

Quarterly Commodity Update

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Evans Policy Analysis and Research (EPAR)

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Executive Summary

This report presents data on selected agricultural commodities for the second and third quarter of 2009 (April-September 2009) and the month of October, where available. More specifically, this report provides a summary of recent changes and trends in agricultural commodities markets. This summary is followed by an analysis of prices, demand, supply, and market conditions for key agricultural commodities. Highlights include:

- According to the most recent forecast available from the World Bank, annual agricultural commodity prices are anticipated to be 21 percent lower in 2009 than in 2008.
- The FAO's food price index decreased nearly 40 percent from June 2008 levels.
- While the prices of agricultural commodities remain low compared to 2008, prices remain at historically high levels and have begun to rebound slightly.
- Cocoa prices have increased by more than 50 percent since October 2008. Industry analysts
 believe that the rise in cocoa prices have largely been driven by concerns over a world
 shortfall in production. Over the second and third quarters of 2009, cocoa prices have
 increased by 23 percent.
- Coffee prices, according to the International Coffee Organization (ICO) Composite Price index, increased by 4.3 percent in the second and third quarters of 2009. Coffee futures have increased in recent weeks likely due in part to concerns over a weak crop in Côte d'Ivoire.
- Average world market prices for long grain rice calculated by the United States Department of Agriculture (USDA) decreased by 7.5 percent over the second and third quarters of 2009.
 The world price for long grain rice averaged \$11.28 per ton in September.
- Over the second and third quarters of 2009, wheat prices decreased by 12.6 percent before rising slightly between September and October. Wheat prices for 2009 have decreased as estimates for wheat production in the 2009/10 season have increased.

- Soybean prices decreased by 5.2 percent over the second and third quarters of 2009. Prices continued to decrease over the past month to reach \$370.28 per ton in October. This decrease was possibly due to significant increases in production in major producing countries during the current harvest season.¹
- Monthly average spot prices for cashews show prices decreasing by 1.7 percent between
 October 2008 and October 2009. World cashew prices have increased slightly in recent
 months due to poor harvests in primary producing countries including Vietnam, the world's
 leading cashew producer since 2006.
- Crude oil prices increased over the second and third quarters of 2009. West Texas Intermediary (WTI) crude oil prices averaged \$69 per barrel in September and \$70 in the first half of October.
- Prices of three of the five major fertilizers decreased over the second and third quarters of 2009. The biggest drop was in Potassium Chloride prices, which decreased by more than 30 percent over the past two quarters amid weakening demand and ample supplies.

Overview of Recent Changes in Agricultural Commodity Markets

After rising in early 2008, commodity prices began to fall in mid-2008 when global economic growth slowed just prior to the financial crisis. During this time, demand for most commodities slowed, especially in high-demand countries. By December of 2008, crude oil prices dropped more than 70 percent from July 2008 peak levels. During the same period, prices for internationally traded agricultural commodities and metals declined by over 40 percent. The moderating of agricultural commodity prices has continued into 2009, despite some price increases for select commodities in recent months. According to the most recent forecast available from the World Bank, average annual agricultural prices are anticipated to be 21 percent lower in 2009 than in 2008. Current forecast show that prices are expected to remain relatively stable in 2010.² Futures prices for agricultural commodities have fluctuated considerably in recent weeks amid changes in the value of the U.S. dollar and speculation over the pace of global economic recovery.

The general easing of agricultural commodity prices in 2009 from 2008 peak levels can be observed in the FAO's food price index. The food price index is a composite price index consisting of 6 commodity group prices (meat, dairy, cereals, oils, fats, and sugar) weighted with the average world export shares of each of the groups. The FAO's food price index has decreased nearly 40 percent since June of 2008. While agricultural commodity prices have decreased significantly since 2008 levels, prices remain at historically high levels.

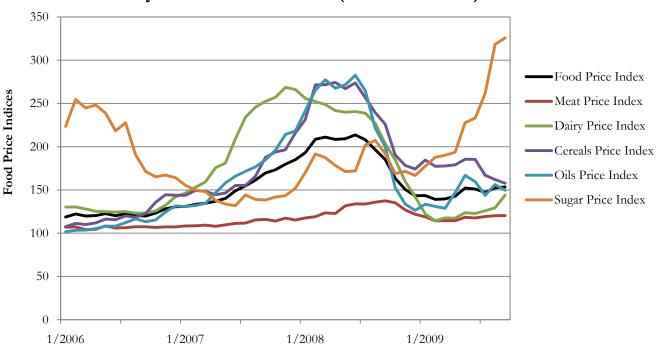
¹ Hilker, J. (2009).Commodity market outlook. Michigan State University. Retrieved from: https://www.msu.edu/~hilker/outlook.htm#SOYBEANS.

² World Bank. (2009). Prices of agricultural commodities to fall to pre-crisis levels. World Bank. Retrieved from: http://web.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTDECPROSPECTS/EXTGBLPROSPECTSAPRI L/0,,contentMDK:21292224~menuPK:659174~pagePK:2470434~piPK:4977459~theSitePK:659149,00.html.

According to the FAO, prices for oil products and sugar have risen in recent months likely due to increased demand and production shortfalls in major producing countries. Sugar prices increased recently as unfavorable weather in Brazil and India, the world's top two sugar producers, have added to concerns that demand will exceed supply.³ Prices for cereals, the critical food security sector, have stabilized over recent months. The record 2008 cereal harvest and the recovery in export supplies helped international prices moderate considerably during the end of the 2008/2009 season.

According to the FAO, cereal prices have remained low recently due in part to prospects for a large crop and estimates of ample supplies. However, a weak U.S. dollar and rising oil prices were contributing to a moderate rally in grain quotations in recent months. Overall, agricultural commodity prices are expected to continue rising through 2009 as Asia and emerging and developing economies lead the global economic recovery. Despite these expectations, the pace and strength of the global economic recovery is uncertain and therefore the outlook for agricultural commodity prices may change in the coming months.

Monthly Food Price Indices (2002-2004=100)



Data Source: FAO Food Price Index

³ Pearson, M. (2009). Sugar Output May Rise Next Year on Higher Prices. *Bloomberg.com*. Retrieved from: http://www.bloomberg.com/apps/news?pid=20601081&sid=aWHHnkCvN3dA.

⁴ International Monetary Fund. (2009). World Economic Outlook. October 2009. Retrieved from: http://www.imf.org/external/pubs/ft/weo/2009/02/pdf/text.pdf

Cocoa

Cocoa prices have increased by more than 50 percent over the past year attributed to concerns over a world shortfall in production and labor strikes in Côte d'Ivoire. Over the second and third quarters of 2009, cocoa prices increased by 23 percent, according to data from the International Cocoa Association. Recent data show that prices continued on an upward trend in the current month, increasing by 8.1 percent from September to October of 2009. Cocoa prices reached a daily price of \$3,488.38 per metric ton on October 29th, 2009.

A monthly review from the International Cocoa Association stated that recent volatility in cocoa prices has been driven by concerns about the world economy, uncertainty about cocoa demand and supply over the next year, and illiquidity in the world cocoa market.⁷ Poor harvests in Côte d'Ivoire, which accounts for 40 percent of global cocoa output, is a major factor in the forecasted shortfall in global production of cocoa beans in 2009. According to Gilbert N'Guessan Anoh, president of the Coffee-Cocoa Management Committee, Côte d'Ivoire's output fell 16 percent to 1.16 million tons in the season ending September 30th, 2009. Poor weather, labor strikes and underinvestment in the cocoa sector are said to be factors contributing to the fall in Côte d'Ivoire cocoa production.⁸ Additional forecasts show that the nation's production may drop to 1 million tons in the current season.⁹

The International Cocoa Association forecasts the following production-related factors to continue to influence prices in the near-term:

- A drop in expected global production to contribute to rising prices. World demand for beans is expected to outstrip supply by 73,000 tons this year.
- World exports of cocoa bean production are expected to fall by 7.0 percent from the previous season.
- Grindings are forecast to decrease by 6.7 percent to 3.494 million tons (a decrease of 249,000 tons). Grinding is the process of making cocoa powder from beans.
- Changes in cocoa production are expected to decrease stocks of cocoa beans as at the end of the 2008/2009 cocoa harvest year to 1.490 million tons, which is equivalent to 42.6 percent of projected annual grindings in 2008/2009.

