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# ***Global Fertilizer Situation & Outlook***

## **FBN Conference Call**

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# World Economic Conditions

## Latest IMF projections

Despite 4.8 percent global growth this year, the world economy remains fragile and recovery uneven.

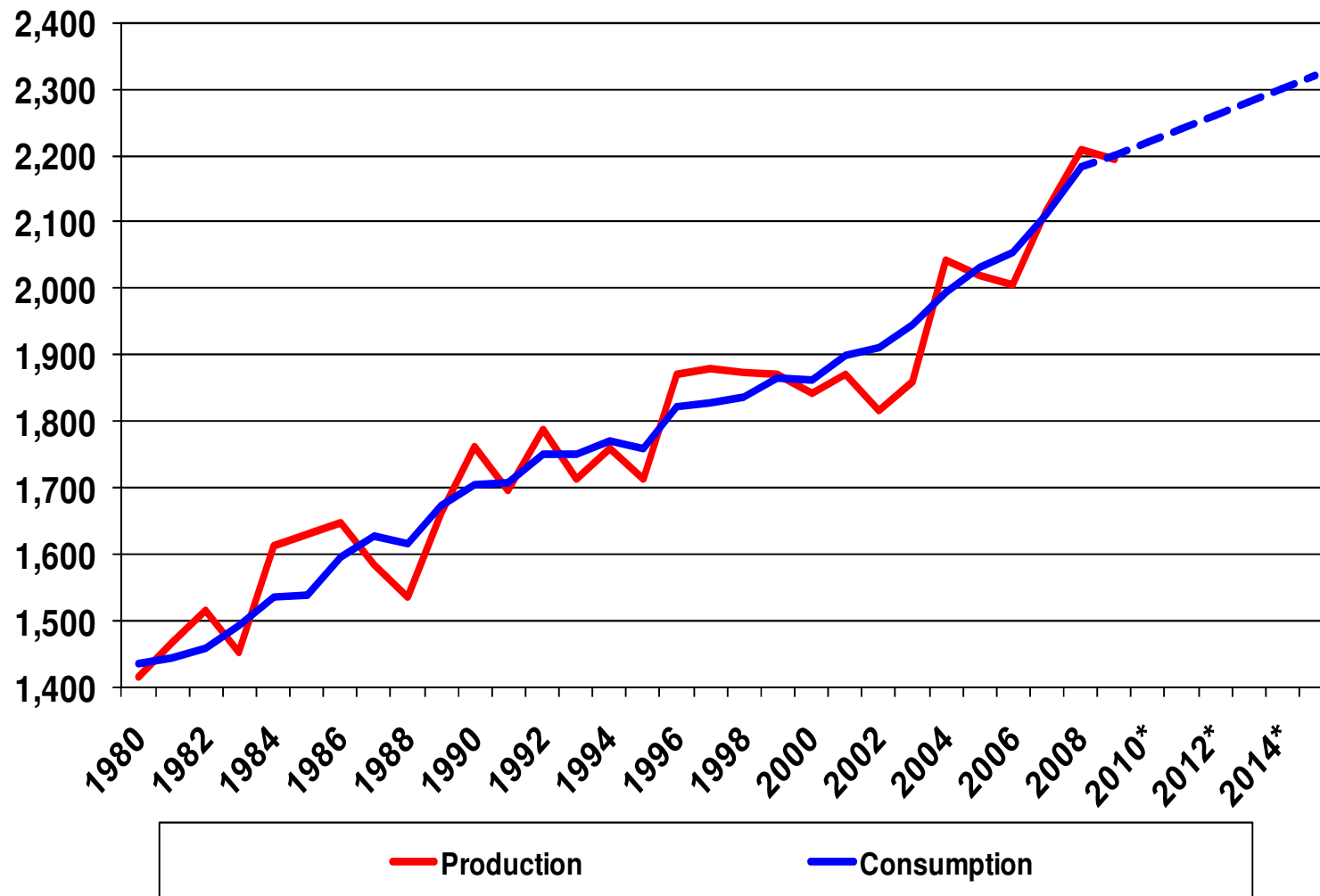
(percent change)

