

## THE OUTLOOK FOR THE U.S. FARM ECONOMY

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At the outset of 2002, the farm economy contains the contrasts that have long seemed normal in agriculture. There are highs and lows in the data, optimism and pessimism among participants, and stagnation and dynamic change in the ways production, processing and marketing are being carried out. This presentation reviews the prospects for the farm economy in 2002 by discussing several key issues and their implication for the farm economy.

Throughout the next two days, session after session of the Outlook Forum will build a more complete picture than provided in this brief overview. The many missing pieces will be filled in, ranging from commodity market detail, to broad financial conditions, to the exciting developments taking place as producers and processors search out value opportunities and find new ways to grow.

### **Issue #1: Global slowdown now, global recovery coming—does that mean a rebound for U.S. agriculture?**

The outlook for the global economy is a continuation of the economic slowdown through 2002. This outlook suggests the slow world economy will constrain overall U.S. agricultural growth, but will also help to stabilize production expenses. Consider the effect on the domestic market. U.S. GDP plunged from an increase of 5.7 percent during the second quarter of 2000 to a decline of 1.3 percent by the third quarter of 2001, but for all of 2001, still averaged an increase of 1 percent. Despite the sharp drop in growth and a rapid rise in unemployment, consumer spending has held up pretty well and helped avoid an even deeper recession.

Chart 1 illustrates U.S. GDP plotted against U.S. personal consumption expenditures for food. The chart suggests that when the economy slows, U.S. demand for food slows, although not very much. Instead of growing perhaps 0.6 percent in 2001, as might have been expected under average GDP growth, food spending was flat, or some \$40 billion below trend. Unfortunately, domestic food sales could remain flat again for much of 2002, as U.S. GDP is expected to grow only 1 percent, about the same as in 2001 and unemployment remains at the 6 percent level. But food sales should improve as the year unwinds, as inventory balance is restored, tax cuts continue to be implemented and the low interest rates finally show their lagged, stimulative effects.

On the foreign side, foreign GDP growth in 2001 was a very slow 1.5 percent and is forecast at an even slower 1 percent this year (Oxford Economics), as many foreign economies continue to shrink. Developed economies will be particularly weak, especially Japan, but prospects are improving in a number of areas, such as the Middle East, East Europe and parts of Asia. The lack of Argentine contagion is also positive for Latin America.

The high value of the dollar is expected to continue to impair the U.S. competitive position in world markets. Chart 2 illustrates the inflation-adjusted average exchange rate of those countries that import U.S. agricultural products. The dollar is up 25 percent over the past 6 years, and a further slight

appreciation is expected in 2002 as the U.S. continues to attract capital inflows as the recovery advances and the United States remains the global safe haven. The combination of lagging recovery of foreign economies and a high value of the dollar will constrain U.S. export expansion. The strong dollar not only makes U.S. products more expensive, it insulates foreign competitors from market price declines and thus serves as an incentive for them to maintain or even expand their farm production.

The relationship between U.S. agricultural exports and foreign economic growth is positive but weak in the short term. Chart 3 plots world economic growth against U.S. agricultural exports. Many factors in addition to GDP determine what importers buy, such as their domestic farm production. Although weak, the chart nevertheless suggests some relationship, as very strong (weak) economic growth is associated with peaks (valleys) in U.S. farm exports. For 2002, despite continued slow foreign GDP growth, the strong dollar and generally good production in many countries, we continue to forecast a modest increase in U.S. exports to \$54.5 billion, up from nearly \$53 billion this past year.

U.S. markets are where they are today largely because of inconsistent and weak world economic growth since the late 1990s and generally good weather for 6 consecutive years. Chart 4 is one way to illustrate the weather story. The chart shows world wheat and coarse grain yield per hectare since the early 1970s. During much of the period, there is much annual variability—yield is up one year and carryover stocks may rise, but then yield declines, and markets move toward balance. The notable exceptions to this up-and-down pattern in yields are 1984-87, a 4-year period when yields were quite consistent, stocks built up, and farm economic problems occurred, and 1996-2001, the 6-year period we are still in, when again yields have been very stable.

In summary, today's markets reflect a world economy has been weaker and more variable during the past few years, while crop production has been reasonably good for successive years around the globe. For 2002, the world and U.S. economy will get better as the year unfolds, but they again are not likely to provide agriculture much demand boost and global farm production may again reflect the past several years. The upshot for 2002/03 is that U.S. farm markets may strengthen somewhat but still look very similar to 2001/2002.

## **Issue #2: Wheat—opportunity missed, a new opportunity in prospect?**

Turning to markets in a little more detail, wheat has been facing very tough competition in recent years. It is a crop for which the U.S. has vast regions well suited for production and for which we are pretty efficient at producing. Yet, wheat acreage has fallen pretty steadily from 88 million in 1981 to 59.6 million last year. We expect 59.5 million this coming year. The problem for wheat is that a number of other countries can also grow wheat pretty well and that number is increasing.

Prior to this year, there have been only two periods during the past two decades when several major exporters have had significant production problems simultaneously. Normally, the mix of winter wheat and spring wheat and Northern Hemisphere and Southern Hemisphere production spreads the risk sufficiently to avoid large production declines. During the 1987/88-1988/89, the combined production of the major competitors dropped 12 percent, their stocks declined almost 40 percent, and U.S. wheat exports rose 50 percent from 1986/87. The other period prior to this year was 1994/95-1995/96. There were weather problems that year, but the major factor is that several years of low prices had shifted land to oilseeds and other crops and the EU had cut area through a set-aside program, steadily drawing down competitor stocks. U.S. exports did not jump in 1994 and 1995, but were steady as wheat prices reached record levels.

Based on those two episodes, the stage was set in 2001/02 for strong U.S. wheat exports and higher U.S. and world prices. Because of weather that reduced plantings and yields, wheat production in the traditional U.S. exporter competitor nations of Argentina, Australia, Canada, and the EU fell by 20 million tons or 12 percent. Yet, this season's U.S. wheat exports are expected to be the smallest in 5 years with prices below \$3.00 again. Wheat missed an opportunity. Why? Russia, Ukraine, and Eastern Europe increased wheat production 31 million tons, and their net exports are up 10 million tons. Add another 3 to 4 million tons from India and Pakistan, and it is no surprise U.S. wheat exports and prices have not rebounded.