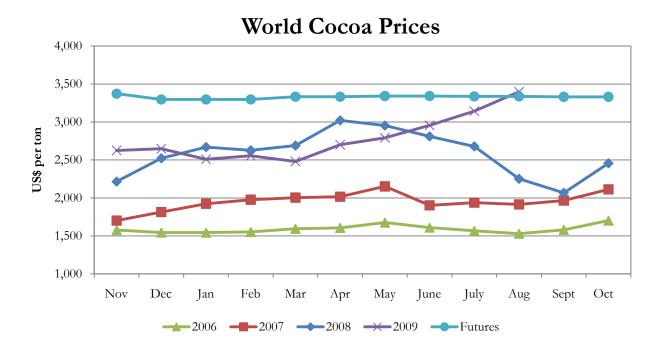
⁵ Henschen, H. (2009, October 21). Cocoa Rallies to 30-Year High on Dollar, Demand. *WSJ.com.* Retrieved from: http://online.wsj.com/article/SB125614460993099343.html?mod=googlenews_wsj.

⁶ Data from the International Cocoa Association's "Daily Prices," which can be accessed here: http://www.icco.org/.

⁷ International Cocoa Association. (2009, September). Cocoa Market Review. ICCO.

⁸ Reuters. (2009, October 29). Ivory Coast Targets 4 percent growth in 2010. Reuters Africa. Retrieved from: http://af.reuters.com/article/investingNews/idAFJOE59S0TZ20091029.

⁹ Firdausi, N. (2009, October 6). Cocoa Output in Indonesia to Top Forecast, Group Says. *Bloomberg.com*. Retrieved from: http://www.bloomberg.com/apps/news?pid=20601080&sid=a2rR9LFAEJuw.



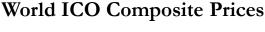
Data Sources: International Cocoa Association, New York Mercantile Exchange (NYMEX) **Notes:** Cocoa futures represent NYMEX settlement prices as of Friday, October 30, 2009. October cocoa prices reflect the daily price from the International Cocoa Association on October 29, 2009.

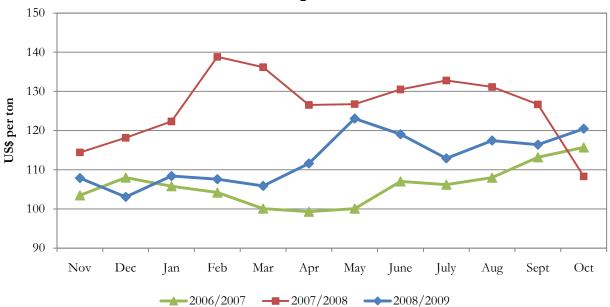
Cocoa futures have risen over 30 percent this year. The rise in futures prices have likely been driven by a weakened U.S. dollar and concerns over shortfalls in world production. Last week, IntercontinentalExchange (NYSE: ICE) cocoa futures for December delivery reached \$3,387 per metric ton, the highest price point for cocoa since February 14, 1980. Cocoa futures prices for the week ending October 30, 2009 show an expected 2 percent decrease in cocoa prices over the next year. Short-term fluctuations in cocoa prices, as with most other commodities, have been significantly influenced by changes in the value of the U.S. dollar in recent weeks.

Coffee

Coffee prices have risen slightly over the second and third quarters of 2009, however, prices remain below 2007/2008 average prices. More specifically, according to the ICO Composite Price Index, coffee prices increased by 4.3 percent in the second and third quarters of 2009. According to the index, coffee prices have continued to increase in the current month. The daily ICO index price for October 27th, 2009 was 3.7 percent higher than the average price for September.

Henschen, H. (2009, October 21). Cocoa Rallies to 30-Year High on Dollar, Demand. WSJ.com. Retrieved from: http://online.wsj.com/article/SB125614460993099343.html.
 Ibid.





Data Source: International Coffee Association

Note: The October 2009 price point reflects the daily ICO Composite Price from the ICO on October 29, 2009. The ICO Composite Price is an index price calculated by the International Coffee Association and not a traded commodity. The ICO Composite Price provides an overall benchmark of green coffee for all major origins and type. ¹² There are no futures prices represented on this chart because the ICO Composite price is a calculated statistic.

Arabica coffee accounts for approximately 70 percent of the world's coffee crop. ¹³ Arabica coffee prices increased by 10.12 percent during the second and third quarters of 2009. Prices then moved downward in mid-September. Arabica prices averaged \$148.53 per ton in September compared to \$149.76 in October. ¹⁴ The most recent data available on Arabica futures prices reflect expectations of continued moderation in Arabica coffee prices in coming months. Arabica futures for December delivery ended the week of October 23rd at \$137.15. Commodity futures prices, including Arabica coffee, were rising recently upon news of poor harvests in Brazil and Vietnam. However, futures prices of Arabica coffee and other commodities moderated last week upon news that the U.S. dollar is gaining strength. ¹⁵

While the overall ICO Coffee Price index has increased over the past two quarters, Robusta coffee prices decreased by 2.3 percent over the second and third quarters of 2009. Robusta coffee is the second most common type of coffee produced in the world.¹⁶ Robusta prices averaged \$73.82 per

¹² More information on the ICO Composite Price can be accessed here: http://www.ico.org/about_statistics.asp

¹³ Christian, J. (2006). Commodities rising. John Wiley and Sons.

¹⁴ International Coffee Organization. (2009). Coffee Market Report September 2009. This document can be accessed here: http://dev.ico.org/documents/cmr-0909-e.pdf.

¹⁵ Lepro, S. (2009). Commodities retreat as dollar gains strength. Reuters.com.

¹⁶ International Coffee Organization. (2009). About Coffee. ICO.com. More information on types of coffee and differences between Arabica and Robust coffee can be accessed here: http://www.ico.org/botanical.asp.

ton in September, which reflects a slight increase from average prices of \$72.35 in October. The most recent futures price for December and January 2010 delivery show coffee prices decreasing to \$65 per ton by the end of the year. Despite this drop, futures prices reflect anticipation for coffee prices to return to \$70 per ton by June 2010.

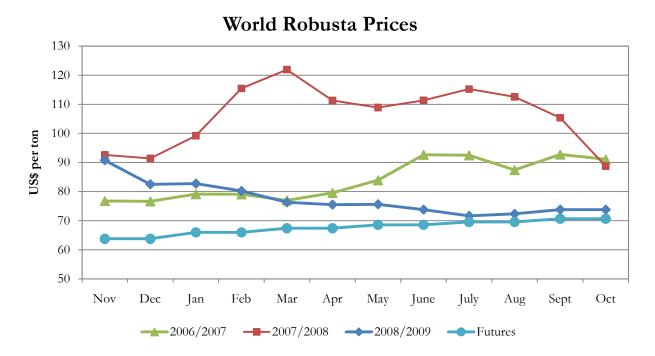
The other two species of coffee, Coffea liberica (Liberica coffee) and Coffea dewevrei (Excelsa coffee), are grown on a much smaller scale. These varieties are traded in small quantities and demand for both of the species is low.¹⁷



Data Sources: International Coffee Association, New York Mercantile Exchange (NYMEX) **Notes:** Arabica coffee futures represent NYMEX settlement prices as of Friday, October 30, 2009. There are no futures prices shown for November because Arabica coffee does not trade in that month. Typically, the previous month's settlement price is graphed in off months.

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 $^{^{\}rm 17}$ See notes from the International Coffee Organization regarding other species of coffee: http://www.ico.org/botanical.asp.



