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Agricultural Outlook Forum U.S. Department of Agriculture

Prospects for the US Farm Economy in 2009

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#### PROSPECTS FOR THE US FARM ECONOMY IN 2009

#### Joseph W. Glauber Chief Economist, USDA

Good morning. I, too, would like to welcome everyone here this morning to USDA's 85<sup>th</sup> annual Agricultural Outlook Forum. In my talk today I will focus on the economic outlook for U.S. agriculture. This time last year, the outlook picture was quite different than today: prices for most commodities were near record highs and rising; farm exports and farm income were projected to be at record levels. There were concerns about whether there would be enough crop production to meet global demand. Livestock, dairy and poultry producers were seeing their operating margins squeezed, and food price inflation was being discussed with concern for the first time in almost 20 years.

What a difference twelve months make. We have seen prices for most commodities fall 40-50 percent from their mid-year peaks (figures 1 and 2). The global economic slump has cast a pall on most markets and while net cash income is projected at high levels relative to historical averages, there remains much uncertainty.

#### World Economy and US Trade

The International Monetary Fund is currently projecting global economic growth for 2009 at 0.5 percent. This would be the lowest growth rate in the post war era. Output of the advanced economies is projected to decline by 2 percent while emerging and developing countries are projected to grow by just 3.3 percent (figure 3). World trade in goods and services is forecast to decline by 2.8 percent—the first decline in world trade since 1982. Imports by emerging and developing countries are projected to fall 2.2 percent in 2009, after annual increases of 14.5 and 10.4 percent in 2007 and 2008, respectively (figure 4).

In fiscal year (FY) 2008, U.S. agricultural export sales surged by an unprecedented \$33 billion, to a record \$115.5 billon (figure 5). Key drivers behind the growth were record grain and oilseed prices and volume gains for virtually all products. Strong global economic growth and a weak dollar were also key factors along with reduced competition in grain markets.

Our export forecast for FY 2009 is \$95.5 billion, \$20 billion lower than 2008, but still more than \$13 billion above FY 2007's level and the second highest on record. Mainly due to increased competition, U.S. wheat and corn exports are expected to account for 60% (down \$12.2 billion) of the overall decrease due to falling prices and volumes. Soybeans and products account for another 20% (down \$4.1 billion) of the \$20-billion decrease, with lower unit values and volumes for oil and meal and lower prices for soybeans. While wheat and coarse grain export volumes are expected to fall about 5 and 6.5 million metric tons (mmt) respectively, soybeans are actually forecast to hold mostly steady at about 31 mmt. Foreign demand for U.S. soybeans remains strong with near record demand from China and reduced South American supplies. The outlook for cotton

indicates sales will fall \$1.2 billion and close to half a million tons as the global recession reduces demand for textiles.

Like bulk commodities, our export outlook for high-value meats and other animal products calls for the value of exports to fall \$1.3 billion to \$19 billion. Here, volume losses could be a more important factor. Beef and pork prices should hold relatively steady, but pork volume is down as China's pork industry rebounds. Price and volume declines are expected for other products like broiler meat, animal fats, hides and skins and dairy products. Animal fats follow vegetable oil markets, and hides and skins (like cotton) are heavily impacted by recession and declining sales of manufactured products. The global dairy market is once again facing an oversupply situation with weakened global demand and rising milk production in Europe, New Zealand, and Australia.

Running counter to the general trend, horticultural exports are actually forecast to rise slightly to \$21.5 billion. The recession's impact is felt as the growth in export value slows to its lowest rate in seven years. Overall volume is likely to remain unchanged, but prices are sticky and may even rise in some fresh produce categories.

#### Crop Prospects

Cropland area is expected to contract in 2009 as plantings for the major field crops decline with lower prices and generally less favorable net returns. Combined planted area for the 8 major field crops (corn, sorghum, barley, oats, wheat, rice, upland cotton, and soybeans) is projected at 247.6 million acres, down 5.2 million acres from 2008 (figure 6).

Soybean planted area for 2009 is expected to increase for a second year to a record 77 million acres, 1.3 million higher than last year (figure 7). However, higher soybean plantings are not expected to offset declines in wheat, cotton, feed grains, and rice. Lower wheat, cotton, rice, and peanut plantings and relatively high input costs make less input-intensive soybeans a preferable alternative for producers, particularly those outside the Corn Belt. Corn area is expected to remain flat at 86 million acres. Rising mandates for ethanol use are expected to support demand and corn prices. Net returns for corn remain favorable to those for soybeans, but the sharp year-to-year drop in expected returns will limit area expansion. Wheat planted area is projected at 58 million acres, down 5.1 million from last year as winter wheat seedings fell 4.2 million acres last fall and spring wheat acres are expected to be lower with soybeans a more attractive option in the Northern Plains.

In 2008, global wheat production exceeded global production by almost 26 mmt, creating record world supplies of wheat and declining prices (figure 8). As a result, pressure to expand wheat production has receded since last year. Producer incentives to plant wheat were reduced by lower prices and high fertilizer costs last fall. Late row-crop harvesting also limited seeding opportunities in the eastern Corn Belt, Delta, and Central Plains.

Wheat production is expected to decline in 2009/10 with lower acreage and a return to trend yields following last year's record. Despite a 15-percent reduction in expected production, wheat supplies fall just 1 percent with beginning stocks up sharply from a 60-year low in 2008/09. U.S. wheat ending stocks are also projected to build slightly in 2009/10 as slow growth in domestic use and lower exports more than offset the expected decline in production. Wheat exports are projected down 5 percent as global wheat production in 2009/10, although down from this year's record, is expected to be the second highest ever.

Wheat prices are expected to remain under pressure from large domestic and foreign supplies. The season average farm price is projected at \$5.15 per bushel, down \$1.65 from the mid-point of the 2008/09 projection. Limited world wheat supplies last summer supported U.S. exports and prices during June through September when producers normally market more than half of their crop. The record 2008/09 farm price is also supported by producer forward contracting at prices well above \$7 per bushel. Similar pricing opportunities have not been available for 2009-crop wheat.

