

Fundamentals Moving The Wheat Market: Supply and Demand, Corn and Soybeans

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Question and Answer

- Wheat prices depend on the balance of U.S. and world wheat supply and demand, with changing stock levels having important price implications.
- Wheat, corn, and soybean prices tend to move together, as they can be substitutes and compliments both on the production and use side.
- There are numerous uncertainties that make it difficult to anticipate how much wheat prices will move in the future.

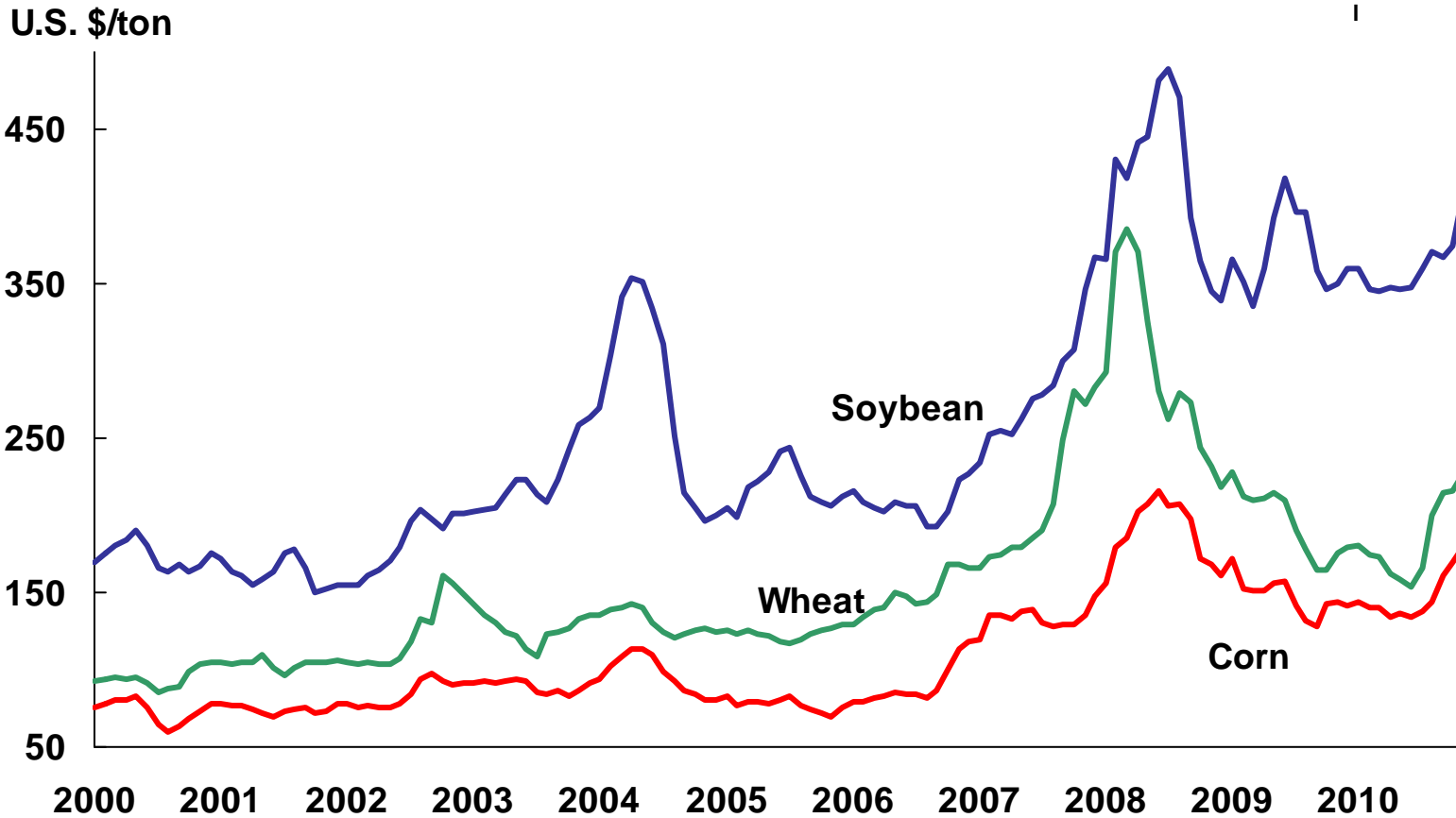


USDA Forecasts

- The World Agricultural Outlook Board heads interagency committees that forecast annual supply, demand, and prices.
- There are different committees for wheat, feed grains, and oilseeds, as well as meats and other products.
- History and forecasts are published monthly for the United States and other countries.
- The Economic Research Service (ERS) is part of the interagency and does analysis and forecasts for domestic and international supply, demand (including trade), and prices.
- I coordinate ERS contributions for wheat, coarse grains, and oilseeds, and devote special attention to the analysis of international wheat and corn markets.

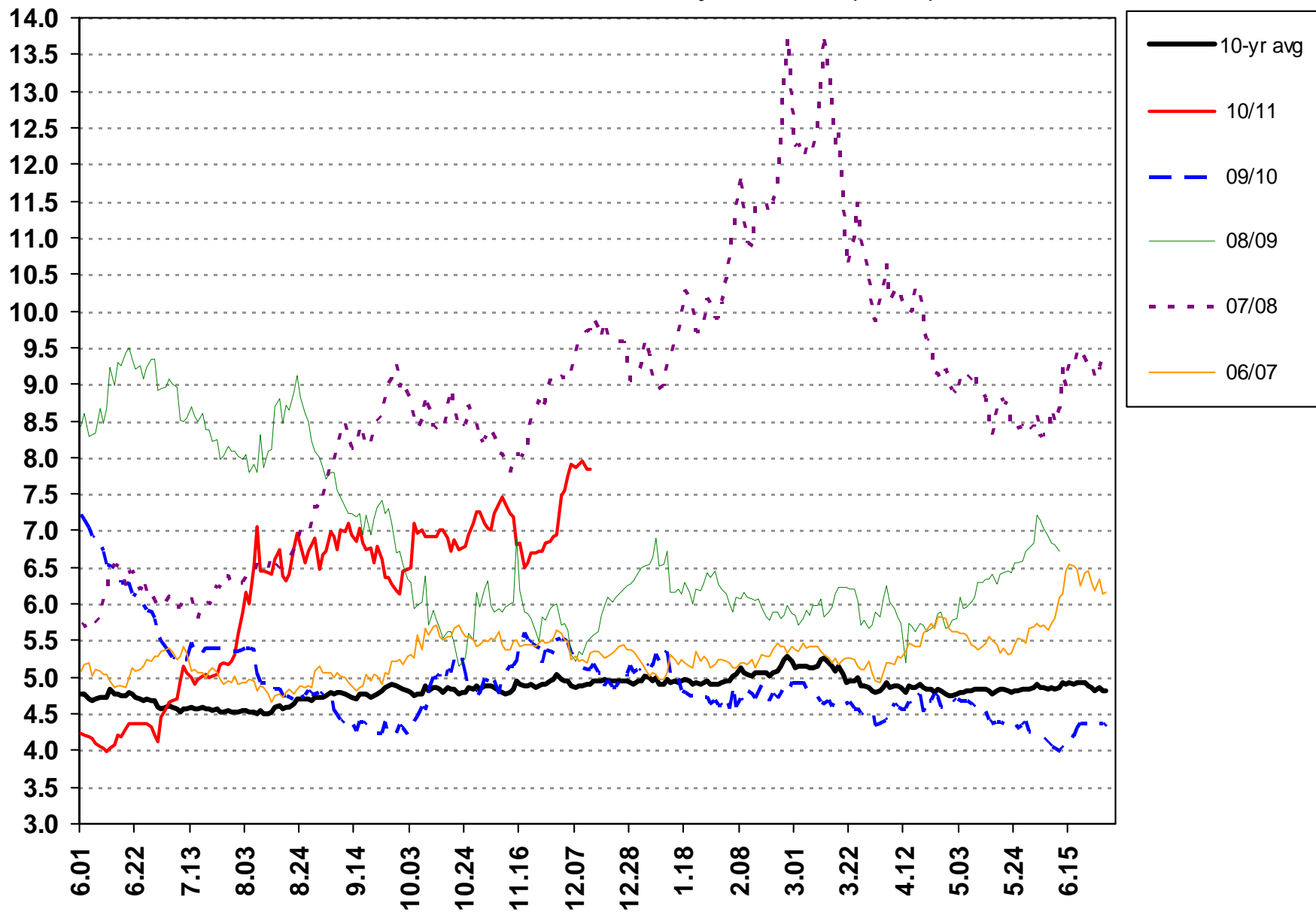


U.S. Producer Prices



Source: NASS, USDA

Wheat: Kansas City Prices (\$/bu)