Data Sources: International Coffee Association, London International Financial Futures and Options Exchange **Notes:** Robusta futures represent LIFFE settlement prices as of Friday, October 30, 2009

Analysts speculate that the following factors are influencing current and future coffee prices:

- Production shortfalls appear to be a major driver of recent increases in coffee prices. The
 International Coffee Organization (ICO) forecasts coffee production for the year ending
 September 30, 2009 to be 128.8 million bags compared to last year's record harvest of 134.8
 million bags. The drop in production is attributed to lower production in Brazil and
 Vietnam, which account for 49 percent of the world's coffee. 19
- Production in Vietnam is forecast to drop 1.3 million bags to total 18.4 million in 2009/2010 mainly due to unfavorable weather and soil quality issues.²⁰
- Production in Brazil is forecast to decline by 8 million bags to total 43.5 million in 2009/2010 as the country enters the off year for Arabica production. ^{21, 22}

¹⁸ International Coffee Organization. (2009). Coffee Market Report September 2009. ICCO. Retrieved from: http://dev.ico.org/documents/cmr-0909-e.pdf.

¹⁹ USDA. (2009). Coffee: World Markets and Trade. Foreign Agricultural Services. Circular Series FCOFF 1-09. Retrieved from: http://www.fas.usda.gov/htp/coffee/2009/June_2009/2009_Coffee_June.pdf
²⁰ Ibid.

²¹ Higher coffee production years are typically followed by lower production years due to the natural cycle of coffee trees Brazil. The year 2009 is an off year for coffee production in Brazil.

²² Ibid.

- The Brazilian government's planned purchase of 10 million bags of coffee from local farmers. ²³
- Short-term fluctuations in commodities futures prices have been influenced by changes in
 expectations over the value of the U.S. dollar. Expectations over the weakening of the U.S.
 dollar have supported commodity prices in recent weeks. However, coffee and other
 commodity futures fell for the week ending October 30, 2009 as the U.S. dollar rose against
 other currencies ^{24, 25}

Rice

World rice prices decreased by 7.5 percent over the second and third quarters of 2009 to an average of \$11.28 per cwt (equivalent to 100 pounds) in September. Rice prices, like most commodities, have significantly decreased over the past year. Rice prices fell 36.7 percent between September 2008 and September 2009.

According to the FAO, while the weakening dollar and below average crops was providing some support for rice prices, the arrival of new supplies expected in the next few months are keeping prices depressed. ²⁶ Despite these trends, government action by several key rice producing countries may influence rice prices in coming months. For instance, Thailand just administered a new price insurance scheme that may lower Thai exportation quotations. The price scheme, implemented October 1, 2009, is a direct payment program that replaces indirect support for rice, corn, and tapioca. The Thai Government's new program directly intervenes in the rice milling industry to purchase rice at above world prices. ²⁷ Government action, as well as the continued fall in international wheat prices, is anticipated to keep a downward pressure on world rice prices in coming months. ²⁸

Rice futures prices have been increasing in recent weeks with speculation of poor harvests due to unfavorable weather in major rice producing countries like India and anticipation of an increase in world demand for rice with the global economic recovery. ²⁹ An October 9th forecast from the USDA estimates a 2.7 percent decline in global output for rice in the current season compared to

²³ Inside Futures. (2009). Foods and Softs Outlook – October 23, 2009. *InsideFutures.com*. This analysis can be accessed here: http://www.insidefutures.com/article/118235/Foods%20and%20Softs%20Outlook%20-

^{%20}October%2023,%202009.html.

²⁴ Ibid.

²⁵ Lepro, Sarah. (2009). Commodities retreat as dollar gains strength. Reuters.com.

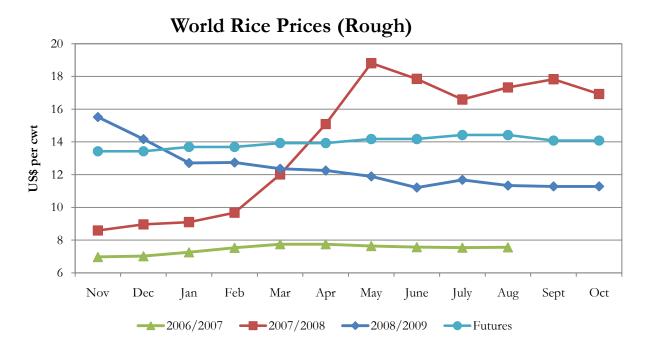
²⁶ FAO. (2009). Rice Market Monitor, September 2009. FAO.

²⁷ Prasertsri, P. (2009). Price Insurance Starts to Replace Mortgage Scheme. United States Department of Agriculture, Foreign Agricultural Service. This brief can be accessed here:

http://gain.fas.usda.gov/Recent%20GAIN%20Publications/Price%20Insurance%20Starts%20to%20Replace%20Mort gage%20Scheme_Bangkok_Thailand_10-29-2009.pdf.
²⁸ Ibid.

²⁹ Javier, L. (2009, October 28). Rice Market 'On Thin ice' as Record Prices May Return. *Bloomberg.com*. This article can be accessed here: http://www.bloomberg.com/apps/news?pid=20601091&sid=ajtGhSQNMg6A.

last year. The same forecast shows that that global demand for rice through 2010 is expected to exceed output by 2.4 million metric tons. ^{30, 31}



Data Sources: United States Department of Agriculture (USDA) Economic Research Service (ERS), Chicago Board of Trade (CBOT)

Notes: Rice futures represent NYMEX settlement prices as of Friday, October 30, 2009.

Wheat

World wheat prices fell by more than 40 percent between September 2008 and September 2009. Wheat prices decreased by 12.6 percent over the second and third quarters of 2009 before rising slightly between September and October.

Wheat prices have remained low over 2009 as estimates for wheat production in the 2009/2010 season have increased. World wheat stocks in 2009 are estimated to be 12 percent larger than in 2008 and 52 percent larger than in 2007. The projected increase in wheat supply is being driven by larger than expected crops in Europe, Russia, Canada and the U.S.³² A recent release from the USDA World Agriculture Supply and Demand Estimate shows an expected wheat increase of

³⁰ Ibid.

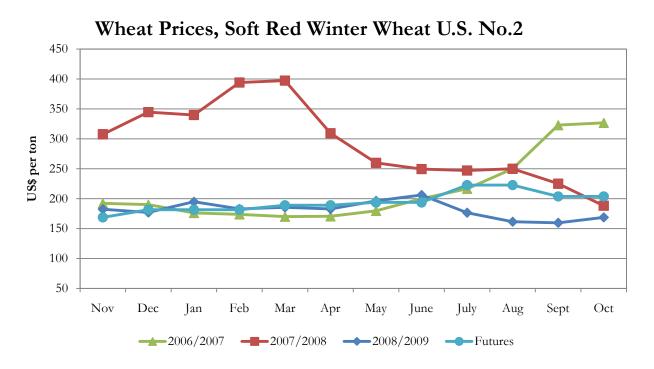
³¹ See USDA for data:

http://www.fas.usda.gov/psdonline/psdreport.aspx?hidReportRetrievalName=BVS&hidReportRetrievalID=681&hidReportRetrievalTemplateID=7.

³² Hilker, J. (2009). Market Outlook Reports from October 2009. Michigan State University. This analysis can be accessed here: https://www.msu.edu/~hilker/outlook.htm#wheat.

668.12 million tons for the current year, which is up from September estimates of 663.72 million tones.

Wheat futures on the Chicago Board of Trade (CBOT) ended the week of October 30th, 2009 at \$181 per ton for December delivery. This ending price reflects a mild decrease from futures prices observed in recent weeks. Wheat futures finished the week of October 23rd, 2009 at \$206 per ton. The increase in commodity price futures in previous weeks appears to have been supported by an influx of financial funds into commodity markets rather than supply or demand issues related specifically to wheat.³³ In addition, commodity futures prices overall decreased this week upon news of strengthening in the U.S. dollar.



Data Sources: United States Department of Agriculture (USDA) Economic Research Service (ERS), Chicago Board of Trade (CBOT)

Notes: Wheat futures represent NYMEX settlement prices as of Friday, October 30, 2009.

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³³ Reading, L. (2009, October 22). Wheat Futures Defy Market. *WeeklyTimesNow.com*. This article can be accessed here: http://www.weeklytimesnow.com.au/article/2009/10/22/125281_grain-and-hay.html.

Maize

Maize prices decreased 3 percent over the second and third quarters of 2009 before increasing slightly from September to October. Prices for maize reached a 12-month high in October at \$171.69, according to data available from the FAO's Commodity Outlook.