Looking ahead to 2002/03, another opportunity like the past year for wheat is unlikely. Stocks remain large in Pakistan, India and Central Asia, EU wheat planting was up sharply last fall, and with a rebound from last year's drought to an average yield in Canada, the world wheat market will likely be brutally competitive in 2002/03. U.S. wheat exports could fall to 900 million bushels, the lowest since 1971/72, stocks remain about the same, and average farm prices decline about 5 cents per bushel from the average price of \$2.80 per bushel expected in 2001/02 (Chart 5). We appear to have missed the opportunity for a rebound in U.S. exports and prices that has occurred every 5 to 6 years during the last two decades.

### **Issue #3: Corn market tightening, soybean market loosening in 2001/02—will adjustment to these market forces lead to convergence in prospects in 2002/03?**

First, I will comment on the global market and, second, the implications for the United States. The amazing developments in these markets continue to be China, South America and ethanol.

World use of energy and high protein feeds appears to continue to expand and be little affected by the global economic slowdown and animal diseases. The demand growth has reduced world coarse grain stocks again, even though world coarse grain production was up a little, mainly due to large crops in Central and Eastern Europe, which offset lower U.S., Canadian, South American and Chinese crops. U.S. corn exports are expected to expand slightly this season due to lower South American production and WTO-constrained exports by China.

For 2002/03, global coarse grain production and use are expected to rise again. Production should increase, mainly due to larger corn crops in the United States and China. Larger corn and barley crops in Canada will likely reduce Canadian corn imports. In addition, there will ample supplies of wheat for feeding. As a result, we are currently expecting U.S. corn exports to reach about 2 billion bushels in 2002/03, slightly above this year's level.

For oilseeds, overall oilseed trade may grow at a somewhat higher rate in 2002/03 than this year, based on expected strong production gains in world oilseed crops, especially rapeseed and sunflowerseed, as yields for these crops rebound from drought-reduced levels in 2001/02. Underlying demand for protein meals and oils is expected to increase 3-4 percent over 2001/02. The strong protein market is helping to push U.S. soybean exports to a record high 1.02 billion bushels this season and a similar level of exports is expected for the 2002 crop.

In the U.S. market, much attention has focused on the expected planted acreage of corn and soybeans. For the 2001 crop, corn planted area and production were down, partly due to bad-planting time weather last spring and partly due to the attractive soybean loan rate which helped keep soybean planted area above 74 million acres. The two markets are moving in opposite directions in 2001/02, as corn stocks are being worked down and corn prices are expected to average \$2.00 per bushel, up 8 percent from a

year earlier. In contrast, soybean stocks are rising and soybean prices this season are expected to decline 5 percent to \$4.30 per bushel. We expect both corn and soybean acreage to expand in 2002 relative to 2001. Most of the gains are expected to come in corn, which could reach 78.5 million acres and produce a 9.9 billion bushel crop. Soybean area may increase only slightly from this year's 74.1 million acres, even with a continuation of the \$5.26 per bushel loan rate, and produce a crop near 3 billion bushels. Producers likely expect slightly higher corn prices in 2002 than they were expecting as the planting season approached a year ago, while soybean prices likely will remain below the loan rate, the same situation as a year ago. In addition, the price of nitrogen fertilizer has declined from last year, favoring a small shift toward corn production.

When all is said and done, the 2002/03 corn market appears to be the strongest among major crops. Although production may approach 10 billion bushels and exports only rise slightly, domestic demand is expected to be quite strong with corn used in ethanol to rise 30 percent. Corn carryover stocks should decline again and the corn price average 5 percent higher than this year.

For soybeans, despite exports remaining close to this year's record level, stocks may rise again and prices average near this year's level. There will simply be a lot of oilseeds available in the world market in 2002/03. Chart 6 shows South American soybean production compared with U.S. production over the past decade. Brazil accounts for most of the gain and is sure to be a formidable competitor in the future. Large South American soybean inventories going into 2002/03 and further acreage and production expansion in 2003 is expected to keep oilseed prices under pressure. Area in South America is expected to continue to expand as long as U.S. prices are around \$4.25 or above.

Availability of large supplies from the Southern Hemisphere has changed the oilseed sector for at least three reasons: (1) today, there is less reliance on the United States as the major supplier; (2) large, new crops available twice per year may lead to lower prices as alternative supplies reduces risk for foreign buyers; and (3) more competition for U.S. fall sales is likely as South American crops and stocks grow. With increased availability of foreign soybean supplies, the global stocks/use ratio has remained relatively high and stable. Concerns about a possible slowdown in China's imports and a possible shift in China's grain acreage toward oilseeds also overhang the market. China is key to insuring consumption keeps pace with production increases. Protein consumption in China has increased at above 10 percent per year since 1997, led by increases in livestock production and shifts toward feeding more optimal rations. Growth in production of soybeans and other oilseeds has not kept pace, leading to strong gains in Chinese imports.

#### **Issue #4: "The touch, the feel, the look . . . the fabric of our lives"—what happened to U.S. demand for cotton?**

U.S. cotton prices this year are averaging the lowest level in 30 years and carryover stocks rising to the highest levels in two decades, as U.S. production reached a record high and domestic use tailed off. There is good news and that is the U.S. has a large supply of high quality cotton, and as a result, the U.S. share of world exports is up sharply this year. So despite slow world economic growth, U.S. cotton exports are forecast to reach 10 million bales, the highest since the 1920s.

However, domestic mill use of cotton is expected to decline about 18 percent in 2001/02. Mill use, at 7.3 million bales, represents a loss of 4.0 million bales, or 35 percent, from its recent peak in 1997/98. U.S. cotton demand has been hurt by contraction of the domestic apparel industry, with the strong dollar a key factor. Since 1997 alone the textile trade weighted value of the dollar has risen 30 percent since 1997, if trade with Mexico is excluded. Textile and apparel imports have risen nearly 5 million raw-

cotton-equivalent bales from 1997/98 to 2001/02. One-third of the increase came from NAFTA countries, one-third from Asia, and one-third from other regions. Over half of the higher imports from NAFTA countries were offset by higher U.S. textile exports, such as yarn and fabric, to them, mainly Mexico. However, with the dollar's strength, it has become more difficult for both U.S. and Mexican businesses to compete with foreign mills, and the growth in NAFTA textile trade has slowed.

The slowdown in the U.S. economy has also hurt U.S. mill use. At retail, U.S. consumers used an estimated 20.7 million bales of cotton in the form of imported and domestic products during 1999/2000, 20.0 million in 2000/01, and an expected 18.9 million bales this season.

For 2002/03, U.S. economic recovery is likely to promote growth in retail use of cotton, after two years of decline. Foreign mills' share of the U.S. consumer market is likely to continue to rise, but higher retail use should help U.S. mill use rise slightly. This season's lower prices should reduce U.S. and foreign planted area, with U.S. cotton production declining about 2.5 million bales from this season's record 20.1 million. U.S. exports could be strong again and could exceed this year's level, but U.S. stocks are likely to be reduced only slightly, keeping prospects for a sharp rebound in U.S. cotton prices limited.