Corn planted area in 2009 is expected to remain nearly unchanged from last year. Corn prices have fallen dramatically since last summer's record highs and forward pricing opportunities for the 2009 crop have been well below those for last year's crop. Despite this, net returns for corn relative to soybeans remain favorable in most areas and the soybean-to-corn price ratio favors corn (figure 9). However, the sharp year-to-year decline in net returns is expected to limit corn plantings, particularly outside the higher yielding Corn Belt. At the projected 86 million acres, planted area is expected to be well above levels of the late 1990s and early 2000s when plantings averaged 79 million acres.

Corn production for 2009/10 is projected up 2 percent as yields are projected at trend levels. Domestic demand is projected higher as a small decline in feed and residual use is more than offset by higher corn use for ethanol. Corn feed and residual use declines 2 percent as animal numbers continue to contract through 2009 and higher ethanol production increases supplies of distillers' grains.

Rising mandates for ethanol use are expected to support corn demand and prices in 2009/10. Mandated ethanol use less the ethanol derived from advanced biofuel under the Renewable Fuel Standard (RFS) program rises from 10.5 billion gallons in 2009 to 12.0 billion gallons in 2010. On a crop year basis, that translates into about 11.5 billion gallons of ethanol demand for crop year 2009/10 (figure 10). Reflecting this increase, corn used to produce ethanol is expected to increase 14 percent. At the projected 4.1 billion bushels (chart data shows 4.26 billion bushels), ethanol use will account for 33 percent of expected corn use in 2009/10, up from a forecast 30 percent this year.

The U.S. ethanol industry remains under significant financial pressure as the result of current economic conditions including historic volatility in energy and corn prices over the past year. Slowing gasoline consumption and lower prices have reduced incentives for blending ethanol in recent months (figure 11). Excess ethanol production capacity weighs on ethanol producer returns even as more plant capacity becomes available.

Ethanol plant data reported by the Renewable Fuels Association (RFA) put existing ethanol production capacity at 12.4 billion gallons, including plants currently not operating, with another 2.1 billion under construction or expansion. Current indications suggest that 2.0 billion gallons or more of plant capacity has been idled (figure 12). Excess capacity is expected to continue to limit returns for ethanol producers. The 2009/10 ethanol corn use forecast suggests that as much as 15 percent of ethanol production capacity will be idle during the 2009/10 marketing year.

Corn exports are projected 6 percent higher in 2009/10. Global corn imports are expected to show some modest recovery as global livestock production begins to rebound in 2010. World corn demand is also expected to benefit from reduced availability and use of feed-quality wheat.

Ending stocks for 2009/10 are projected to decline modestly as increases in total corn use outpace the growth in supplies. The season average farm price is projected at \$3.60 per bushel, down \$0.30 per bushel from the mid-point of 2008/09 forecast range. Declines in cash prices are not expected to be as large as implied by the year-to-year change in the projected farm price. Farm prices in 2008/09 have been well above cash market levels as producers benefit from forward prices contracted last spring and summer. Similar pricing opportunities have not been available to support farm prices in 2009/10.

Global oilseed production for 2008/09 is projected at a record 408 million tons, up 4 percent from 392 million produced in 2007/08. Much of the increase is attributed to a sharp expansion of area planted to sunflowerseed and rapeseed as producers around the world responded to high prices. Global soybean area also increased sharply, but lower yields in South American countries limited the gain in production. U.S. soybean producers planted a record 75.7 million acres, and despite below-trend yields managed to increase soybean production 11 percent from 2007/08.

South American soybean production continues to account for almost half of global production. Brazil and Argentina are projected to account for 45 percent of global soybean production, up from 40 percent 7 years ago. At a projected 101 million tons, combined 2008/09 production for these two countries exceeds U.S. production by about 25 percent despite drought in Argentina and southern Brazil.

Brazil and Argentina account for just over half of global soybean trade in 2008/09, with the U.S. accounting for about 42 percent. The U.S. share has declined from about 55 percent 7 years ago.

China's soybean imports now account for 49 percent of global imports, up from 34 percent in 2002/03 as soybean import penetration continues to grow (figure 13). China has accounted virtually all of the growth in world trade over the same time period. Soybean imports by the world's second largest importer, EU-27, have declined over the same period.

U.S. soybean production is expected to increase from 2008/09 with record planted area and a return to trend yields. Increased area is expected to come from reduced wheat, cotton, peanuts, and rice plantings. Although soybean plantings are projected to increase from 2008/09, lower double cropping of soybeans is expected due to lower soybean prices and reduced winter wheat area in the Delta and Eastern Corn Belt. With beginning stocks near year-earlier levels, increased production will results in a 9-percent increase in soybean supply for 2009/10.

U.S. soybean crush is projected to increase modestly to 1.675 billion bushels reflecting mainly increased export prospects due to constrained South American supplies for the first half of the 2009/10 marketing year. With minimal growth in animal numbers for 2009/10 and increased substitution of corn by-products and other protein meals in rations, growth in soybean meal domestic disappearance is projected at less than 1 percent. With the exception of 2008/09, soybean meal feeding in the U.S. is expected to be the lowest in ten years.

Total domestic soybean oil disappearance is projected to decline in 2009/10 as biodiesel use remains flat and food use declines (figure 14). Growth in soybean oil used for biodiesel is not expected despite an increase in the mandated biodiesel level due to the continuing growth in use of other fats and oils. Soybean oil now accounts for about 55 percent of total oil used for biodiesel, down from around 85 percent two years ago. Trans-fat substitution and slow growth in the economy is expected to result in the fifth consecutive year of declining soybean oil use in the domestic food market. Soybean meal and oil prices are projected at \$250 per ton and \$0.31 per pound, respectively compared with \$285 per ton and \$0.32 per pound in 2008/09.

With drought-reduced crops and lower stocks expected in South America, and sharply higher domestic supplies, U.S. soybean exports are projected to reach a record 1.225 billion bushels in 2009/10. With increased supplies exceeding gains in crush and exports, soybean stocks are projected to rise 81 percent to 380 million bushels. This would be the highest level since the record of 574 million bushels in 2006/07. Prices are projected to decline to \$8.00 per bushel, the lowest since 2006/07.

