



NGFA Annual Convention 2011

Looking for Delta: Tectonic Shifts in Global Agribusiness

David Nelson, Global Strategist

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Rabobank International

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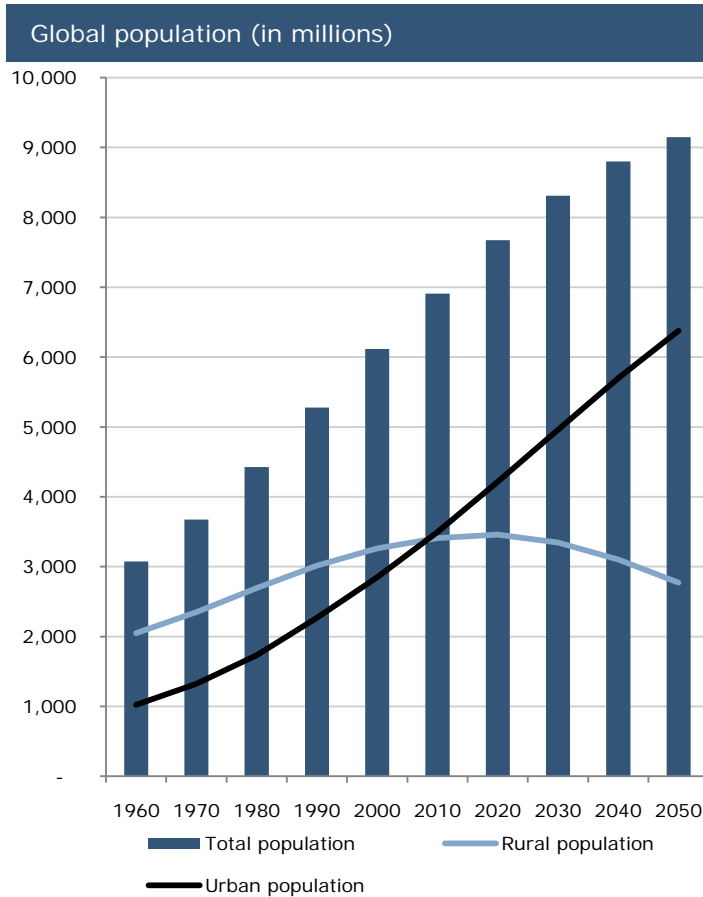
Section I

Key Macro Issues

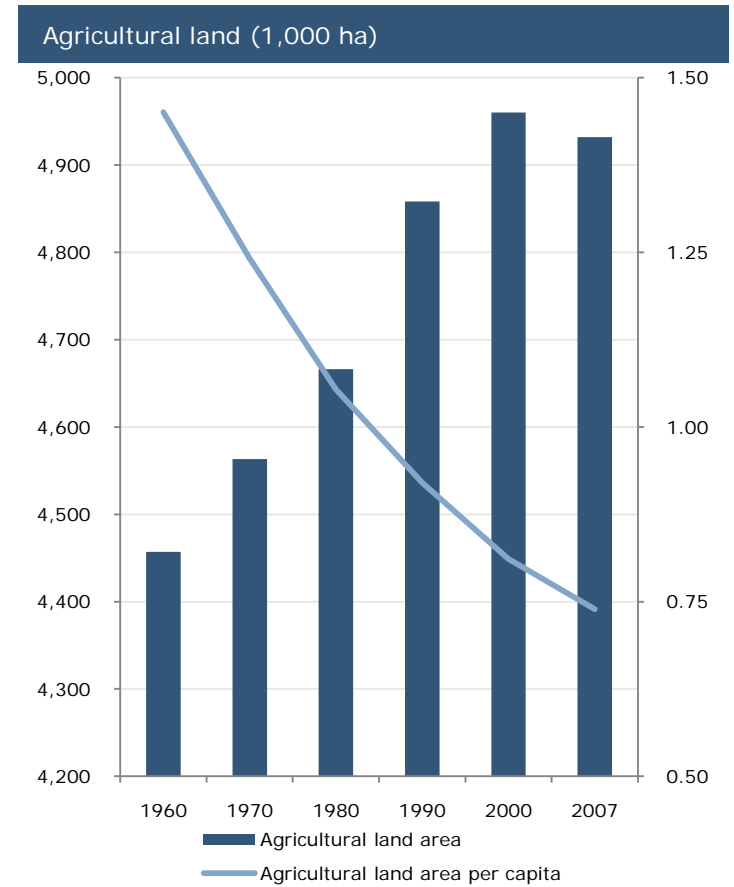
Introduction

The basics have remained the same...

Demand supply imbalance



Source: FAO Stat



Source: FAO Stat, Rabobank



Introduction

... But GDP growth is accelerating demand growth

The connection to wealth creation...

	Higher GDP growth	Higher protein consumption	Higher grain demand
Country	2010 GDP growth rate		Population
Brazil	7.5%		193,734,000
China	10.3%		1,331,460,000
India	8.2%		1,155,348,000
Indonesia	6.9%		229,965,000

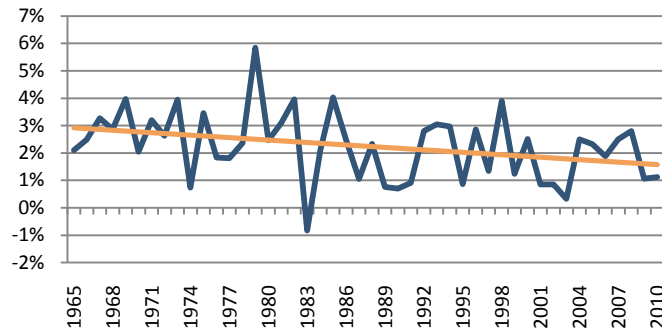
Source: Bloomberg, World Bank, IBGE, National Bureau of Statistics China, India Central Statistical Organization



Introduction

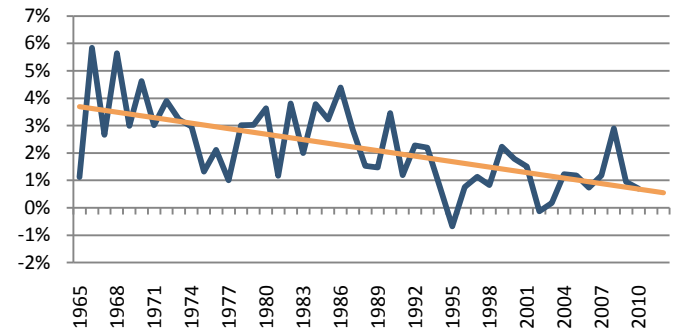
While most yield improvements are decelerating

World corn yield % change, 5 yr moving avg



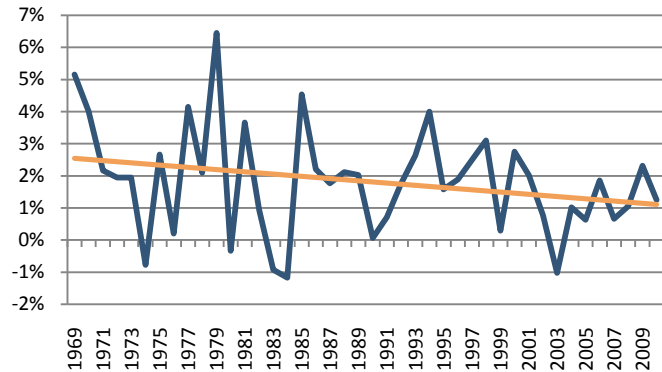
Source: USDA

World wheat yield % change, 5 yr moving avg



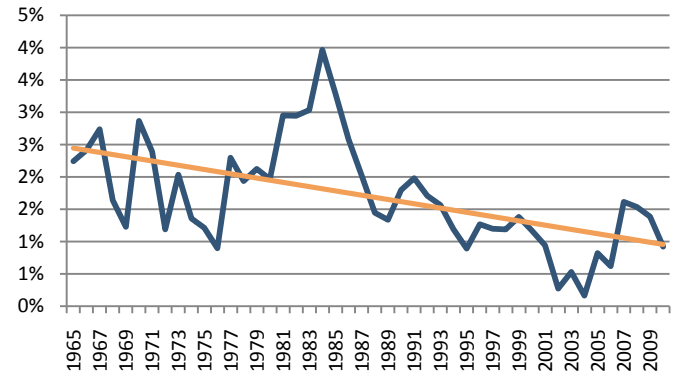
Source: USDA

World soybean yield % change, 5 yr moving avg



Source: USDA

World rice yield % change, 5 yr moving avg



Source: USDA



Introduction

Price gravitates to marginal cost of production

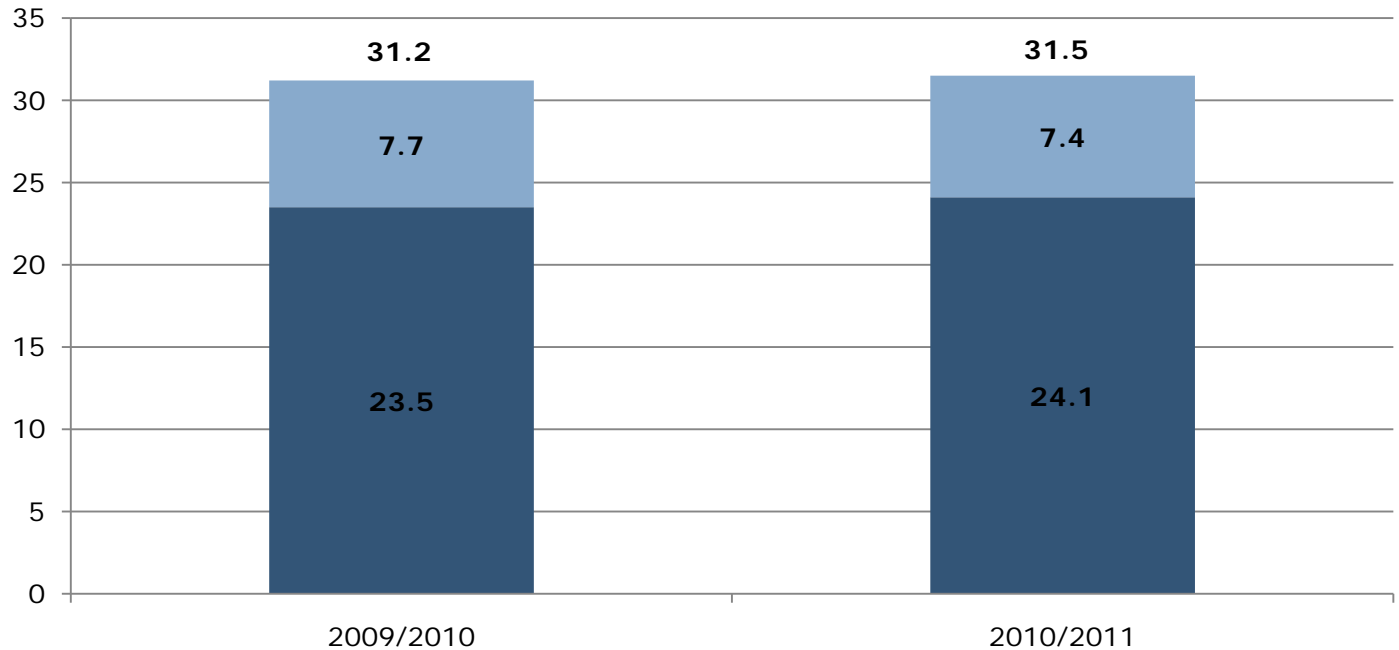
Brazil soybean and corn production

What is the market telling us?

Brazil will grow more, but...

China will have to pay more.

If corn cost \$3.50-\$4.00, then soy cost \$8.40-\$9.60.