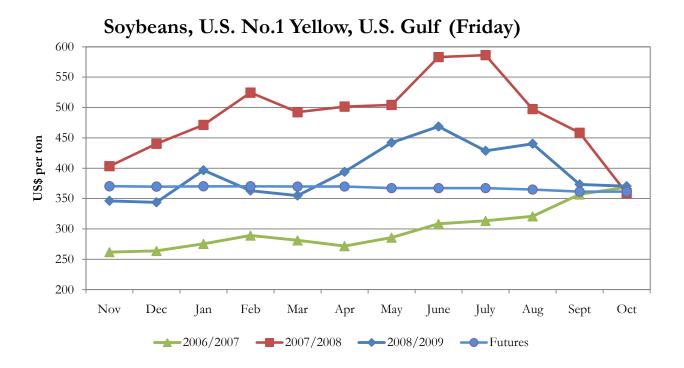
Data Source: FAO Commodity Outlook

Soybeans

Soybean prices fell by 5.2 percent over the second and third quarters of 2009. Prices continued to decrease over the past month to reach an average of \$370.28 per ton in October. World soybean production for 2009/10 is forecast to rise a record 246.1 million metric tons, compared to 210.6 million in 2008/09, according to the USDA. The forecast increased 2.1 million tons from last month, mainly due to larger crop estimates for the Argentina, Brazil, the United States, and Paraguay. Production in Argentina alone is expected to increase by 64 percent from last year when

³⁴ Ash, M., Dohlman, E. & Wittenberger, K. (2009). Oil Crops Outlook. *United States Department of Agriculture, Economic Research Service*. Retrieved from: http://usda.mannlib.cornell.edu/usda/ers/OCS//2000s/2009/OCS-10-13-2009.pdf.

drought limited yields. Production is also expected to increase by 9 percent in both Brazil and the United States, contributing to the world supply and low world prices.³⁵



Data Sources: FAO Commodity Outlook, Chicago Board of Trade (CBOT)

Notes: Soybean futures represent NYMEX settlement prices as of Friday, October 30, 2009.

Crude oil

Crude oil prices increased over the second and third quarters of 2009 and into October. West Texas Intermediary (WTI) oil prices averaged \$69 per barrel in September and \$70 in the first half of October. Price pressures from expectations of a global economic recovery and increased oil consumption were moderated by weak demand and high inventories over the past several months. In September, OPEC agreed to maintain its existing production targets and the U.S. Energy Information Administration (EIA) expects the organization to increase production in the fourth quarter of 2009 to meet increasing world demand.³⁶

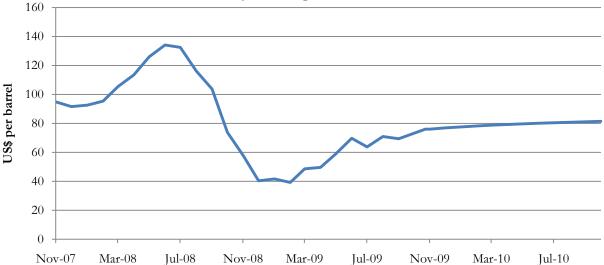
On October 23rd, the NYMEX futures market price for WTI crude oil for December 2009 delivery was \$81.48. Futures prices for crude oil have been increasing in recent weeks upon expectations of a weakening U.S. dollar and growing world demand for oil. Demand for oil in China increased by 14

³⁵ Hilker, J. (2009). Market Outlook Reports from October 2009. Michigan State University. This analysis can be accessed here: https://www.msu.edu/~hilker/outlook.htm#SOYBEANS.

³⁶ Energy Information Administration. (2009, October 6). Short-Term Energy and Winter Fuels Outlook. EIA Official Energy Statistics from the U.S. Government. Retrieved from: http://www.eia.doe.gov/emeu/steo/pub/contents.html.

percent in September and 16 percent in August, according to energy analysts.³⁷ In recent weeks, the U.S. Energy Information Administration increased its estimate of world oil consumption by 0.2 million barrels per day for the remainder of 2009 and 2010, however, they did not adjust price forecasts because of expectations that the world supply of oil will remain high in the short-term. EIA expects the price of WTI crude oil to average about \$70 per barrel between October and March 2009, representing a \$19 increase over last year. The EIA's forecast for average WTI prices rises gradually to about \$75 per barrel by December 2010 as U.S. and global economic recovery occurs.³⁸

Crude Oil (Cushing, OK WTI Spot Price, FOB), Monthly Average and Futures Prices



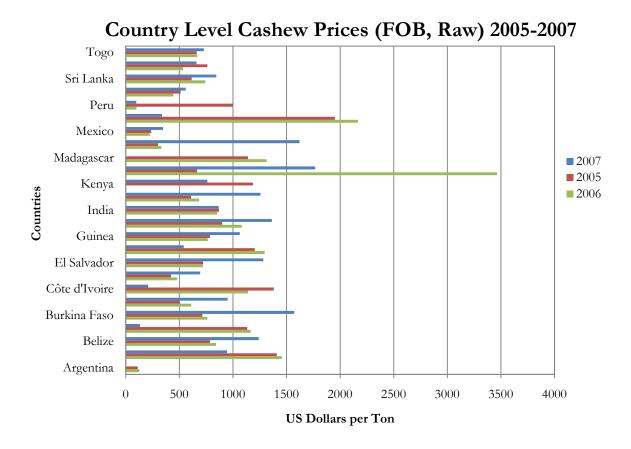
Data Source: Energy Information Administration (EIA)

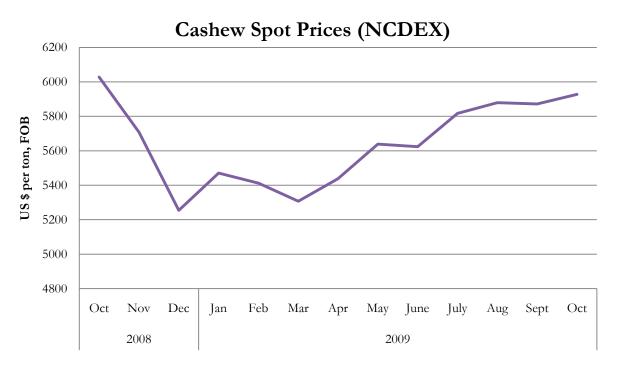
Notes: This chart presents the most recent data available on WTI spot prices from the Energy Information Administration as of October 31, 2009. The October 23, 2009 WTI spot price was used for the October 2009 monthly price.

Cashews

The NCDEX (India) market currently lists cashews as a publicly traded commodity. Monthly average spot prices for cashews show prices decreasing by 1.66 percent between October 2008 and 2009. World cashew prices have been increasing slightly in recent months due to poor harvests in primary producing countries including Vietnam, the world's leading cashew producer since 2006. In addition, heavy rains and high temperatures have affected the cashew crop this season.

³⁷ Lin, M. (2009, October 23). Oil Futures: Crude Nears Fresh One-Year High; Mood Optimistic. *WSJ.com.* Retrieved from: http://www.marketwatch.com/story/oil-futures-crude-nears-fresh-one-year-high-mood-optimistic-2009-10-23.
³⁸ Energy Information Administration. (2009, October 6). Short-Term Energy and Winter Fuels Outlook. EIA Official Energy Statistics from the U.S. Government. Retrieved from: http://www.eia.doe.gov/emeu/steo/pub/contents.html.





Data Source: National Commodity and Derivatives Exchange (NCDEX)

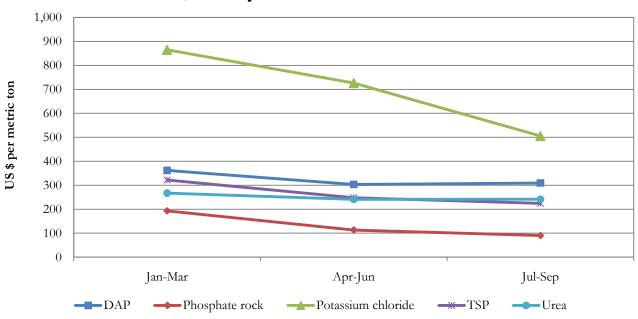
Fertilizer

Prices of three of the five major fertilizers decreased over the second and third quarters of 2009. The biggest drop was in Potassium chloride prices, which decreased by more than 30 percent over the past two quarters amid weakening demand and ample supplies. The drop in fertilizer prices in recent months is part of a longer-term trend in falling prices that began in mid-2008. DAP fertilizer prices increased by 1.98 percent over the second and third quarters with some strengthening in demand. ³⁹

Prices skyrocketed in 2008 for all five major types of fertilizer, peaking during the summer months and beginning on a downward trend at the end of the year. Prices showed a steep downward trend in the final quarter.

