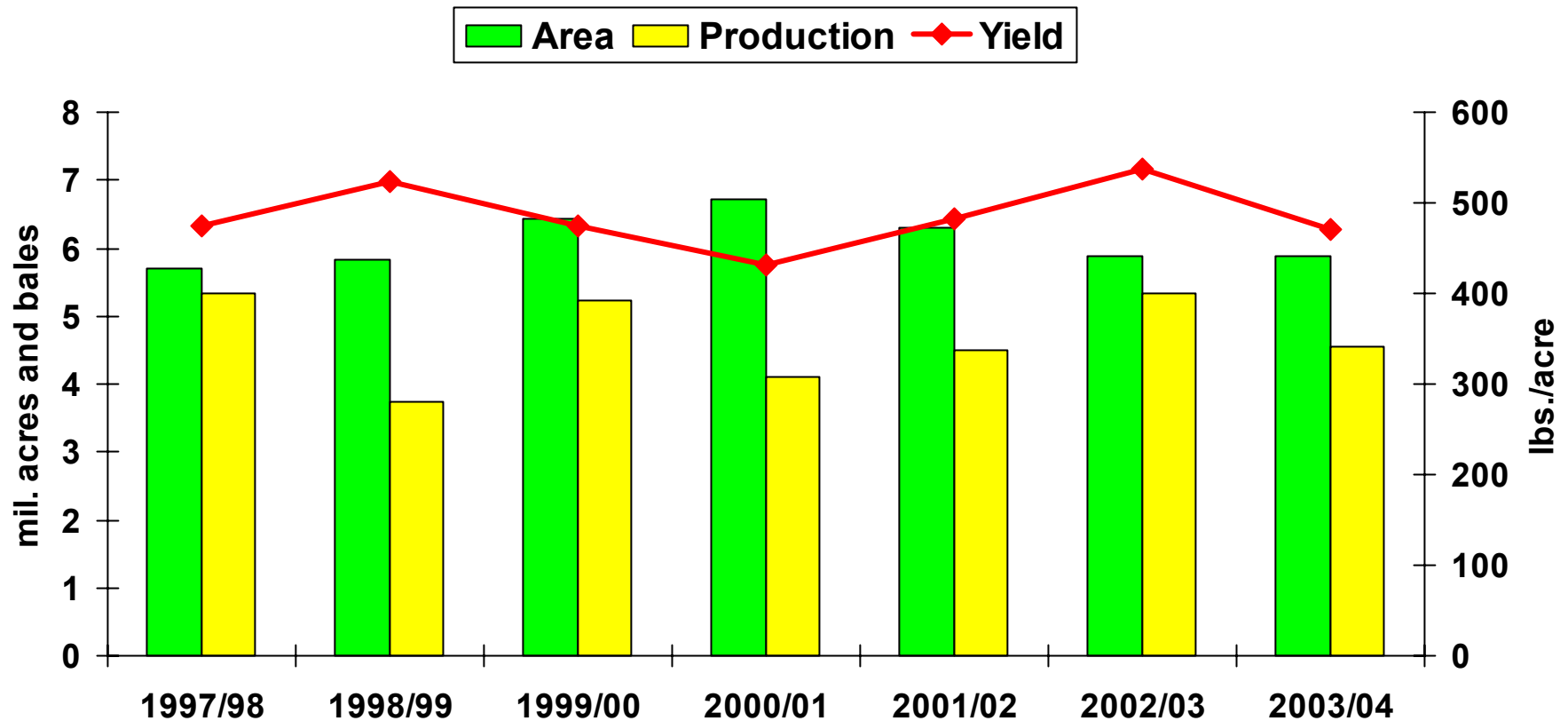
1997/98 to 2003/04



# Southwest Region

## Upland Cotton Area, Production, and Yield

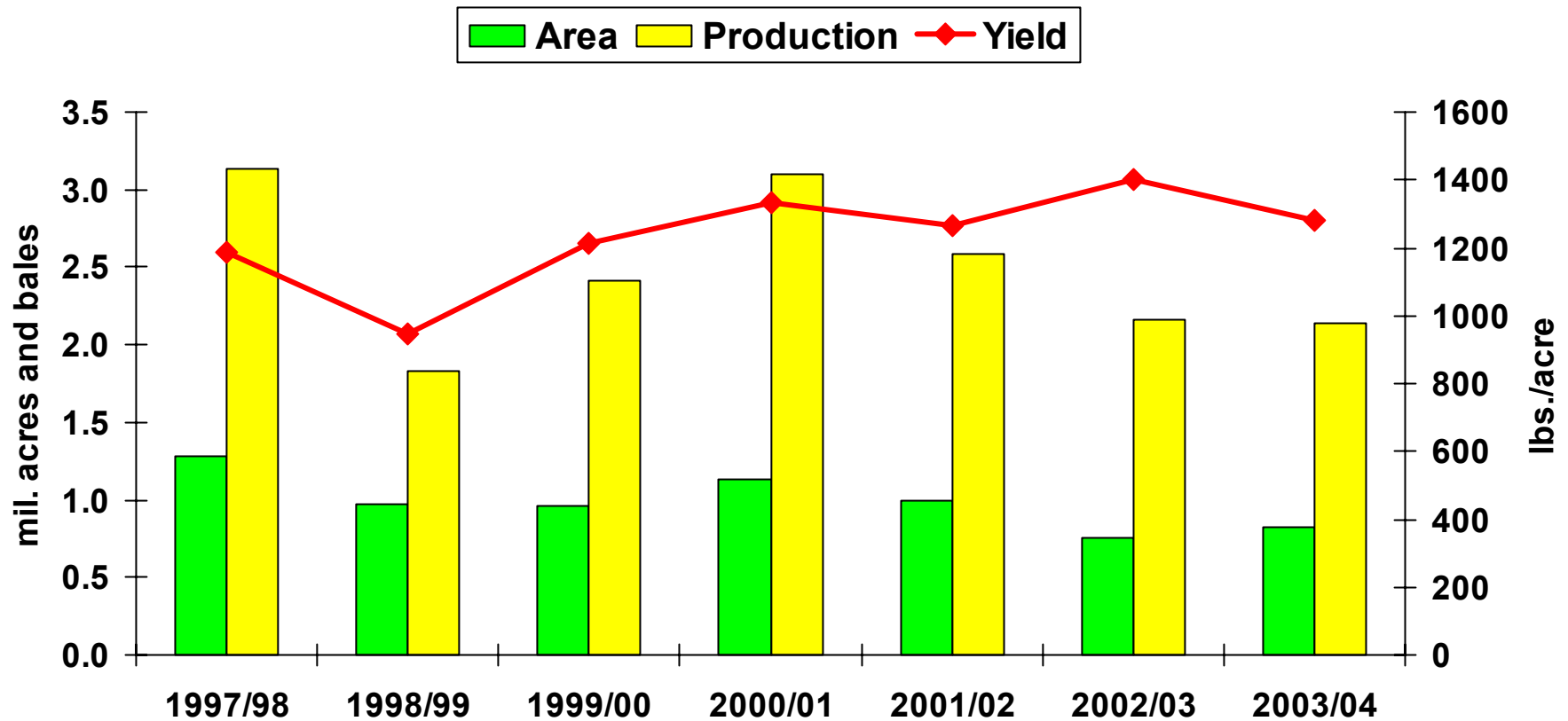
1997/98 to 2003/04



# Far West Region

## Upland Cotton Area, Production, and Yield

1997/98 to 2003/04