October Mato Grosso prices:

Soybeans = 41.80 BRL/60kg
Corn = 8.30 BRL/60kg

Soybeans = 40.09 BRL/60kg
Corn = 12.40 BRL/60kg

■ Soybean ■ Corn

Source: Conab, Bloomberg



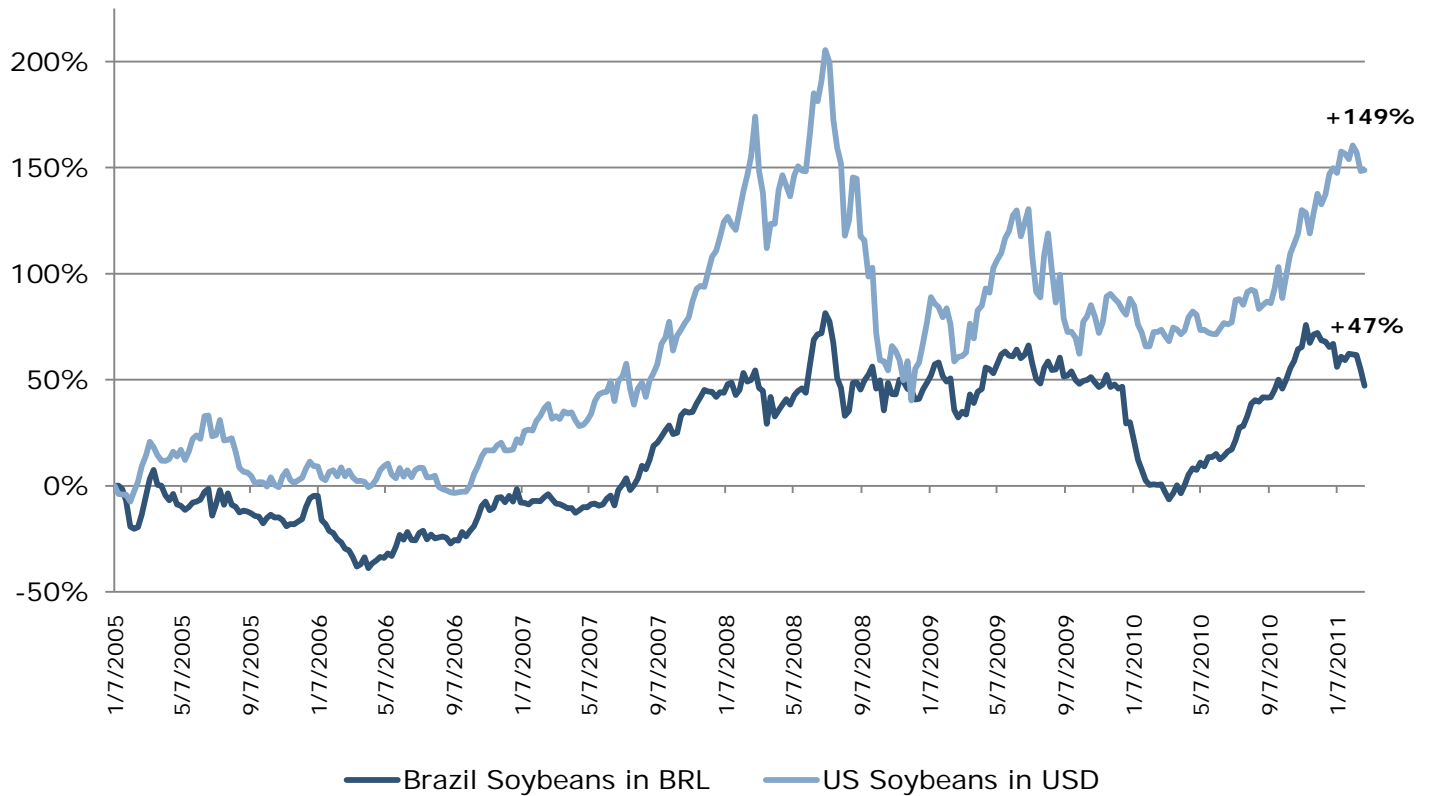
Other key issues

Brazil: higher but not so volatile

Percent change in Brazil and US soybeans since 2005

Brazil's farmers have not benefitted as much from rising soy prices as in the US due to appreciating Real

Prices need to rise to stimulate incremental production



Source: Bloomberg

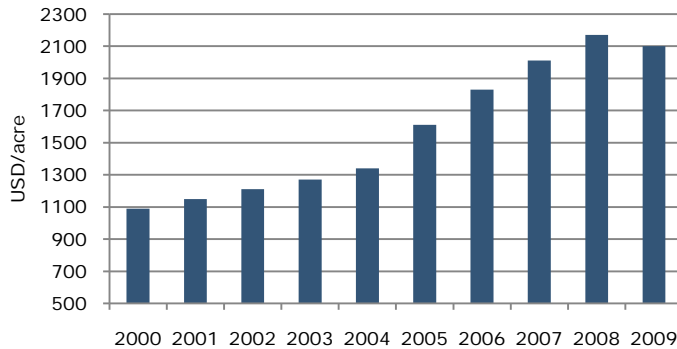


Other key issues

What is break even cost for corn and soy production?

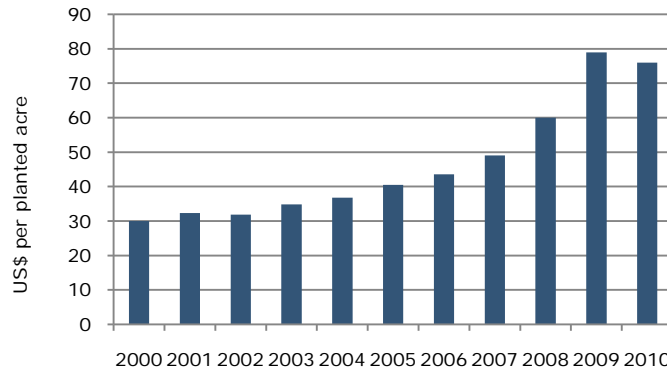
We believe the break-even cost of U.S. corn production is \$4.00 - \$4.50, and for soybeans near \$10.00

US farm land price per acre



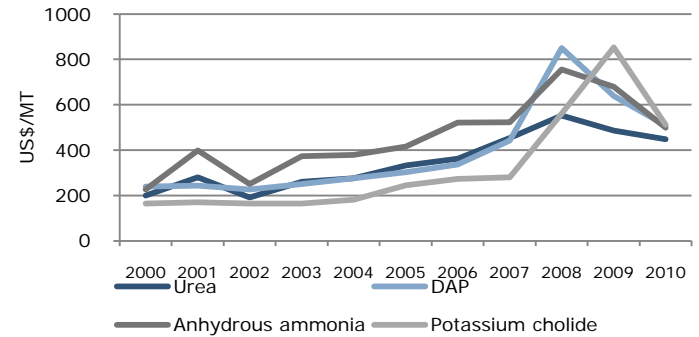
Source: USDA

US corn seed prices



Source: USDA

US Fertilizer prices



Source: USDA

WTI crude oil



Source: Bloomberg

USDA acreage projection looks aggressive

Planted acres projected to rise in 2011

Crop	2006	2007	2008	2009	2010	2011F	change
Corn	78.3	93.5	86	86.4	88.2	92	3.8
Soybeans	75.5	64.7	75.7	77.5	77.4	78	0.6
Wheat	57.3	60.5	63.2	59.2	53.6	57	3.4
Upland cotton	14.9	10.5	9.3	9	10.8	12.8	2
Minor feed grains	14.1	15.5	15.8	13.6	11.4	12.2	0.8
Rice	2.8	2.8	3	3.1	3.6	2.9	-0.8
Total 8 crops	243.1	247.5	253	248.7	245	254.8	9.8

Source: USDA



2008 vs. 2011

Feed costs: No Light at the End of the Tunnel

It would take a by far record yield and nearly a 5 million acre increase in planted area for the corn stocks to use ratio to get back over 10% -- which is not a terribly comfortable level.

Area planted	Yield			
	155	160	165	170
90	-1.1%	2.0%	5.0%	8.0%
91	0.0%	3.0%	6.1%	9.2%
92	1.0%	4.1%	7.2%	10.3%
93	2.1%	5.2%	8.3%	11.4%

Source: USDA, Rabobank

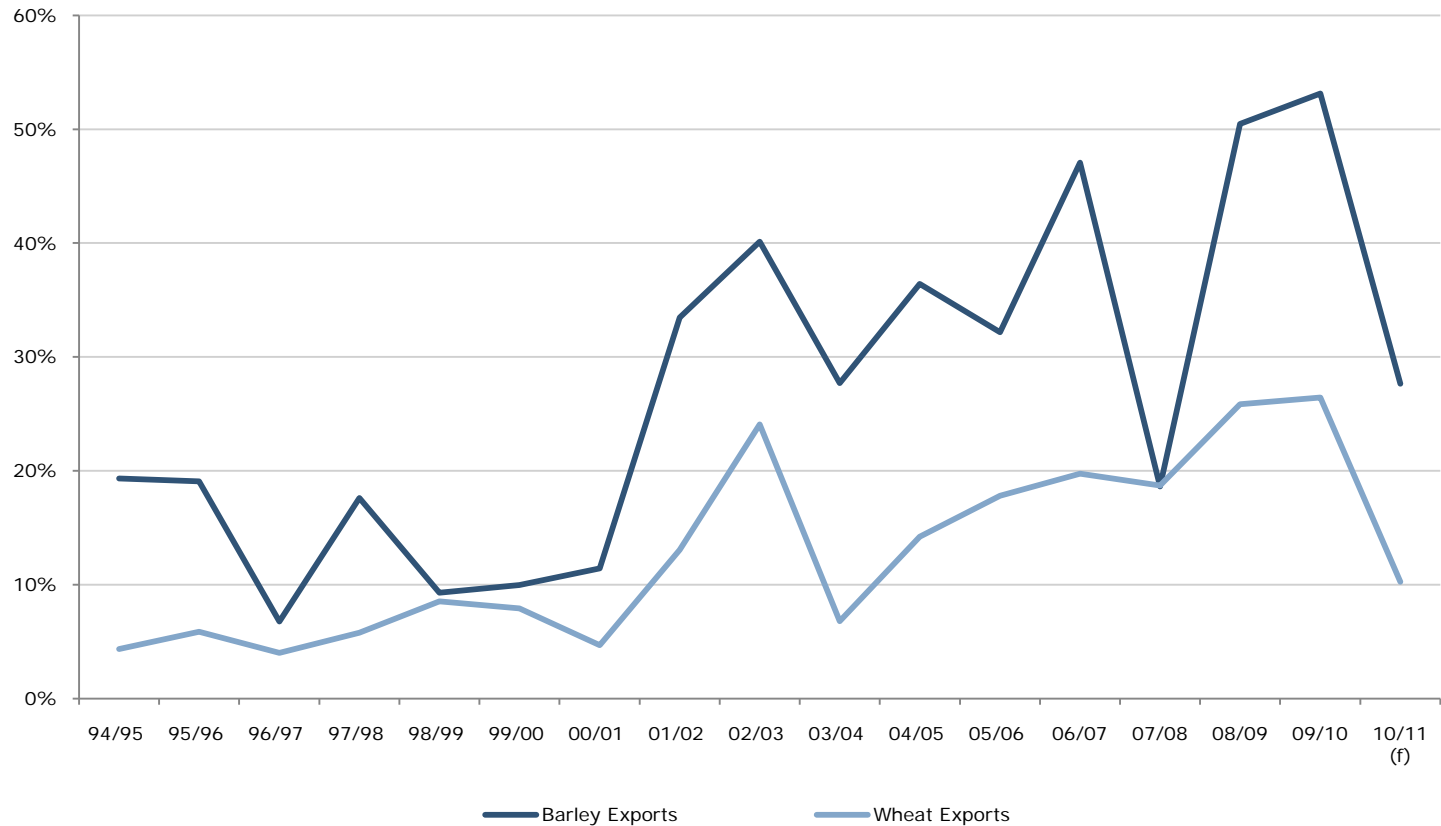


Black Sea Region

Black Sea region rising in importance...

Black Sea share of world exports

Russia, Ukraine and Kazakhstan are the primary incremental producers of the world's grain