Source: AMS, USDA

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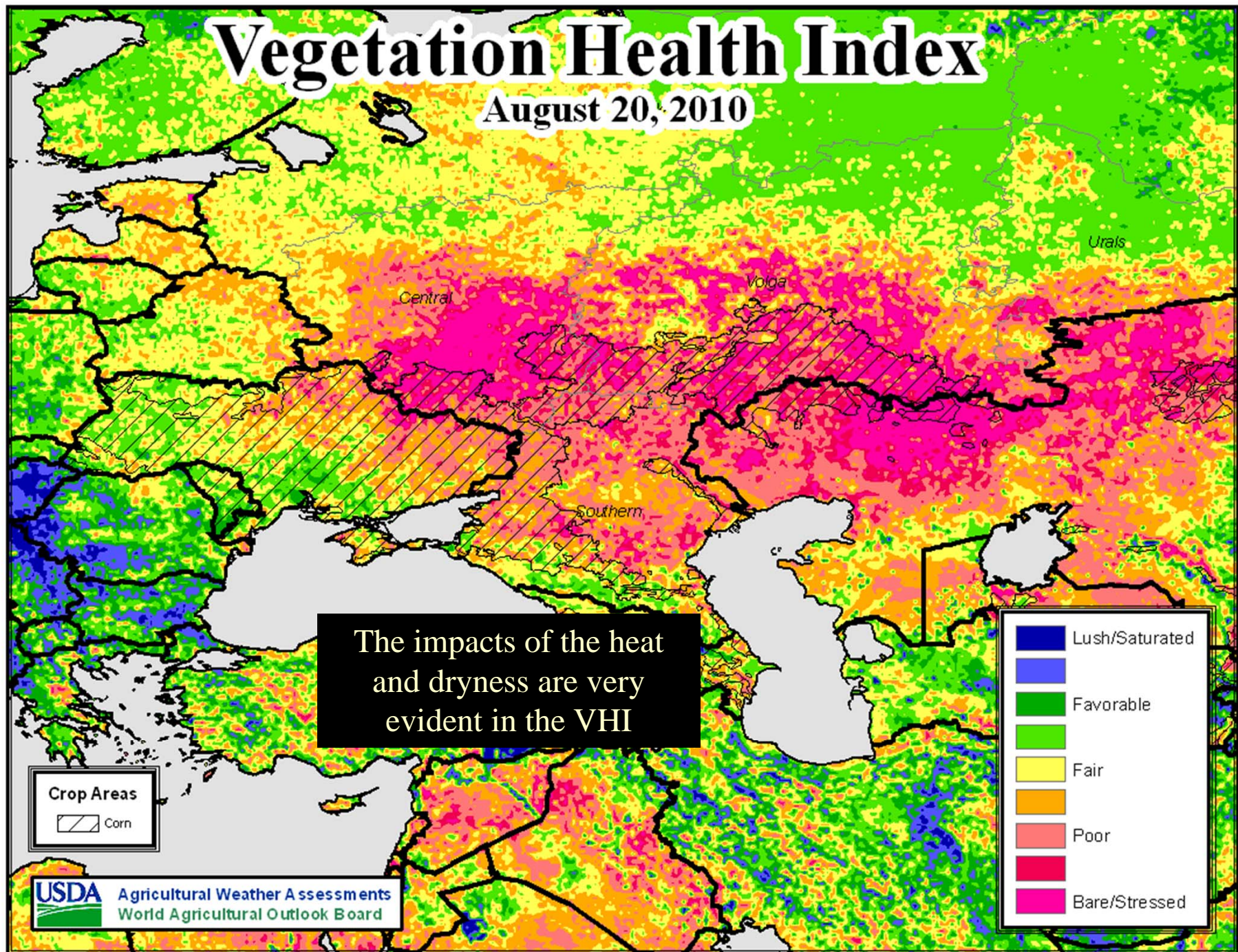
Factors Supporting Prices

- Wide spread weather problems, Russia to Australia.
- Policy changes (export ban or quotas)
- China's demand for soybeans and corn.
- U.S. use of corn for ethanol.
- Bio-fuel demand in the EU, especially for vegetable oil.
- Recovery of global economic growth.
- World population growth.