South American soybean production is expected to rebound from drought-reduced levels of 2008/09 as yields return to trend. Planted area is not expected to rise significantly due to relatively low prices. With limited supplies available until harvest in the spring of 2010, trade shares for South America are likely to decrease in 2009/10. Global demand for soybeans is likely to expand only modestly, mostly due to growth in China. Shipments to EU-27 could also rise as demand for soybean meal is likely to be rebound with less availability of other grains.

The U.S. is projected to plant 8.5 million acres of cotton in the spring of 2009, a 10-percent reduction from 2008/09 (figure 15). Planted area would be the lowest since 1983 and a 44-percent reduction from the recent high of 15.3 million acres planted in 2006. More favorable returns for alternative crops – especially soybeans and corn – are the primary reason for the decline, but reduced access to irrigation in the Far West is also a

factor. Harvested area is projected at 7.7 million acres, the same as 2008, based on a historical average abandonment of just over 9 percent, compared with 18.4 percent in 2008. With a projected yield per harvested acre of 810 pounds, production of 13.0 million bales is also the same as last season. Domestic mill use is projected marginally higher and exports slightly lower, with a resulting decline of 2.0 million bales in U.S. ending stocks to 5.7 million bales, or about 38 percent of use. The U.S. season average price is projected to rise 9 percent to 55 cents per pound.

The world outlook for 2009/10 includes slightly lower production and slightly higher consumption. Global production is likely to fall once again in response to depressed world cotton prices, tight credit, and more favorable returns for other crops. In contrast, world cotton consumption is forecast to rise 2 percent as the world economy begins to recover from the current global recession in late 2009 or early 2010. World ending stocks of 56 million bales are 9 percent below the beginning level, but are still adequate to support projected demand.

#### Livestock, Poultry, and Dairy

The livestock, poultry, and dairy sectors are being challenged by weakening domestic and global demand for meat and dairy products. Uncertain demand, coupled with relatively high feed prices, caused producers to start cutting back, or slow production by the last quarter of 2008. The pullback in output is expected to continue through most of 2009, with total meat production down about 2 percent from 2008, and milk production declining about 0.3 percent (figure 16).

The recent *Cattle* report indicated that cattle inventories declined 1.6 percent in 2008 and that producers were holding 2 percent fewer beef replacement heifers on January 1. These numbers combined with downward revisions to January 1, 2008 estimates, point to tight cattle supplies in 2009 and lower beef production.

Beef production is forecast to decline 1 to 2 percent in 2009. Steer and heifer slaughter declines as fewer cattle are available for marketing, and cow slaughter decreases but remains at a relative high level compared with recent years. U.S. beef imports increase about 6 percent as U.S. cow slaughter falls and foreign exporters increase shipments to the U.S. as other global markets weaken. U.S. beef exports are expected to be about unchanged from 2008 as a global recession undercuts exports and a strengthening of the U.S. dollar makes U.S. beef relatively more expensive (figure 17). Per capita disappearance of beef in the United States is expected to decline about 2 percent.

The December *Quarterly Hogs and Pigs* report indicated that hog producers farrowed about 4 percent fewer sows during the last half 2008 and intend to farrow about 2 percent fewer sows through the first half of 2009. Recent growth in pigs per litter has been substantial and expected to partially offset the effects of reduced farrowings on slaughter levels in 2009. In addition, live hog and pig imports from Canada are forecast 23 percent lower than 2008, further reducing the number of hogs available for marketing this year.

Pork production for 2009 is forecast to decline 1 to 2 percent. Pork imports are forecast to remain close to last year's level. Pork exports are forecast to fall 14 percent to 4 billion pounds. Strong foreign demand, especially in China, for U.S. pork during 2008 boosted exports 50 percent last year. This year, weak global demand will dampen export growth. China which grew rapidly as an export market, is expected to have much lighter demand for imported pork in post-Olympics 2009 as well as larger domestic supplies as production recovers from hog disease outbreaks. U.S. per capita disappearance of pork is expected to increase more than 1 percent as a smaller share of pork output enters export channels.

Broiler meat production for 2009 is forecast to decline 2 percent and turkey output is forecast to fall almost 4 percent. The poultry sector was hit hard by high feed prices in 2008. Returns sank and producers began to reduce chick and poultry placements by the middle of last year. The production cuts are expected to continue though the third quarter for broilers and for the entire year for turkeys. Broiler exports reached a record 6.8 billion pounds in 2008, but exports for 2009 are forecast to drop 11 percent because of across-the-board weakness in demand and newly instituted quotas by Russia. Turkey exports also reached a record 676 million pounds last year, but are expected to drop 10 percent this year. Per capita disappearance of poultry meat is expected to decline slightly in 2009.

Cattle, hog, and turkey prices in 2009 are expected to be lower as a weak demand outlook more than offsets usual gains from tighter supplies. Broiler prices are the exception. Fed cattle will be about \$3 per cwt lower than 2008, and hogs about 50 cents per cwt lower. Turkey prices are expected to be 2 cents per pound lower. However, broiler prices are expected to be about 4 cents per pound higher as production cuts are fairly sharp and broiler meat's relatively low price compared to other meats should benefit broiler prices.

Sharply lower returns to producers result in lower milk production for 2009. The estimated milk-feed ratio for 2009 is expected to be a contractionary 1.50 (figure 19). Cow numbers are expected to start falling by the second quarter 2009 and accelerate in the last half of the year. For 2009, foreign demand for dairy products will be weakened by global recession and increased exportable supplies from other suppliers dampens prospects for U.S. commercial exports. Dairy product prices dropped sharply at the end of 2008 as demand fell. The much weaker outlook results in sharp drops in dairy product prices and Class III and Class IV milk prices. The all-milk price for 2009 is forecast to decline to \$10.95 to \$11.65 per hundred weigh (cwt), the lowest since 1978.