	Projections				Difference from July 2010 WEO projections	
	2008	2009	2010	2011	2010	2011
<b>World Output</b>	<b>2.8</b>	<b>-0.6</b>	<b>4.8</b>	<b>4.2</b>	<b>0.2</b>	<b>-0.1</b>
<b>Advanced Economies</b>	<b>0.2</b>	<b>-3.2</b>	<b>2.7</b>	<b>2.2</b>	<b>0.1</b>	<b>-0.2</b>
United States	0.0	-2.6	2.6	2.3	-0.7	-0.6
Euro Area	0.5	-4.1	1.7	1.5	0.7	0.2
Germany	1.0	-4.7	3.3	2.0	1.9	0.4
France	0.1	-2.5	1.6	1.6	0.2	0.0
Italy	-1.3	-5.0	1.0	1.0	0.1	-0.1
Spain	0.9	-3.7	-0.3	0.7	0.1	0.1
Japan	-1.2	-5.2	2.8	1.5	0.4	-0.3
United Kingdom	-0.1	-4.9	1.7	2.0	0.5	-0.1
Canada	0.5	-2.5	3.1	2.7	-0.5	-0.1
Other Advanced Economies	1.7	-1.2	5.4	3.7	0.8	-0.0
Newly Industrialized Asian Economies	1.8	-0.9	7.8	4.5	1.1	-0.2
<b>Emerging and Developing Economies</b>	<b>6.0</b>	<b>2.5</b>	<b>7.1</b>	<b>6.4</b>	<b>0.3</b>	<b>0.0</b>
Central and Eastern Europe	3.0	-3.6	3.7	3.1	0.5	-0.3
Commonwealth of Independent States	5.3	-6.5	4.3	4.6	0.0	0.3
Russia	5.2	-7.9	4.0	4.3	-0.3	0.2
Excluding Russia	5.4	-3.2	5.3	5.2	0.9	0.5
Developing Asia	7.7	6.9	9.4	8.4	0.2	-0.1
China	9.6	9.1	10.5	9.6	0.0	0.0
India	6.4	5.7	9.7	8.4	0.3	0.0
ASEAN-5 <sup>1</sup>	4.7	1.7	6.6	5.4	0.2	-0.1
Western Hemisphere	4.3	-1.7	5.7	4.0	0.9	0.0
Brazil	5.1	-0.2	7.5	4.1	0.4	-0.1
Mexico	1.5	-6.5	5.0	3.9	0.5	-0.5
Middle East and North Africa	5.0	2.0	4.1	5.1	-0.4	0.2
Sub-Saharan Africa	5.5	2.6	5.0	5.5	0.0	-0.4

Source: IMF, *World Economic Outlook*, October 2010.

<sup>1</sup>Indonesia, Malaysia, Philippines, Thailand, and Vietnam.