#### **Issue #5: Animal agriculture, staying resilient despite September 11, diseases and recession?**

Over the past 2 years, U.S. meat and poultry production has stabilized as lower beef production has offset higher poultry production. This has led to declines in per capita meat consumption since consumption exceeded 220 pounds per person for the first time in 1999. Over the last two years, there was also a slowdown in milk production, too. During this period, livestock and livestock product prices generally moved up, cash receipts grew faster than for crops, and net returns were generally positive.

The September 11 attack caused a marked decline in restaurant and hotel business, where higher-valued meat cuts, primarily Choice beef, but also pork and poultry, are used extensively. Beef and pork loin prices fell. The effects were compounded by general slowdown in the U.S. economy for beef and by the slowdown in exports after the discovery of BSE in Japan. However, there probably will not be long term repercussions from the September 11 events.

A key ongoing adjustment is occurring in the cattle market, the largest U.S. farm production sector. Cattle producers have been liquidating animals since late 1995 and the U.S. cattle inventory has been steadily declining. In 2001, beef production finally started to decline as the national herd continued to shrink. Still, today, there is little heifer retention taking place. The February 1 Cattle report indicated that the total number of heifers 500 pounds and over is fractionally below last year. This would imply that the number of heifers which will be available to be bred in late spring or early summer for calving next spring will be about the same as last year. Thus, if the liquidation phase of the cattle cycle is to end, the majority of the herd retention will have to come out of calves born this year. These animals would be bred in 2003 for calving in 2004. If this occurs, it is likely that beef production will not expand before 2005. The major constraint to expansion remains forage. Given dry conditions in many cattle areas producers appear to be holding back on expansion until the forage base shows improvement.

For 2002, beef production is expected to be down 2.5 percent and down again, by 1.5 percent in 2003. Fed cattle prices are forecast to continue rising, tempered by lower exports and the U.S. economic slowdown, to \$74 per cwt in 2002 and then a stronger boost to \$78 in 2003 as the U.S. and global economies recover.

The prices of hogs and broilers are expected to remain about the same or to be down slightly in 2002, compared with 2001, as the economy remains weak. Pork production, based on inventory numbers and farrowing intentions, is forecast to be flat in 2002, but may expand a modest 1.5 percent in 2003, with a little stronger prices. Broiler production is expected to rise 2.5 percent this year but slow a little to 1.5 percent in 2003, with prices up slightly.

On the trade front, U.S. total meat exports are expected to rise less than 0.5 percent, the smallest increase since the mid 1980s. Chart 7 shows U.S. exports and suggests animal disease outbreaks have not generally disrupted global exports too much in the past because when the outbreak occurs in an exporting country, other exporters move to fill gaps. However, Russia's financial problems hurt poultry in 1998, and BSE concerns about EU beef and the BSE outbreak in Japan hurt the global beef market in 2001 and will add uncertainty to the 2002 outlook, as will the weak global economy. U.S. beef exports to Japan suffered in 2001 and are expected to be weak in 2002, as Japanese beef consumption and imports falter. Pork exports in 2001 picked up largely due to Japan increasing pork imports, but this is expected to slacken in 2002. Poultry exports are expected to continue to expand as Russia increases imports. Avian Influenza outbreaks are expected to lead to only short-term disruptions in poultry exports.

For milk, producers received the second highest all-milk price ever during 2001, reflecting the largest year over year drop in milk production since 1984. The strong price increase will result in more milk production, with output up an expected 1.8 percent in 2001/02 and 2.5 percent in 2002/03. The all-milk price, which averaged \$14.48 per cwt in 2000/01 could slip to \$13.30 this season and into the range of \$13.00 next season.

#### **Issue #6: Many other exciting developments—consider horticulture**

There are many other facets to the outlook for agricultural markets, rice, sugar, peanuts, tobacco, lamb, etc. All have their own story. For example, horticultural markets have become an important contributor to farm income for many producers. For 2002, cash receipts from fruits, vegetables, and greenhouse and nursery crops are forecast to reach \$43.5 billion, up 2 percent from last year and 12 percent over 1998. Exports for FY 2002 are forecast at \$11.3 billion, up slightly from last year's \$11.1 billion.

Horticultural imports are expected to total \$16.8 billion in FY 2002, \$0.4 billion above a year ago. Wine, malt beverages and cut flowers—all counted in horticultural imports—account for \$5.8 billion of the total. I mention imports because they are often portrayed as something gone wrong in agriculture—a result of a strong dollar or competitive problems of U.S. producers. But on the positive side, our imports are playing a crucial role in meeting the needs of U.S. consumers, just as we believe U.S. products meet the needs of foreign consumers.

U.S. fruit and vegetable consumption during the 1990s grew about 20 percent, about twice as fast as population. Consumption increased in part because of rising incomes and even retail price increases that generally exceeded increases for other foods. However, another part of the increase in demand for fruits and vegetables likely was a response to recommendations in the Food Guide Pyramid and initiatives like the 5-A-Day For Better Health campaign. Without imports of fruits and vegetables, the goal of increasing consumption to 5 or more servings a day would be more difficult to reach.

As a share of total fruit and vegetable consumption, imports claim about 20 percent today, compared with about 17 percent in the early 1990s. The increase in import share followed reduced trade barriers

in the North American Free Trade Agreement, competitive pricing from foreign suppliers, a strengthening of the U.S. dollar, and increasing popularity of tropical produce (Chart 8).

### **Issue #7: Putting it all together—farming stays on track!**

The farm economy is in reasonably good financial shape entering 2002, despite continued low market returns for some commodities. Net cash farm income, a measure of cash flow, reached a record-high \$59.5 billion in 2001 (Chart 9). Clearly, large government payments were instrumental in setting last year's record for net cash income; however, markets have been strengthening as well. After bottoming out in 1999 at \$188 billion, farm cash receipts reached \$202 billion in 2001, the second highest level ever. Net cash income, excluding government payments, measures the net income received from the market alone. It has risen from \$34.2 billion in 1999 to \$38.4 billion in 2001—a 12 percent gain.

Government payments supplied a large cash inflow to the farm economy in 2001, totaling \$21.1 billion. For 2002, government payments will again be important in supporting farm income. Taking an average of the added calendar year 2002 payments that would likely be paid out under the Senate and House passed bills suggests added payments in the range of \$5.5 billion, in addition to payments of \$10.7 billion already scheduled to be made under 1996 Farm Bill provisions. This would mean net cash farm income of about \$56.4 billion, about the same as the average level in recent years.