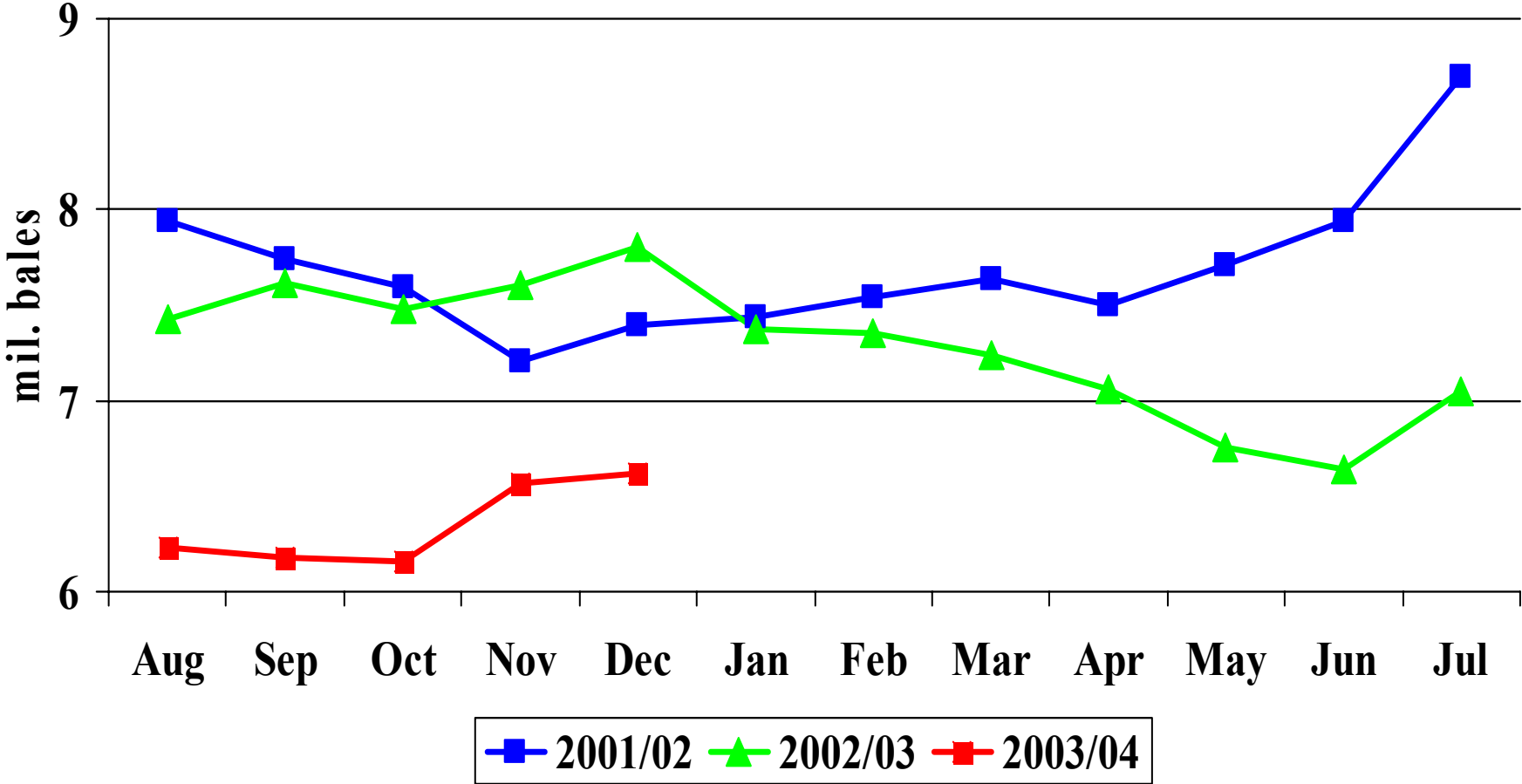


# U.S. Cotton Supply-Demand Estimates

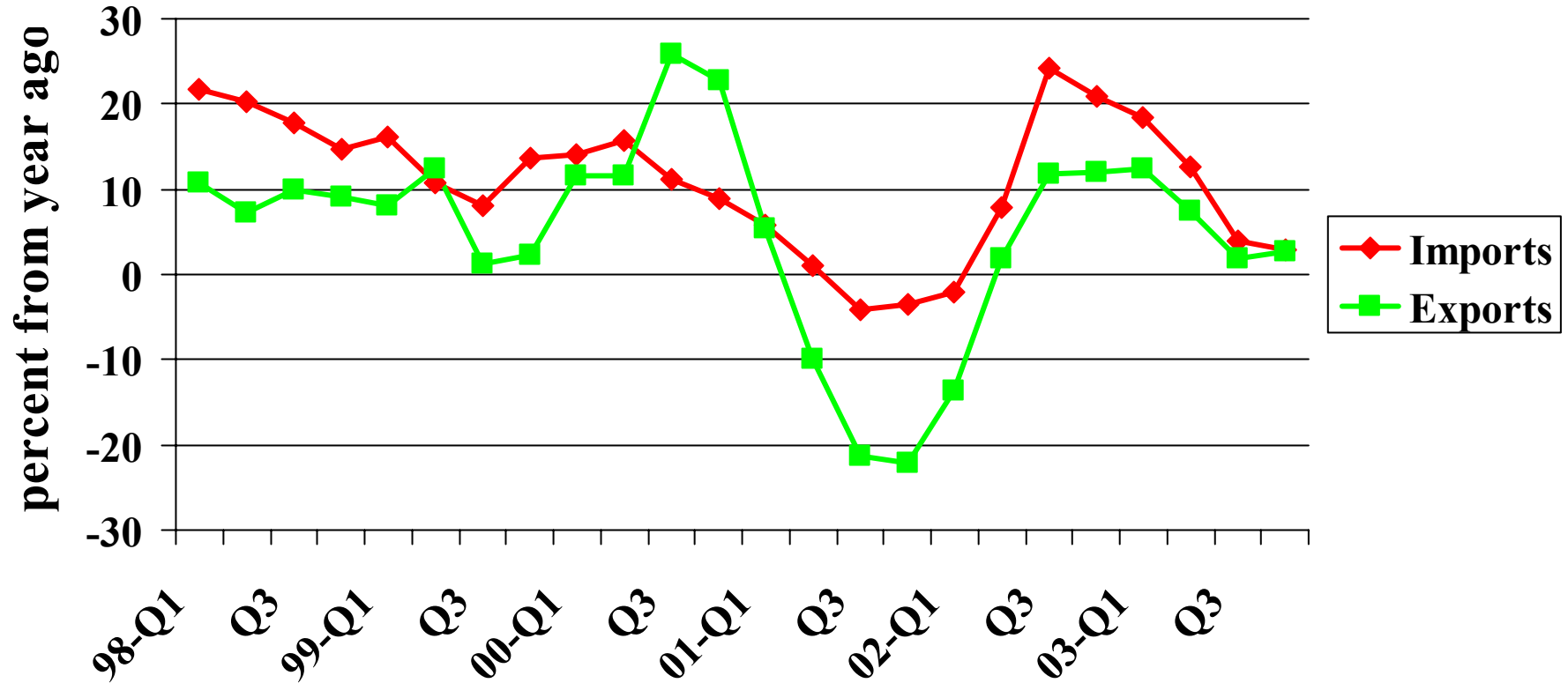
mil. bales

	<u>2002/03</u>	<u>2003/04</u>
<b>Beg. Stocks</b>	7.5	5.4
<b>Production</b>	17.2	18.2
<b>Imports</b>	<u>0.0</u>	<u>0.0</u>
<b>Total Supply</b>	24.7	23.7