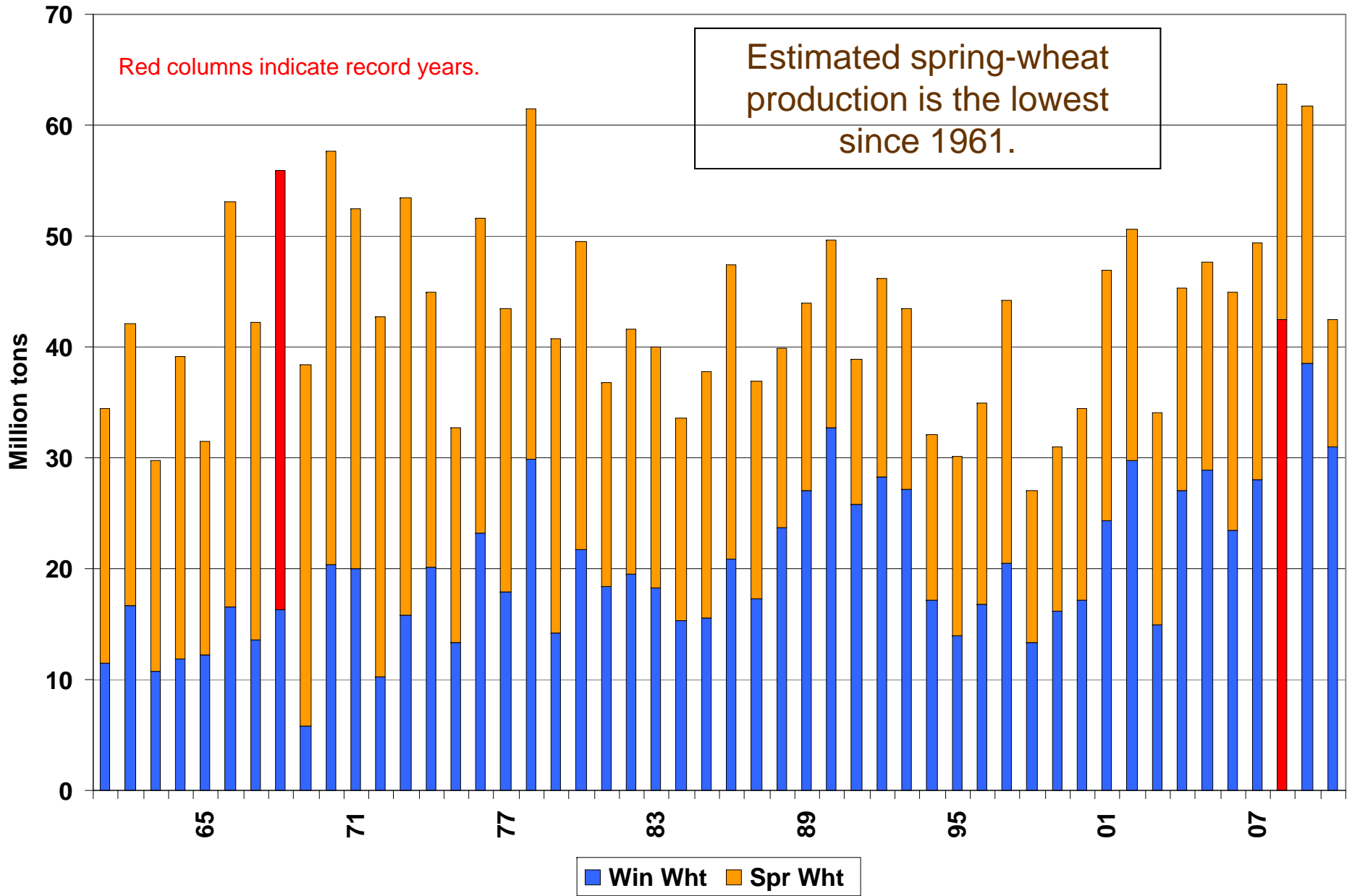


Vegetation Health Index

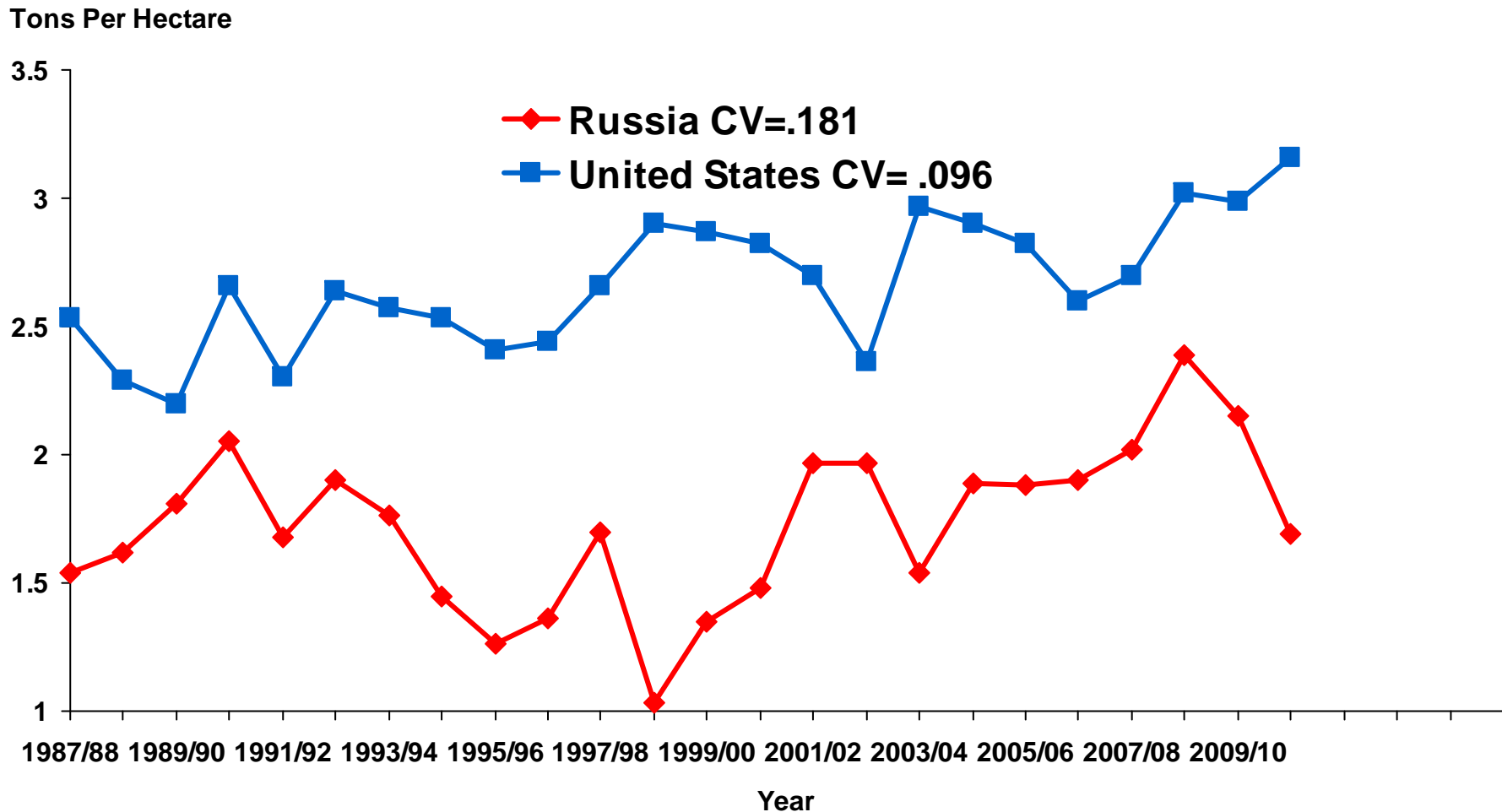
August 20, 2010



Russia: Wheat Production 1961-2010



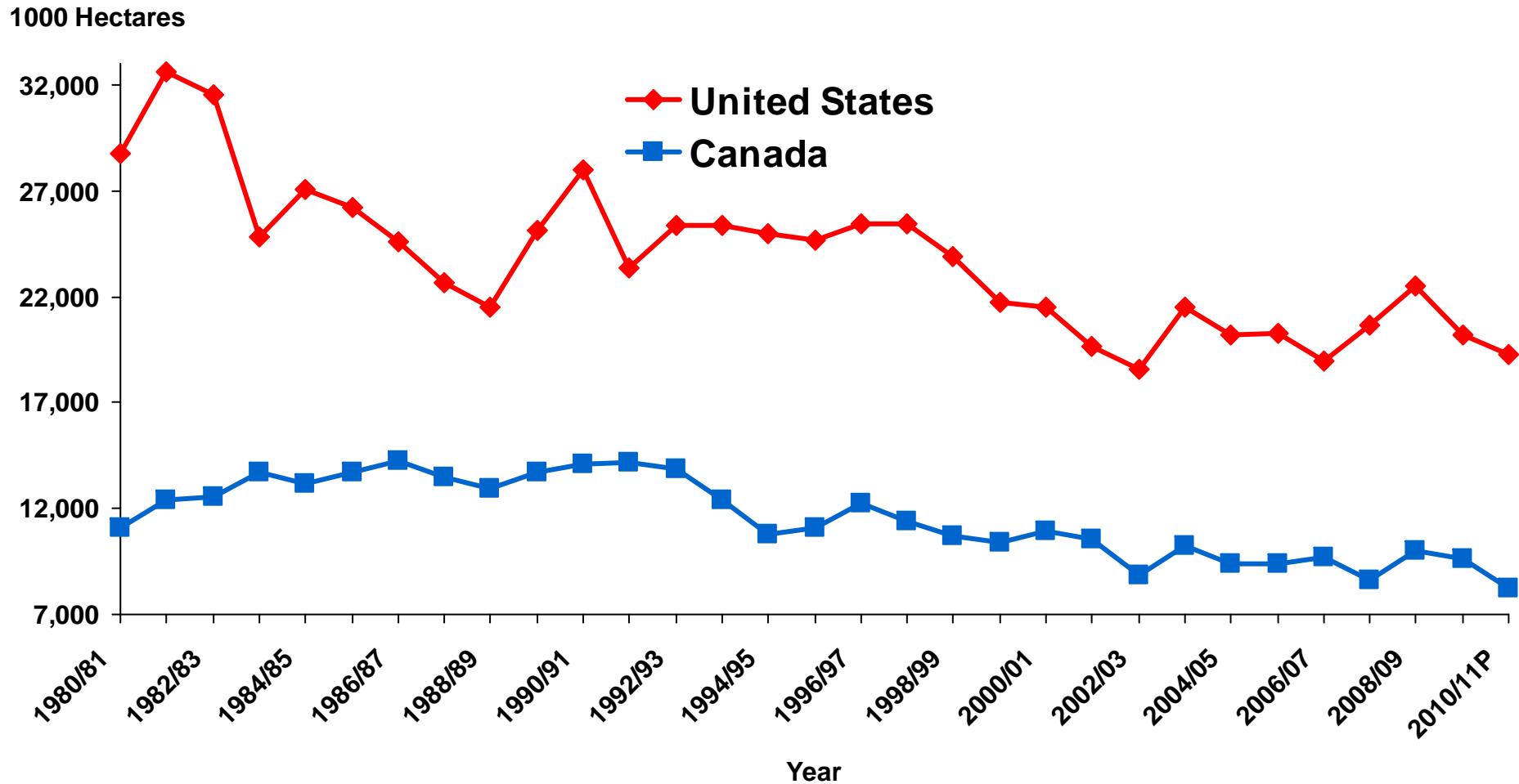
Russia's Wheat Yields Are Comparatively Variable



Source: USDA



Key Exporters Reducing Wheat Area

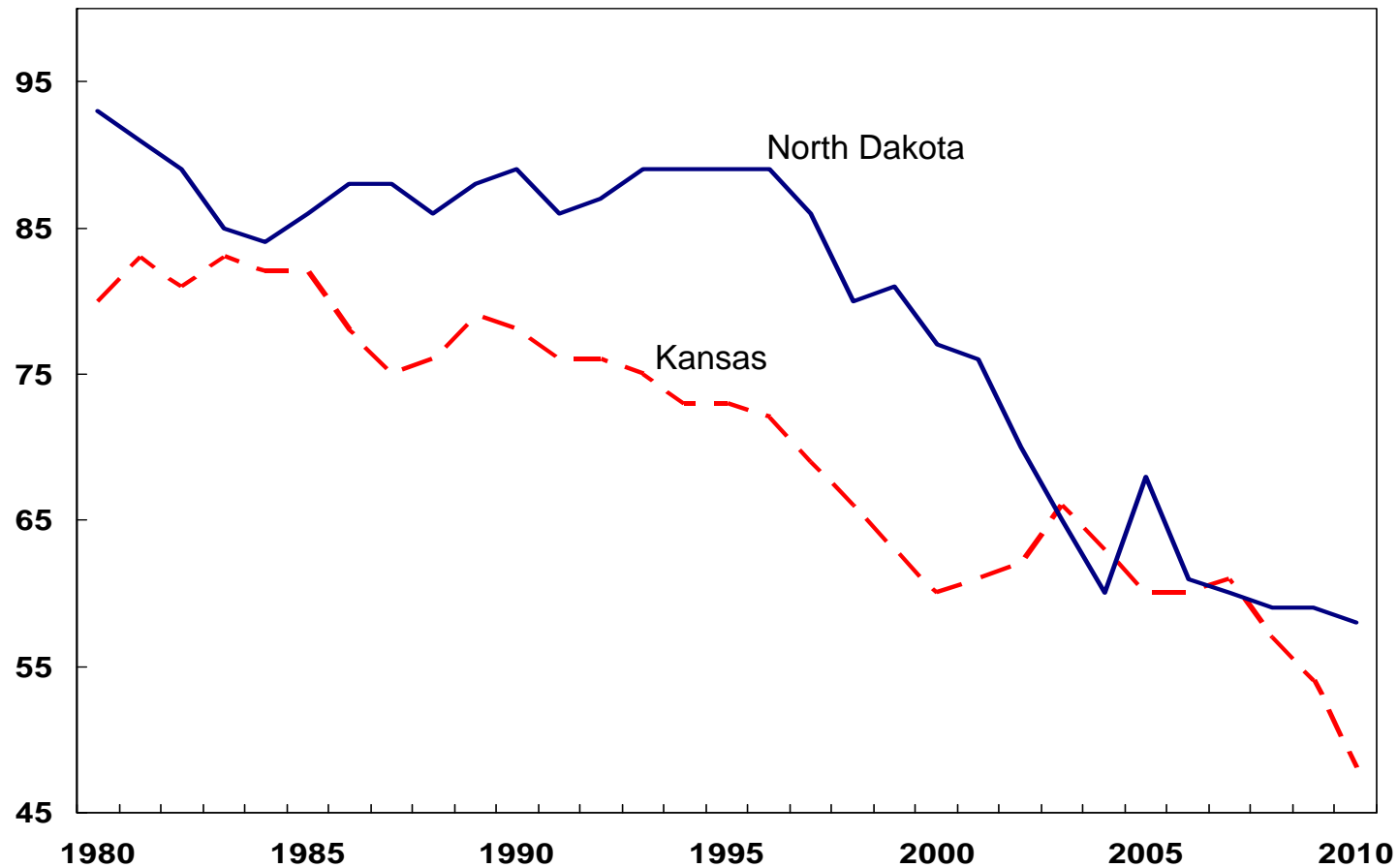


Source: USDA



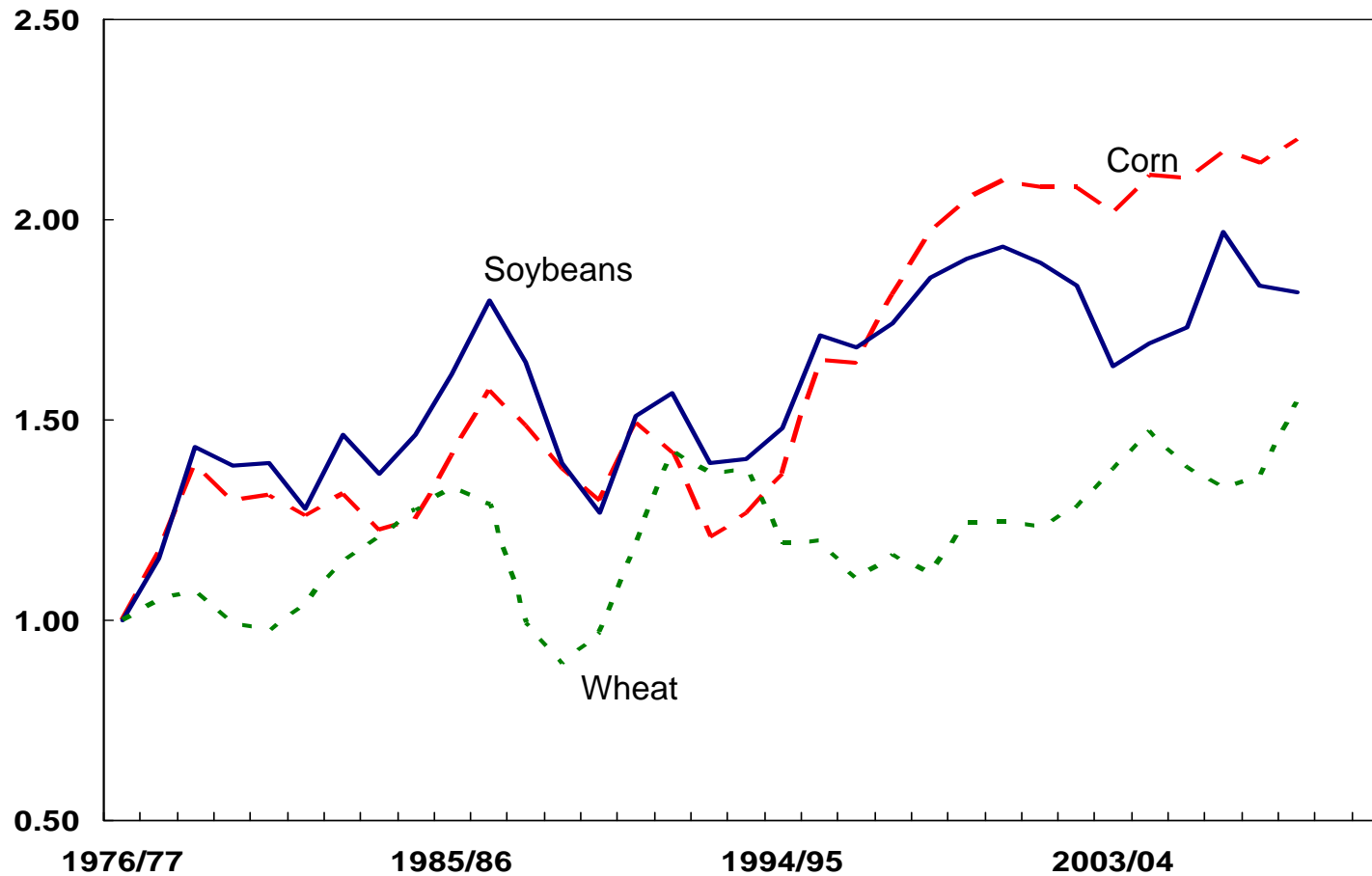
Wheat's share of planted area has declined in Kansas and North Dakota (compared to wheat, corn, and soybean total)