Farm production expenses are also under control and are expected to total the same as last year. Excluding feed costs, total farm production expenses are expected to decline in 2002. Fertilizer costs are expected to drop by \$0.5 billion as natural gas prices have declined; fuel and oil costs are expected decline by \$0.2 billion; and interest expenses are likely to decline by \$0.5 billion.

The farm balance sheet looks fairly strong. The value of U.S. farm real estate rose 3 percent during 2001, bringing total net equity to \$1.024 trillion, 12 percent higher than at the end of 1998. The farm debt-to-asset ratio rose slightly in 2001 to 15.8 percent from 15.5 percent in 1999 and 2000, and remains well below the level reached during periods of farm financial stress such as in the 1980s. Although farm debt increased the past two years, most farmers are not as heavily leveraged as a decade ago, face lower interest rates and are in better financial health.

All major lenders to agriculture, including USDA, continue to experience very low levels of delinquencies, foreclosures, chargeoffs and loan restructurings. No agricultural bank failed in 2001 and only 5 failed during 1994-2000. In the mid 1980s, 60-70 banks were failing annually. Surveys find banks healthy, liquid and ready to make loans. Farmers are repaying loans—with the help of government payments—and are somewhat hesitant to take out new loans which shows prudent behavior on their part. However, bankers in a number of regions express pessimism about their borrowers financial positions.

In conclusion: despite continued low returns in some commodity markets, slow and steady market improvements, a strong balance sheet, lenders in good shape with ample loanable funds, and new farm legislation this winter or spring that will continue financial support, all suggest the farm sector is secure and in reasonably good shape as the planting period for the 2002/03 season approaches.

Finally, a few key factors to watch in the coming months:

- The pace of Chinese imports and exports and crop supplies in the major exporters. Global stock levels mean little, concentrate on stocks in the major exporters and production prospects in Central and Eastern Europe.

- Resolution of the U.S. farm bill debate which will potentially affect relative loan rates and planting incentives.
- USDA's March Planting Intentions report which will give a preliminary indication of U.S. planted area for 2002.
- Transparency of China's biotech regulations to be implemented beginning March 20.
- Evolution of WTO implementation in China, particularly with respect to the relative incentives provided to grains and oilseed producers, which may affect domestic production of these crops. A possible scenario would be for an increase in the incentive to produce oilseeds relative to grains, reducing grain supplies and also reducing reliance on imported oilseeds including rapeseed.
- South American crop developments in the months ahead.
- The global economy.