Source: USDA

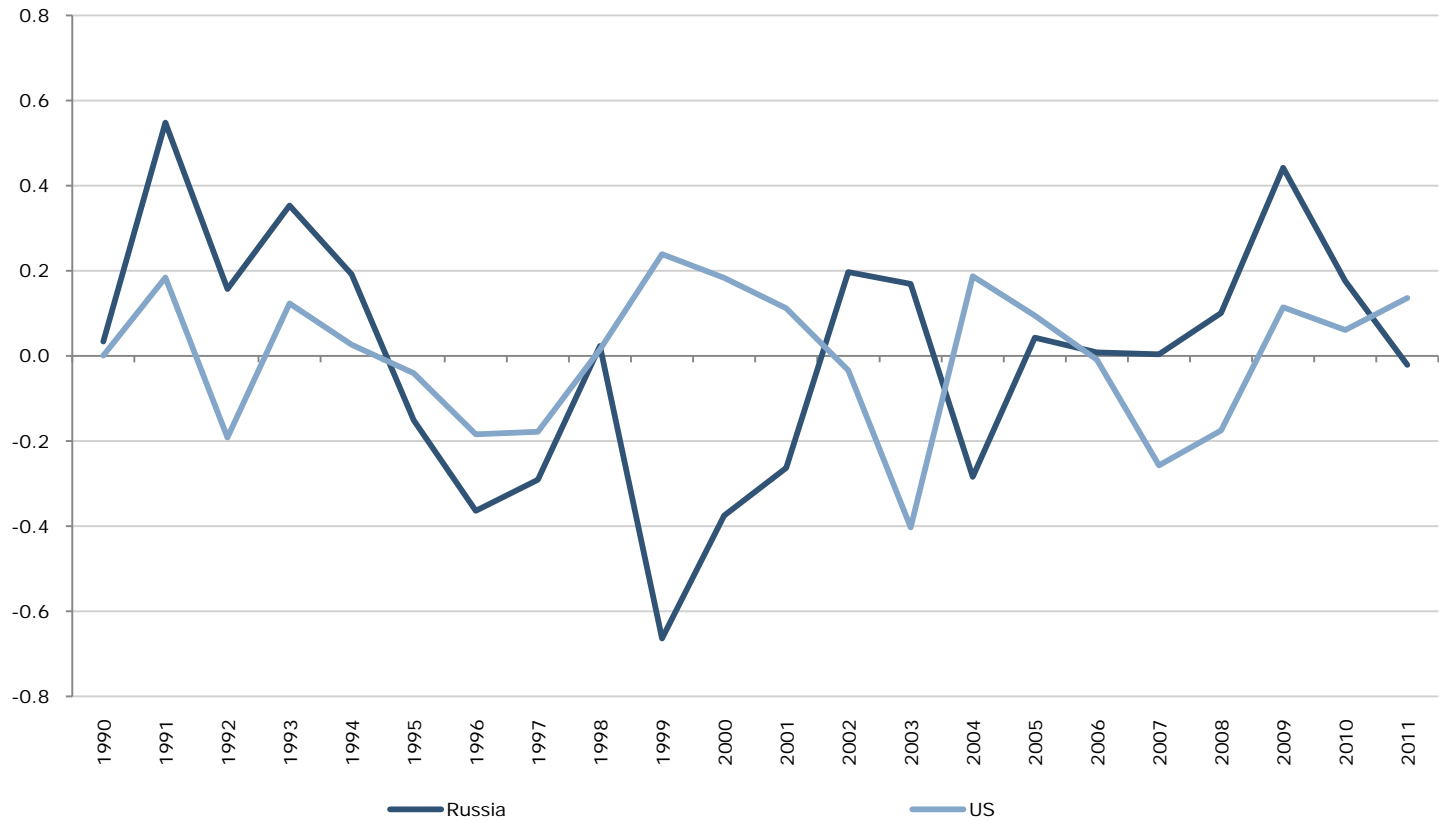
Black Sea Region

Volatile production in Russia relative to the U.S.

Yield deviation from 20-year trend

Russian standard deviation = 0.29
MT / hectare

U.S. standard deviation = 0.17
MT / hectare



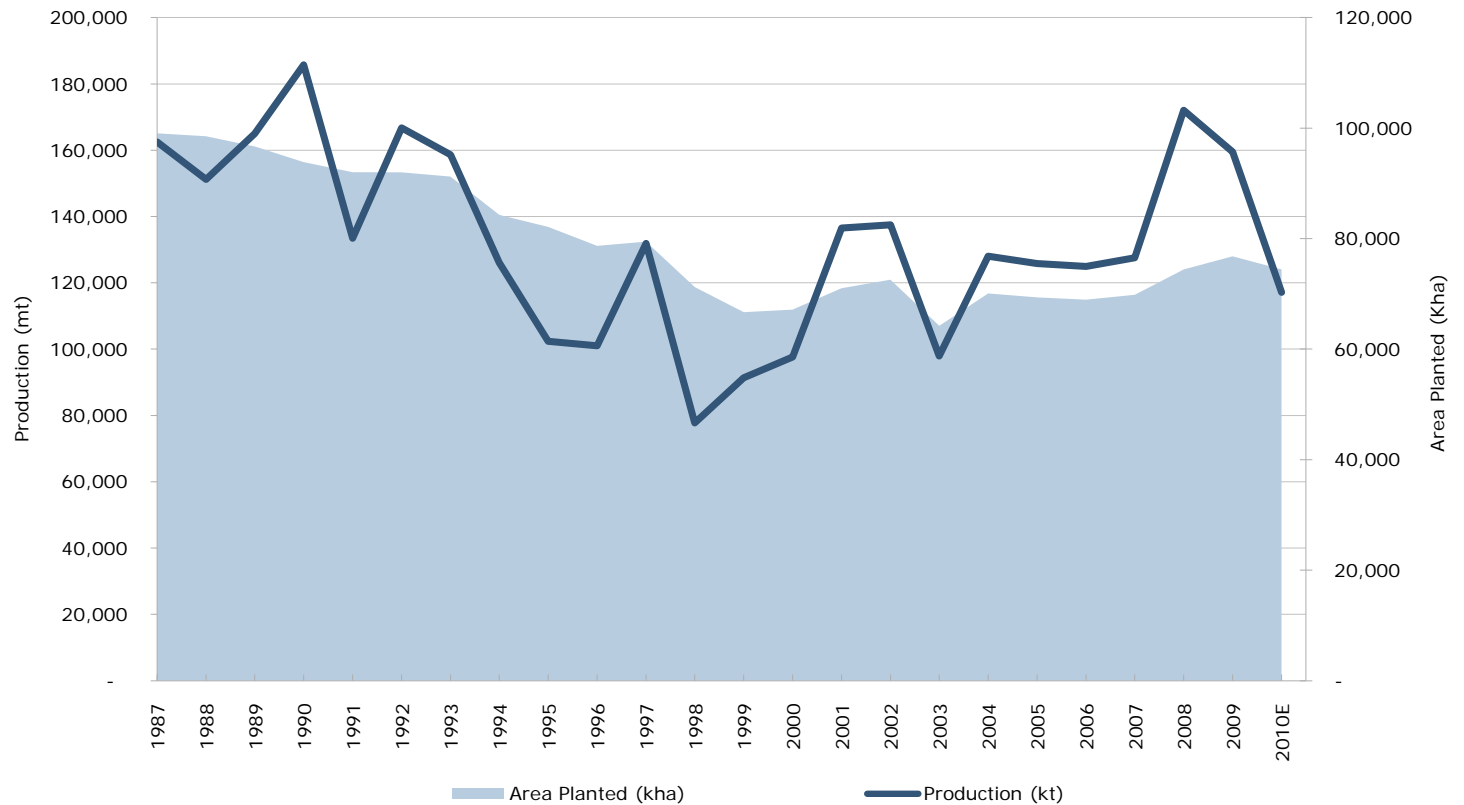
Source: USDA, Rabobank

Black Sea Region

...with much upside still remaining in grain production area planted...

Russia, Ukraine, Kazakhstan grain production and area planted

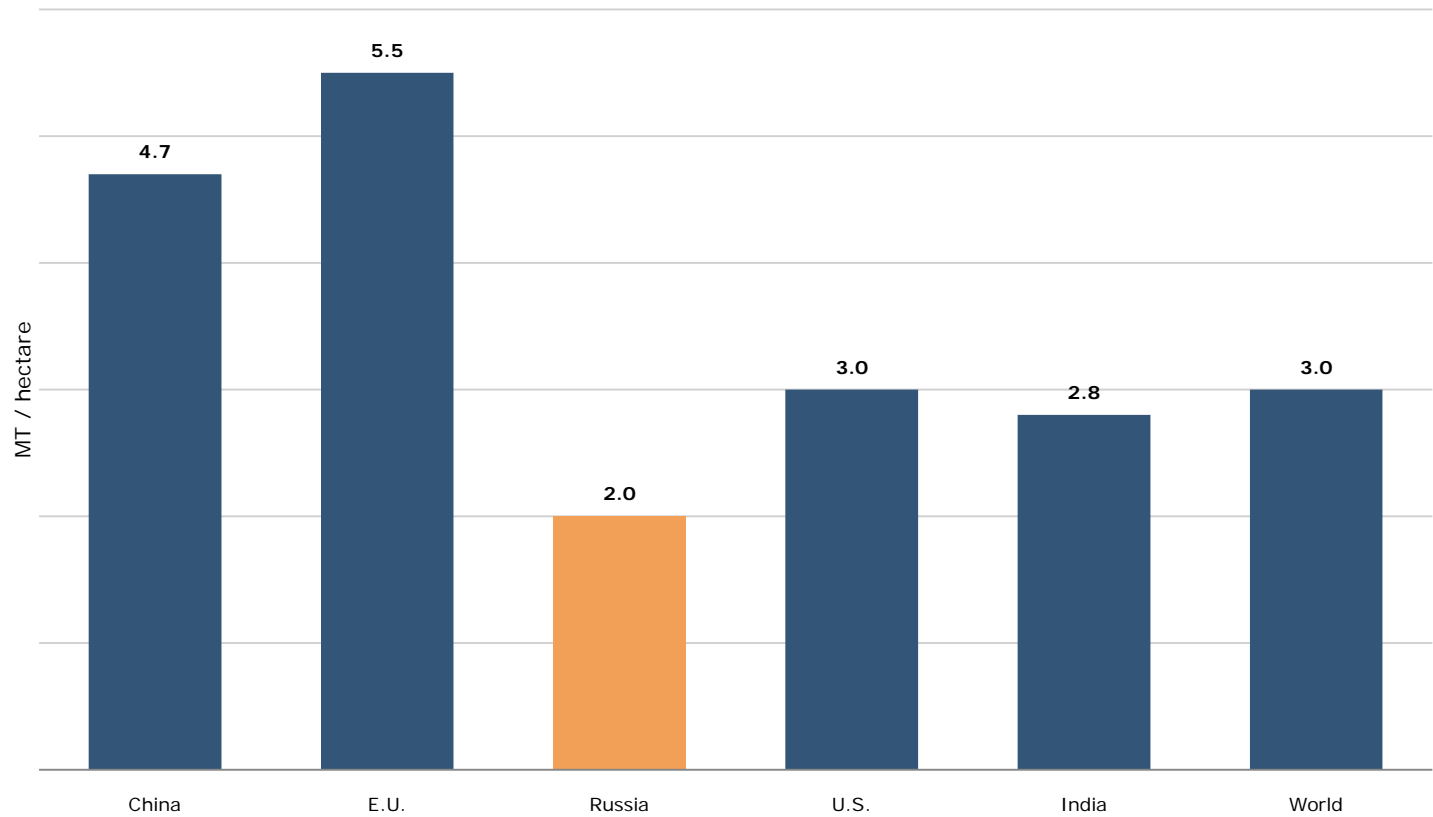
A return to prior highs for planted area in Russia would add 50mmt to grain production



Source: USDA

Black Sea Region

...and crop yield



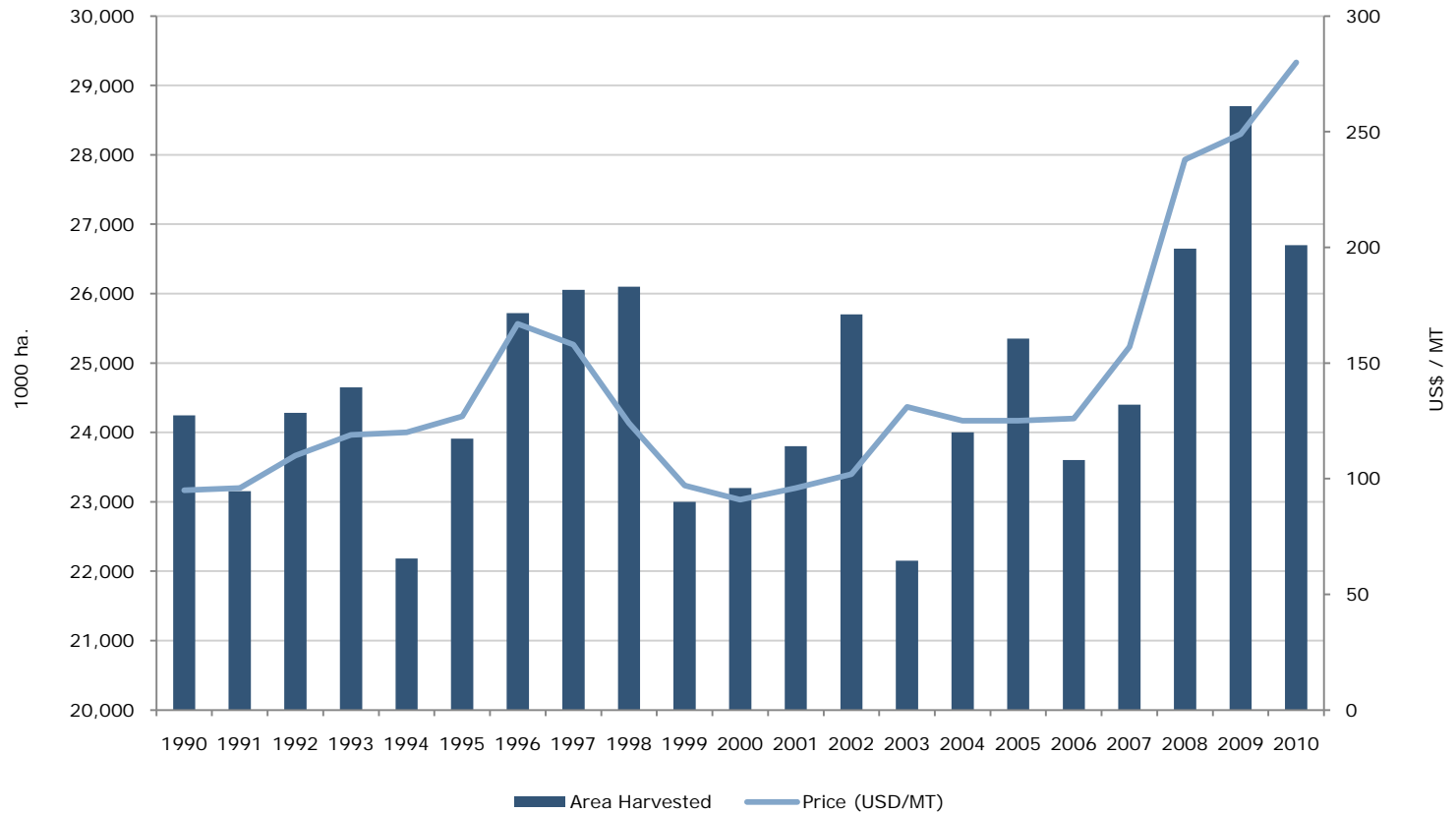
Source: USDA

Black Sea Region

Russia's wheat production is highly elastic to price...