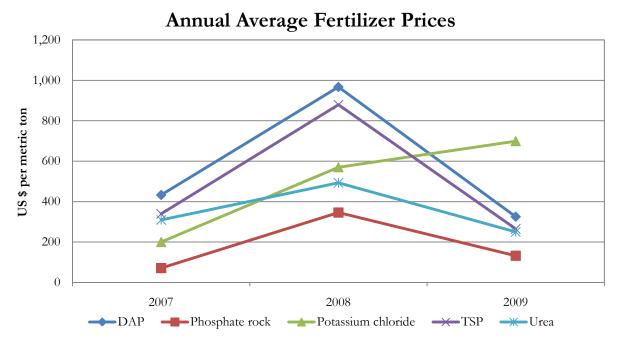
Quarterly Percent Change in Fertilizer Prices: Q2 to Q3 2009	
Fertilizer	Q2 to Q3 % Change
DAP	1.98%
Urea	0.19%
TSP	-9.29%
Phosphate rock	-20.56%
Potassium chloride	-30.42%

Quarterly Fertilizer Prices 2009



Data Source: World Bank Pink Sheet

³⁹ World Bank. Commodity Markets Review. (2009, September 10). World Bank. http://siteresources.worldbank.org/INTDAILYPROSPECTS/Resources/1324037-1124814752790/CommodityMarketsReviewSeptember2009.pdf.



Data Source: World Bank Pink Sheet

Conclusion

In conclusion, agricultural commodity prices in 2009 have thus far decreased significantly from 2008 peak levels. While agricultural commodity prices remain subdued, the prices of some commodities including cocoa, coffee and maize have risen recently. Agricultural commodity prices are expected to continue on a graduate upward trajectory over the coming months as the global economy recovers and world demand increases. In the short-term agricultural commodity prices continue to be influenced by changes in the value of the U.S. dollar, in addition to factors related to prices, demand, supply and other market-specific factors. Most analysts expect that the longer-term outlook for agricultural commodity prices will depend on the pace, strength and geographical distribution of the global economic recovery.

Please direct comments or questions about this research to Leigh Anderson, at eparx@u.washington.edu.

Appendix 1: Factors Contributing to Agricultural Commodity Price Volatility

Agricultural commodity prices are influenced by a variety of complex factors including macroeconomic forces, input costs, and other changes in the fundamentals of demand and supply, such as fluctuations in income, supply shocks resulting from bad weather or crop disease, government interventions and changes in price of related goods.

In general, a weakening U.S. dollar is associated with rising agricultural commodity prices and vice versa. Recently, commodity market analysts have attributed the moderating in agricultural commodity prices in part to gains in the value of the U.S. dollar relative to other currencies. Despite the apparent relationship, it is unclear how much of recent fluctuations in agricultural commodity prices can be attributed to changes in the value of the U.S. dollar.

Short-Term Factors

A brief survey of literature from the FAO, USDA and IFAP reveals the main factors that contribute to short-term volatility in agricultural commodity prices. 40,41,42 These factors include:

- Changes in demand due to shifts in incomes (purchasing power) and consumption
- Productivity improvements and new technologies
- Shocks to production (weather, disease, war, etc.)
- Changes in global stocks and reserves
- Short term government policies
- Energy and input prices and availability (labor, credit, water, fertilizer, seed, etc.)
- Biofuel policies and technology prospects
- Changes in the value of the U.S. dollar
- Developments in financial markets and speculative fund positions
- New investments in agricultural production
- Spillover effects between commodity prices including crude oil

High Agricultural Commodity Prices in 2008⁴³

Numerous studies and research briefings consider the factors contributing to the observed spikes in agricultural commodity prices in 2008. According to the USDA, the sharp increase in agricultural commodity prices observed in 2008 was due to several contributing factors including:

⁴⁰ Sarris, A. (2009, July). International Farm Policy Challenges to 2050. Presentation at the IFAP Commodity Conference. FAO. This presentation can be accessed here:

http://www.ifap.org/en/newsroom/documents/InternationalFarmPolicyChanges2050.pdf.

⁴¹ Schnepf, R. (2008). High Agricultural Commodity Prices: What Are the Issues?", Congressional Research Service (CRS) Report for Congress.

 ⁴² FAO (2009). The State of Agricultural Commodity Markets, High food prices and the food crisis – experiences and lessons learned. FAO. This document can be accessed here: ftp://ftp.fao.org/docrep/fao/012/i0854e/i0854e.pdf.
 ⁴³ Trostle, R. (2008, May). Global Agricultural Supply and Demand: Factors Contributing to the Recent Increase in Food Commodity Prices. United States Department of Agriculture, Economic Research Service.

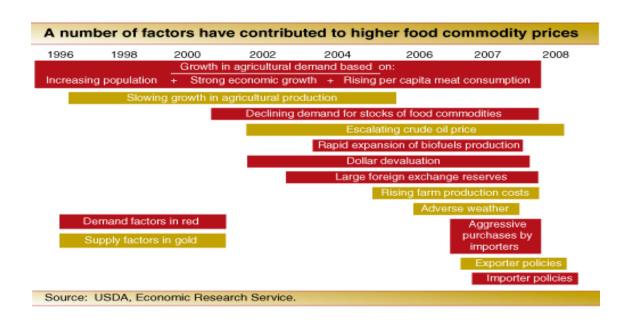
Changes in demand: Trends of more rapid expansion in demand and slower growth in production began in the 1990s. These changing dynamics contributed to declining global demand for stocks of grains and oilseeds since 2000.

Rising energy prices: Between 2000 and 2008, prices of crude oil prices increased contributing to more expensive inputs. In addition, changing biofuel policies provided incentives to expand biofuel production in some countries.

Value of the dollar: Commodity prices were influenced by the declining value of the U.S. dollar, which allowed some countries to increase food commodity imports.

Rising production costs: In 2006 and 2007, rising energy prices and adverse weather in a number of countries reduced global production of grains and oilseeds, which contributed to short-term price volatility.

The figure below from the USDA shows the factors that contributed to higher agricultural commodity prices between 1996 and 2008.



Appendix 2. Data Sources and Methods

Cocoa

Historical prices: The ICCO daily price for cocoa beans is the average of the quotations of the nearest three active futures trading months on NYSE, LIFFE (London International Financial Futures and Options Exchange) and, NYBOT (New York Board of Trade) at the time of London close.⁴⁴ Monthly averages of these prices are shown in the quarterly commodity price update.

Futures: Cocoa futures represent NYMEX settlement prices for the most recent trading day available. This data is available from the Chicago Board of Trade.

Coffee

Historical prices: Historical coffee prices are from the International Coffee Organization. The ICO composite index is based on ex-dock quotations, daily trading, and sales from origin in U.S., German and French markets. Arabica and Robusta coffee prices are based on daily weighted averages of coffee prices in international markets.⁴⁵

Futures: Arabica and Robusta futures represent NYMEX settlement prices for the most recent trading day available. This data is available from the Chicago Board of Trade.

Rice

Historical prices: Based on a simple average of the U.S. Department of Agriculture's weekly-adjusted estimates of world market prices. This information is based on rice quotations and other market data.⁴⁶

Futures: Rice futures represent NYMEX settlement prices for the most recent trading day available. This data is available from the Chicago Board of Trade.

Wheat

Historical prices: Wheat prices from the USDA are based on cash-bids in principal markets, the International Grain Council's Grain Market Report and from in-country ministries.

Futures: Wheat futures represent NYMEX settlement prices for the most recent trading day available. This data is available from the Chicago Board of Trade.