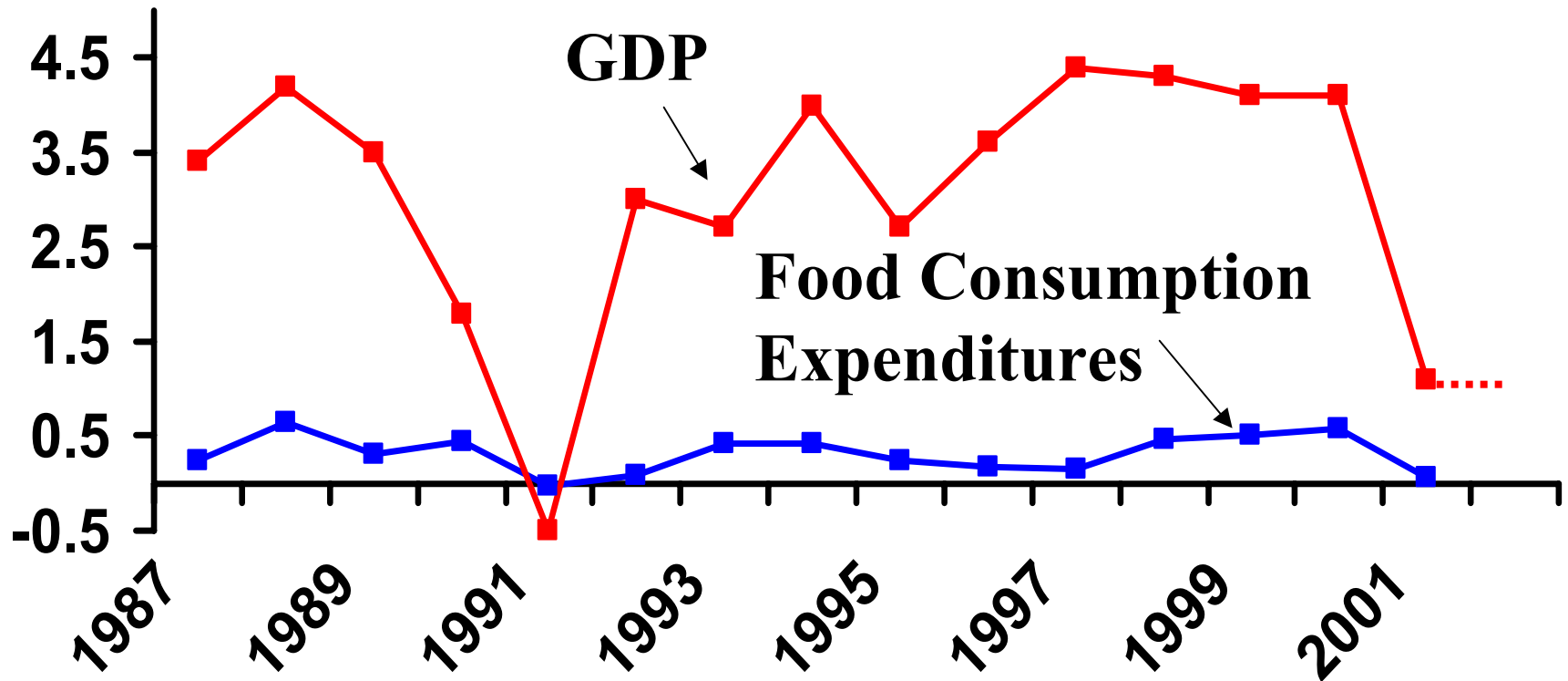


# U.S. REAL GDP AND FOOD SPENDING

*Annual percentage changes*

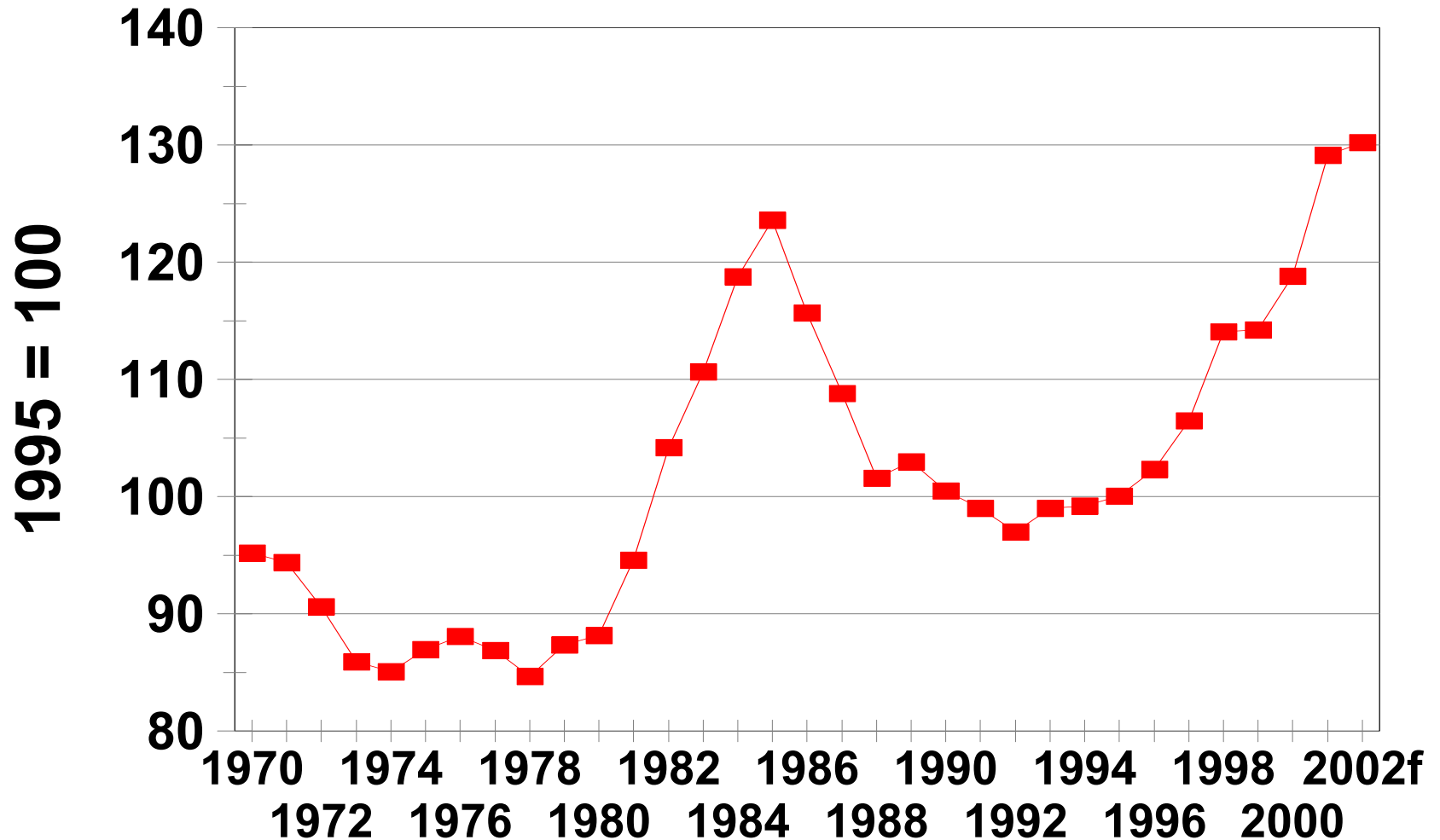
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Percent