# World Grain Production and Use (MM Tonnes)



Source: USDA, NPKFAS

# Corn Futures

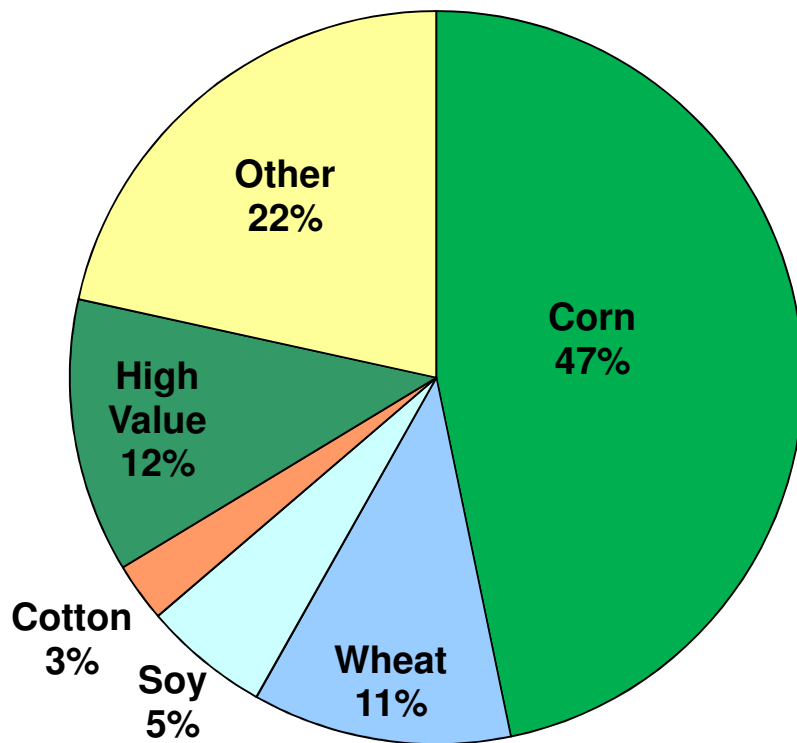
## CBOT

ZC - Corn (CBOT) - Monthly OHLC Chart

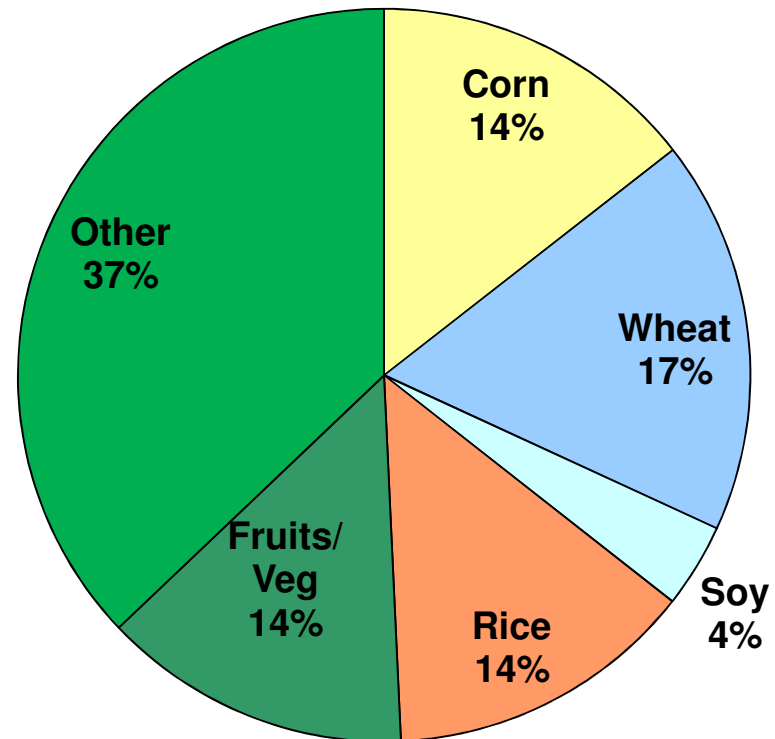


# ***U.S. Demand Driven by Corn*** ***(% of Total NPK Demand)***

## ***United States***



## ***World***



Source: IFA, NPKFAS

## 2011 Crop Budgets Clearly Favor Corn

(\$/Acre)

	Corn	Soybeans	Wheat
<b>Revenue</b>			
Yield (bu/acre)	162.0	43.5	44.5
Avg. Season Price	\$5.00	\$11.00	\$5.35
Crop Revenue (per acre)	\$810	\$480	\$240
<b>Total Revenue</b>	<b>\$810</b>	<b>\$480</b>	<b>\$240</b>
<b>Variable Costs / Acre</b>			
Fertilizers	\$125	\$22	\$58
Crop Protection Chemicals	\$28	\$18	\$11
Seed Costs	\$82	\$56	\$16
Other (Interest, Insurance, Etc.)	\$65	\$44	\$45
<b>Total Variable Costs</b>	<b>\$300</b>	<b>\$140</b>	<b>\$130</b>
<b>Return Over Variable Cost</b>	<b>\$510</b>	<b>\$340</b>	<b>\$110</b>

## ***U.S. Corn Acreage Expected to Climb to Highest Level Since 2007***

(Million Acres)	2007	2008	2009	2010	2011	Change 2010-11
Corn	93.5	86.0	86.4	88.2	92.0	3.8
Soybean	64.7	75.7	77.5	77.4	77.0	-0.4
Wheat	60.5	63.2	59.2	53.6	56.0	2.4
Cotton	10.8	9.5	9.2	11.0	12.5	1.5
<b>4 Major</b>	<b>229.6</b>	<b>234.4</b>	<b>232.3</b>	<b>230.2</b>	<b>237.5</b>	<b>7.3</b>
Sorghum	7.7	8.3	6.6	5.4	5.7	0.3
Oats	3.8	3.2	3.4	3.1	3.3	0.2
Barley	4.0	4.2	3.6	2.9	3.1	0.2
Rice	2.8	3.0	3.1	3.6	3.3	-0.3
<b>8 Major</b>	<b>247.8</b>	<b>253.1</b>	<b>249.0</b>	<b>245.5</b>	<b>252.9</b>	<b>7.4</b>
<b>Total Principal</b>	<b>320.4</b>	<b>324.9</b>	<b>319.6</b>	<b>321.2</b>	<b>327.5</b>	<b>6.3</b>

Source: USDA, NPKFAS

# ***Strong Farm Sector Financials***

***(\$Billion)***

	2007	2008	2009	2010	2011	% Change 2011/10
<b>Gross farm income</b>	<b>318</b>	<b>352</b>	<b>318</b>	<b>346</b>	<b>373</b>	<b>7.8</b>
Crops	150	177	164	171	195	14.1
Livestock and products	138	142	120	141	146	3.0
Government payments	12	12	12	12	11	-12.7
Other	18	21	22	21	21	0.6
<b>Cash Expenses</b>	<b>249</b>	<b>271</b>	<b>254</b>	<b>261</b>	<b>283</b>	<b>8.2</b>
Purchased inputs	184	203	190	195	212	8.4
Feed purchased	42	47	45	45	50	10.1
Seed purchased	13	15	16	15	16	5.3
Fertilizer and lime	18	23	20	18	21	14.4
Pesticides	11	12	12	11	12	7.2
Fuel and oil	14	16	13	16	18	16.0
Electricity	4	5	5	5	5	3.3
Other purchased inputs	65	68	64	66	71	7.8
<b>NET CASH INCOME</b>	<b>78</b>	<b>90</b>	<b>69</b>	<b>91</b>	<b>99</b>	<b>8.0</b>