<b>Mill Use</b>	7.3	6.2
<b>Exports</b>	<u>11.9</u>	<u>13.2</u>
<b>Total Use</b>	19.2	19.4
<b>Ending Stocks</b>	5.4	4.3

# Seasonally Adjusted Annual Mill Use Rates by month since August 2001



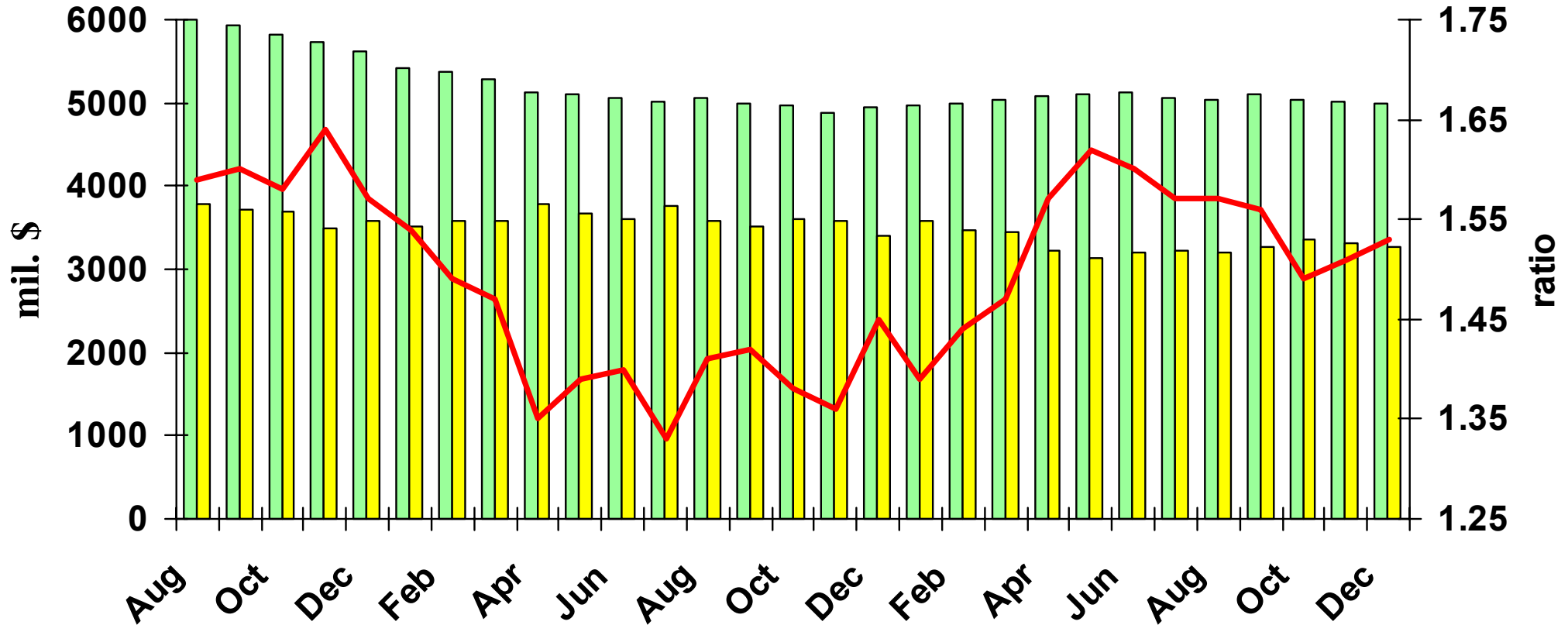
# Cotton Textile Trade Growth Rates (by quarter since 1998)