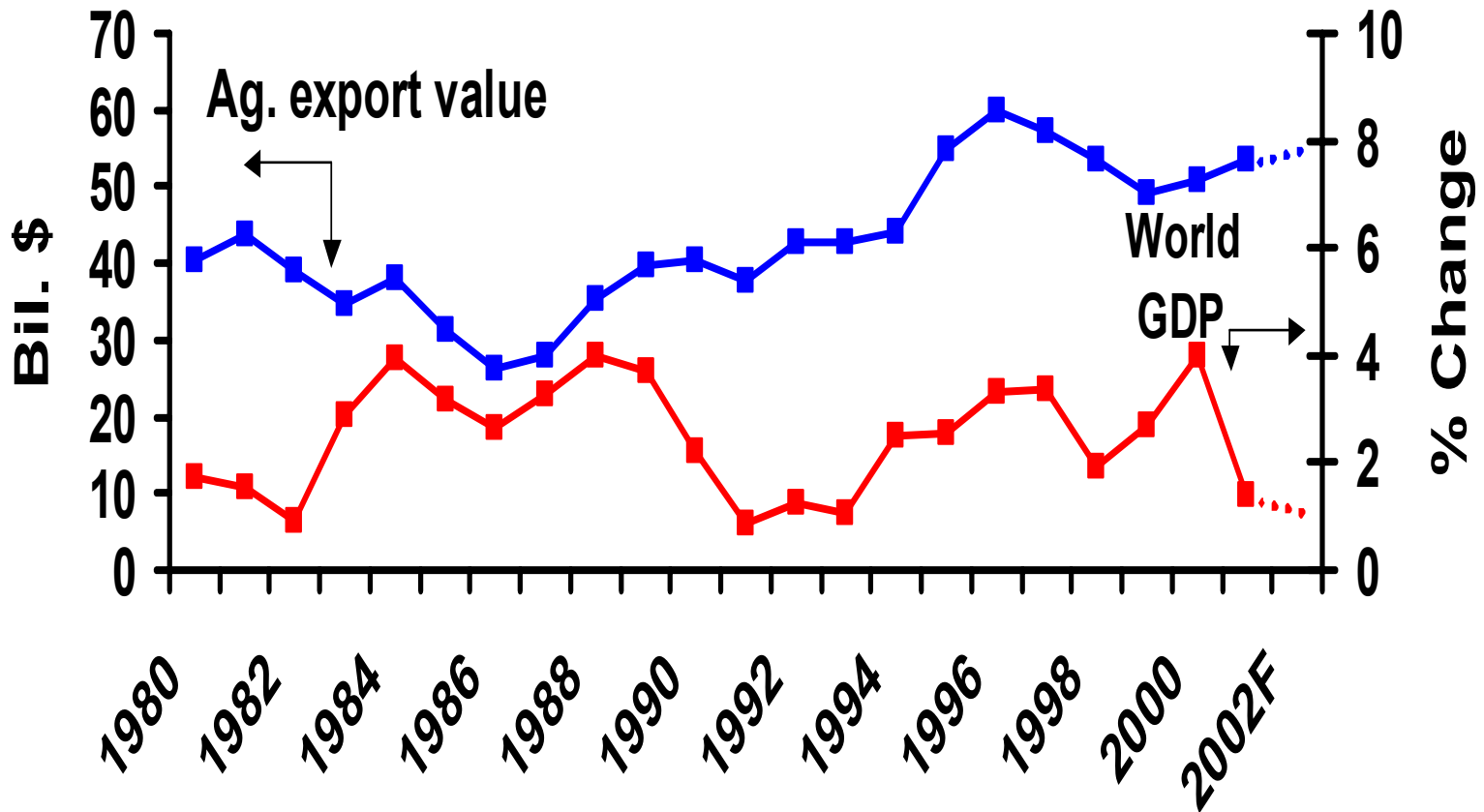


# REAL \$ EXCHANGE RATE

*Weighted by U.S. Ag Exports*



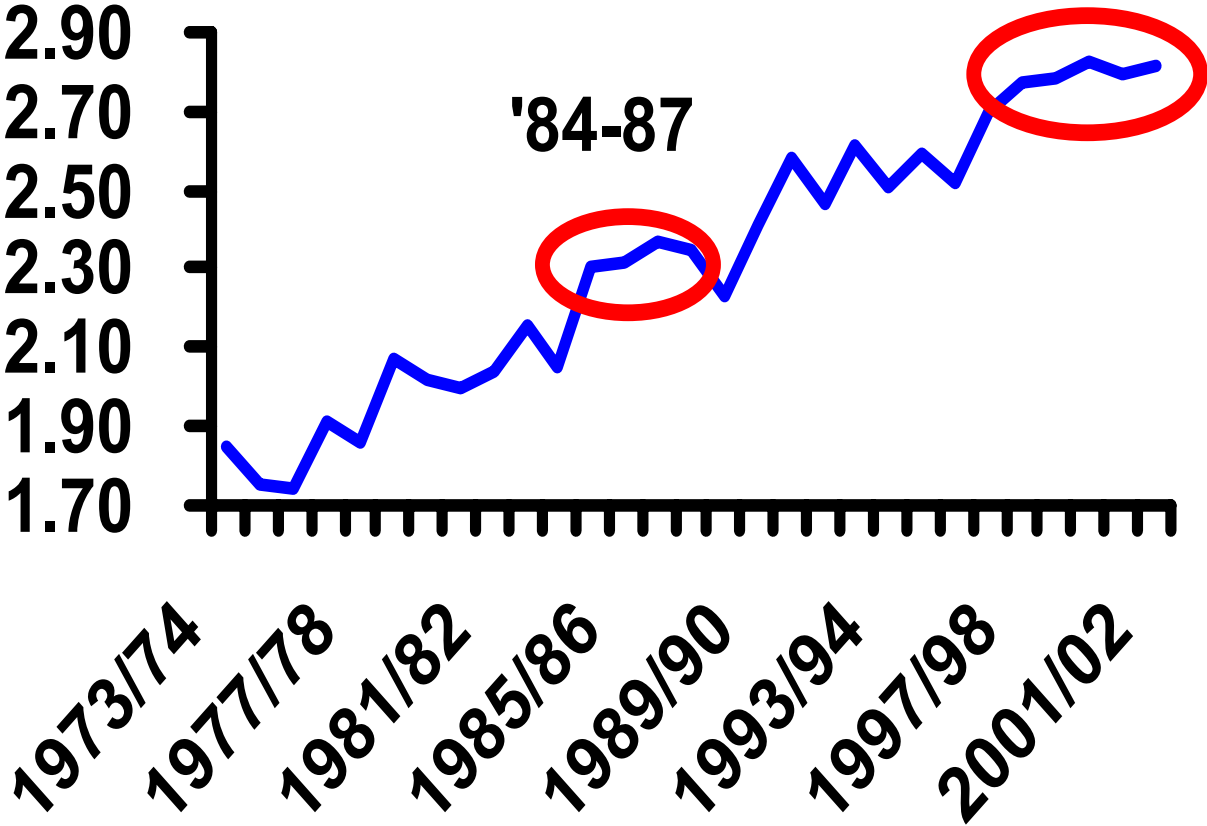
# WORLD GDP AND U.S. AG EXPORTS



# WORLD WHEAT & COARSE GRAIN YIELD

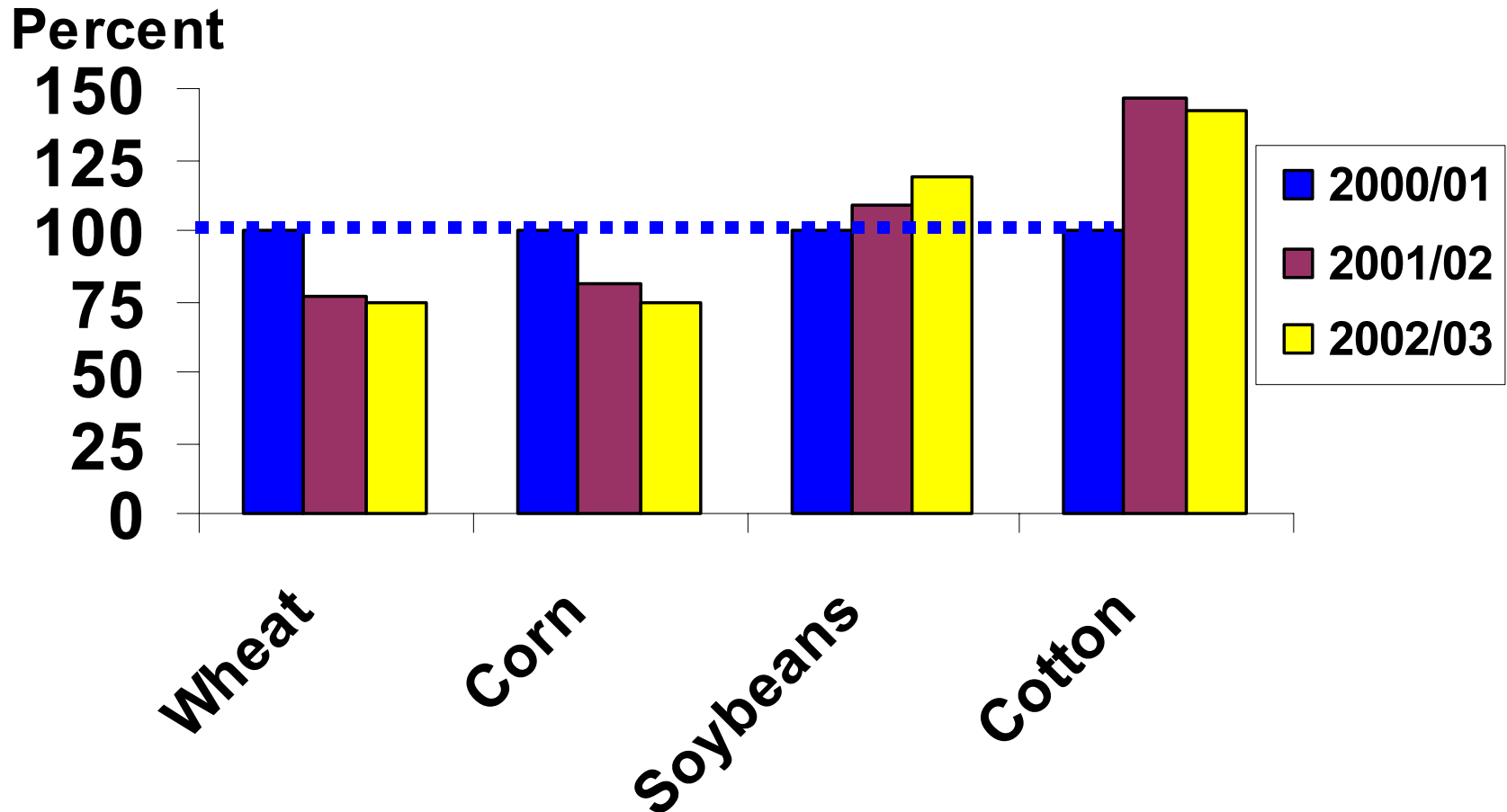
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Tons/ha