***“Highest on record.”***

## ***Fertilizer Demand Outlook –*** ***(000 Nutrient Tons)***

<b>Fert Year</b>	<b>N</b>	<b>P</b>	<b>K</b>	<b>Total</b>
<b>2007</b>	<b>13,194</b>	<b>4,572</b>	<b>5,133</b>	<b>22,899</b>
<b>2008</b>	<b>12,561</b>	<b>4,247</b>	<b>4,660</b>	<b>21,468</b>
<b>2009</b>	<b>11,434</b>	<b>3,192</b>	<b>3,090</b>	<b>17,716</b>
<b>2010</b>	<b>12,603</b>	<b>4,216</b>	<b>4,332</b>	<b>21,151</b>
<b>2011</b>	<b>13,164</b>	<b>4,582</b>	<b>4,781</b>	<b>22,527</b>
<b>2010-2011 Change</b>				
<b>Percent</b>	<b>4.5%</b>	<b>8.7%</b>	<b>10.4%</b>	<b>6.5%</b>

◆ Source: AAPFCO, NPKFAS

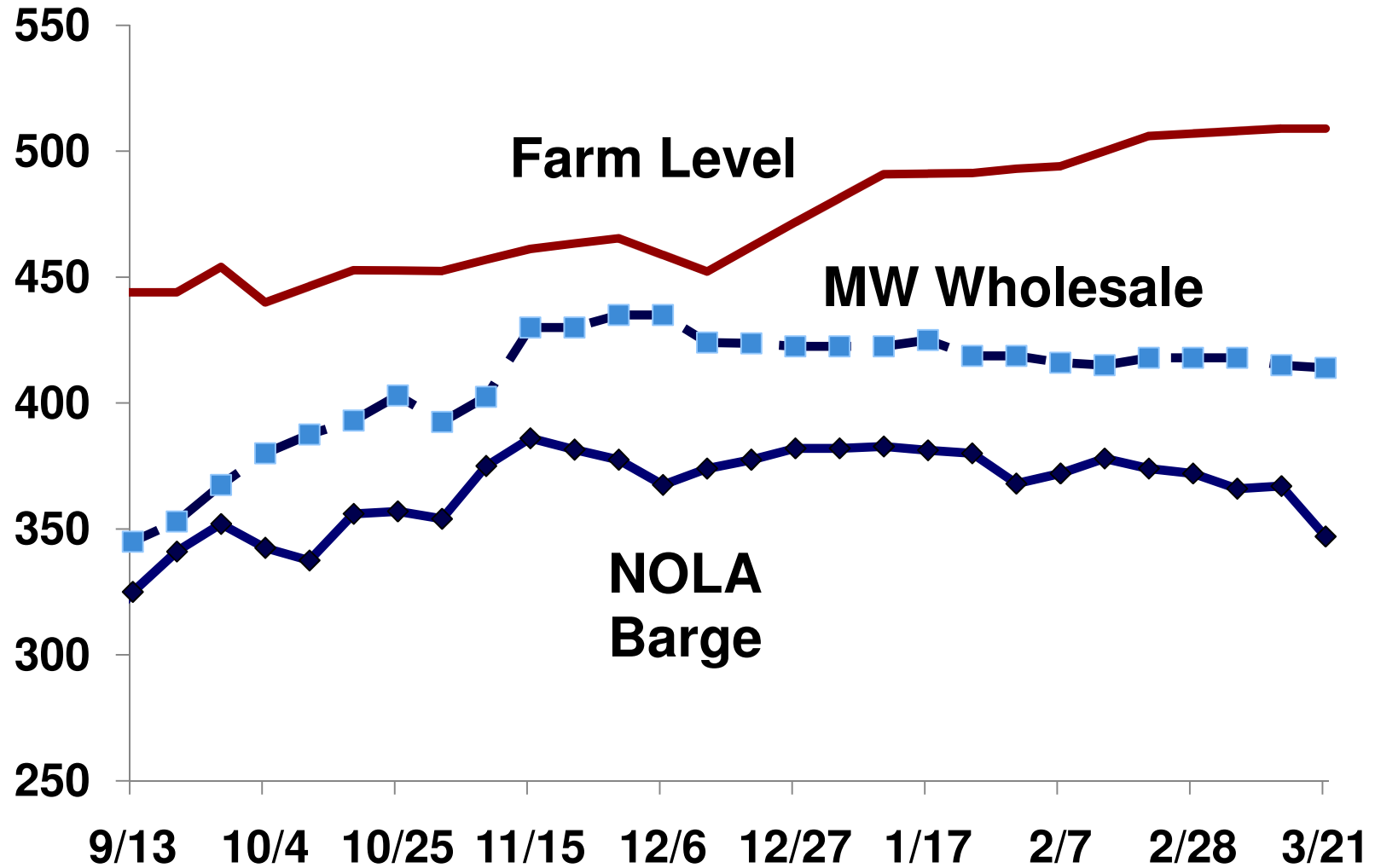


# ***Urea***

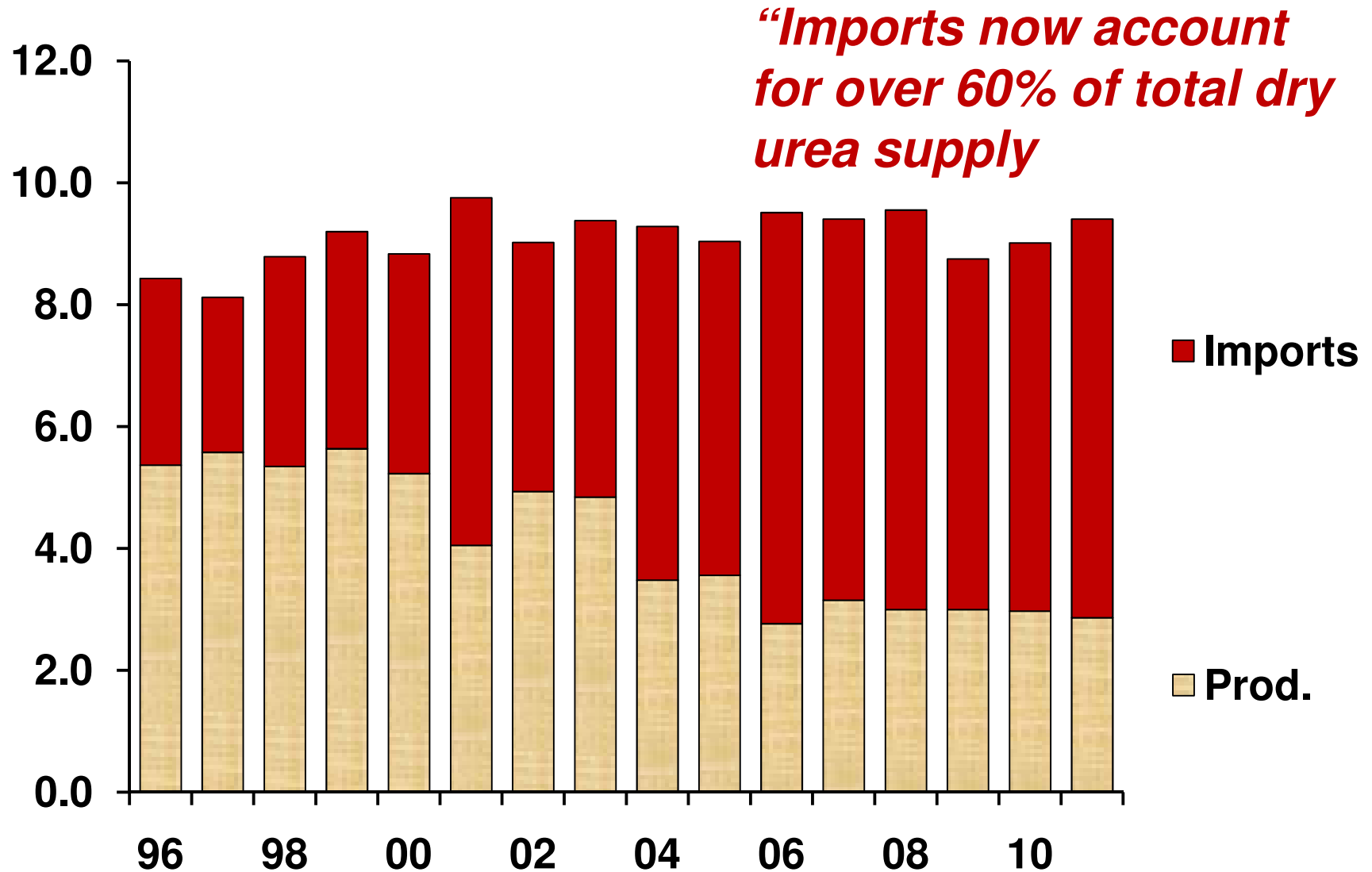
## ***Situation & Outlook***

# U.S. Urea Prices

(\$/ton FOB)