#### Farm Income

On February 12, USDA's Economic Research Service (ERS) released the farm income and costs forecasts for 2009. ERS forecasts net cash income at \$77.3 billion, down \$16.1 billion from 2008 (figure 20). Crop receipts are forecast at \$162.4 billion in 2009, down \$18.7 billion from 2008, but still the second highest on record. Livestock receipts for 2009 are forecast at \$132.2 billion, down \$10.9 billion from 2008. Lower input costs

such as feed, fuel, and fertilizer will mean lower cash expenses. ERS forecasts total cash expenses at \$246.8 billion, down \$14 billion from 2008 levels.

The farm financial picture going into 2009 remains favorable with total farm debt equal to 9.1 percent of total assets (compared to over 20 percent in the mid-1980s). The debt-to-asset ratio has declined steadily from 15.2 percent in 1998 (figure 21). The decline in the debt-to-asset ratio over that period was due to the strong appreciation in land values, which increased by over \$1 trillion from 1998 to 2008. ERS forecasts farm assets to rise by 1.6 percent in 2009, the smallest increase since 1991 (figure 22). Recent Federal Reserve surveys showing fourth quarter declines in land values in the Seventh and Tenth districts gives further credence to the view that land markets have softened.

#### **Conclusions**

With confidence in financial markets weakened and the global economy in the worst recession since World War II, the agricultural economy faces much uncertainty. As expected, most aggregate measures are forecast to be down sharply from the record highs reached last year. Concerns with deflationary pressures remain, particularly if lower farm receipts persist over the longer run. This could adversely affect farm real estate values and undermine what has been to date a relatively strong financial position. That said, the outlook is for a return to higher prices as many of the pressures that drove last year's price increases—high energy prices, the Renewable Fuel Standard, and strong economic growth in emerging markets—will return to play a major role. In addition, while other sectors of the economy may be credit constrained, many farm lenders appear to be in good financial shape and access to credit for farmer appears to be sufficient.

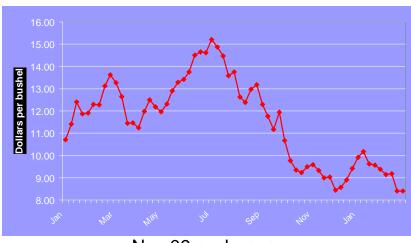
#### Outlook for 2009

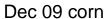
Joseph W. Glauber, USDA

85<sup>th</sup> Annual Agricultural Outlook Forum February 26, 2009

### 1--Volatility roils crop markets . . .







corn Nov 09 soybeans



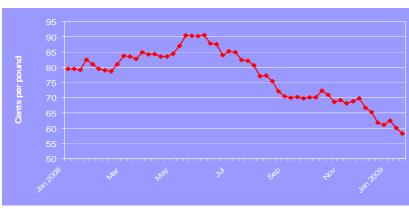


Jul 09 HRW wheat

Dec 09 cotton

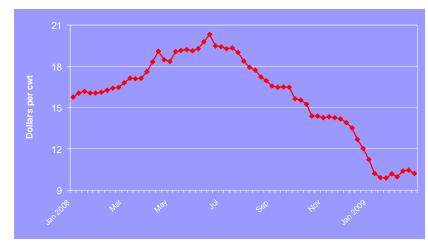
#### 2--and livestock markets...





Apr 09 Live cattle

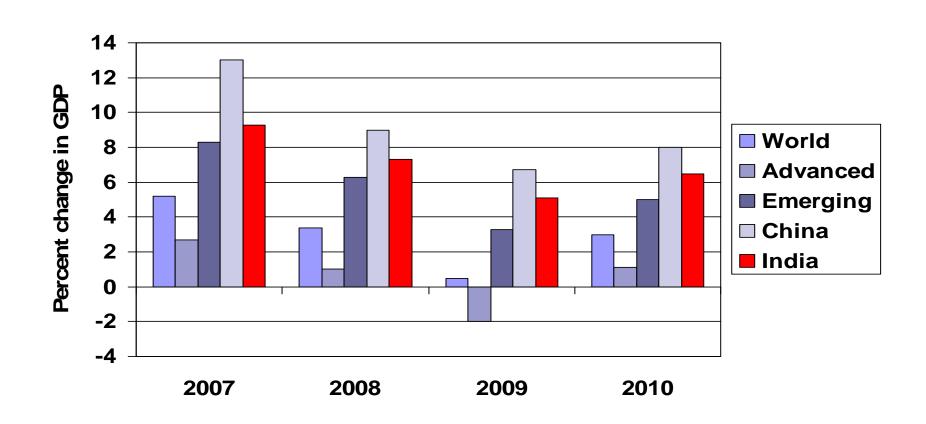
Apr 09 Lean hogs



Apr 09 Class III milk

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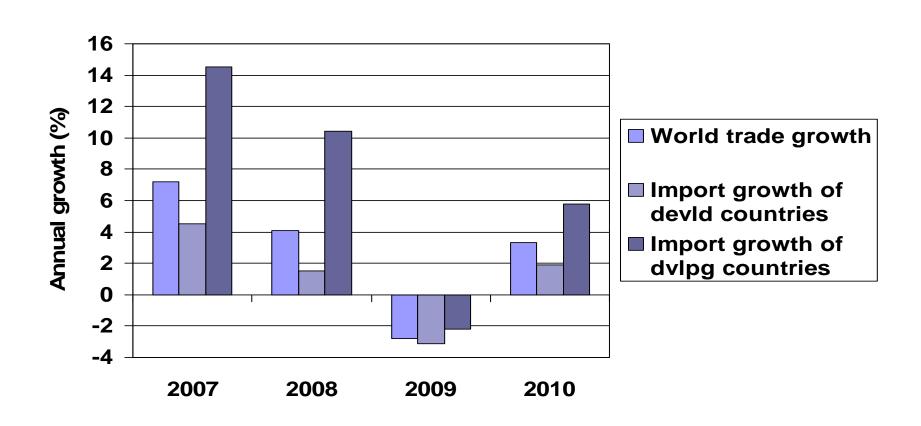
# 3--World GDP grow weakest since WWII



Source: IMF World Economic Outlook

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# 4--World trade to fall in 2009-first time since 1982