# U.S. CARRYOVER STOCKS: KEY CROPS

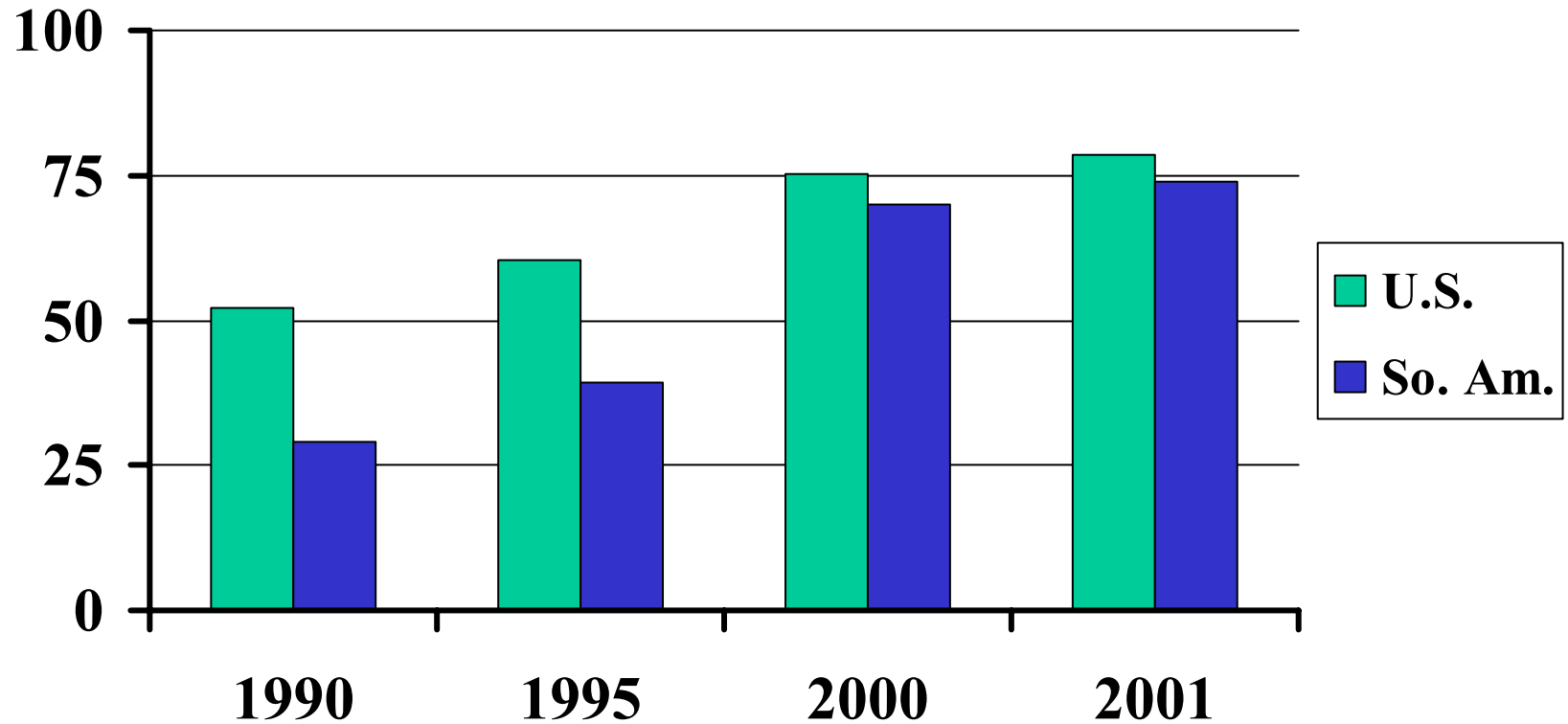
*Change from 2000/01*



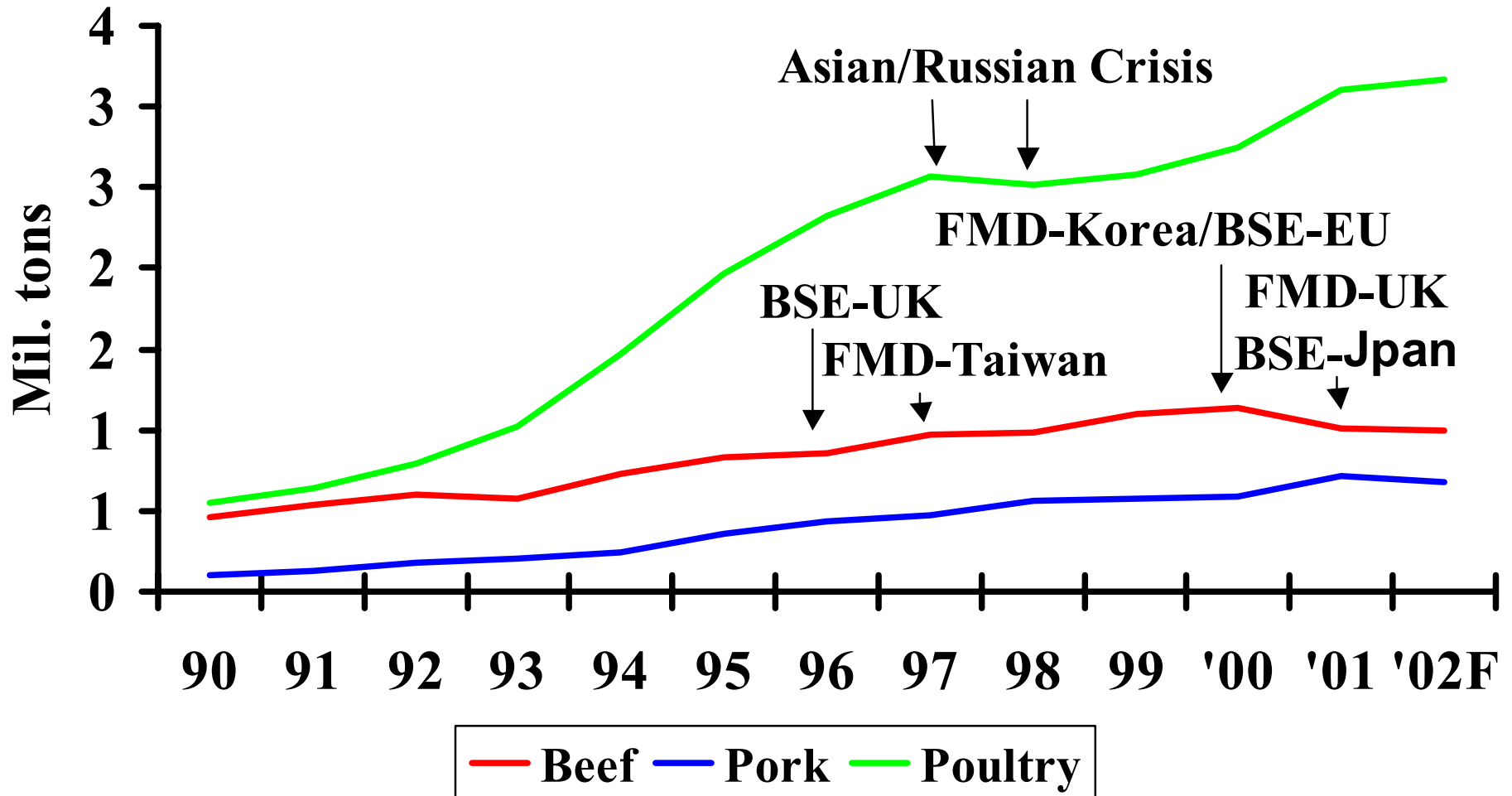
# U.S. AND SOUTH AMERICAN SOYBEAN PRODUCTION

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Mil. tons