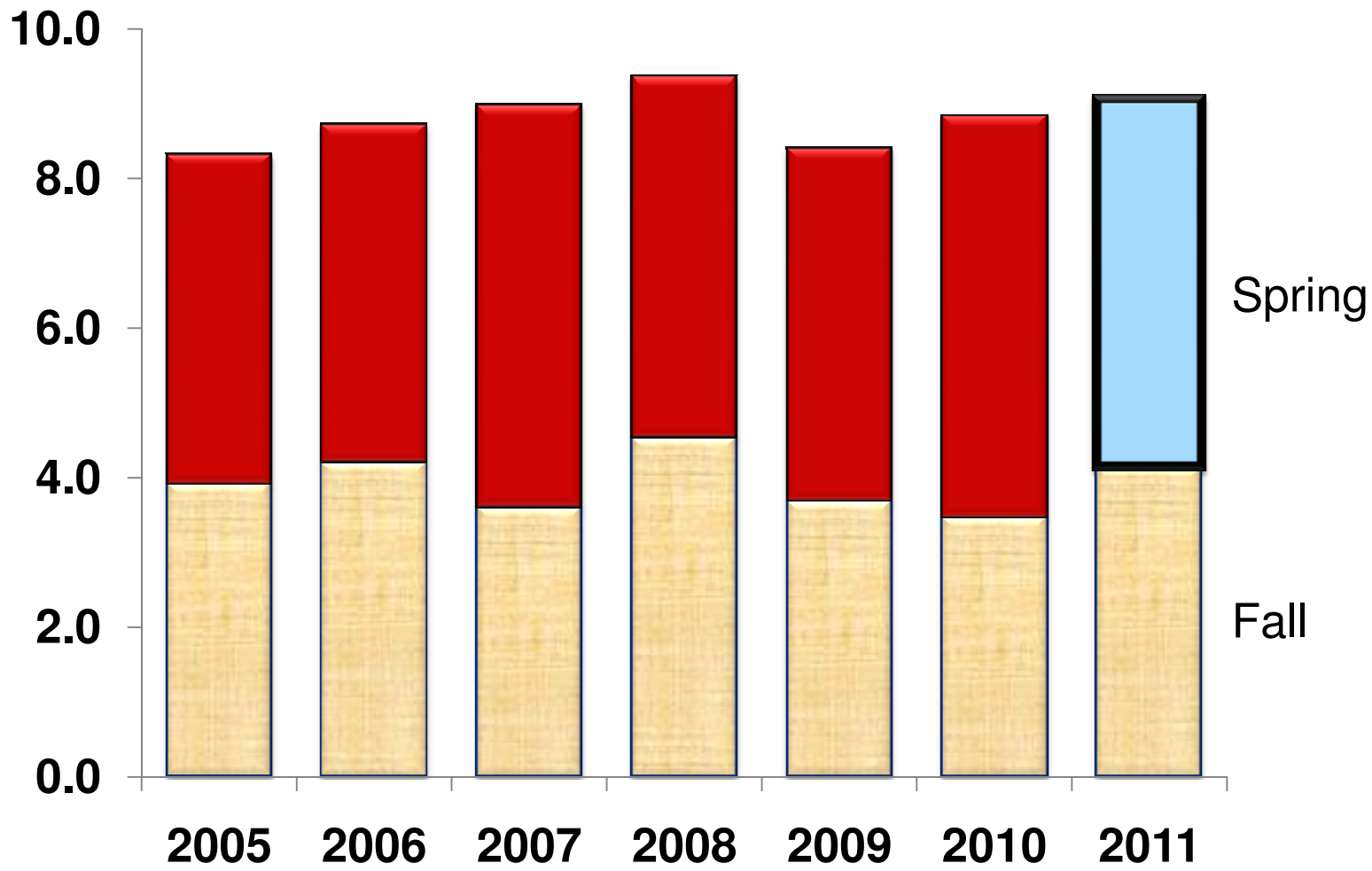


# U.S. Dry Urea Supply (MM Tons)



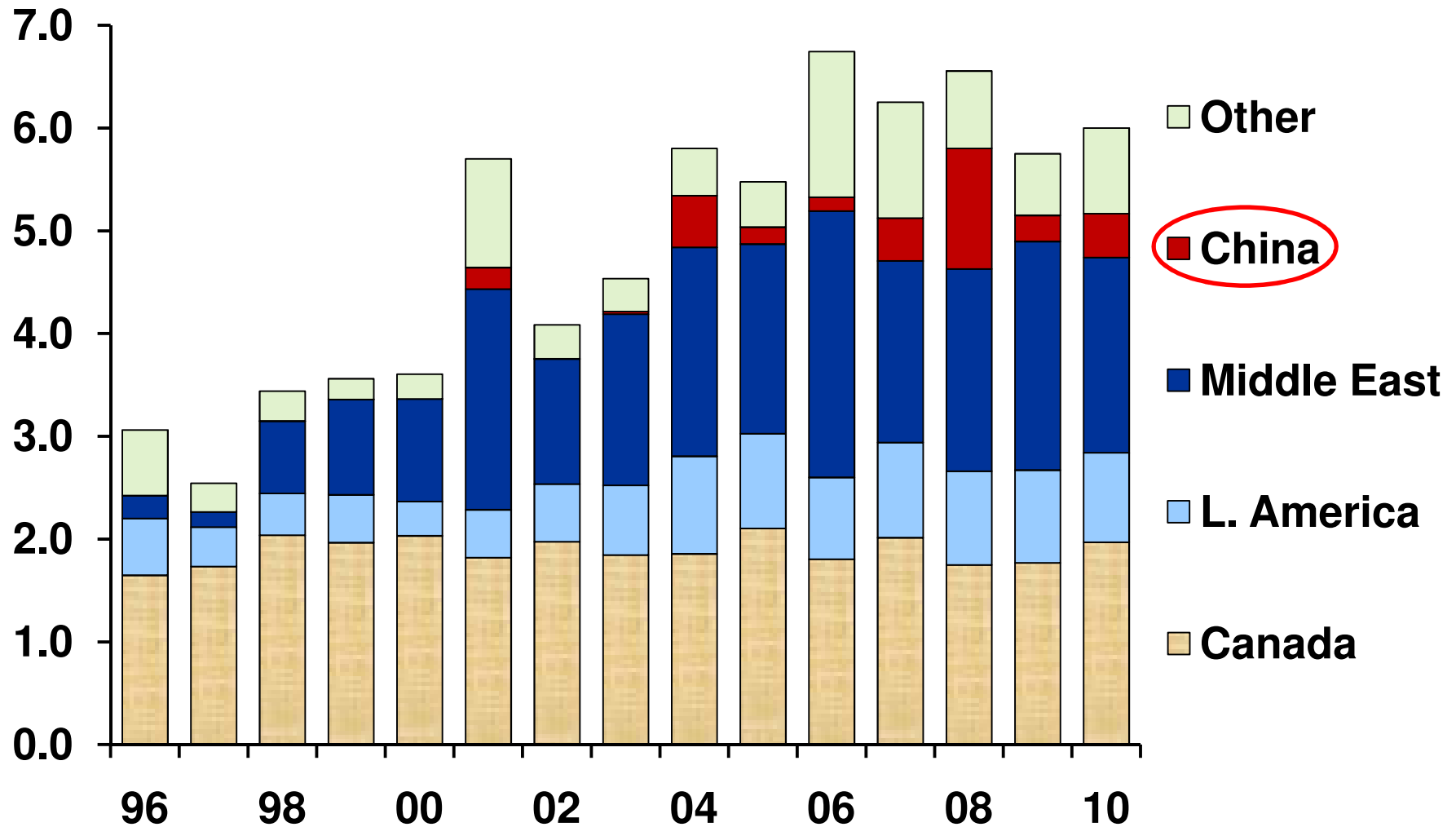
◆ Source: TFI, DOC, NPKFAS

# U.S. Dry Urea Shipments (MM Tons)



◆ Source: TFI, DOC, NPKFAS