Percent



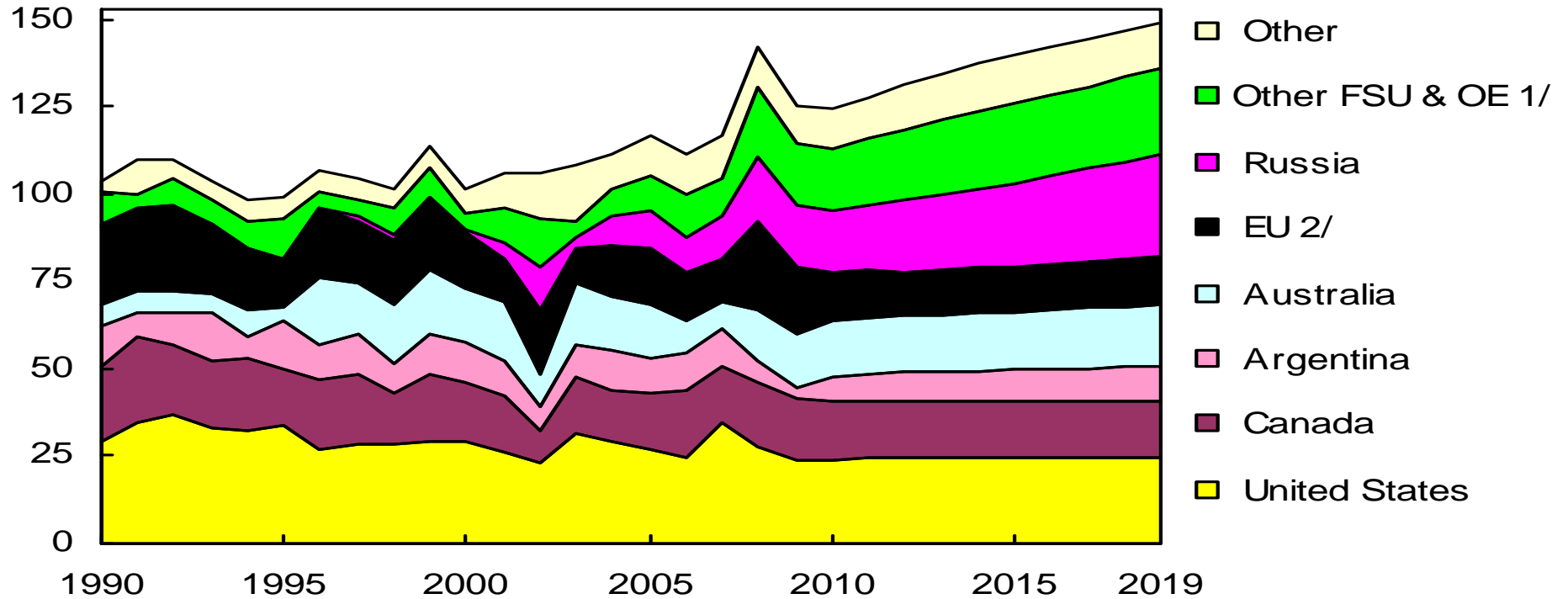
Corn and soybean yields have outpaced wheat yields in North Dakota

3-year averages indexed to 1976/77



Global wheat exports

Million metric tons

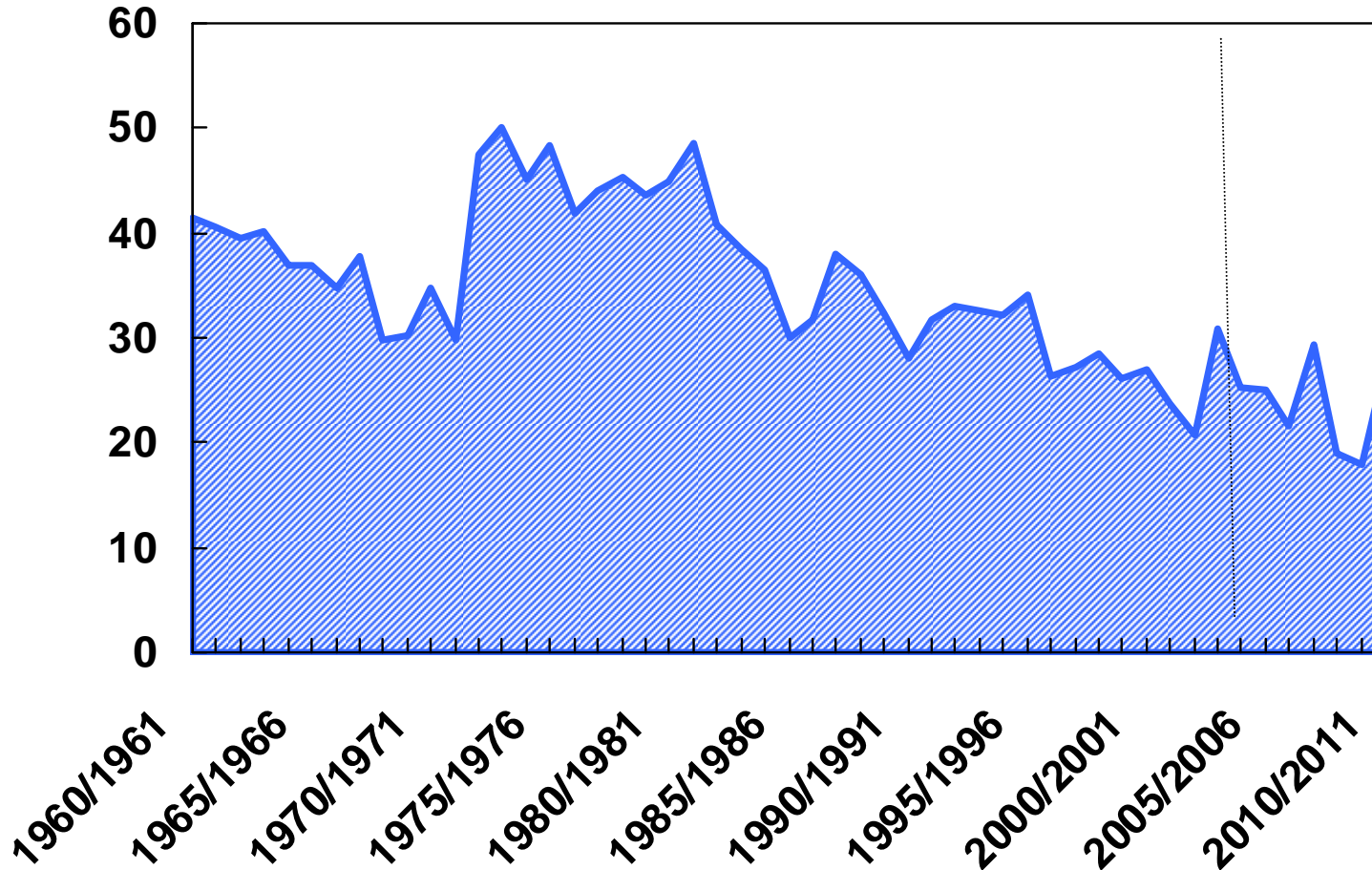


1/ Former Soviet Union and other Europe; prior to 1999, includes Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, and Slovenia.
 2/ Excludes intra-EU trade.