Enabling environment is a big problem, and getting worse.

Russian area harvested and lagged price of wheat



Source: USDA, Bloomberg

Key Global Animal Protein Issues

Two areas with rapid growth in animal protein production

Grain trapped due to poor infrastructure



China

The China corn conundrum

- Why is China importing corn for the first time since 1994 if their stock levels are anywhere near as high as stated?
 - 60 MM MT, or for an ending stocks-to-use ratio of 37.1%
- Same goes for why would they have an internal price of over \$8/bushel if stocks are satisfactory?
- Why has China limited bidding from industrial users their Tuesday auctions?
- China's soy imports continue to expand rapidly and faster than anticipated. If meal use is rising so rapidly, how could it be much different for corn?
- China's soy imports since 1998 imply an incremental corn need of 90mmt compared to only 30mmt as reported

Answer:

China's corn supplies appear to be desperately low



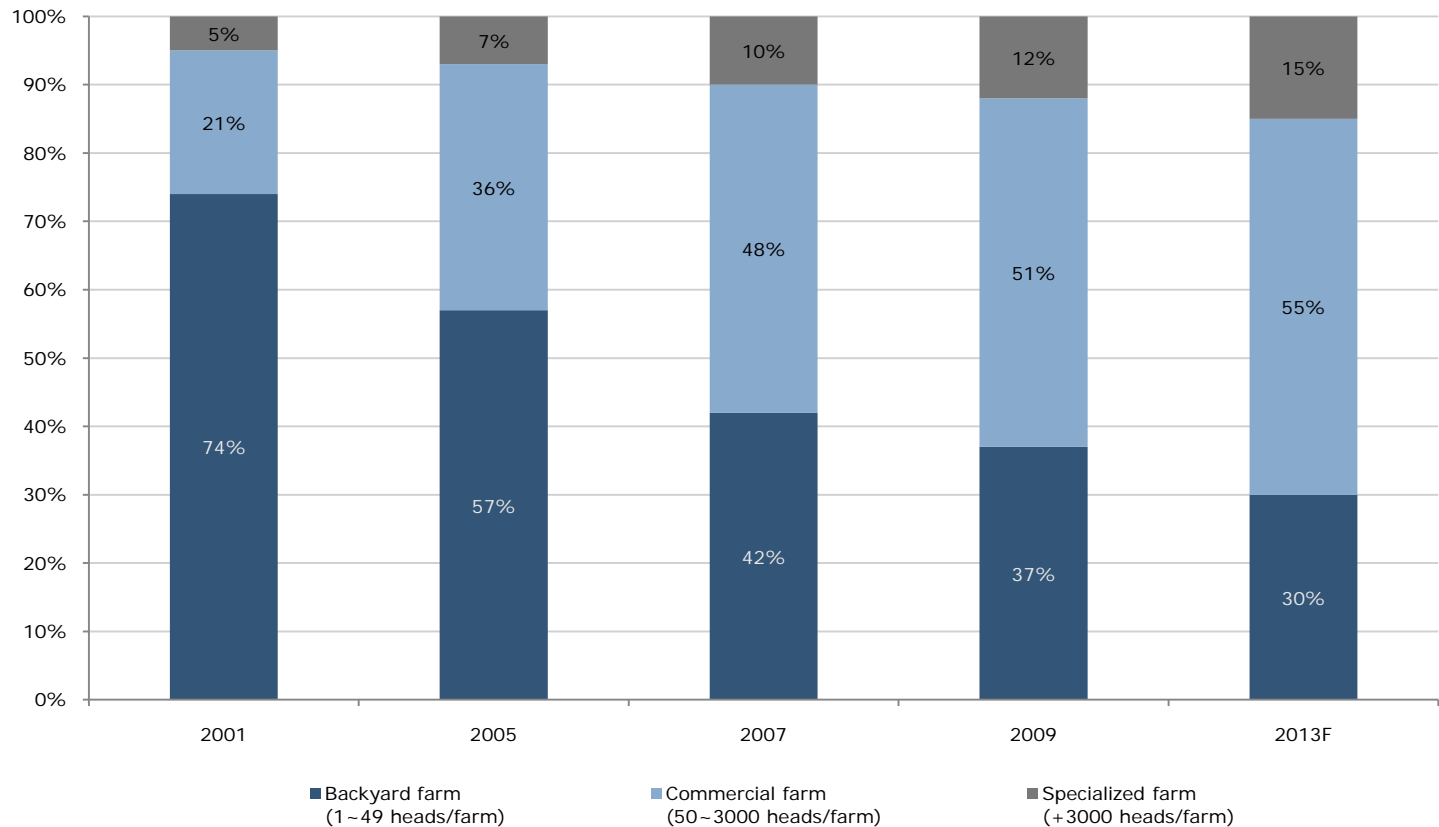
China

Industrialization of China's hog production industry

Herd size of hog farms in China

If industrial hog production grows from 55% to 60%, and modified from 11% to 21%, deficit expected to be 23 MM MT by 2015

-Assuming 10 bu. of corn per pig

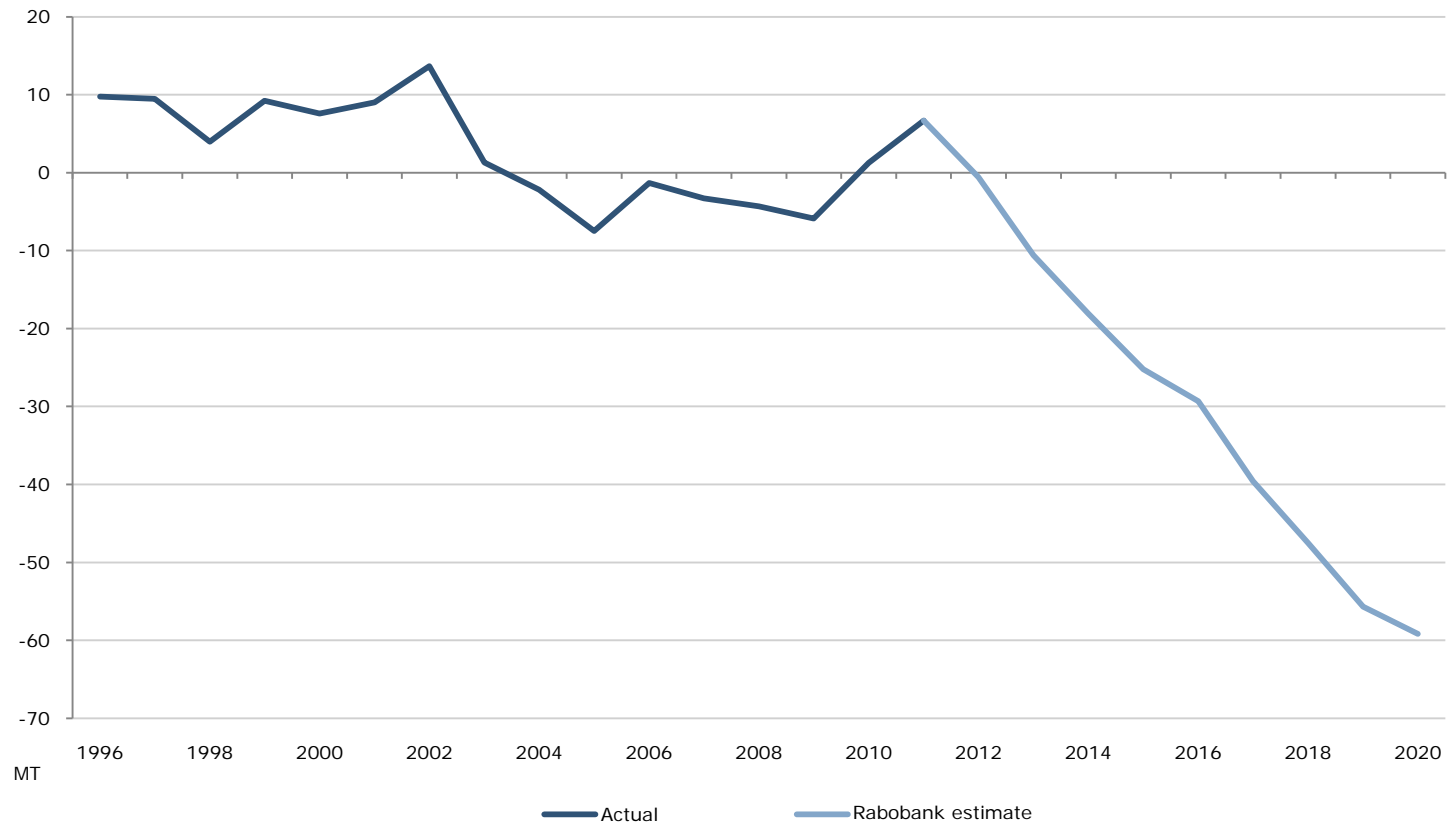


Source: MOA, Rabobank

China

China's corn balance sheet

Even with only 2% pork production growth, China could be importing 25 MM MT of corn per year by 2015 due to industrialization