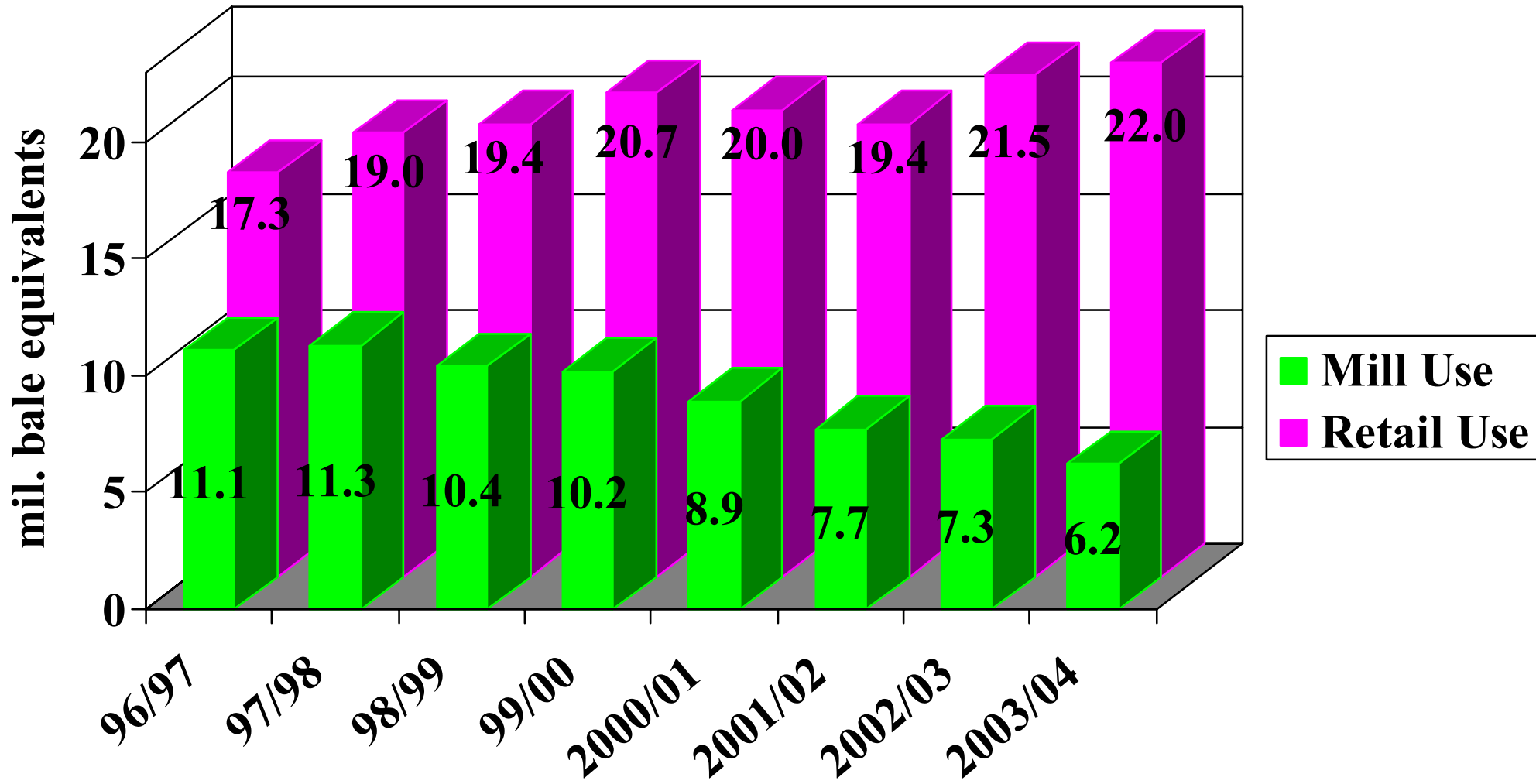
# U.S. Textile Mill Inventories and Shipment Values

## August 2001 to date

Inventories
  Shipments
  Inv:Shipment Ratio



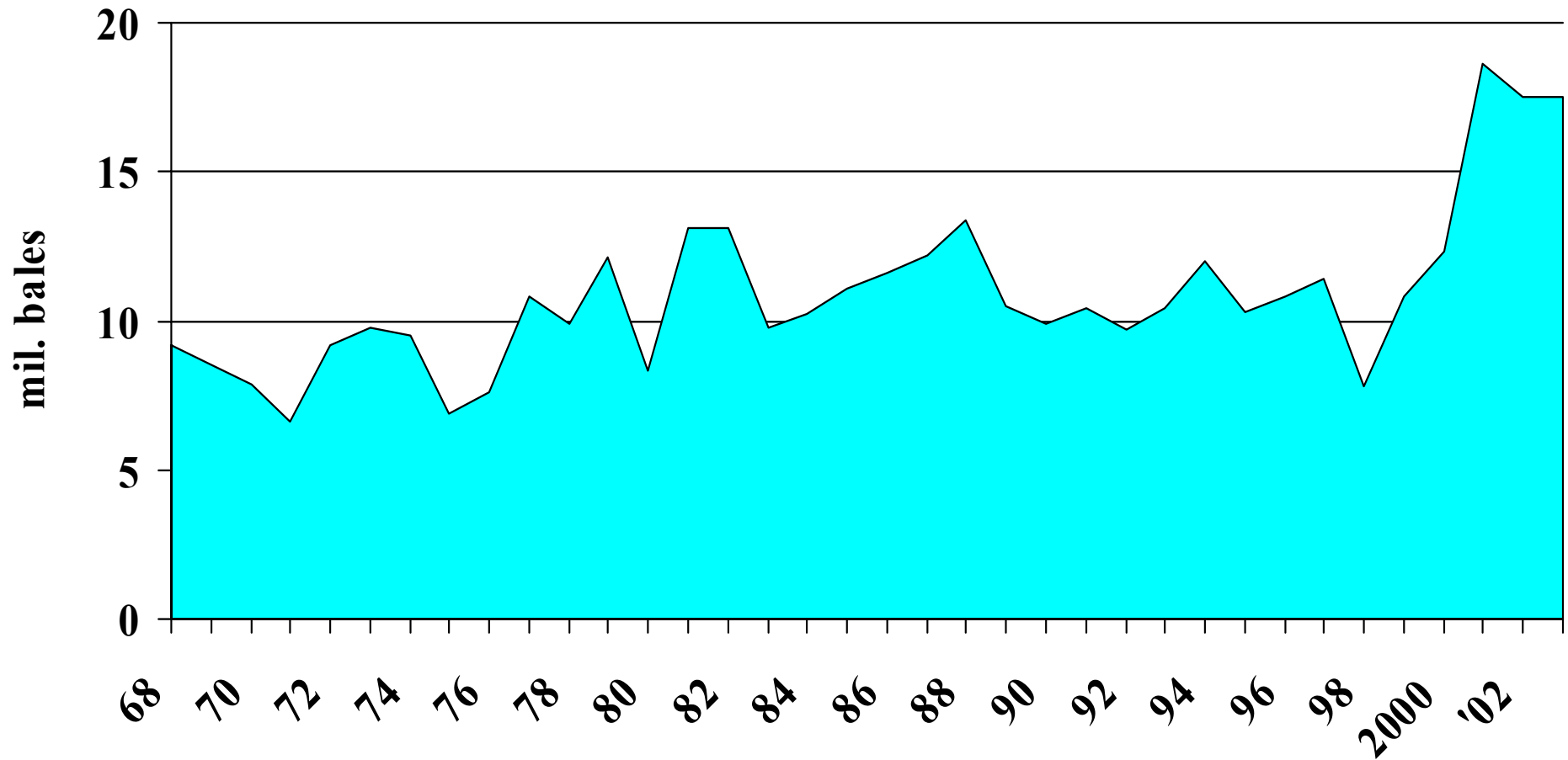
# U.S. Retail Consumption and Share of U.S. Mills