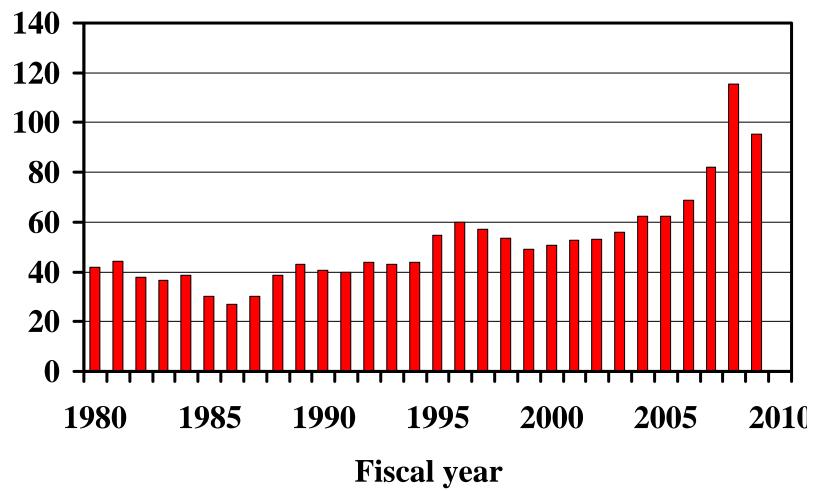


Source: IMF World Economic Outlook



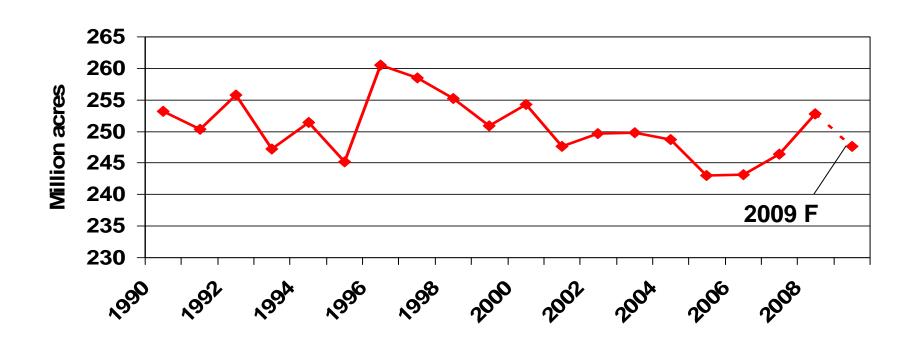
5--U.S. agricultural exports to fall but remain 2<sup>nd</sup> highest on record