Source: MOA, USDA, FAPRI, Rabobank estimates

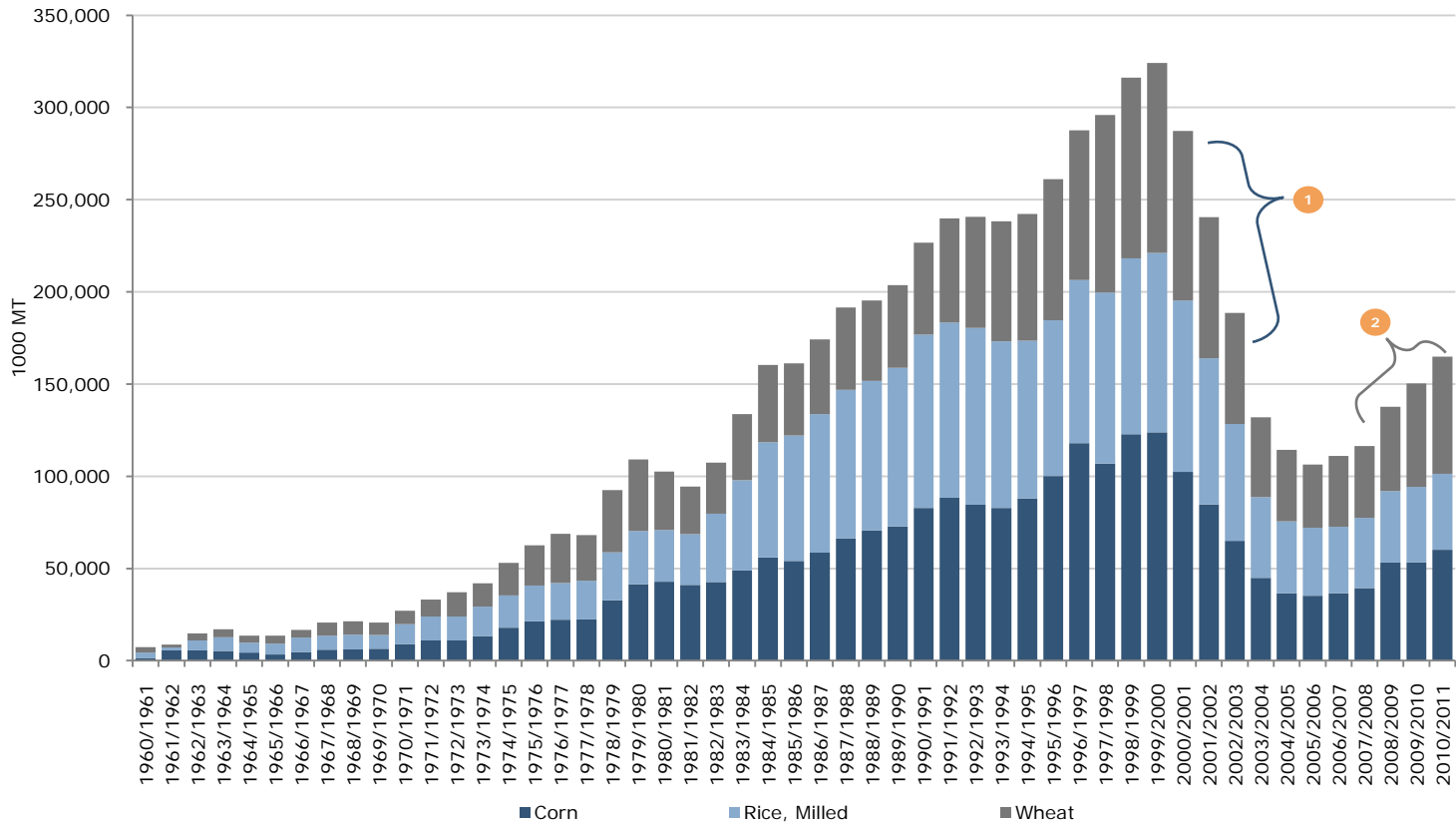
China

China will want to rebuild diminished stocks

China ending stocks

1 Late 1990s: China moved towards "just-in-time" inventory management

2 2005: China starts building inventory again due to rising commodity prices



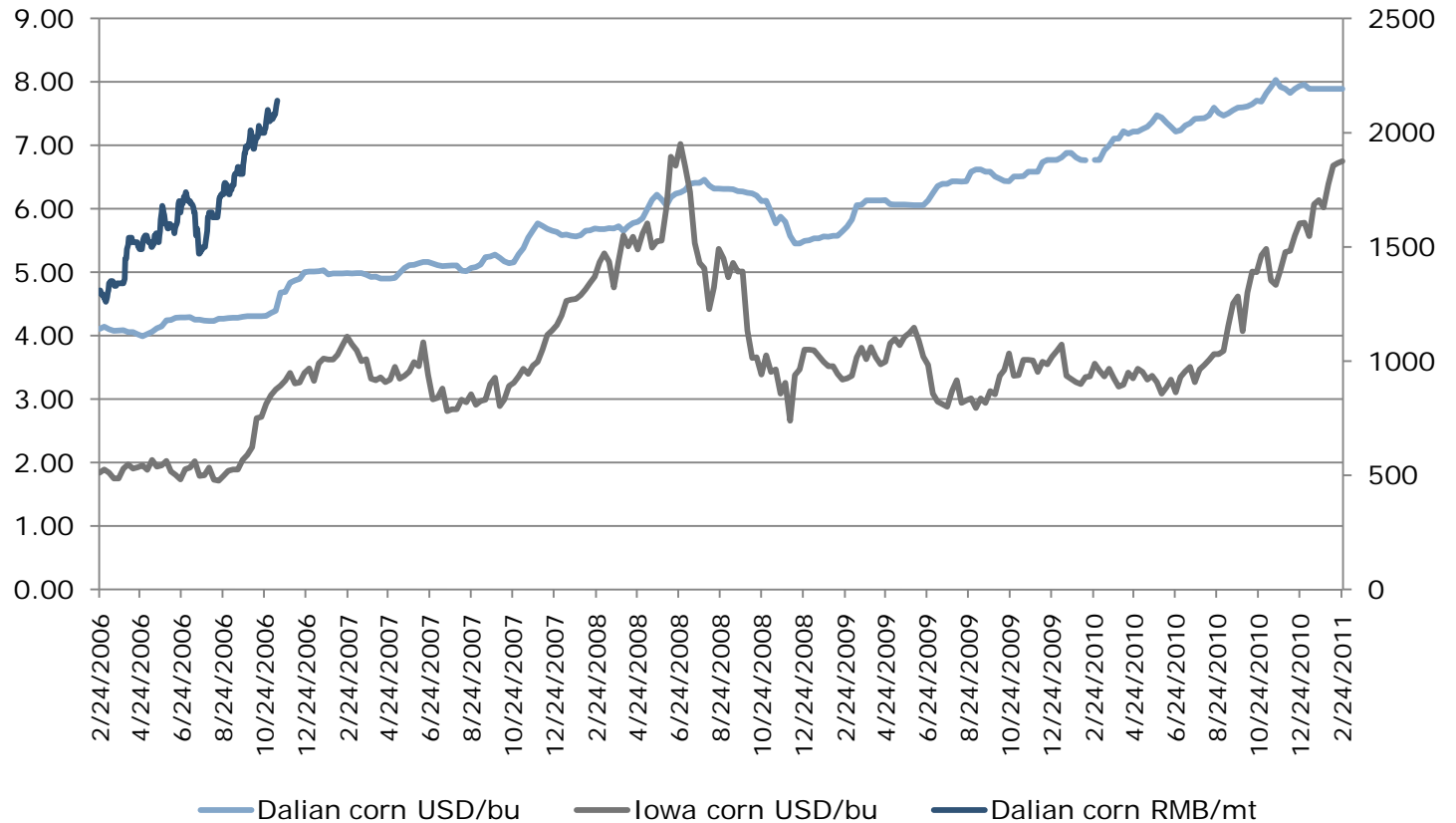
Source: USDA

China

Rising corn prices in China

Corn price development - China and U.S.

Decoupling

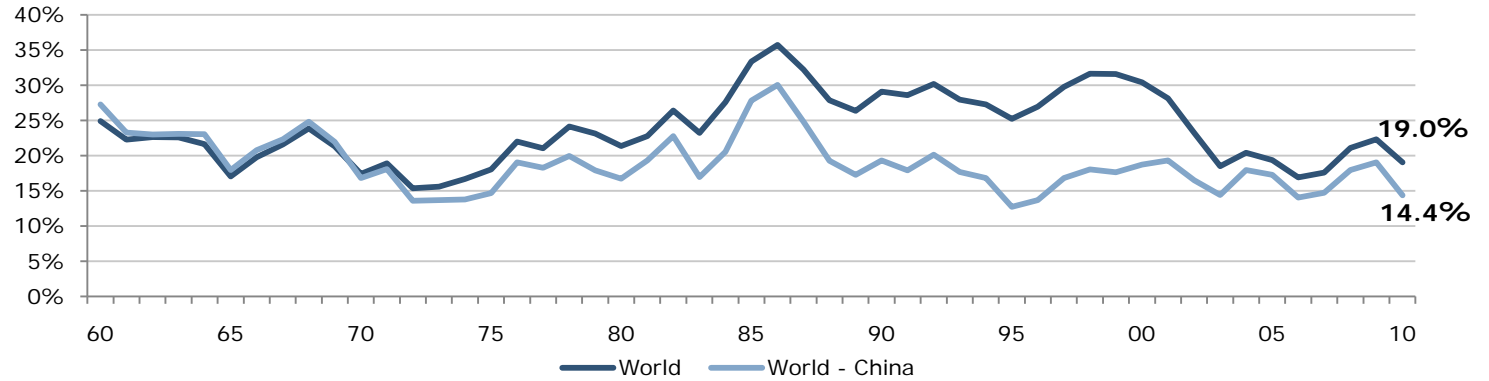


Source: Bloomberg

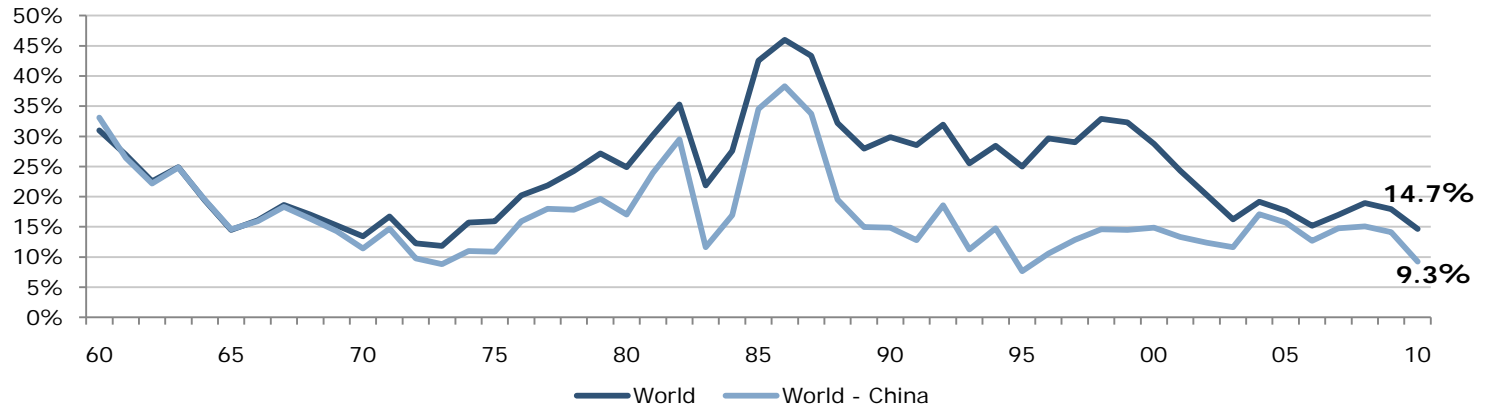
China

Global stocks-to-use ratios

World grain situation is not benign if we take China out of the global stock-to-use equation



World stocks-to-use ratio: Corn



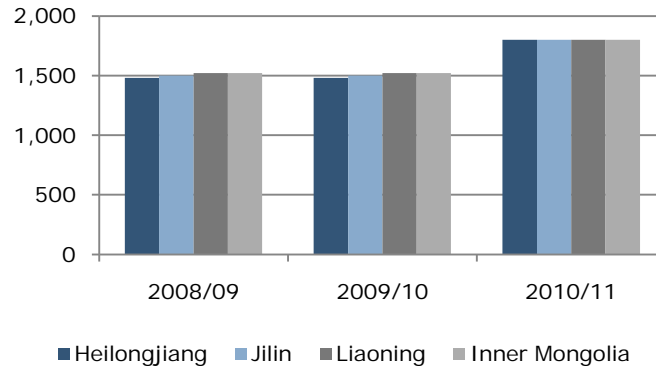
Source: USDA

China

China key crop support prices

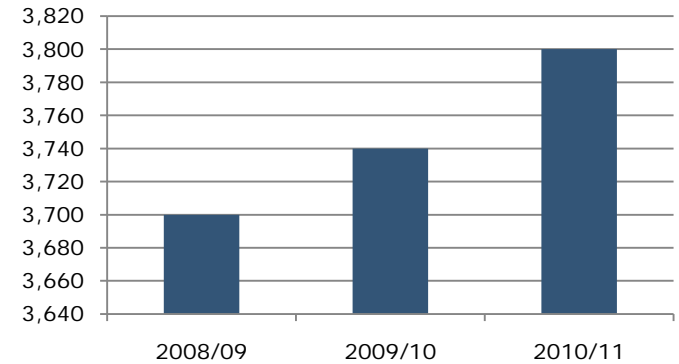
Temporary sourcing for corn and soybeans – volume targets vary

China corn sourcing price by location, RMB/mt



Source: MOA, Rabobank

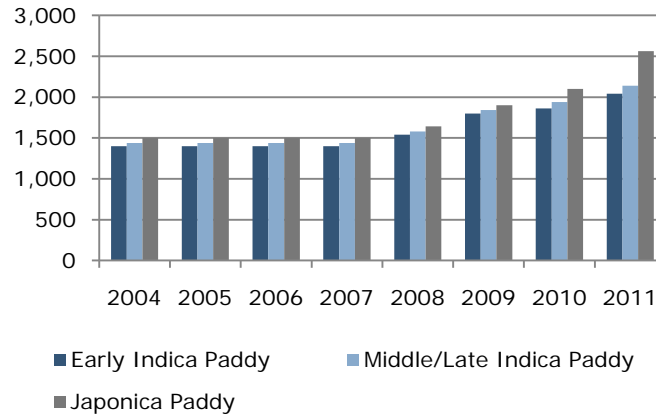
China soybean sourcing price all locations, RMB/mt



Source: MOA, Rabobank

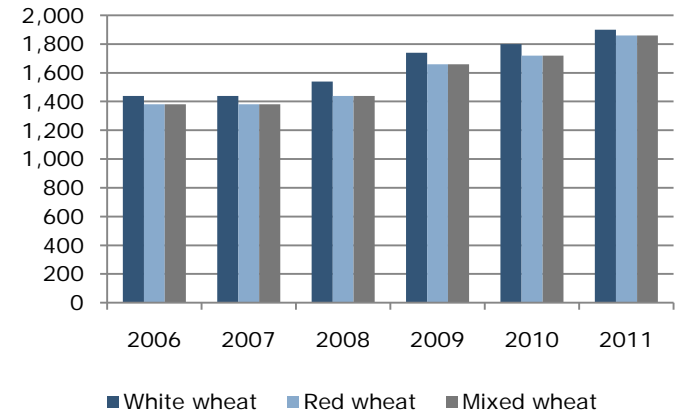
Permanent sourcing for paddy and wheat – no volume limits