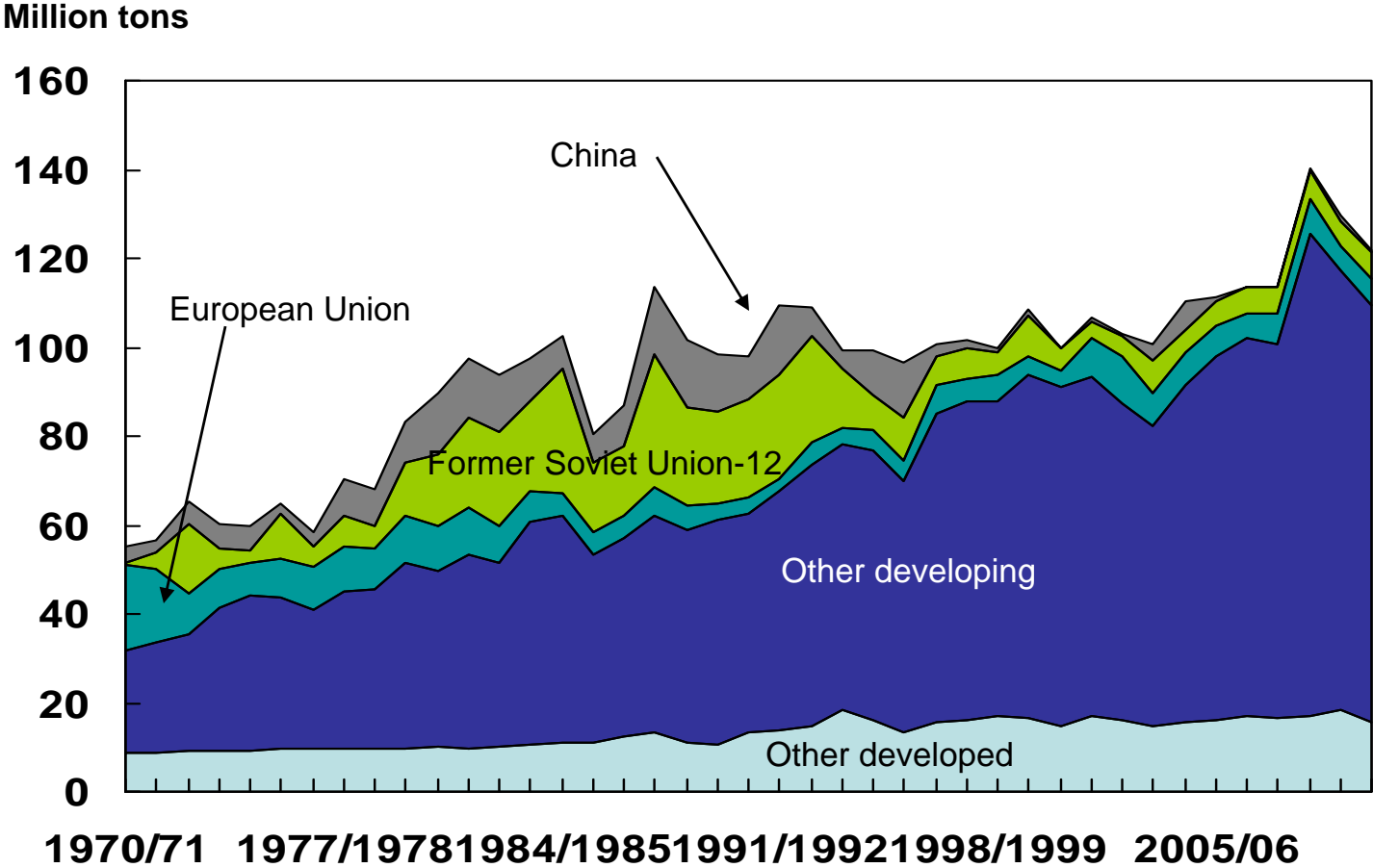
Source: *USDA Agricultural Projections to 2019*, February 2010.
 USDA, Economic Research Service.

U.S. share of world wheat trade trending down

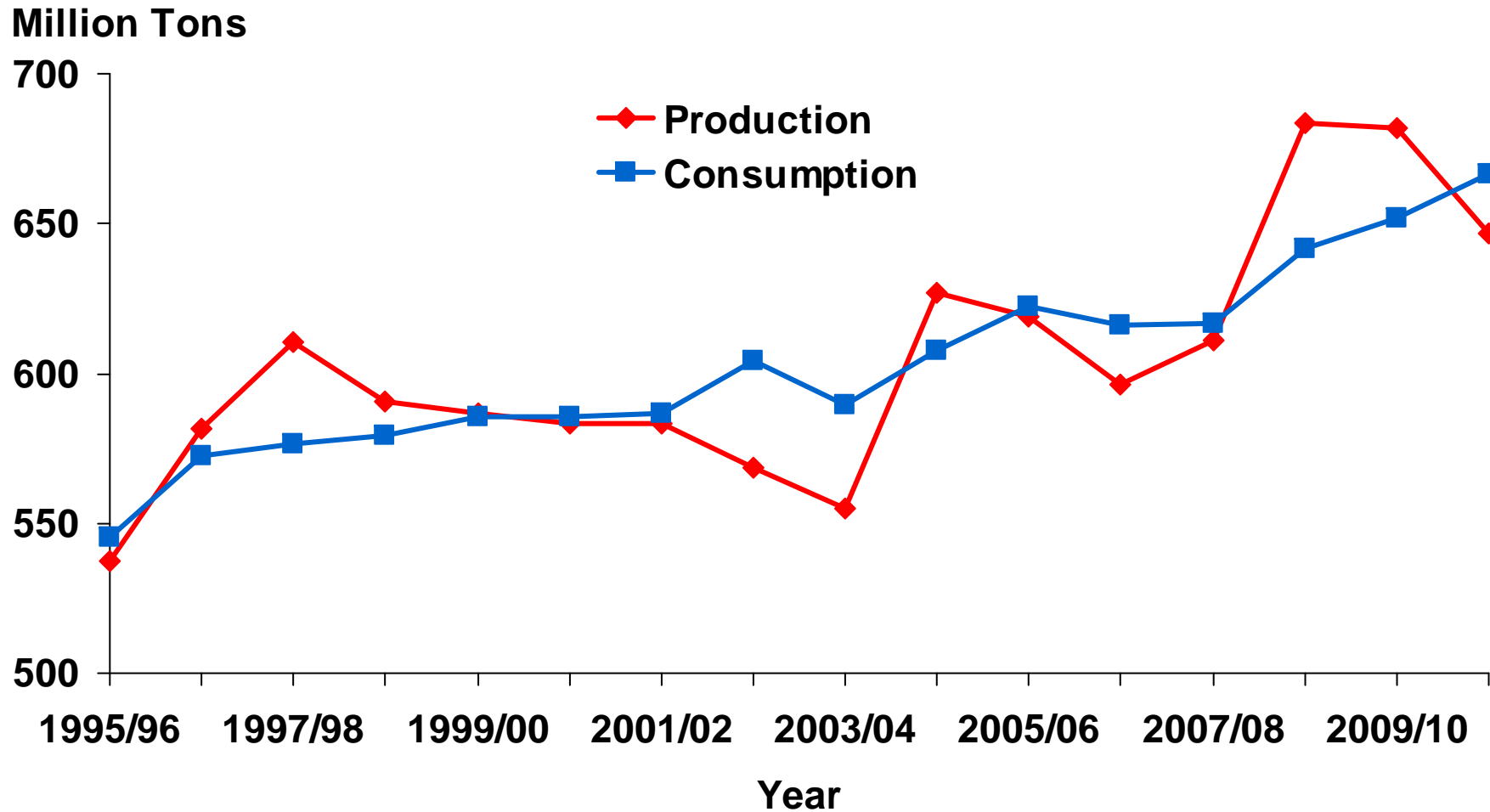
Percent



Developing countries have imported increasing amounts of wheat



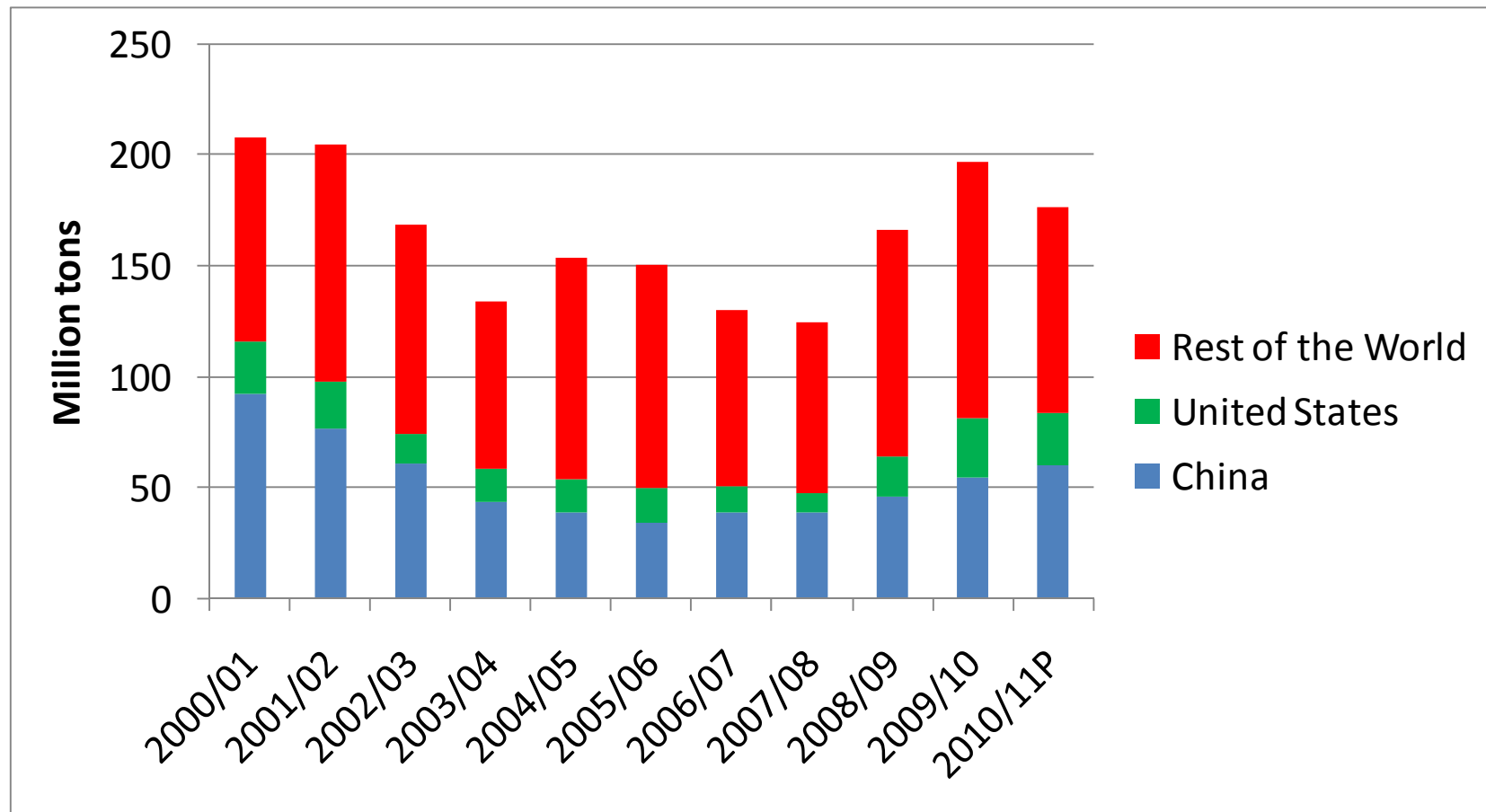
World Production and Consumption of Wheat