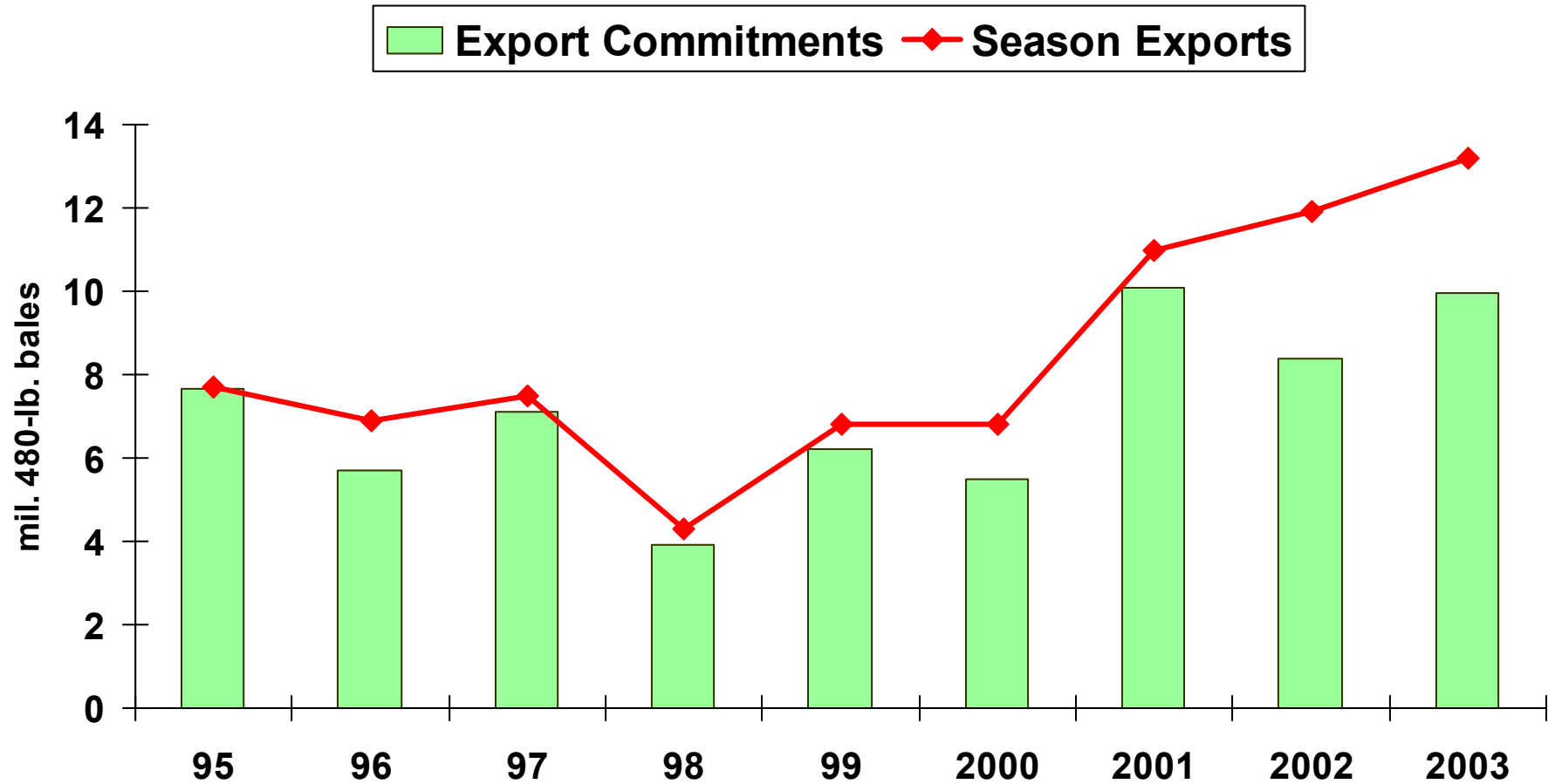


# U.S. Exportable Supply Second Largest in 35 Years for 2002/03 and 2003/04

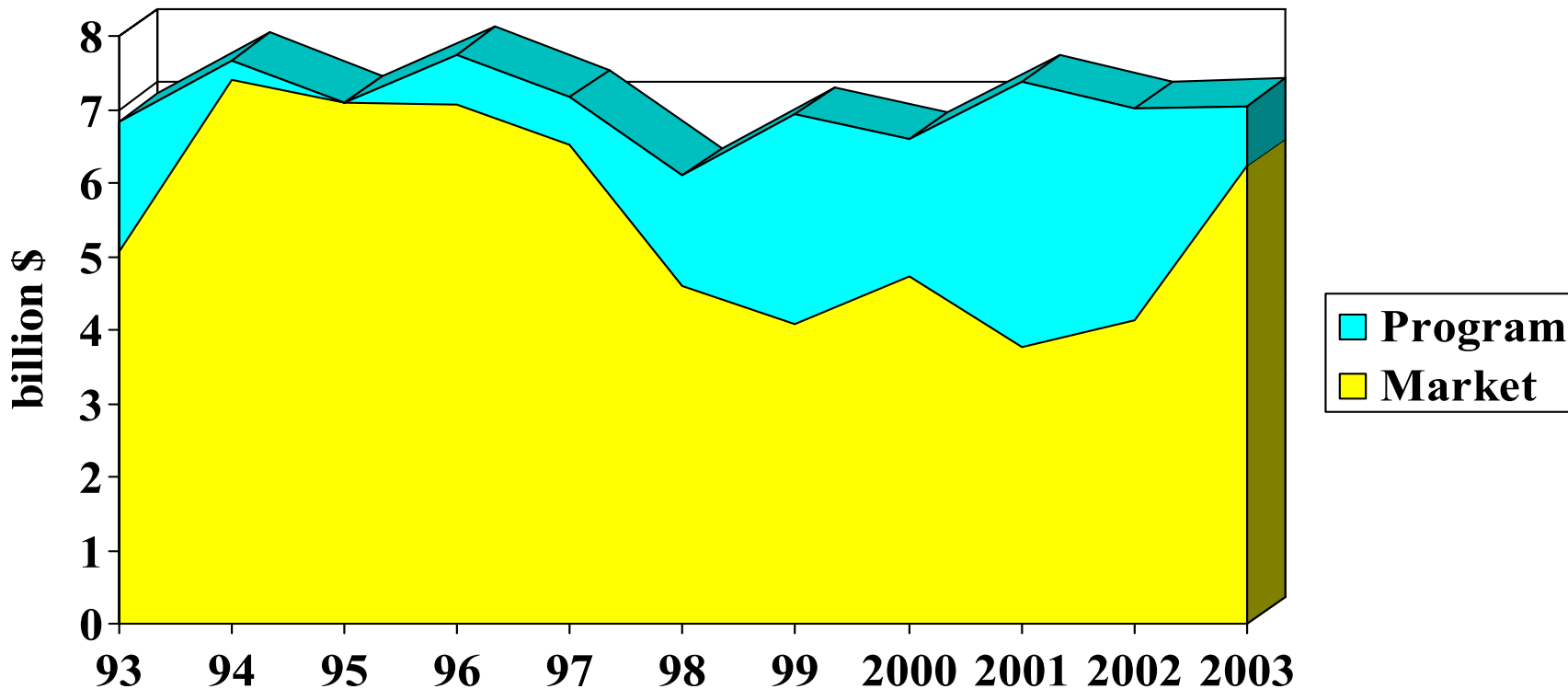
(exportable supply = total supply - mill use)