Bil. \$

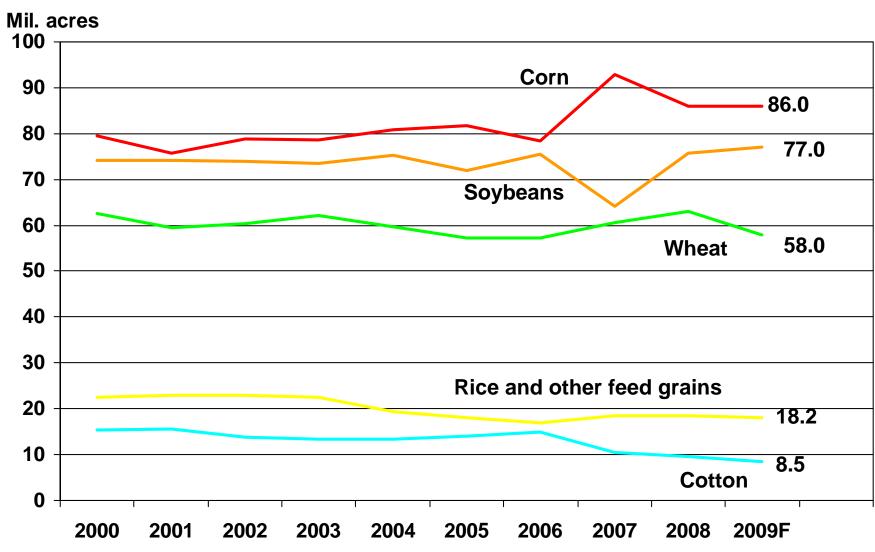


### b/A

## 6--Area planted to 8 major field crops projected to fall 5 million acres in 2009

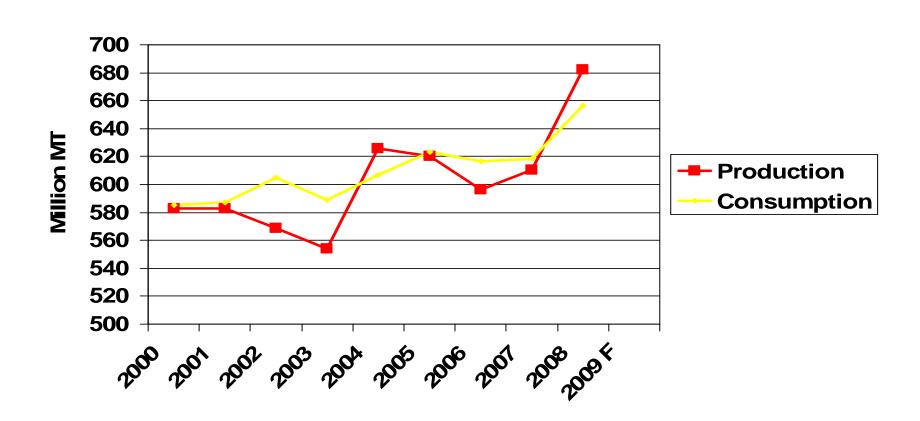


# 7--Soybean area to rise in 2009; other crop area flat or declining

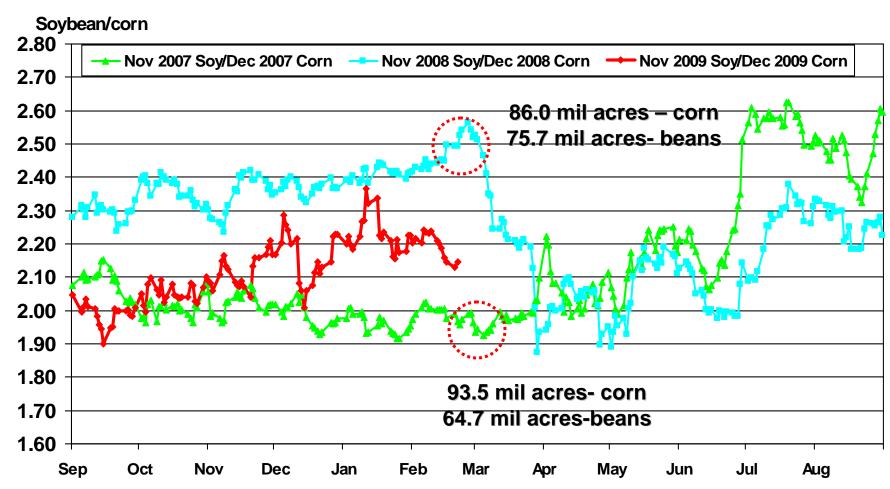


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# 8--World wheat production exceeds consumption for only 2nd time since 2000



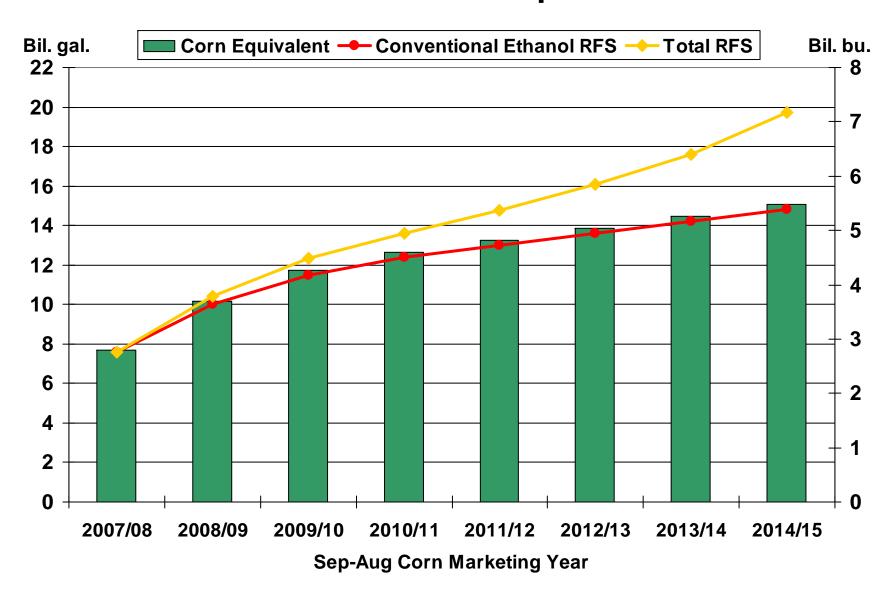
## 9--New-crop soybean/corn futures price ratio compared to 2007 and 2008



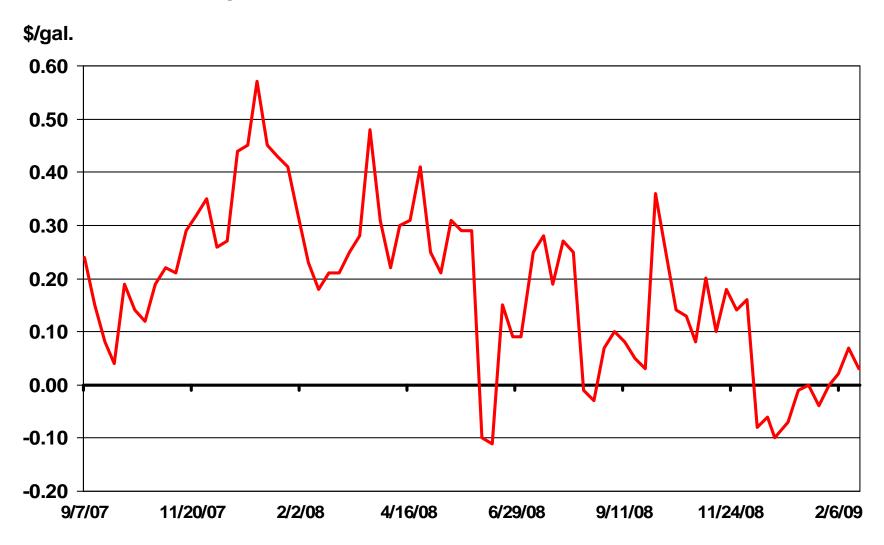
Note: Chicago Board of Trade daily settlement prices.

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### 10--RFS and corn equivalent



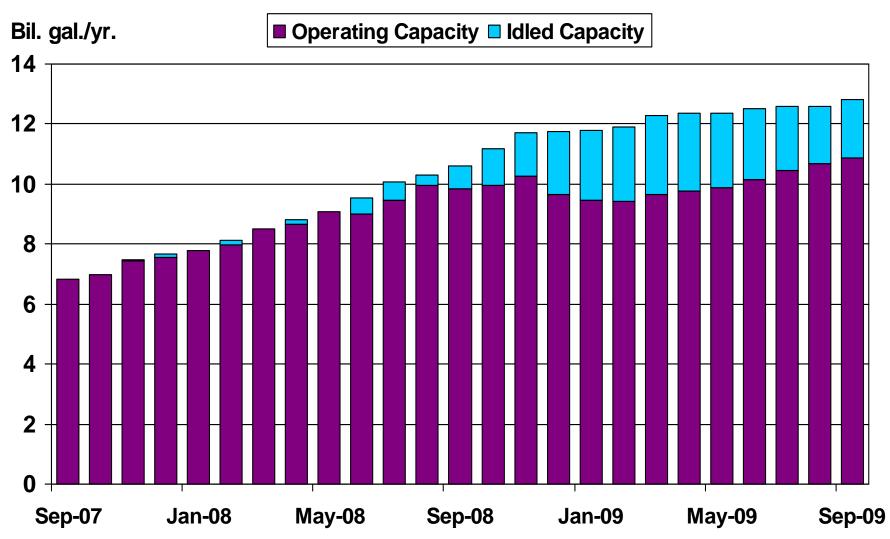
#### 11-Ethanol producer net returns remain low



Note: USDA-WAOB estimates based on USDA-AMS plant reports and DOE-EIA estimates and forecasts for natural gas and electricity prices.