Source: USDA



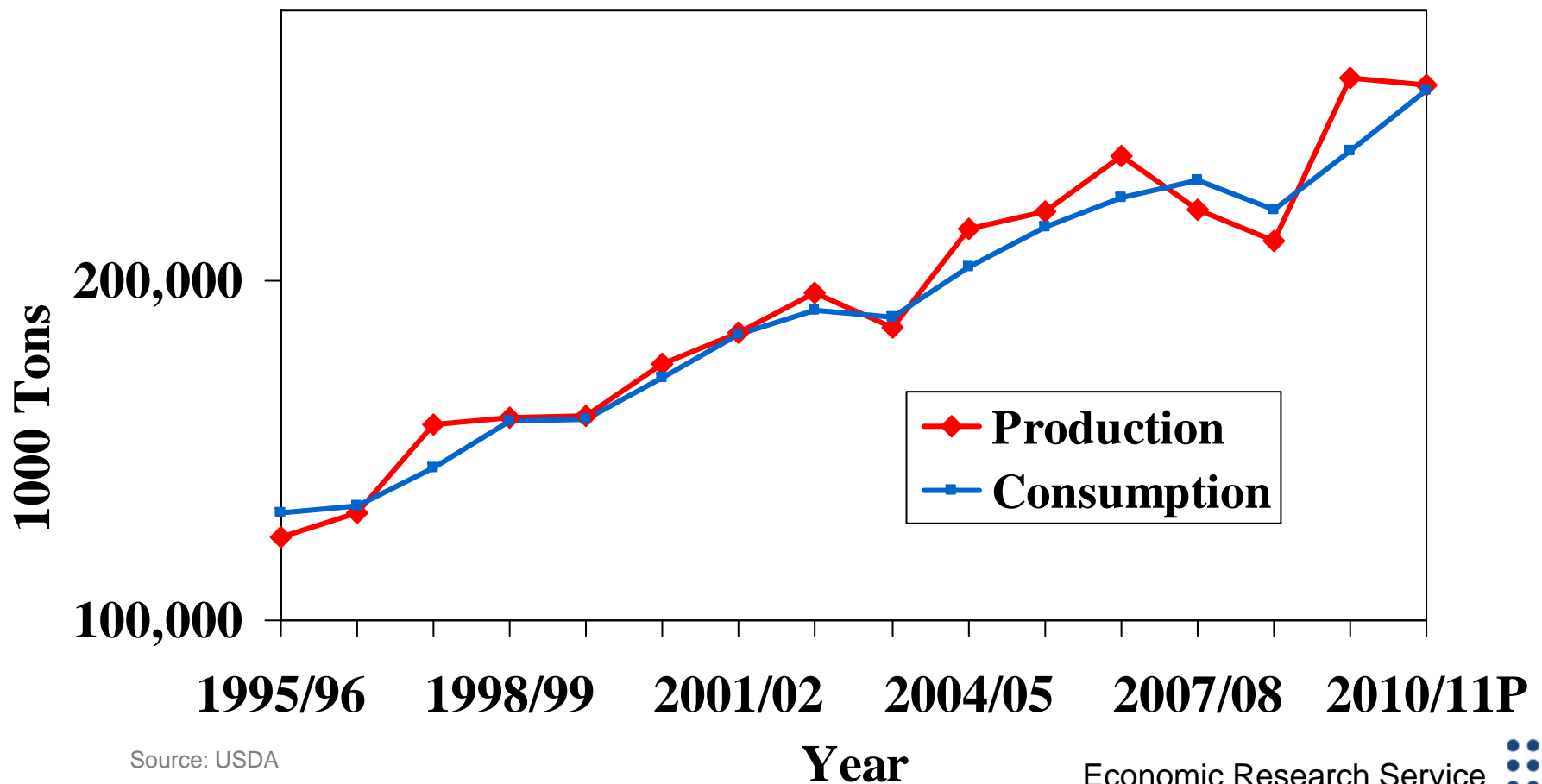
Large Global Wheat Stocks



Source: USDA

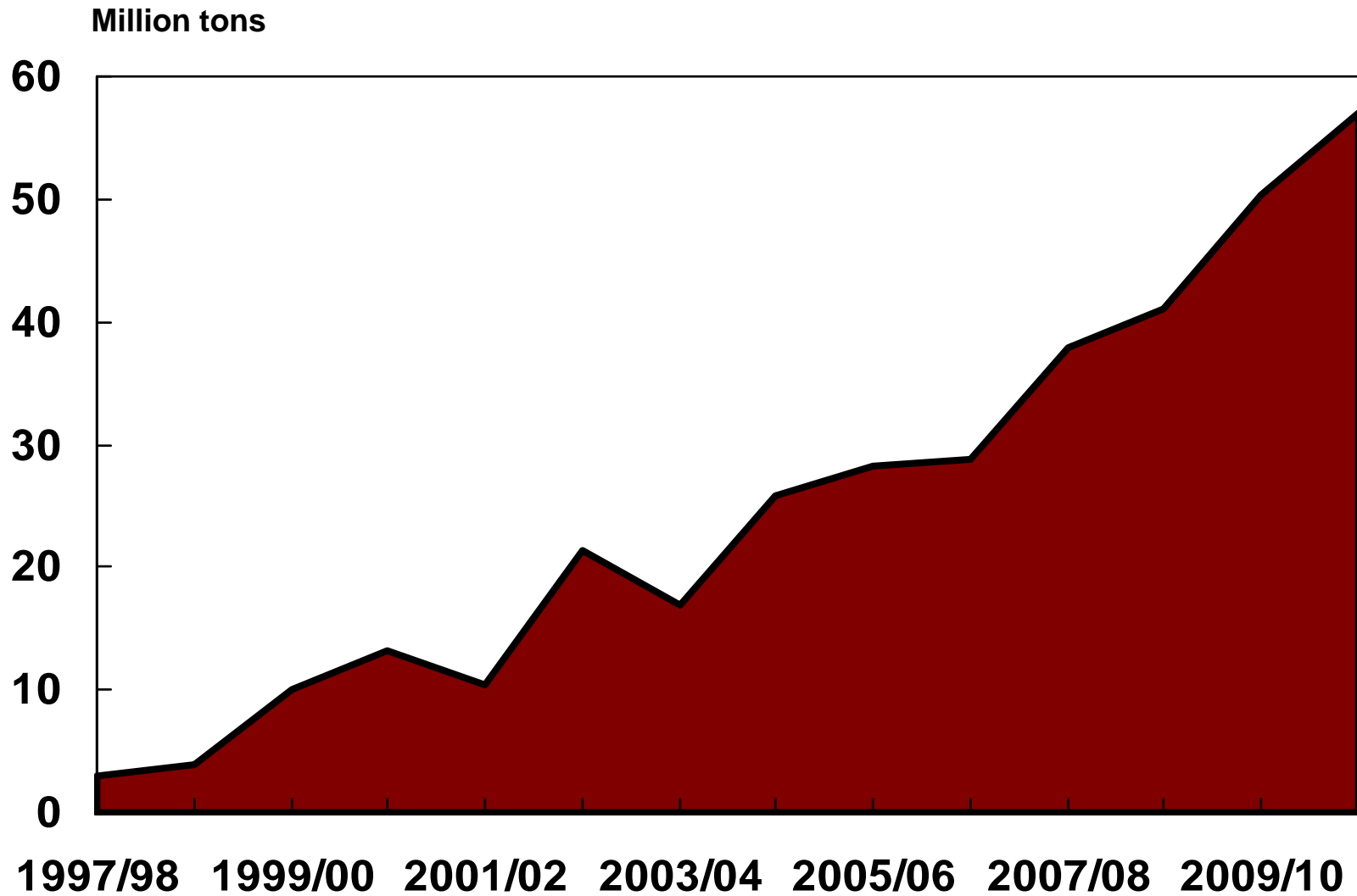


World Production and Consumption of Soybeans



Source: USDA

China's Soybean Import Growth



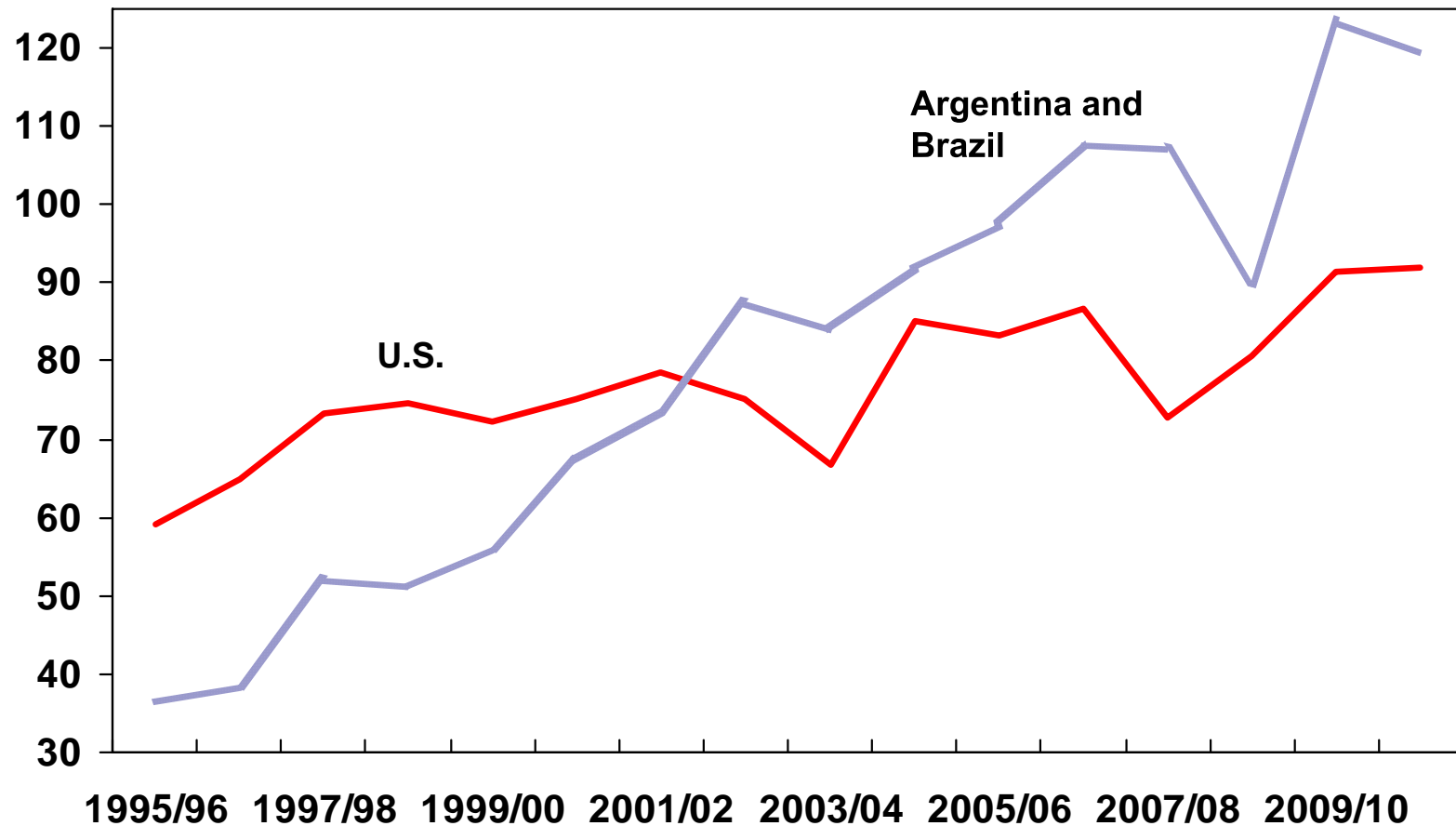
Source: USDA

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U.S. Soybean Production Takes a Backseat, Drought Hits Argentina in 2008/09