# U.S. Export Commitments as of End-January 1995/96 through 2003/04



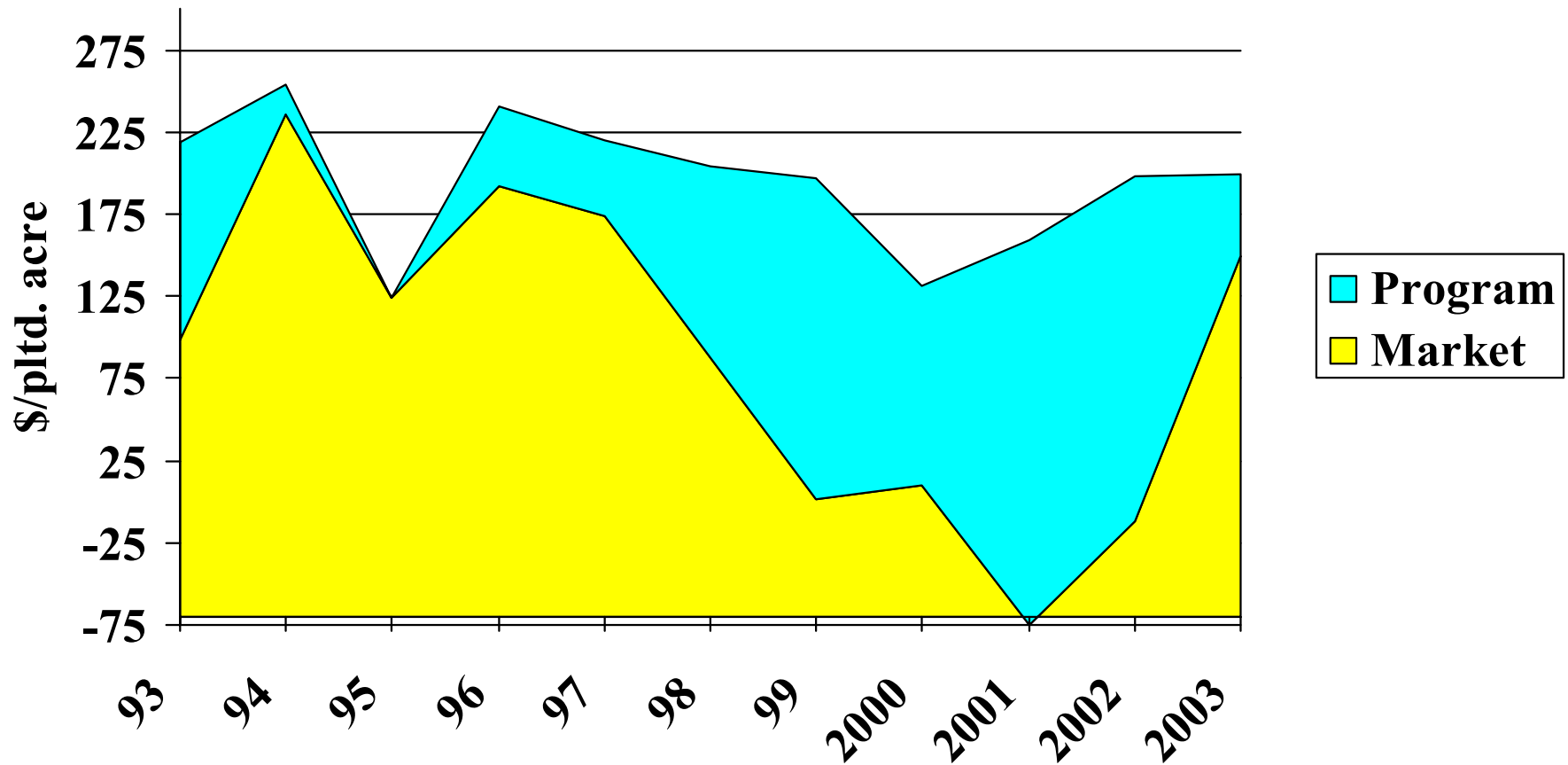
# Gross Cotton Farm Income 1993/94 through 2003/04 est.



# Net Returns/Acre over Variable Costs

## Program and Market

1993 thru 2003 est.