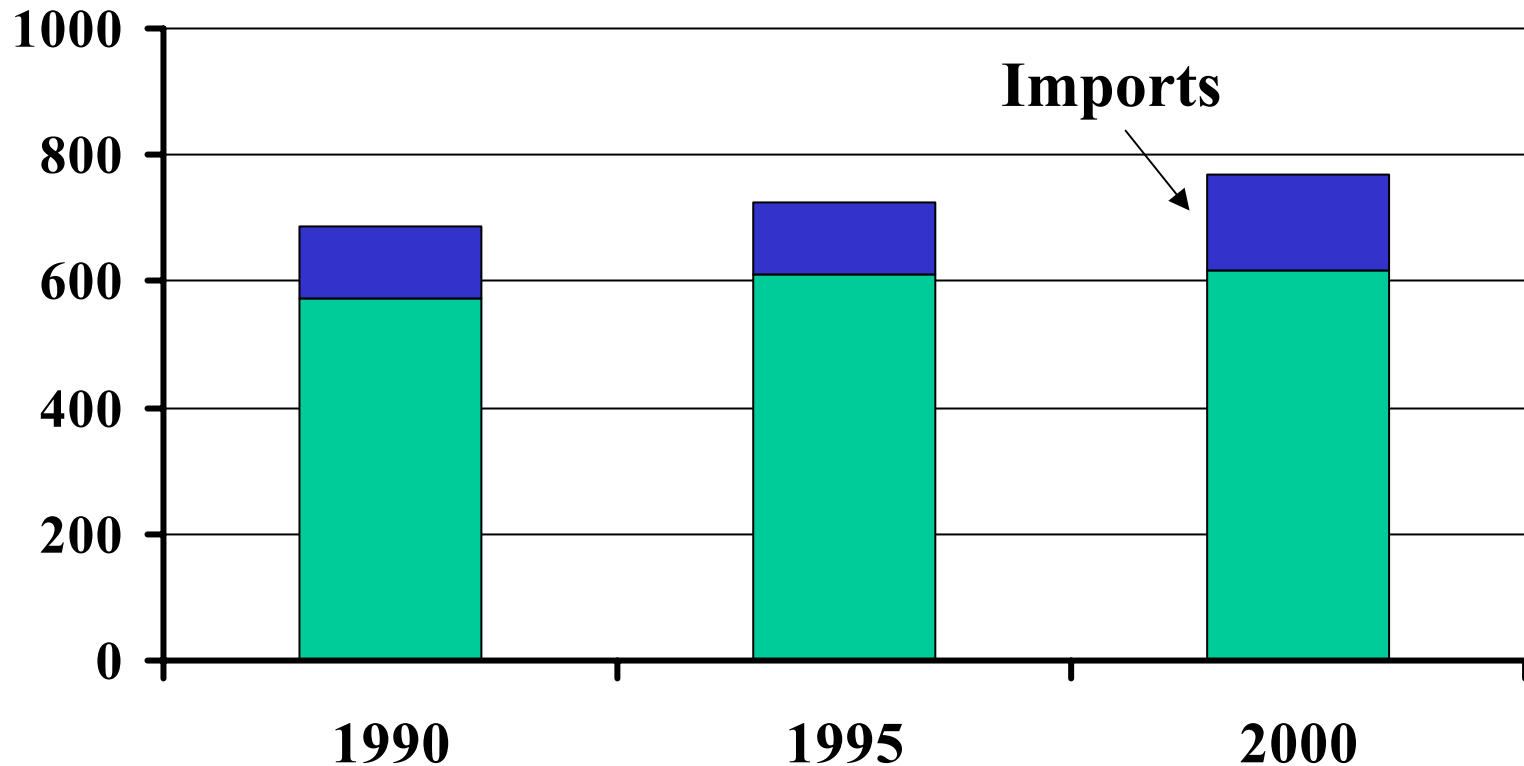
# U.S. MEAT EXPORTS



# U.S. CONSUMPTION OF FRUITS AND VEGETABLES

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Lbs/capita





# U.S. NET CASH FARM INCOME

Bil. \$