Million tons



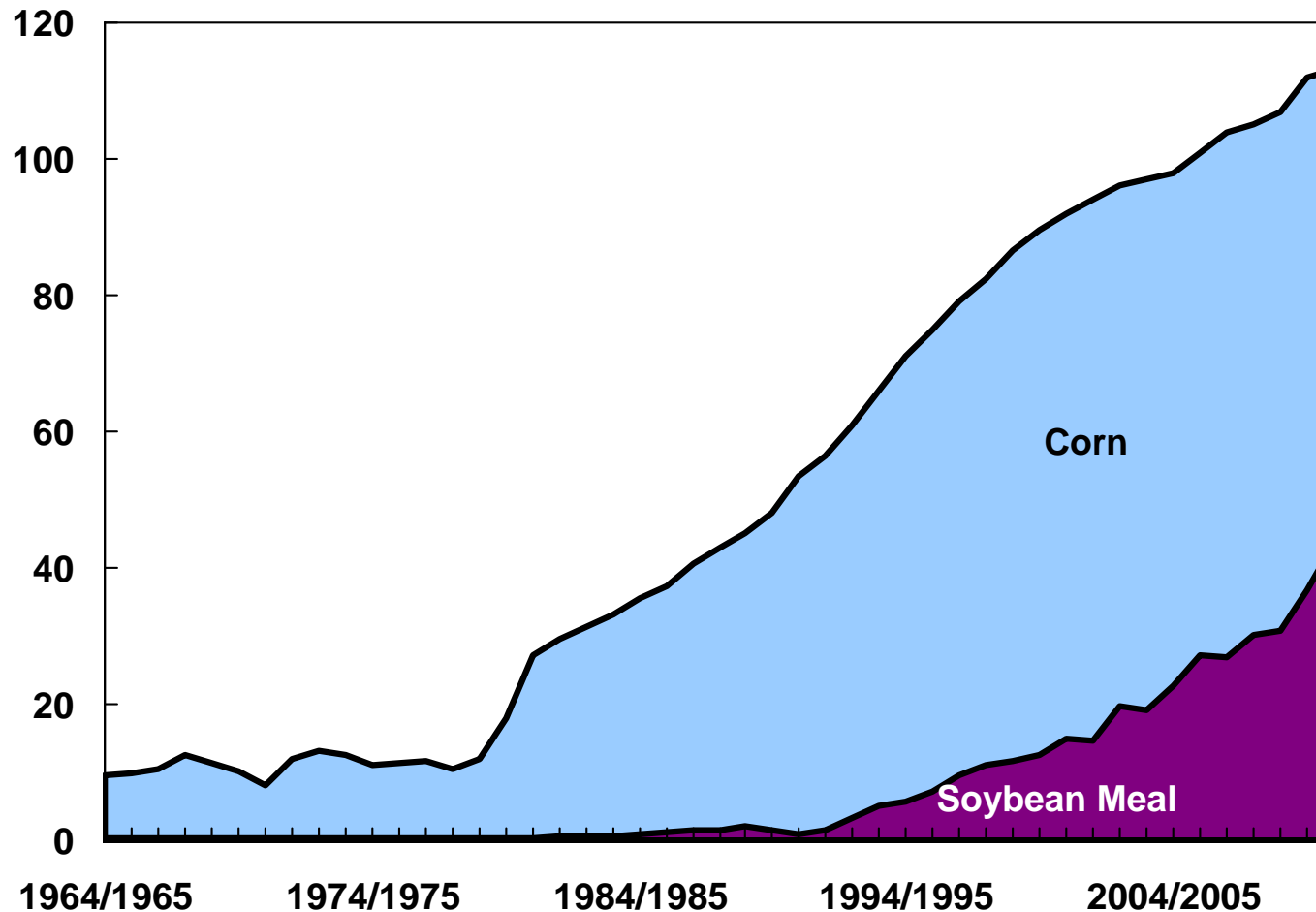
Source: USDA

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China: Corn and Soybean Feed and Residual Use

Million tons

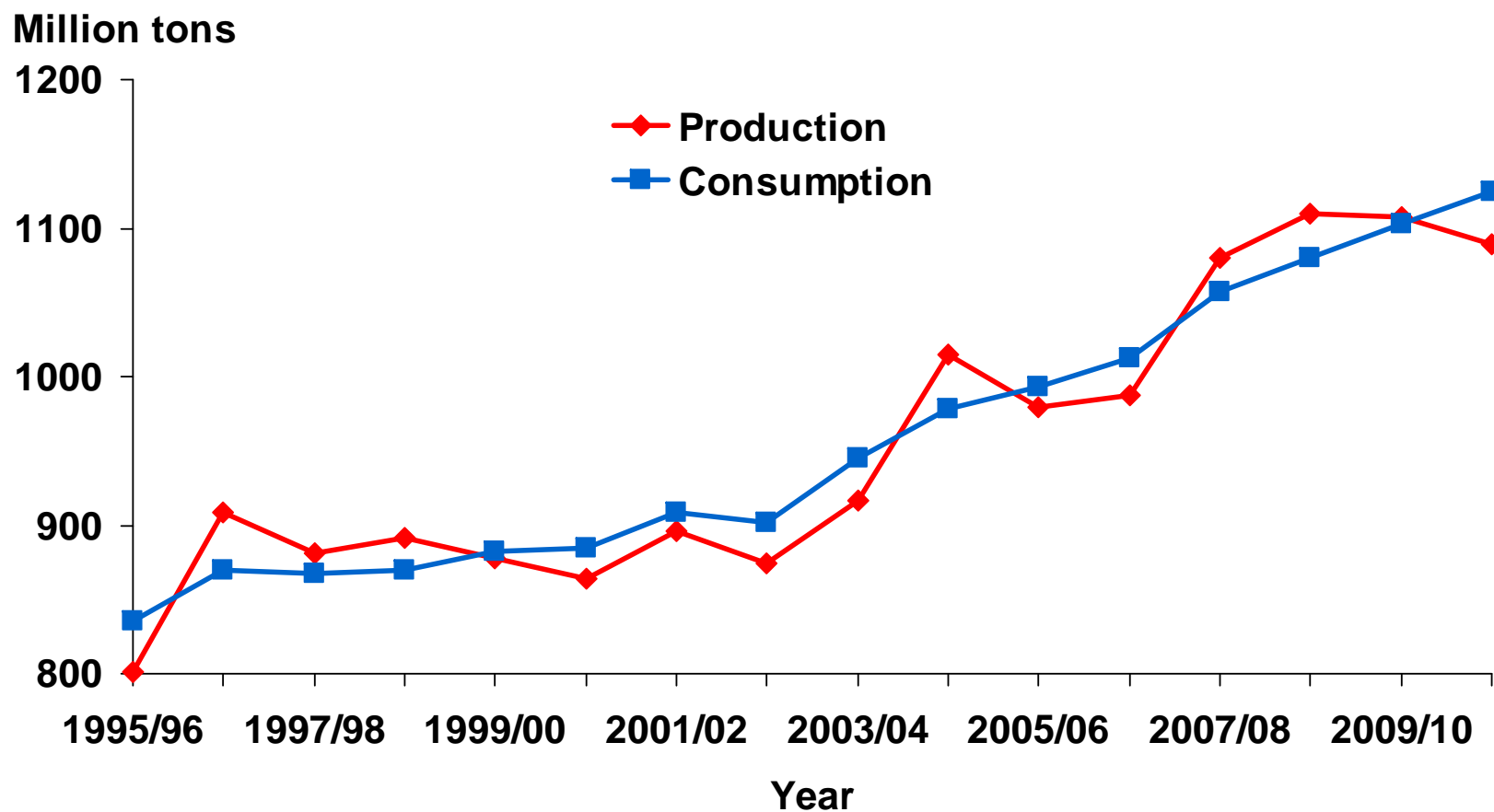


Source: USDA

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World Production and Consumption of Coarse Grains