Maize

Historical prices: Maize prices from the FAO are based on monthly averages calculated from the available weekly price quotations. Weekly observations are recorded under the date of the Friday at

⁴⁴ See the ICCO for more information on prices: http://www.icco.org/statistics/qbcs.aspx.

⁴⁵ See the ICO for more information: http://www.ico.org/coffee_prices.asp.

⁴⁶ See the USDA's rice briefing room for more information: http://www.ers.usda.gov/Briefing/Rice/data.htm.

the end of each week but the observation is not necessarily the price on that Friday. Monthly and annual averages of weekly data are simple (unweighted) averages of the available observations.⁴⁷

Soybeans

Historical prices: Soybean prices from the FAO are based on monthly averages calculated from the available weekly price quotations. Weekly observations are recorded under the date of the Friday at the end of each week but the observation is not necessarily the price on that Friday. Monthly and annual averages of weekly data are simple (unweighted) averages of the available observations.⁴⁸

Crude Oil

Historical/Futures prices: Crude oil prices for West Texas Intermediate (WTI) crude oil spot prices from the Energy Information Administration are used as a benchmark in oil pricing. These spot prices are the underlying commodity of NYMEX futures prices. Typically, the NYMEX futures prices tracks within pennies of the WTI spot price described above.⁴⁹

Cashews

Historical prices: Cashew prices represent monthly averages of cashew spot prices on the National Commodity and Derivatives Exchange market.⁵⁰

Fertilizers

Historical prices: Price data from the World Bank Pink Sheet is based on daily, weekly or monthly prices international commodity study groups, government agencies, industry trade journals, and Bloomberg and Datastream data feed systems. ⁵¹

⁴⁷ See FAO Commodity Outlook notes page: http://www.fao.org/es/esc/prices/report/wpnote-e.htm. Note the notes pages for specific commodities is not working.

⁴⁸ See FAO Commodity Outlook notes page: http://www.fao.org/es/esc/prices/report/wpnote-e.htm. Note the notes pages for specific commodities is not working.

⁴⁹ See the Energy Information Administration for more information: http://tonto.eia.doe.gov/ask/crude_types1.html.

⁵⁰ See the National Commodity and Derivatives Exchange market for more information on spot prices http://www.ncdex.com/Market_Data/Spot_price.aspx.

⁵¹ For more information, see the World Bank Pink Sheet page:

 $http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTDECPROSPECTS/0, acontentMDK: 21148472 \sim menuPK: 556802 \sim pagePK: 64165401 \sim piPK: 64165026 \sim the SitePK: 476883, 00. html.$



Addendum to the Quarterly Commodity Update

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Professor C. Leigh Anderson, PI and Lead Faculty Associate Professor Mary Kay Gugerty, Lead Faculty Ryan Gockel, Lead Research Analyst December 2, 2009

Executive Summary

This addendum to the Quarterly Commodity Price Update from April-October 2009 presents an overview of price data and recent trends in cotton, dairy, and international wheat commodity markets. Highlights of this briefing include:

- World cotton prices¹ have increased 45.9 percent since November 2009 to reach 67.47 cents per pound in November 2010.² According to USDA forecasts, global cotton consumption will rebound in 2009/10 while foreign production is expected to decline.³
- Dairy prices rose in recent months. According to a recent report from the USDA, increased global demand is contributing to dairy price increases. The FAO Dairy Price Index increased 28.9 percent from January to October 2009. World production of the primary dairy products including milk powder, skim milk powder, butter, and cheese, is expected to increase 1.6 percent in 2009 compared to 2008. This increase is below the average of 2.0 percent annual growth over the past decade.

¹ Cotton prices are presented for the "A" Index. Cotton "A" Index is the proxy for the world price of cotton, according to the National Cotton Council of America.

² Food and Agriculture Organization of the United Nations. (2009). *Commodity Outlook for "A" Index Cotton prices.* FAO Commodity Outlook Database.

³ USDA. (2009, November 10). World Agricultural Production. United States Department of Agriculture, Foreign Agricultural Services. Circular series. WAP 11-09.

⁴ United States Department of Agriculture. (2009, November). *Livestock, Dairy, and Poultry Outlook*. Document LDP-M-185. United States Department of Agriculture.

⁵ Food and Agriculture Organization of the United Nations. (2009). *Dairy Price Index*. Available from the FAO website: http://www.fao.org/worldfoodsituation/FoodPricesIndex/en/.

⁶ Food and Agriculture Organization of the United Nations.(2009). *Have prices hit bottom? Milk and Milk Products.* Available from the FAO website: http://www.fao.org/docrep/011/ai482e/ai482e09.htm.

- World wheat prices increased in recent months. According to the FAO, recent increases in wheat prices were driven primarily by fluctuations in the U.S. dollar and increases in maize prices.⁷
- World wheat production is expected to decrease slightly in 2009/10 with forecasts for world wheat stocks currently estimated to grow over 14 percent. In India, the government has been attempting to increase wheat production to help overcome losses in rice production from the recent monsoon. Nonetheless, wheat prices have increased.^{8,9}

Overall, speculators note that fluctuations in the U.S. dollar, growing world demand, and uncertainty over the pace of global economic recovery have influenced agricultural commodities.

Cotton

World cotton prices have increased significantly over recent months as world production of cotton is expected to reach its lowest level in five years. World cotton prices for the "A" index¹⁰, considered the proxy for world cotton prices, increased 45.9 percent since November 2009 to reach 67.47 cents per pound in November 2010. Analysts speculate that recent movements in cotton prices have been driven largely by concerns over a shortfall in world production. According to USDA forecasts, global cotton consumption will rebound in 2009/10 while foreign production is expected to decline. Highlights from a November 10th report from the USDA's Foreign Agricultural Service with information on forecasted world cotton production for the 2009/10 season include:

- World cotton production is expected to reach 102.7 million bales¹³ in the 2009/10 season, a
 4.5 percent decrease from 2008/09 production levels.¹⁴
- World cotton consumption is expected to reach 113.5 million bales in 2009/10, which represents a 2.2 percent increase from 2008/09 levels.¹⁵

⁷ Food and Agriculture Organization of the United Nations. (2009, November). *Crop Prospects and Food Situation November 2009*. No. 4. Food and Agriculture Organization of the United Nations.

⁸ International Grains Council. (2009, November 26). *Grain Market Report. November 2009*. GMR No. 395. International Grains Council.

⁹ Reuters. (2009, November 30). India wheat futures higher on spot demand. Reuters.com. Retrieved from: http://in.reuters.com/article/domesticNews/idINBOM29027220091130.

¹⁰ The "A" Index is an average of five quotations from a selection of upland cottons traded internationally. See the National Cotton Council for a more detailed description: http://www.cotton.org/econ/prices/monthly.cfm.

¹¹ Food and Agriculture Organization of the United Nations. (2009). *Commodity Outlook for "A" Index Cotton prices*. FAO Commodity Outlook Database.

¹² National Cotton Council. (2009, November). *Monthly Prices.* National Cotton Council's Economics Data Center. Available on the National Cotton Council's website: http://www.cotton.org/econ/prices/monthly.cfm.

¹³ The USDA provides cotton production estimates in millions of 480-pound bales.

 ¹⁴ USDA. (2009, November 10). World Agricultural Production. United States Department of Agriculture, Foreign Agricultural Services. Circular series. WAP 11-09.
 ¹⁵ Ibid.