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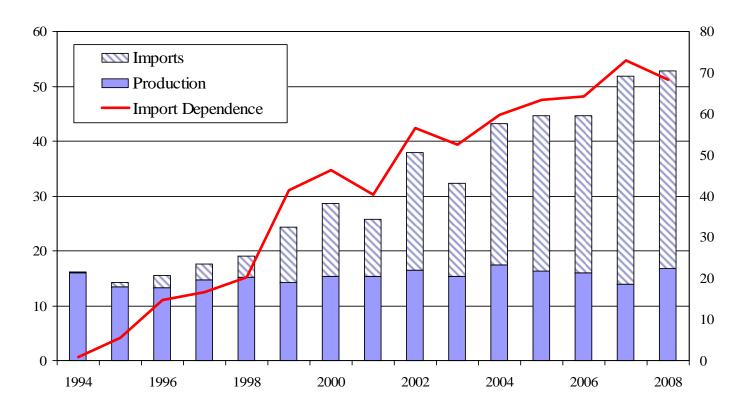
#### 12--U.S. ethanol production capacity



Source: USDA-WAOB internal estimates and projections.

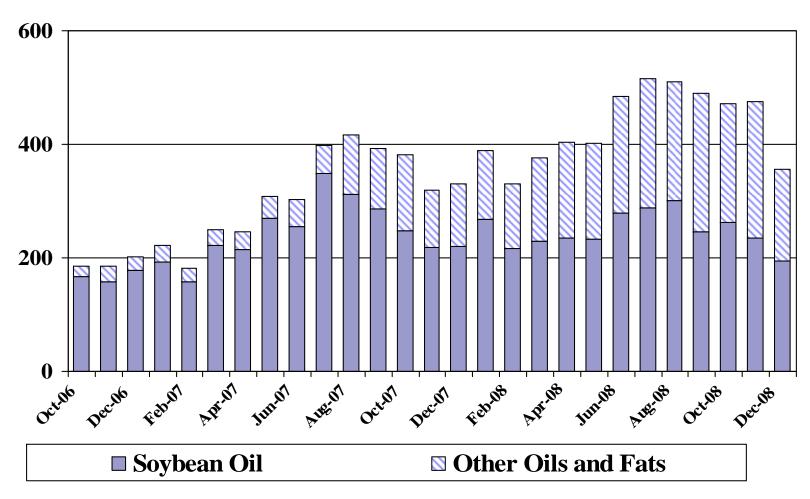
# 13—China soybean import dependence continues to grow

Million Tons Percent



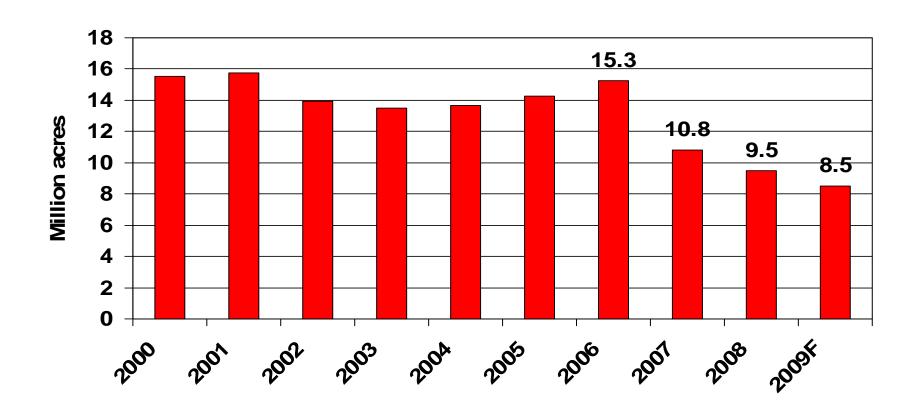
# 14--Soybean oil share of biodiesel declining

Million lbs.



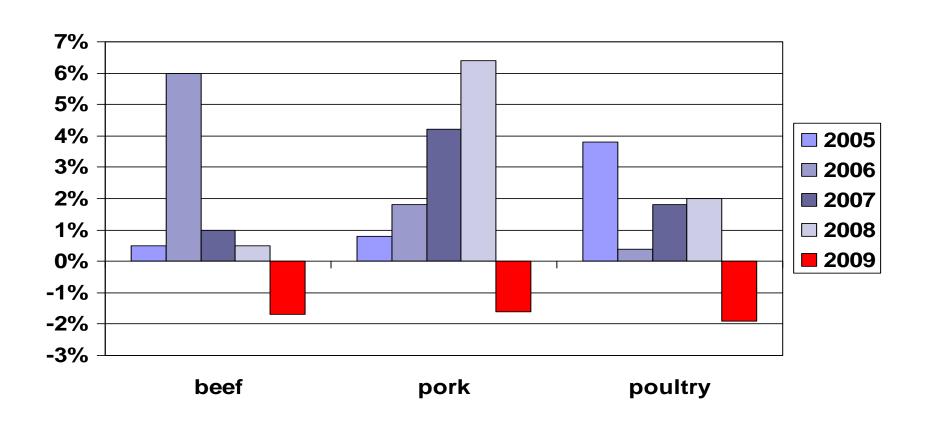
### NA.