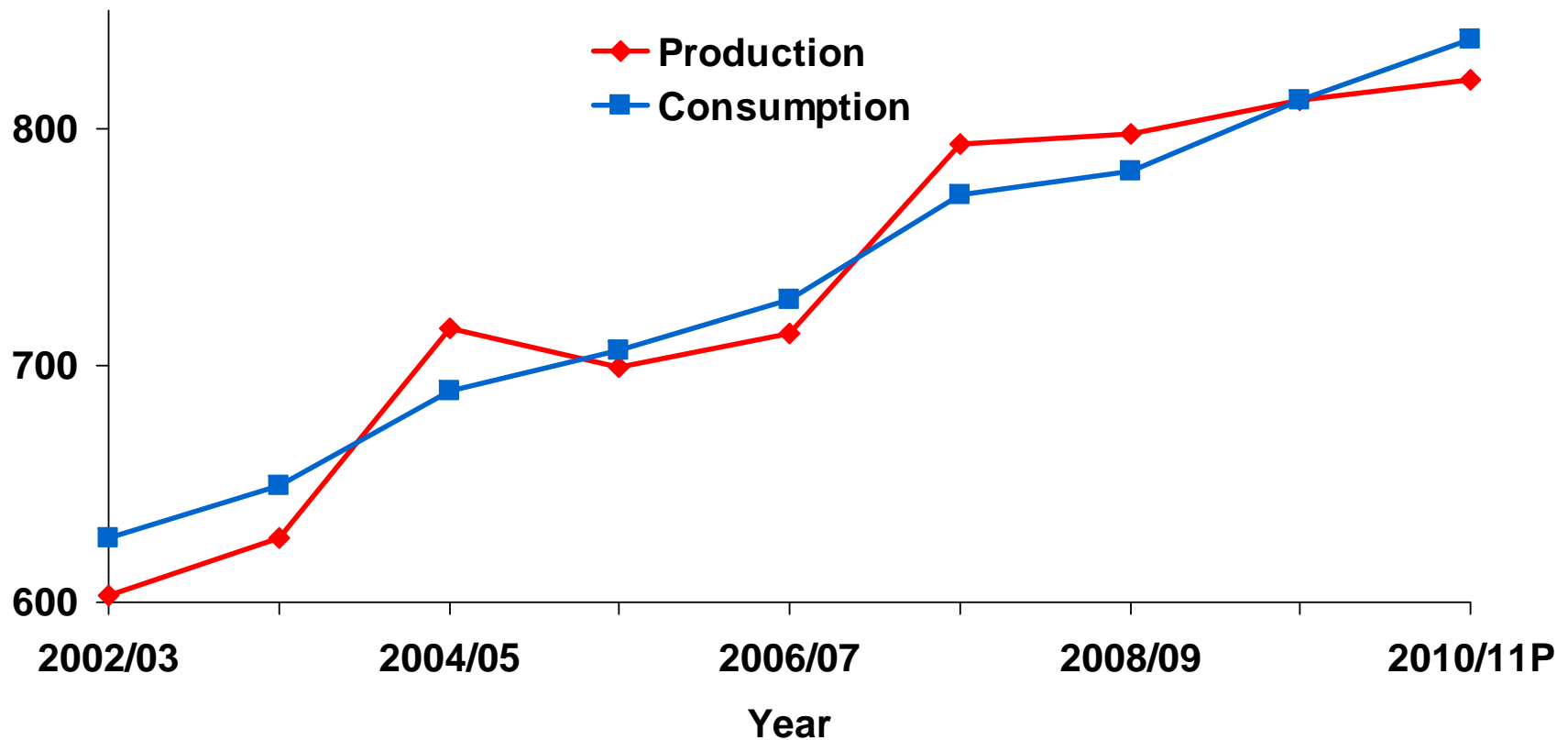
Source: USDA

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World Production and Consumption of Corn

Million tons

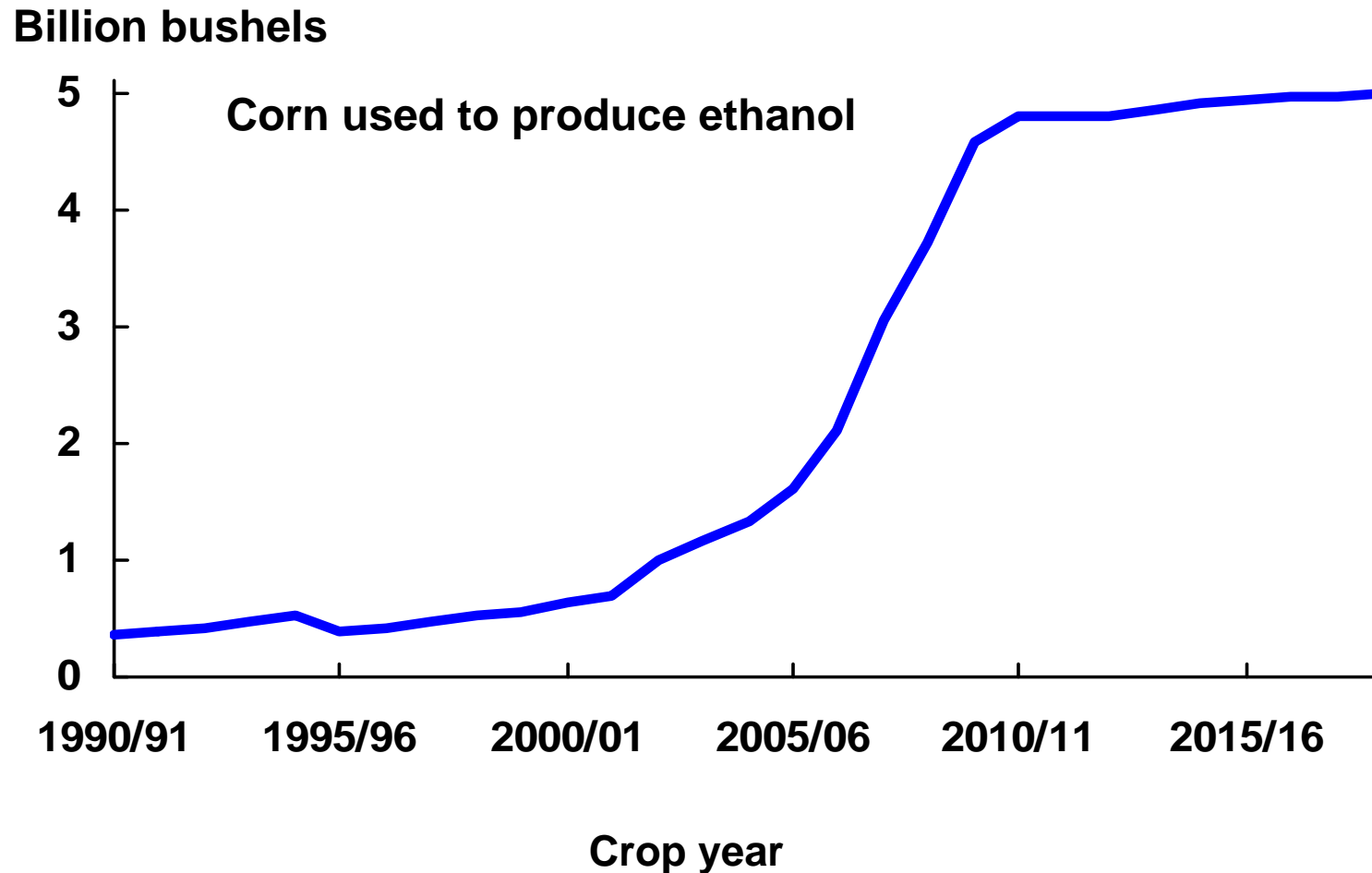


Source: USDA

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U.S. Ethanol: Expansion to Slow



Source: *USDA Agricultural Projections to 2019*, February 2010; 2009/10 and 2010/11 updated, August 2010; USDA, Economic Research Service.

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Rapid ethanol expansion reflected market factors and policy setting

- Global macroeconomy raised demand for oil
- Oil prices rose
- 2005 Energy Policy Act
 - Renewable Fuel Standard
- Energy Independence and Security Act of 2007
 - Expanded Renewable Fuel Standard

Factors underlying a slowing of U.S. ethanol expansion

- Nearing the 10-percent “blend wall”
 - Mid-level blends approved for only new cars, and it will take time to implement
- E85 market small
- Fuel economy gains limit overall gasoline market growth

Key Factors Limiting Prices

- Large U.S. crops for wheat, corn, and soybeans in 2010/11. Large crop production in China and many other countries.
- Modest growth in meat production in most countries, partly due to sluggish rebound from recession, and poor returns for meat production.
- Much slower future growth expected in U.S. corn used for ethanol.

Key Developments To Watch

- **Will big yields in the U.S., China, and other countries be confirmed?**
- **Will Russia plant enough wheat to re-emerge as an exporter in 2011/12?**
- **The “La Nina” in the Pacific is correlated with an increased chance for poor rains for soybeans and corn in parts of Brazil and Argentina.**
- **China’s pace of soybean imports, given large stocks and rapid early purchases.**
- **How will U.S. policy towards corn ethanol evolve?**
- **Global macro-economic growth or lack there of.**

Summary

- **Increasing Russian wheat exports in recent years have facilitated the decline in U.S. wheat area planted. Poor U.S. returns for wheat production compared to corn and soybeans have helped U.S. meet strong demand growth for corn and soybeans.**
- **Large world wheat production for the past 2 years has boosted world and U.S. stocks, providing a cushion for the 2010/11 Russian shortfall.**
- **Very strong expected corn use and a significant yield reduction reported by NASS this fall have tightened U.S. corn stocks, supporting prices.**
- **Oilseed prices depend largely depend on the growth of China's import demand for soybeans compared to production growth in the United States, Brazil, and Argentina.**



Summary

- **Trend yield growth in global grains and oilseeds, especially in U.S. corn, are sufficient to outpace growth in world food and feed demand. Widespread below average yields, programs such as U.S. and EU bio-fuels, or significantly higher energy prices, boost demand and support prices.**



Related reports on the ERS web site

- **Wheat Outlook (monthly)**
<http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1293>
- **Feed Outlook (monthly)**
<http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1273>
- **Oil Crops Outlook (monthly)**
<http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1288>
- **Long-term projections** <http://www.ers.usda.gov/publications/oce091/>
- **2008/2009 world economic crisis** <http://www.ers.usda.gov/Publications/WRS0902/>
- **2008 commodity price spike** <http://www.ers.usda.gov/Publications/WRS0801/>
- **U.S. ethanol expansion**
<http://www.ers.usda.gov/Publications/FDS/2007/05May/FDS07D01/>