- The anticipated rise in world cotton consumption is driven in part by increased activity in the world textile industry and increasing demand for cotton products. Yarn output since January 2009 is up 10.4 percent and garment and textile exports are increasing.¹⁶
- Currently, the combination of lower production and increasing demand appear to be supporting world cotton prices. Market analysts note that fluctuations in the value of the U.S. dollar, the pace of global economic recovery, realized cotton production levels and potential government interventions in China and India may influence cotton prices in the coming months.^{17,18}

According to analysts, the drop in world cotton production is being driven in part by lower Chinese production. China, the world's largest cotton producer, accounts for approximately 30 percent of world cotton output per year. PRecent forecasts show that China's cotton production is expected to decline by 13 percent in 2009/10 compared to last year. According to the USDA, farmers in China reduced area sown in 2009 in response to high production costs, labor shortages, higher government subsidies for grain, disappointing cotton prices, and weak demand for textiles at the end of 2008. In addition, late wet summer weather in 2008/09 contributed to reduced harvests and poor quality cotton production in China during the current season. In response to declining production and rising prices, the Chinese government has taken action in recent weeks to support cotton markets. On November 20th, China reintroduced state reserves to stem upward price trends. In the coming weeks, China is expected to provide clarification on updated cotton import quota and domestic supply policies, which could result in price implications.²¹

The USDA also estimates that cotton production will remain near 2008/09 levels this season in India, the world's second largest cotton producer. In the U.S., which ranks third in world cotton output, production is expected to decline 2.5 percent to 12.5 million bales. Unfavorable weather in the southern United States appears to have contributed to reduced production. Despite these changes, increases in production estimates for Pakistan and Uzbekistan are expected to partially offset recent reductions to world cotton production in 2009/10.²²

Concerns over world shortfalls in production are reflected in cotton futures prices (product symbol TT) on the New York Stock Exchange. Cotton futures for March 2010 delivery closed at 75.22 cents per pound on Wednesday, November 25th, 2009. Recent cotton price futures show that market

¹⁶ Ibid.

¹⁷ Cotton Outlook. (2009, December 3). Cotton Outlook Volume 87 No. 48. November 27, 2009. Cotlook.com.

¹⁸ National Cotton Council. (2009, November). *Monthly Prices*. National Cotton Council's Economics Data Center. Available on the National Cotton Council's website: http://www.cotton.org/econ/prices/monthly.cfm.

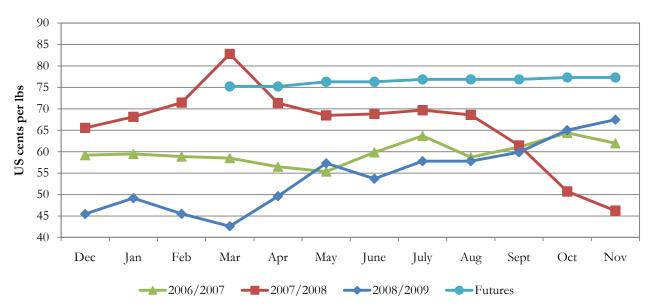
 ¹⁹ National Cotton Council. (2009, November). Monthly Prices. National Cotton Council's Economics Data Center.
 Available on the National Cotton Council's website: http://www.cotton.org/econ/prices/monthly.cfm.
 ²⁰ USDA. (2009, November 10). World Agricultural Production. United States Department of Agriculture, Foreign Agricultural Services. Circular series. WAP 11-09.

Cotton Outlook. (2009, December 3). Cotton Outlook Volume 87 No. 48. November 27, 2009. Cotlook.com.

²² USDA. (2009, November 10). World Agricultural Production. United States Department of Agriculture, Foreign Agricultural Services. Circular series. WAP 11-09.

players expect prices to continue to rise into 2011. While cotton futures prices are increasing, some analysts note that the key to the 2009/10 cotton price outlook will be the pace of global economic recovery and its influence on world cotton prices.²³

World Cotton Prices



Data Sources: FAO Commodity Outlook, New York Mercantile Exchange (NYMEX) **Notes:** Historical cotton prices from the FAO represent prices for the cotton index "A". Cotton futures represent index "A" NYMEX settlement prices as of Wednesday, November 25th, 2009.

Dairy

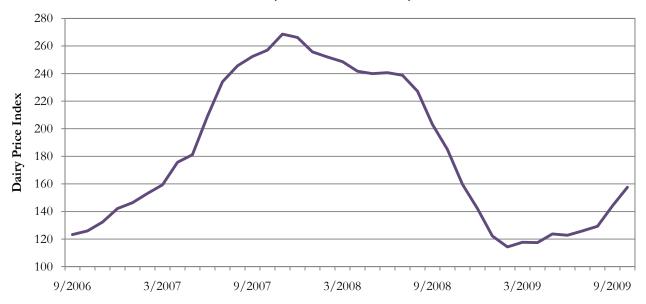
The FAO Dairy Price Index is an index of price quotations for butter, skim milk powder (SMP), whole milk powder (WMP), cheese, and casein (protein found in milk, which is used as a binding agent in food products). The index is weighted for average exporting shares between 2002 and 2004. The index shows that after peaking in November 2007, dairy prices declined dramatically in 2008 before bottoming out in February 2009. Since then, dairy prices have been volatile. The FAO Dairy Price Index increased 28.9 percent from January to October 2009. According to the USDA, rising world demand for dairy products and lower than expected milk production in the U.S. and internationally, are leading to tightening stocks and expectations for rising dairy prices in the remainder of 2009 and into 2010. The FAO and USDA concur that rebounding world demand for dairy products and slow growth in production are likely contributing to increasing prices. ^{25,26}

²³ Cotton Incorporated. (2009). Monthly Economic Letter, U.S. and Global Market Fundamentals. November 2009. Accessed from: cotton.inc.

²⁴ Food and Agriculture Organization of the United Nations. (2009). *Dairy Price Index*. Available from the FAO website: http://www.fao.org/worldfoodsituation/FoodPricesIndex/en/.

Food and Agriculture Organization of the United Nations. (2009). *Have prices hit bottom? Milk and Milk Products*. Available from the FAO website: http://www.fao.org/docrep/011/ai482e/ai482e09.htm.

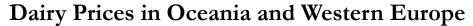
FAO Dairy Price Index (2002-2004 = 100)

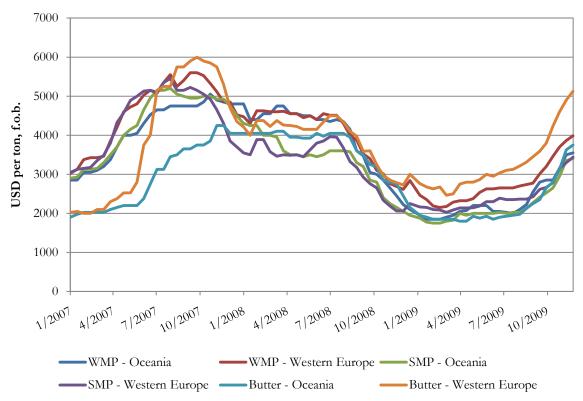


Data Source: FAO Dairy Price Index

The general increase in dairy prices can also be observed in the individual prices of the primary dairy products tracked by the FAO and the USDA, including whole milk powder, skim milk powder, butter, and cheese. In recent months, the prices of each of these dairy products have increased.

²⁶ United States Department of Agriculture. (2009, November). *Livestock, Dairy, and Poultry Outlook*. Document LDP-M-185. United States Department of Agriculture.





Data Source: USDA Agricultural Marketing Services

Notes: Data represent average (high and low) bi-weekly prices for primary agricultural products. Data are presented from Oceania and Western Europe, the only two regions for which data is available from the USDA Agricultural Marketing Services division.

According to the USDA and the FAO, the general rise in dairy prices is being driven in part by world demand that is increasing at a faster rate than production. Based on forecast data from the FAO, world dairy production (whole milk powder, skim milk powder, butter, and cheese) is expected to increase 1.6 percent in 2009 compared to 2008. Highlights of the FAO's most recent 2009 world dairy production forecast include:

• Whole milk power production is expected to reach 31.6 million tons in 2009, a 1.6 percent increase from 2008 levels. The FAO notes that this pace of growth is below the average global trend rate of 2.0 percent growth in milk production annually over the last decade. Increases in whole milk powder production in New Zealand are contributing to rising whole milk powder production while significant declines in the European Union are moderating world production levels.²⁷

²⁷ Food and Agriculture Organization of the United Nations. (2009). *Have prices hit bottom? Milk and Milk Products*. Available from the FAO website: http://www.fao.org/docrep/011/ai482e/ai482e09.htm.