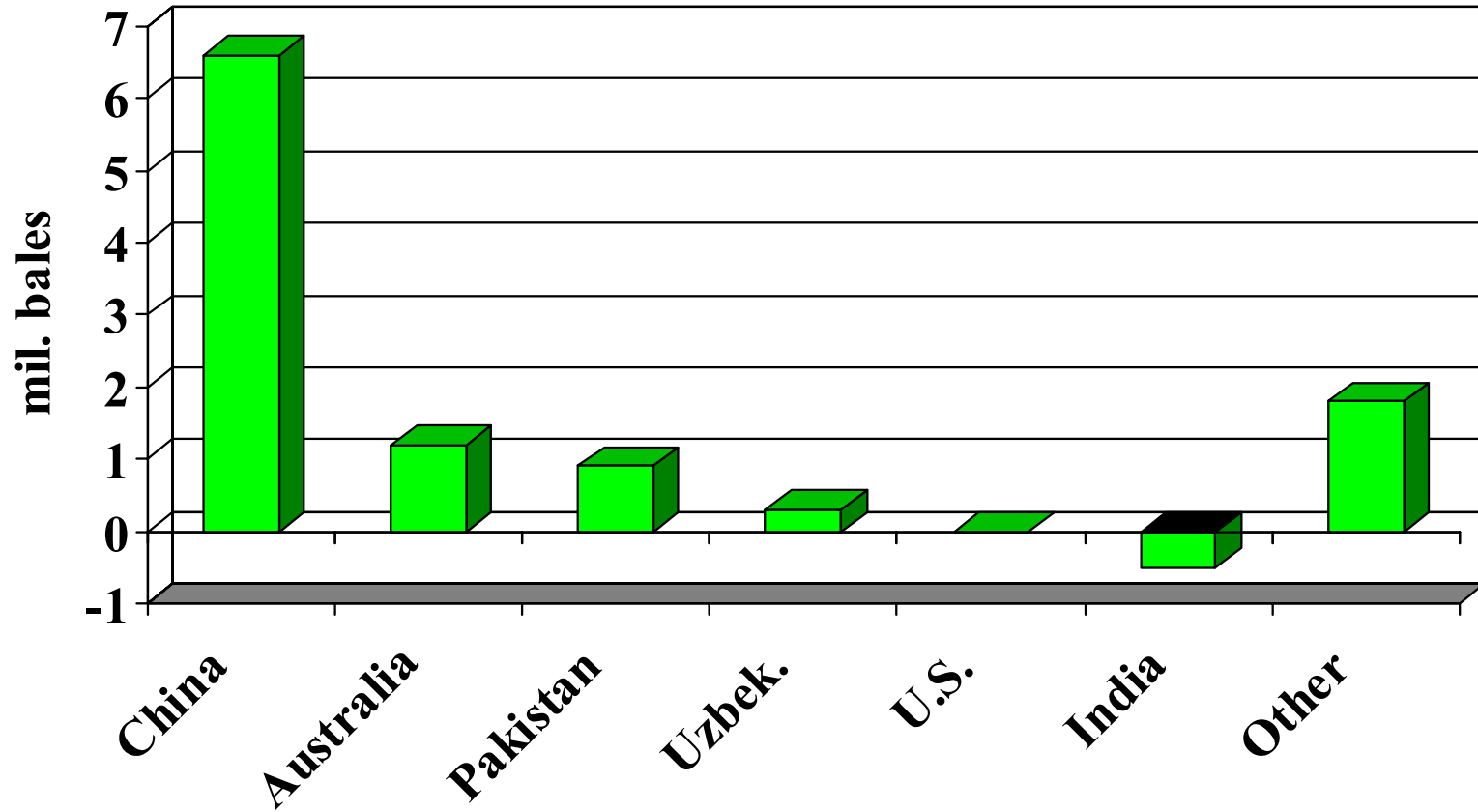


# **World Cotton Supply-Demand Estimates**

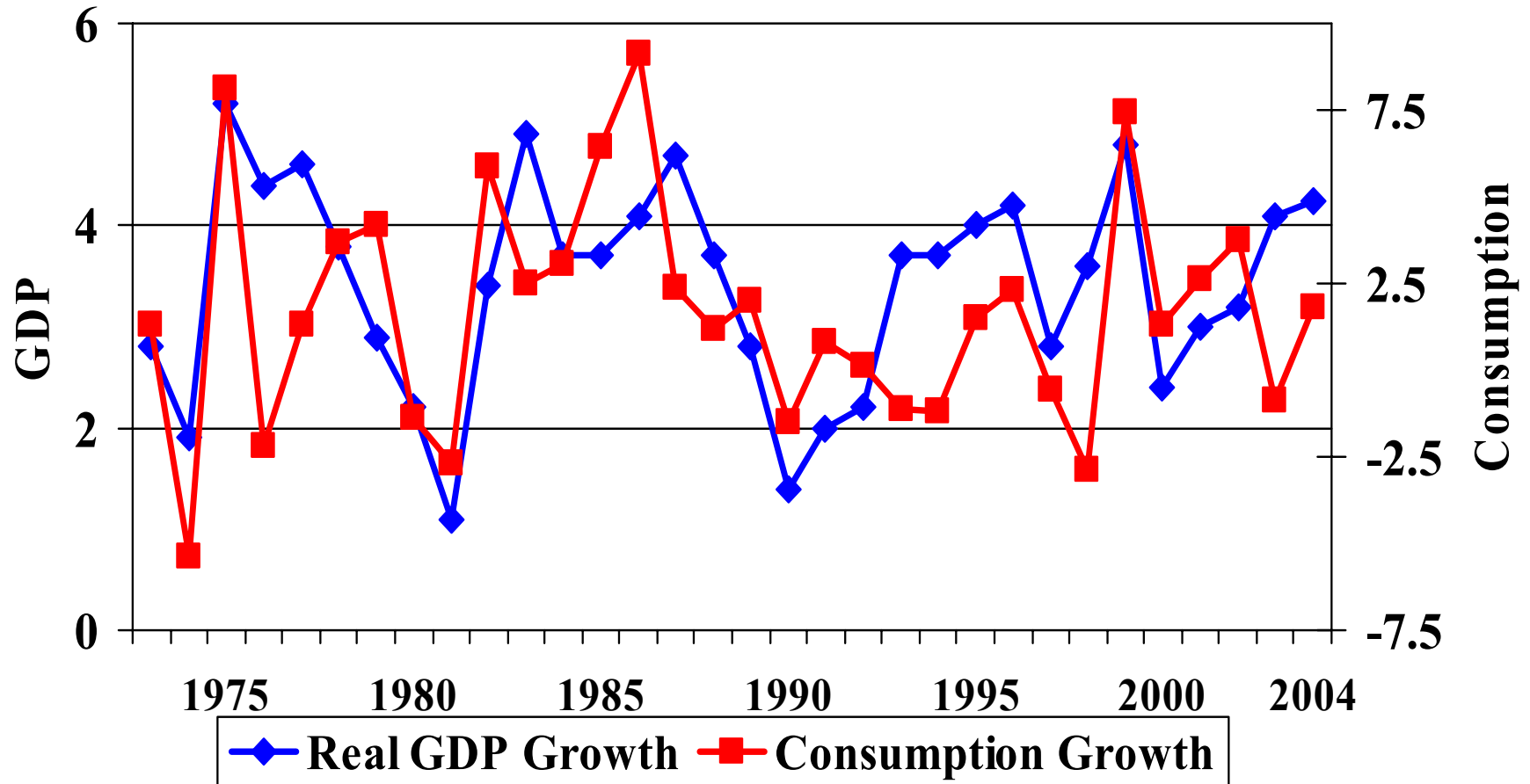
(mil. bales)