China paddy sourcing price by variety, RMB/mt



Source: MOA, Rabobank

China wheat sourcing price by variety, RMB/mt

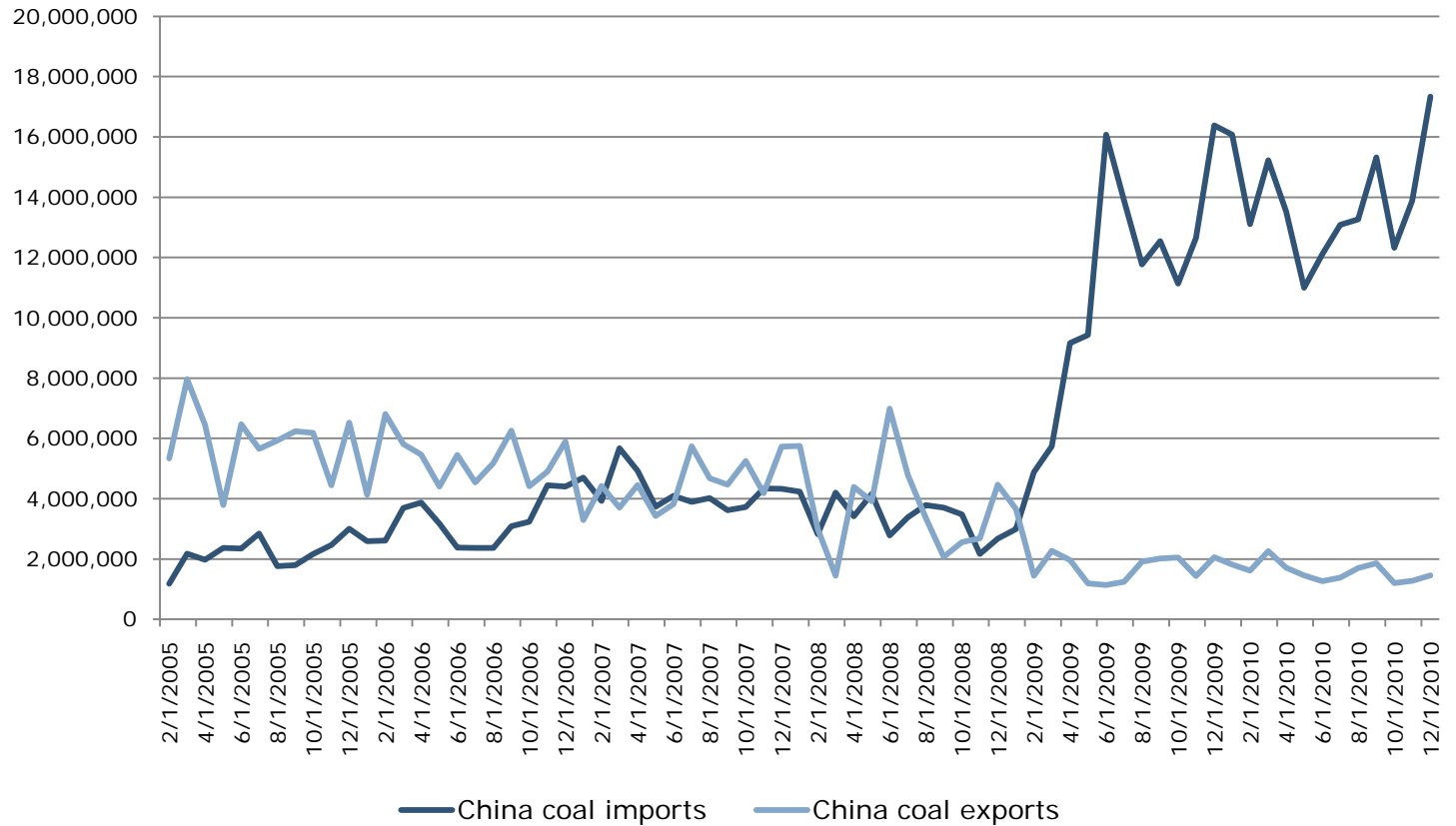


Source: MOA, Rabobank

China

China coal trade

China monthly coal imports and exports, million metric tons



Source: Bloomberg



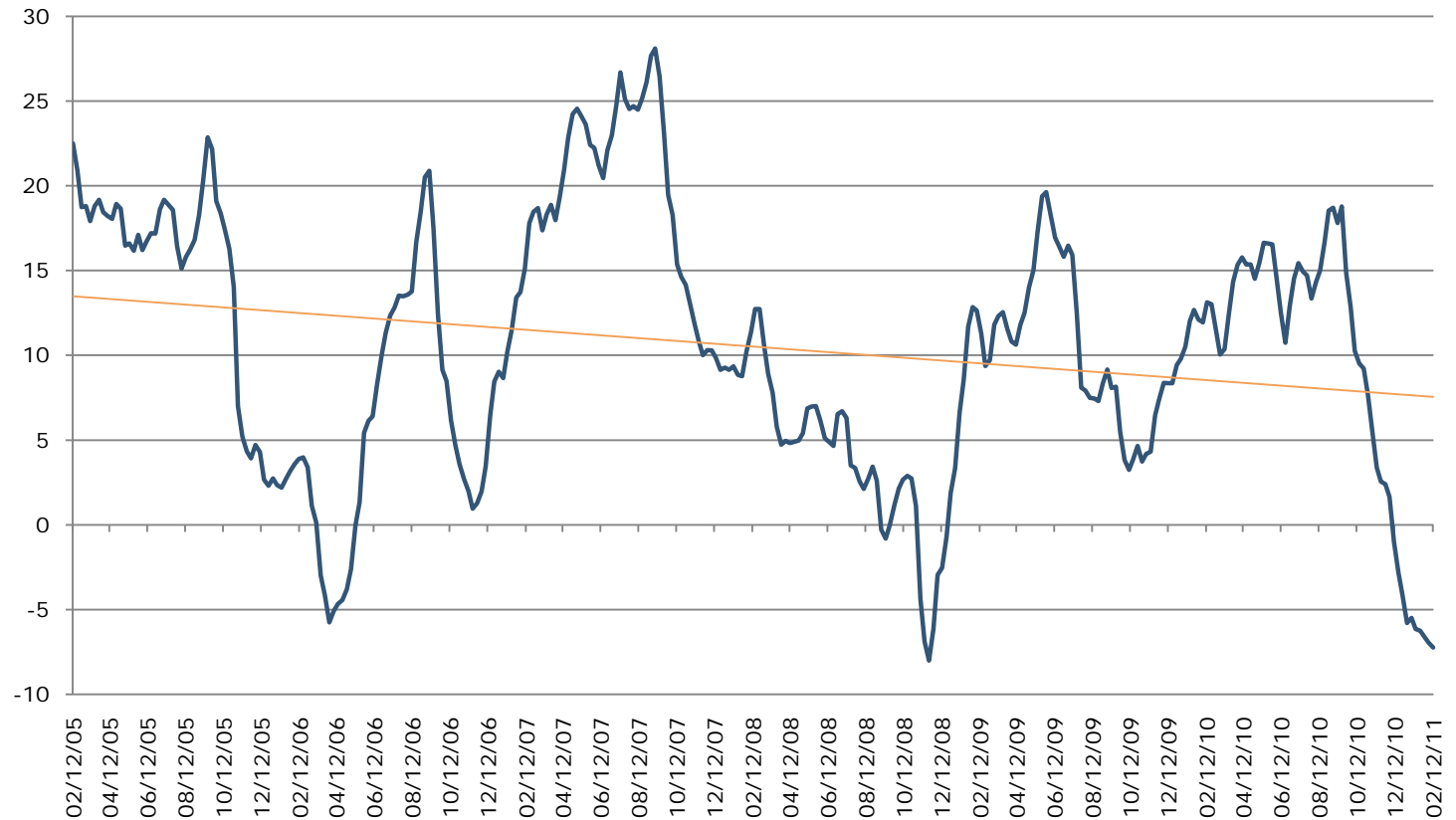
Section II

Key Protein Issues: Demand Rationing?

Chicken Industry Profitability Worst Ever

Industry profitability has been declining and becoming more volatile

U.S. broiler margin, cents/lb



Source: LMIC, Bloomberg

Key Pork Industry Issues

Approximately 1.2mmt swing in 2011 outlook in recent months

- FMD in Korea has already led to the liquidation of about 25% or 2.5 million hogs, and a figure that looks likely to rise to 3.0 – 3.5 million head before all is done. This is in the context of Korea's herd size of 10 million head. We expect Korea's pork imports to rise by 30% this year to 380,000 tons.
- China is experiencing sow liquidation and we believe has an FMD problem of its own. China's sow herd is down 3% compared to year-ago levels by the latest statistics, which we believe could lead to 2011 pork imports of 1.1 – 1.4 MMT, a four-fold increase from 2010.
- The fourth consecutive negative profitability in the EU pork industry and the effects of the dioxin contamination in Europe, particularly Germany, is leading to herd liquidation across the continent. We now believe that EU pork production could fall 1 – 1.5% impacting production by around 300,000 tons.
- USDA's forecast for a 1.5% or 150,000 ton increase in U.S. pork production looking optimistic. The U.S. breeding herd was down 1% in December which can be substantially offset by productivity gains but we are not hearing of any expansions and in fact are hearing of financing difficulties.
- This all adds up. These factors alone suggest a swing in production expectations of about 1.2 – 1.3MMT compared to expectations last fall. World pork production is about 103MMT, and half of that is in China.



Key Pork Industry Issues

2011 Outlook

USDA 2011 production estimates for the top 3 world pork producers are overstated:

▪ *China FMD, most recent sow estimate is -3%*

▪ *EU dioxin contamination causing liquidation*

▪ *U.S. breeding herd -1% YOY in December, but hog prices rising faster than feed costs*

Pork Production (1000 mt)						
	2010	USDA	% change	Rabobank	% change	
China	50,000	51,500	3.0%	49,500	-1.0%	
EU-27	22,250	22,120	-0.6%	21,900	-1.6%	
United States	10,052	10,204	1.5%	10,200	0.0%	
Brazil	3,170	3,260	2.8%	3,235	2.1%	
Russia	2,270	2,310	1.8%	2,290	0.9%	
Vietnam	1,870	1,900	1.6%	1,870	0.0%	
Canada	1,750	1,720	-1.7%	1,750	0.0%	
Japan	1,280	1,290	0.8%	1,280	0.0%	
Philippines	1,255	1,260	0.4%	1,250	-0.4%	
Mexico	1,161	1,184	2.0%	1,160	-0.1%	
Korea, South	1,097	1,140	3.9%	700	-36.2%	
World	101,507	103,392	1.9%	100,000	-1.5%	