- Skim milk powder production is expected to reach 25.0 million tons in 2009, a 1.6 percent increase from 2008 levels. Skim milk output is expected to decline in the United States, the world's leading skim milk powder producer. However, analysts forecast this decline to be offset by production increases in Oceania and stable production levels in the European Union.²⁸
- **Butter production** is expected to reach 64.0 million tons in 2009, a 2.7 percent increase from 2008 levels. Butter production increases are being led by New Zealand, the world's largest butter producer.²⁹
- Cheese production is expected to reach 89.8 million tons in 2009, an increase of 2.2 percent from 2008 levels. Exports from the European Union, the world's largest cheese producer, and increased output in the United States are expected to contribute to higher cheese production in 2009 compared to 2008.³⁰

Other dairy price data may be included in future commodity price updates, as requested.

Wheat

The Quarterly Commodity Price Update: April-October 2009 presented price data and market information for U.S. red winter wheat (also included here). This addendum provides additional information on other indicators of world wheat prices, where data is available. Unfortunately, I could not find data on spring wheat in India.

Highlights of the current world wheat market include:

- World wheat prices are expected to decrease by 40 percent in 2009 compared to 2008, following the downward price trend of other commodities. Wheat prices remained low through most of 2009 as estimates for wheat production in the 2009/10 season increased; however, prices have recently begun to trend upward.
- According to analysts, the recent increases in wheat prices were driven primarily by external
 market developments including fluctuations in the U.S. dollar and increases in maize prices.³⁴

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²⁸ Ibid.

²⁹ Food and Agriculture Organization of the United Nations.(2009). *Have prices hit bottom? Milk and Milk Products*. Available from the FAO website: http://www.fao.org/docrep/011/ai482e/ai482e09.htm.

³⁰ Food and Agriculture Organization of the United Nations.(2009). *Have prices hit bottom? Milk and Milk Products*. Available from the FAO website: http://www.fao.org/docrep/011/ai482e/ai482e09.htm.

 $^{^{31}}$ This price decrease is reflective of the FAO's world wheat price index. The wheat price index is based on the International Grain Council's wheat price index (2002-2004 = 100).

³² Food and Agriculture Organization of the United Nations. (2009, November). *Crop Prospects and Food Situation November 2009*. No. 4. Food and Agriculture Organization of the United Nations.

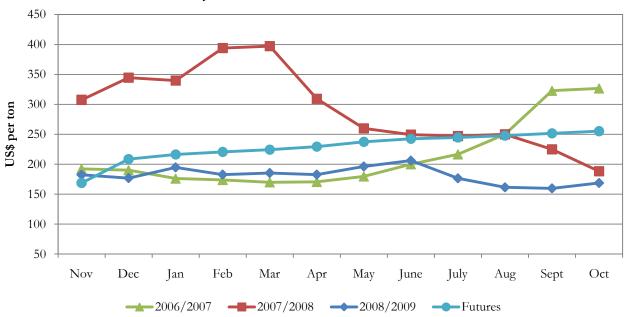
³³ United States Department of Agriculture. (2009, November). *Livestock, Dairy, and Poultry Outlook*. Document LDP-M-185. United States Department of Agriculture.

³⁴ Food and Agriculture Organization of the United Nations. (2009, November). *Crop Prospects and Food Situation November 2009*. No. 4. Food and Agriculture Organization of the United Nations.

- World wheat stocks in 2009 are estimated to be 14.3 percent larger than in 2008 and over 50 percent larger than in 2007.³⁵
- The projected increase in wheat supply is being driven by larger than expected crops in Europe, Russia, Canada and the U.S.³⁶
- A recent release from the USDA, forecasts wheat to reach 671.9 million tons in 2009/10, which represents a 1.6 percent decrease from record 2008/09 levels.³⁷

Since the last briefing in October, wheat prices for U.S. winter wheat have continued to increase, as shown in the chart below. On Monday, November 30th, futures prices for U.S. #2 soft winter wheat contracts for December 2009 delivery reached \$0.57 cents per bushel.

Wheat Prices, Soft Red Winter Wheat U.S. No.2



Data Sources: United States Department of Agriculture (USDA) Economic Research Service (ERS), Chicago Board of Trade (CBOT)

Notes: Wheat futures represent NYMEX settlement prices as of Monday, November 30, 2009.

This chart appeared in the previously completed Quarterly Commodity Price Update. It appears again here with updated data.

India is the world's second largest wheat producing nation. According to the most recent production forecast from the USDA, India is expected to produce 11 percent of total world wheat output in 2009. Despite being a significant producer of wheat, India accounts for only 0.07 percent of world

36 Ibid.

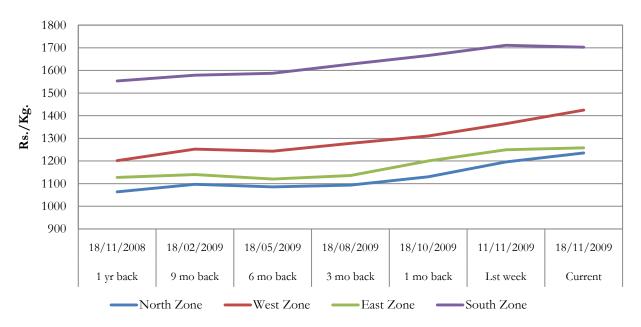
³⁵USDA. (2009, November 10). World Agricultural Production. United States Department of Agriculture, Foreign Agricultural Services. Circular series. WAP 11-09.

³⁷ USDA. (2009, November 13). Wheat Outlook. United States Department of Agriculture. WHS-09k.

wheat exports.³⁸ Given its low share of world exports, wheat prices in India are not likely to have a significant impact on commonly reported world wheat prices, which are typically based on world export shares. For example, the International Grain Council provides an index of world wheat prices weighted for world export shares. This index is commonly cited by the FAO and others. This briefing provides data on wheat prices in India because of its importance to the Foundation.

Wheat prices, based on data from the Government of India, have been rising this year, as shown in the graph below. Based on data from November 18th, 2009, wholesale wheat prices in India increased an average of 14.0 percent between November 2008 and November 2009 across the north, south, east, and west zones of the country. Retail wheat prices increased an average of 15.0 percent over the same time period. Indian wheat futures have also been increasing in recent weeks; however, analysts note that high levels of wheat stocks have moderated prices. Price for dara wheat, a popular type of wheat commonly used in bread., have been rising recently, closing at 1,400 rupees per 100 kg in Delhi on Monday, November 30th, 2009. Prices for the most traded December wheat contract, NWTZ9, have also been increasing in recent weeks, closing at 1,402.6 rupees per 100 kg on November 30th, 2009.

Wholesale Wheat Prices in India



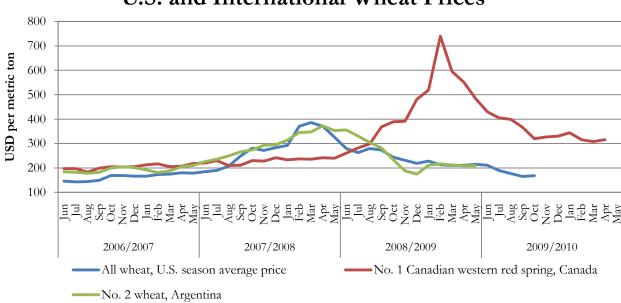
Data Source: Government of India, Ministry of Consumer Affairs, Food, and Public Distribution, Department of Consumer Affairs, Price Monitoring Cell, Prices of Essential Commodities **Notes:** Data is available only in the time increments displayed in the chart above.

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³⁸ USDA. (2009, November 10). World Agricultural Production. World Wheat Supply and Use WASDE-476-18. United States Department of Agriculture, Foreign Agricultural Services. Circular series. WAP 11-09.

Some analysts suggest that the Government of India's actions to increase wheat production are influencing prices. The new Indian crop season began October 1st and the government is aiming to increase wheat production to overcome a decline in rice output due to the nation's worst monsoon since the 1970s. Indian farmers have increased the amount of land dedicated to wheat in the current season. Recent data show that wheat was planted on 13.7 million hectares of land compared with 13.03 million hectares during the same period last year.³⁹



U.S. and International Wheat Prices

Data Source: USDA Economic Research Service

³⁹ Reuters. (2009, November 30). India wheat futures higher on spot demand. Reuters.com. Retrieved from: http://in.reuters.com/article/domesticNews/idINBOM29027220091130.