#### 15--Cotton planted area continues to fall



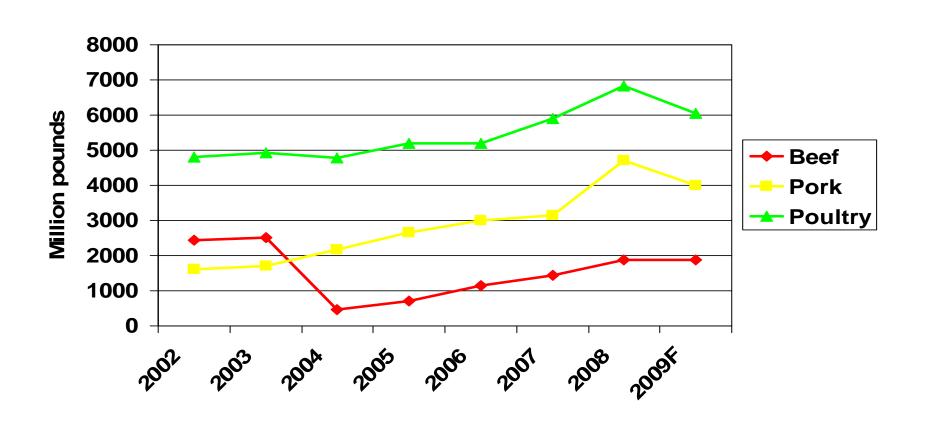


# 16--Meat and poultry production projected to contract in 2009



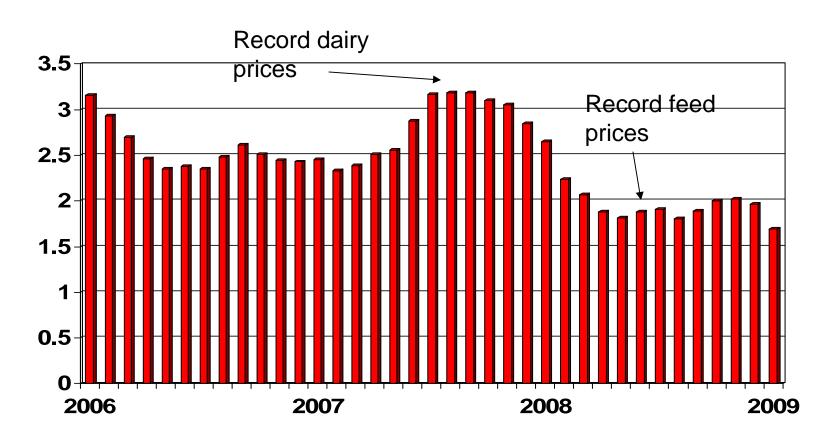
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## 17--Meat and poultry exports forecast to fall in 2009



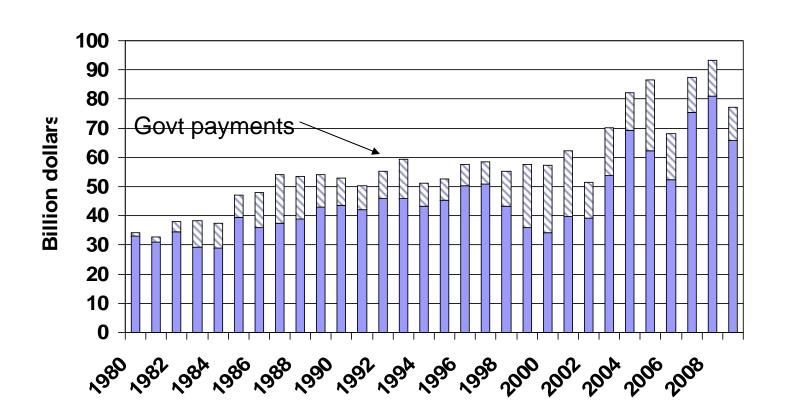
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## 19--Milk price-to-feed ratio falls to lowest level since 1983



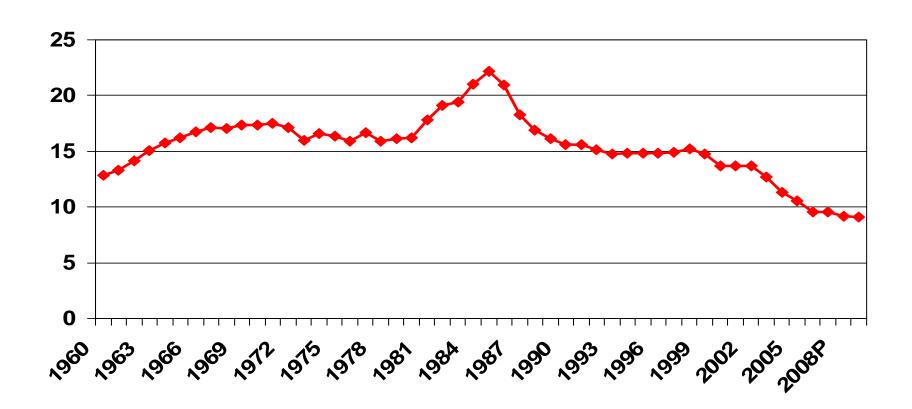
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#### 20--Net cash farm income



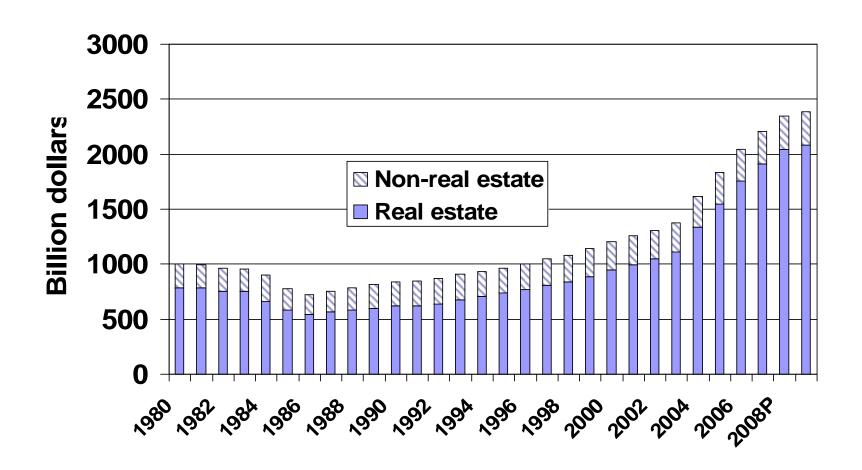
### MA.

## 21--Debt as a percent of assets falls to 9 percent





## 22-Farm real estate values flatten after appreciating over \$1 trillion since 2002







#### USDA's 85<sup>th</sup> Agricultural Outlook Forum

Global Agriculture & Rural America in Transition

February 26-27, 2009