Source: USDA, Rabobank



Key Beef Industry Issues

Declining world production

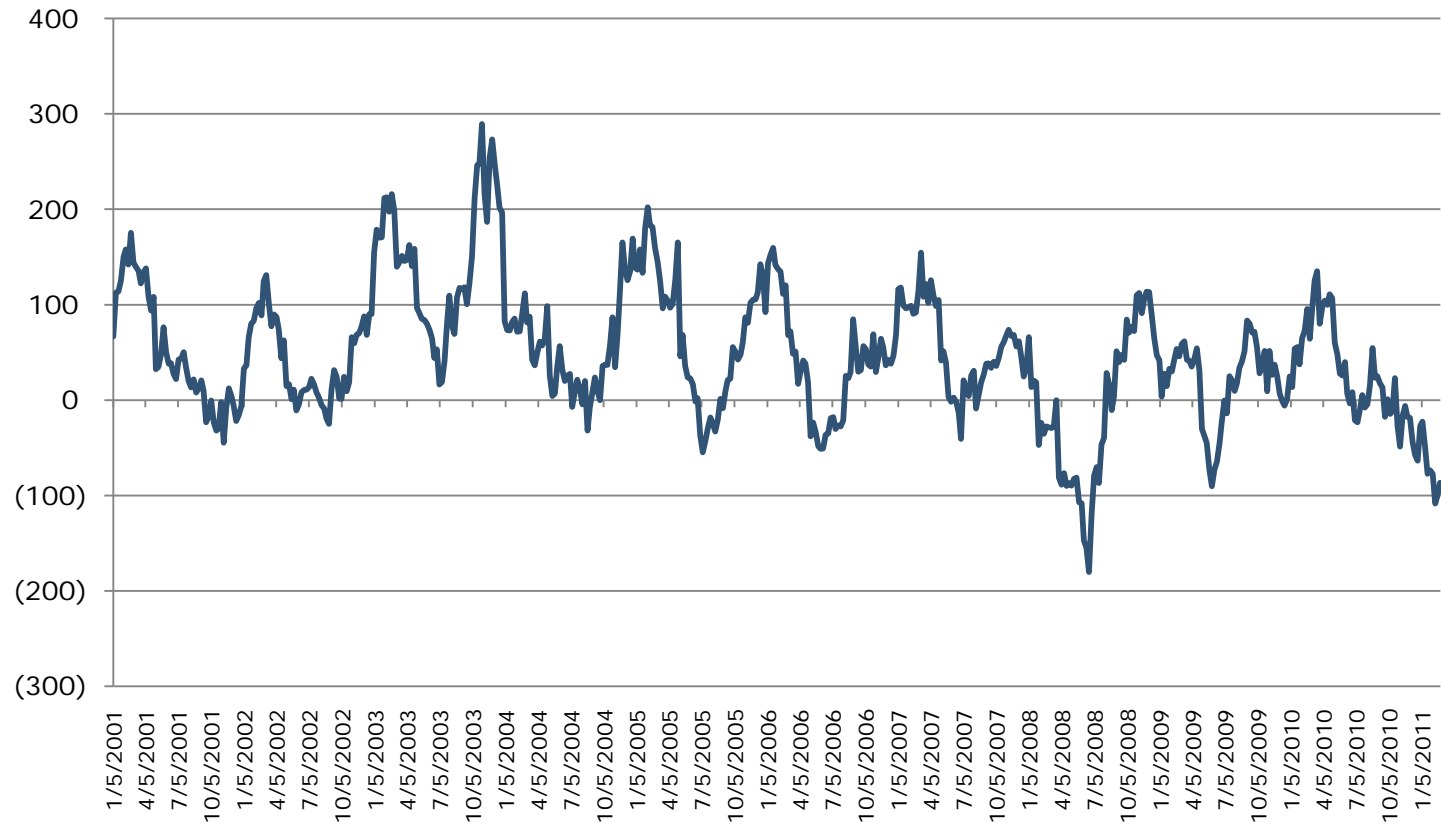
Brazilian herd may actually be in liquidation.

Beef Production (1000 mt)				
	2008	2009	2010	2011
United States	12,163	11,891	11,828	11,556
Brazil	9,024	8,935	9,145	9,410
EU-27	8,090	7,900	7,870	7,850
China	6,132	5,764	5,550	5,450
India	2,650	2,750	2,850	2,920
Argentina	3,150	3,375	2,600	2,550
Australia	2,159	2,129	2,080	2,050
World	58,522	57,431	56,763	56,663

U.S. cattle feeding margin

Some of these losses will have to get passed back to ranchers

U.S. cattle feeding margin, USD/hd



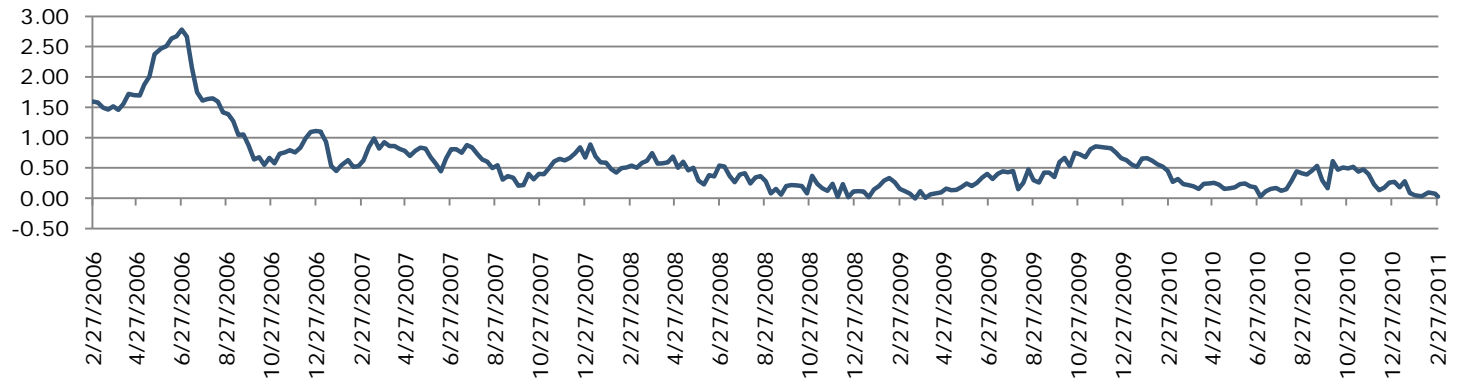
Source: Bloomberg



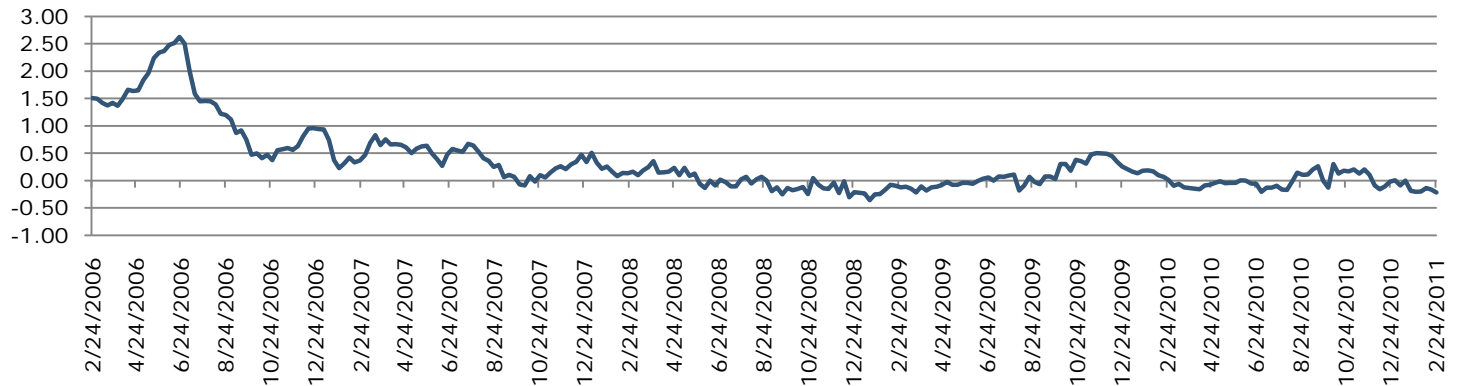
Ethanol Margins

Profitability is holding up despite higher corn prices

U.S. wet ethanol margin, USD per gallon



U.S. dry ethanol margin, USD per gallon



Source: Bloomberg

Section III

Grain and Feed Company Implications

Grain and Feed Company Implications

- Power and profitability are shifting upstream in the value chain
- Higher working capital needs
- Scramble for origination
 - Securing supplies (companies and countries)
 - Network effect
- Crop diversification
- Shift to the East



Value and Profitability are Shifting Upstream

... as a consequence of structurally higher and more volatile prices

- ADM reported recurring earnings for Q211 of \$1.06 compared to consensus expectations of \$0.79. The primary driver of outperformance was the Merchandising and Handling operations of their Ag Service Division where profits rose from \$103M in the year-ago quarter to \$376M this year.
- Bunge reported a profit increase in their Ag Services division from \$65m to \$377m.
- Cargill's recent results where earnings rose to \$832M from \$420M excluding Mosaic and led by origination and processing.
- **Our view. As grain markets become more volatile, power and profitability are shifting up the value chain and even towards production.**

...but volatility puts a premium on positioning

Dislocations create opportunity, but also risk

- Bunge Q210 results: sold soybeans in China before they originated them in Brazil
- Wilmar last quarter