	<b><u>2003/04</u></b>	<b><u>2004/05</u></b>
<b>Beg. stocks</b>	<b>36.8</b>	<b>32.5</b>
<b>Production</b>	<b>92.7</b>	<b>103.0</b>
<b>Imports</b>	<b><u>32.4</u></b>	<b><u>31.3</u></b>
<b>Total Supply</b>	<b>161.8</b>	<b>166.8</b>
<b>Consumption</b>	<b>97.2</b>	<b>99.0</b>
<b>Exports</b>	<b><u>32.0</u></b>	<b><u>31.0</u></b>
<b>Total Use</b>	<b>129.2</b>	<b>130.0</b>
<b>Ending Stocks</b>	<b>32.5</b>	<b>36.8</b>

# Forecast Changes in World Production, 2004/05



# 2004/05 World Consumption Forecast to Increase 1.8%



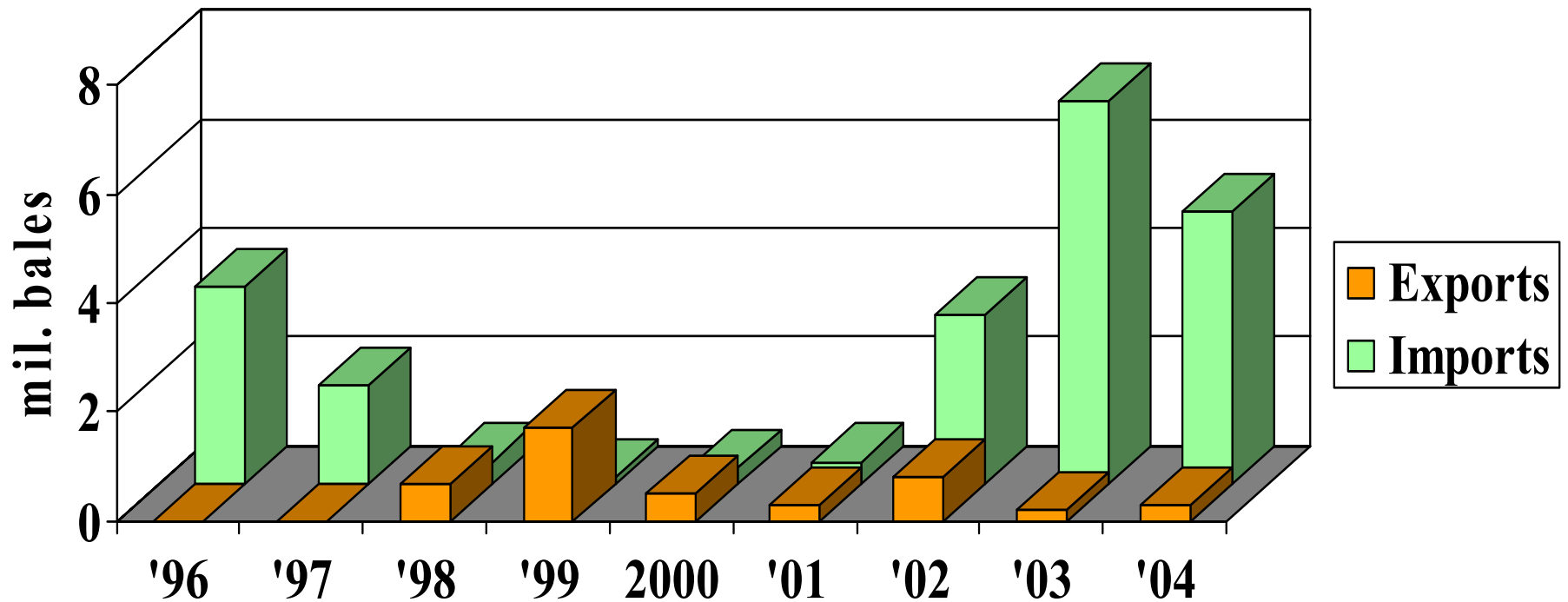
# China Supply-Demand Estimates

mil. bales

	<u>2003/04</u>	<u>2004/05</u>
<b>Beg. Stocks</b>	<b>8.1</b>	<b>6.8</b>
<b>Production</b>	<b>22.4</b>	<b>29.0</b>
<b>Imports</b>	<b><u>7.0</u></b>	<b><u>5.0</u></b>
<b>Total Supply</b>	<b>37.5</b>	<b>40.8</b>
<b>Mill Use</b>	<b>30.5</b>	<b>32.5</b>
<b>Exports</b>	<b><u>0.2</u></b>	<b><u>0.3</u></b>
<b>Total Use</b>	<b>30.7</b>	<b>32.8</b>
<b>Ending Stocks</b>	<b>6.8</b>	<b>8.0</b>



# China's Import and Export Projections through 2004/05



# U.S. Cotton Supply-Demand Estimates

mil. bales

	<u>2003/04</u>	<u>2004/05</u>
<b>Beg. Stocks</b>	5.4	4.3
<b>Production</b>	18.2	18.0-18.5
<b>Imports</b>	<u>0.0</u>	<u>0.0</u>
<b>Total Supply</b>	23.7	22.3-22.8
<b>Mill Use</b>	6.2	5.5-6.0
<b>Exports</b>	<u>13.2</u>	<u>11.5-12.5</u>
<b>Total Use</b>	19.4	17.0-18.5
<b>Ending Stocks</b>	4.3	4.3-5.3

# U.S., China, and Other Foreign Stocks through 2004/05