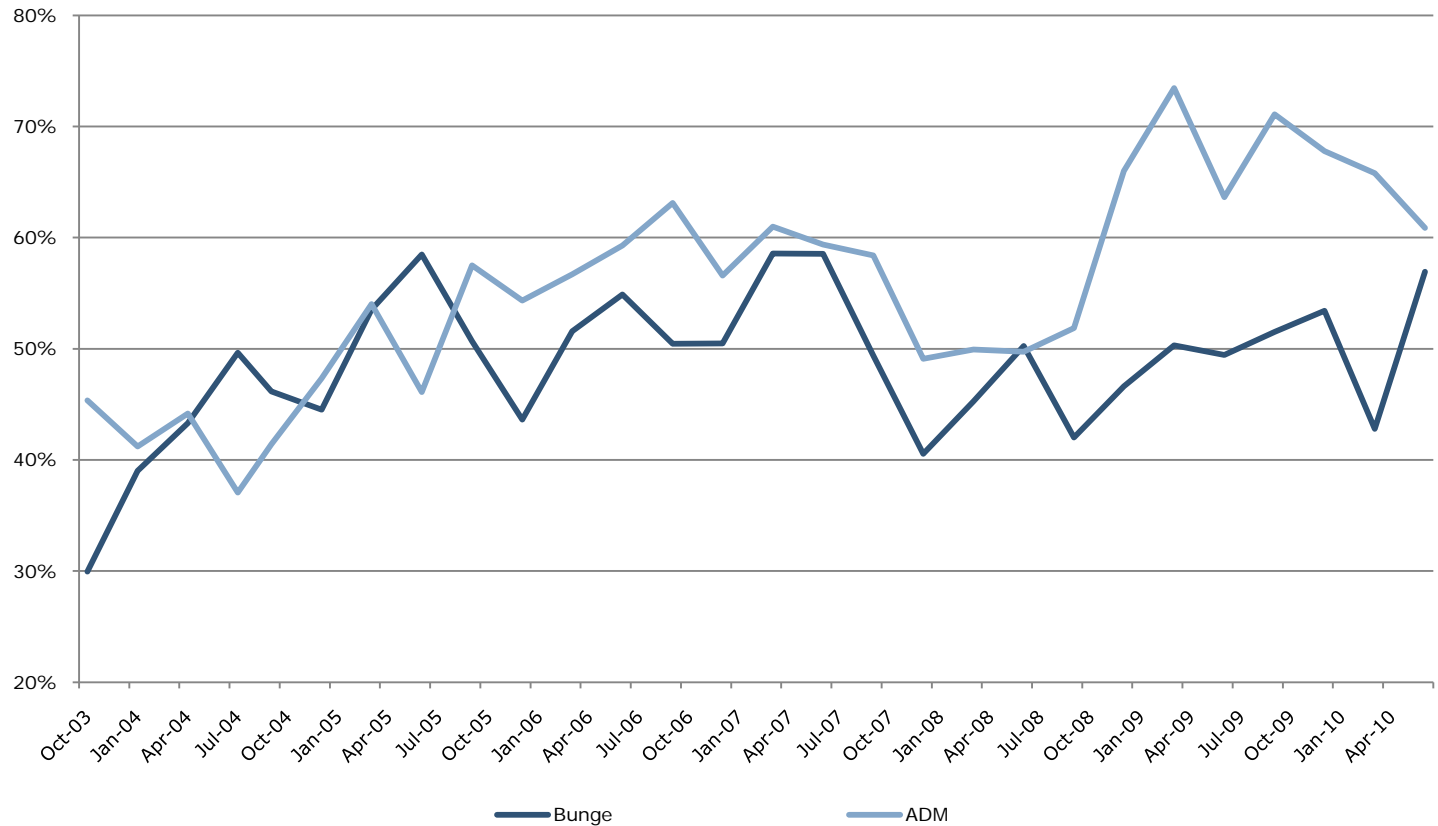


Grain and Feed Company Implications

Working capital needs are rising

Working capital / sales

Higher, more volatile prices cause inherent increase in working capital

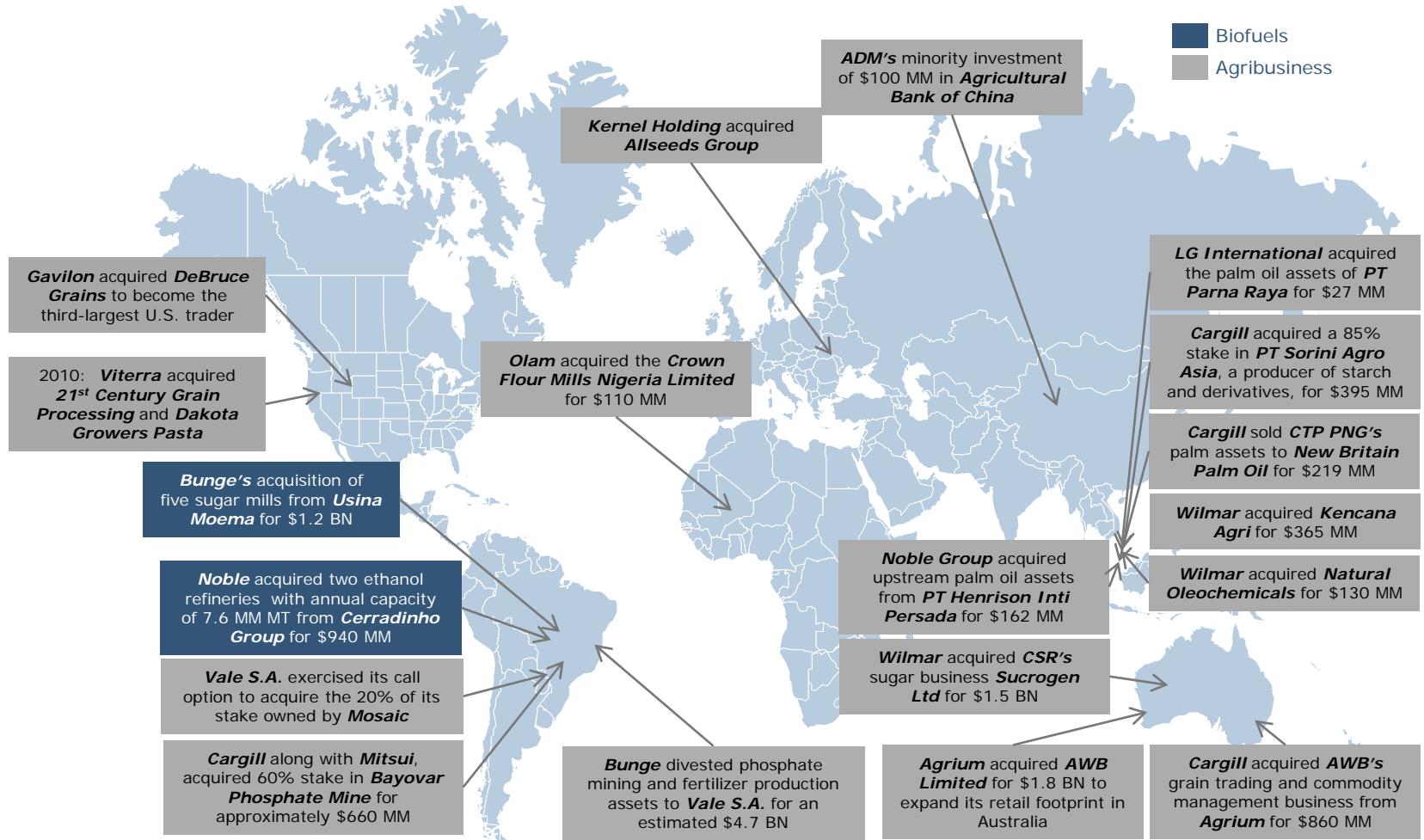


Source: Bloomberg



Grain and Feed Company Implications

Selected G&O transactions during 2010



Sources: Capital IQ

Grain and Feed Company Implications

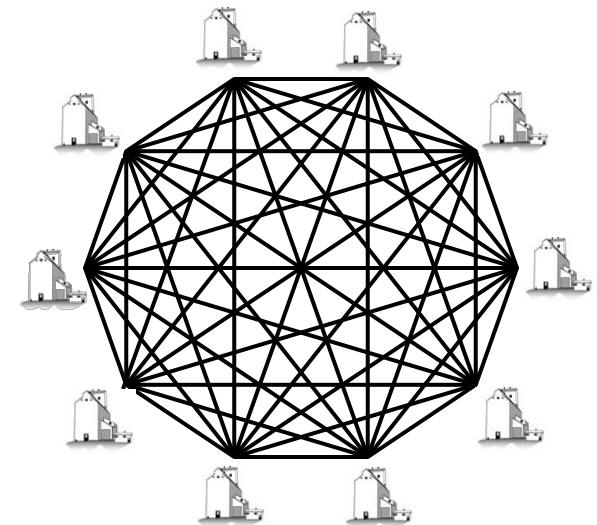
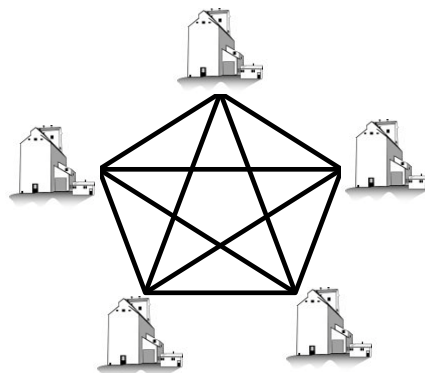
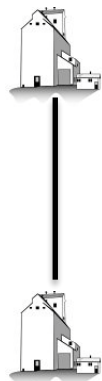
The network multiplier effect

Lower margins from
"toll-based" service...

...amplified by high throughput
and large volumes...

...driving enhanced profitability
and increased returns

*Higher, more
volatile prices are
causing a
scramble for
origination*



Grain and Feed Company Implications

Crop diversification

- Wilmar into sugar/CSR
- ADM and Bunge into sugar ethanol, palm
- Noble, Glencore into Brazil sugar



Grain and Feed Company Implications

The shift to the East

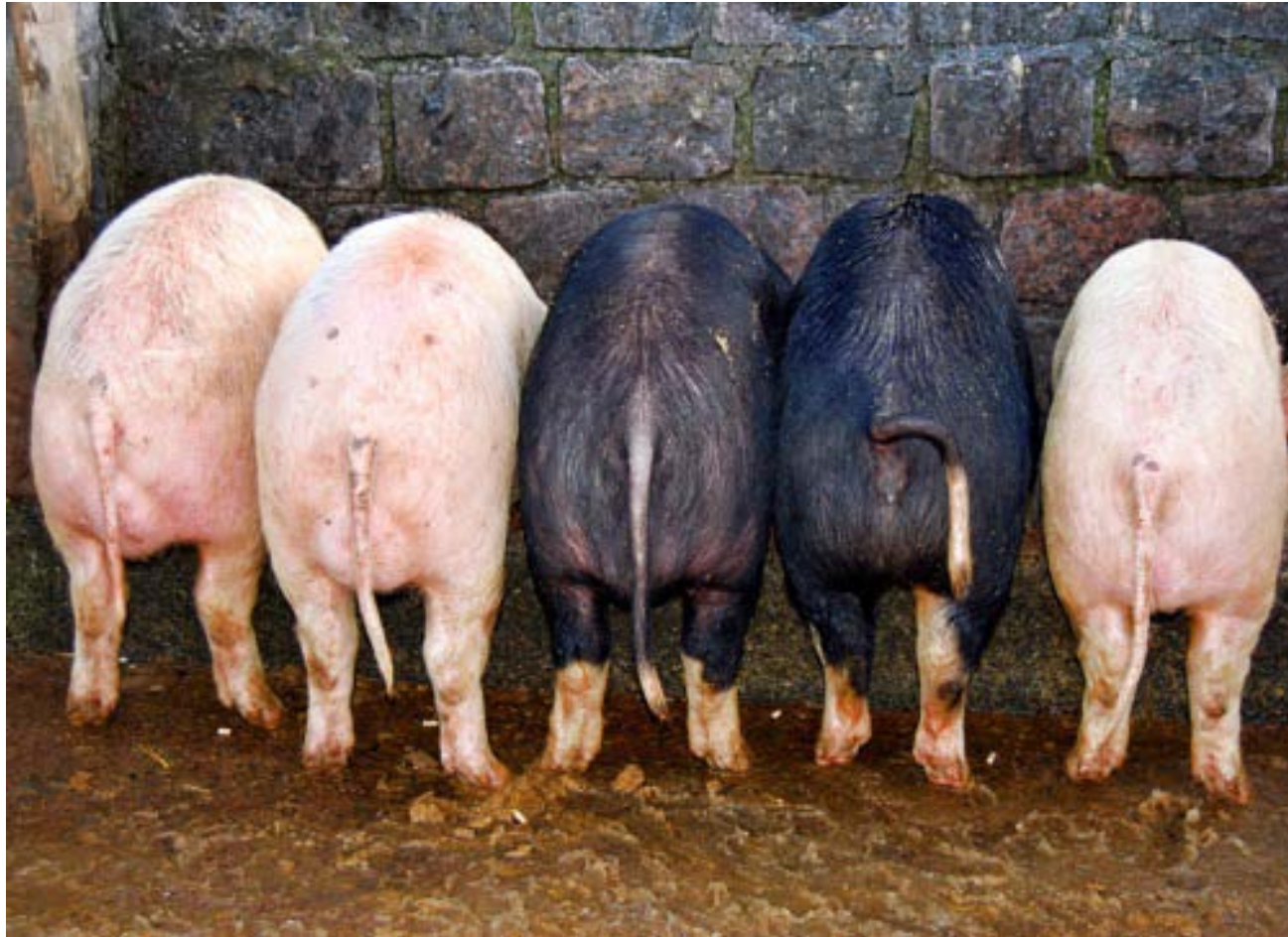
Enterprise value		
	2007	2011
ADM	25,899	28,878
Bunge	12,917	15,097
Noble	2,712	15,188
Olam	4,200	8,674
Wilmar	5,622	40,021

- ADM strategist to Beijing
- BG strategist palm expert
- Asian companies now looking to Africa

Source: Bloomberg



The End

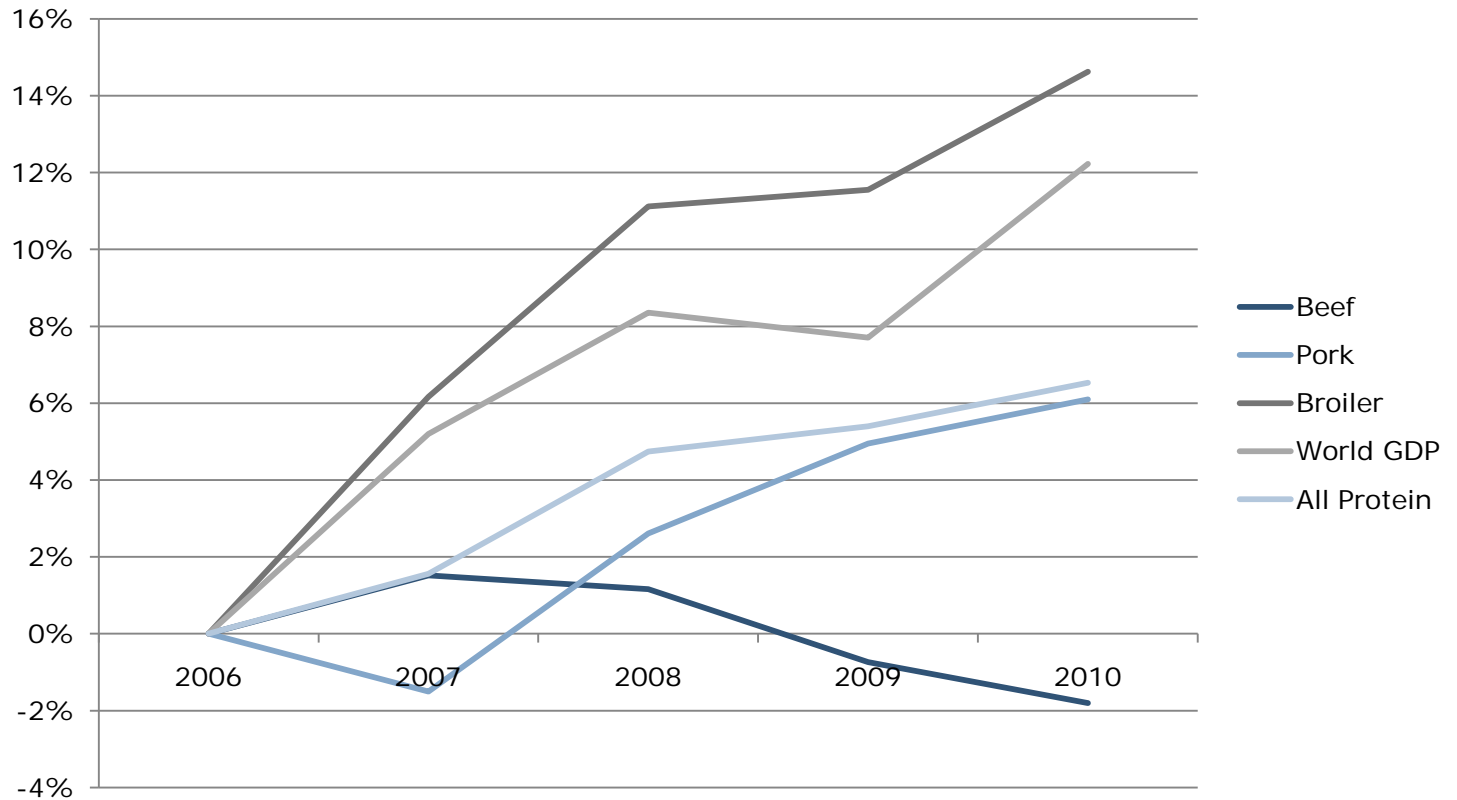


Key Global Animal Protein Issues

Meat production growth < demand

World GDP growth = higher prices

Meat production and GDP, % growth since 2006



Source: USDA, World Bank