# U.S. Dry Urea Imports (MM Tons)



◆ Source: TFI, DOC, NPKFAS

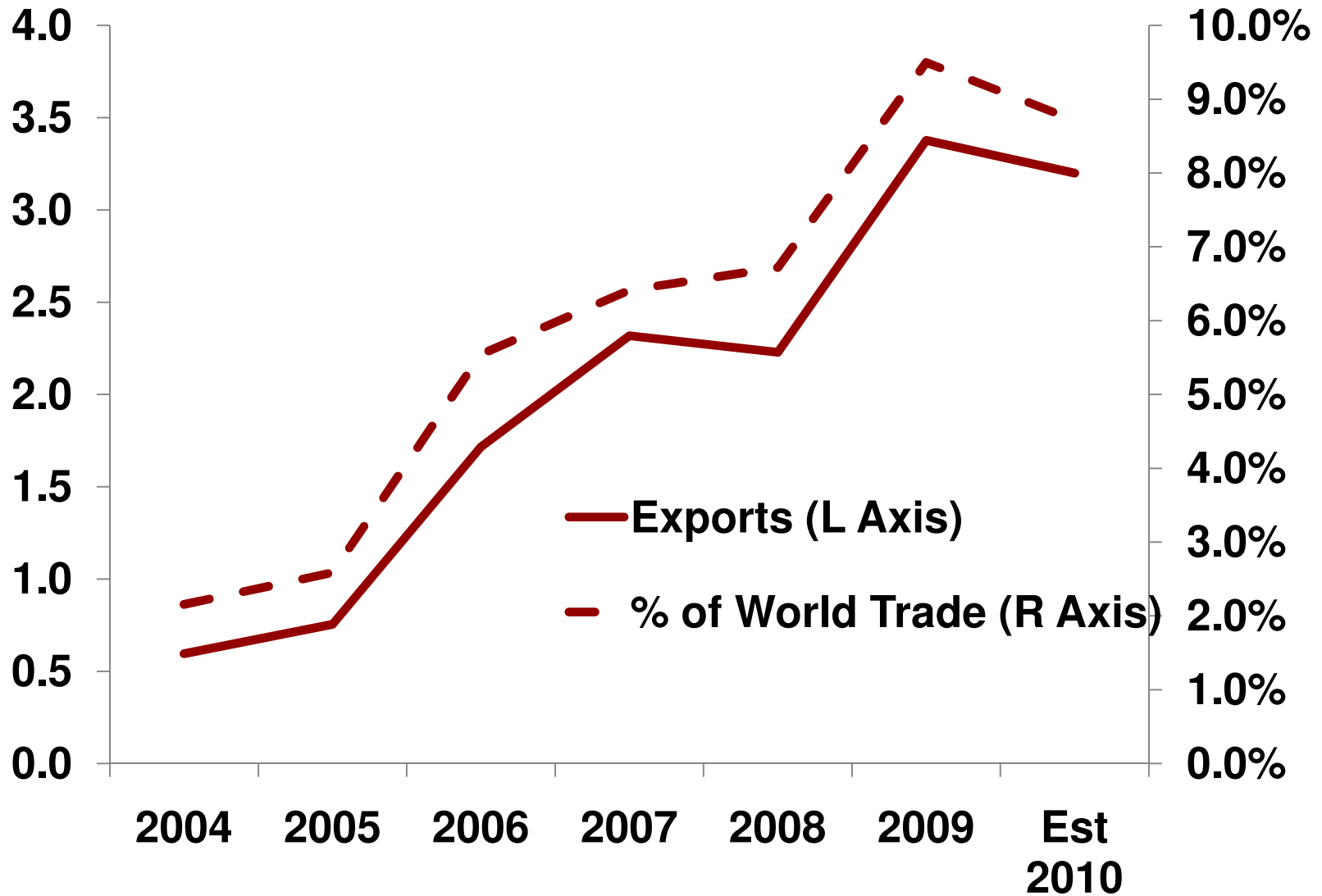
# China Urea Export Tax

J	F	M	A	M	J	J	A	S	O	N	D
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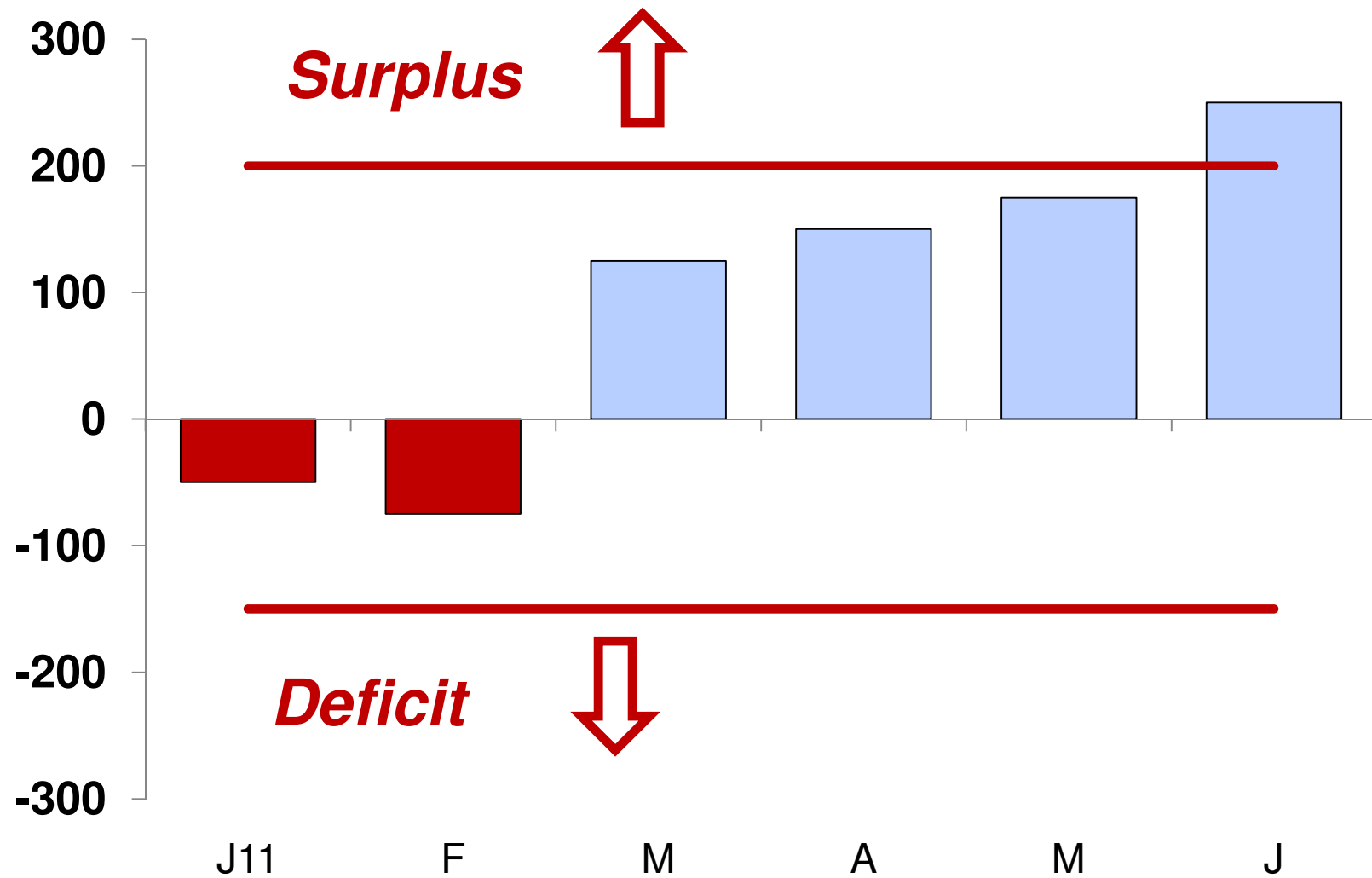
2011	110%					10%				110%	
2010	7%	110%				7%		110%	7%	110%	
2009		110%				10%		110%	7%		
2008	35%			135%			185%	175%		10%	

Off Season
Peak-Season

# ***Egyptian Urea Exports*** ***(MM Tonnes)***

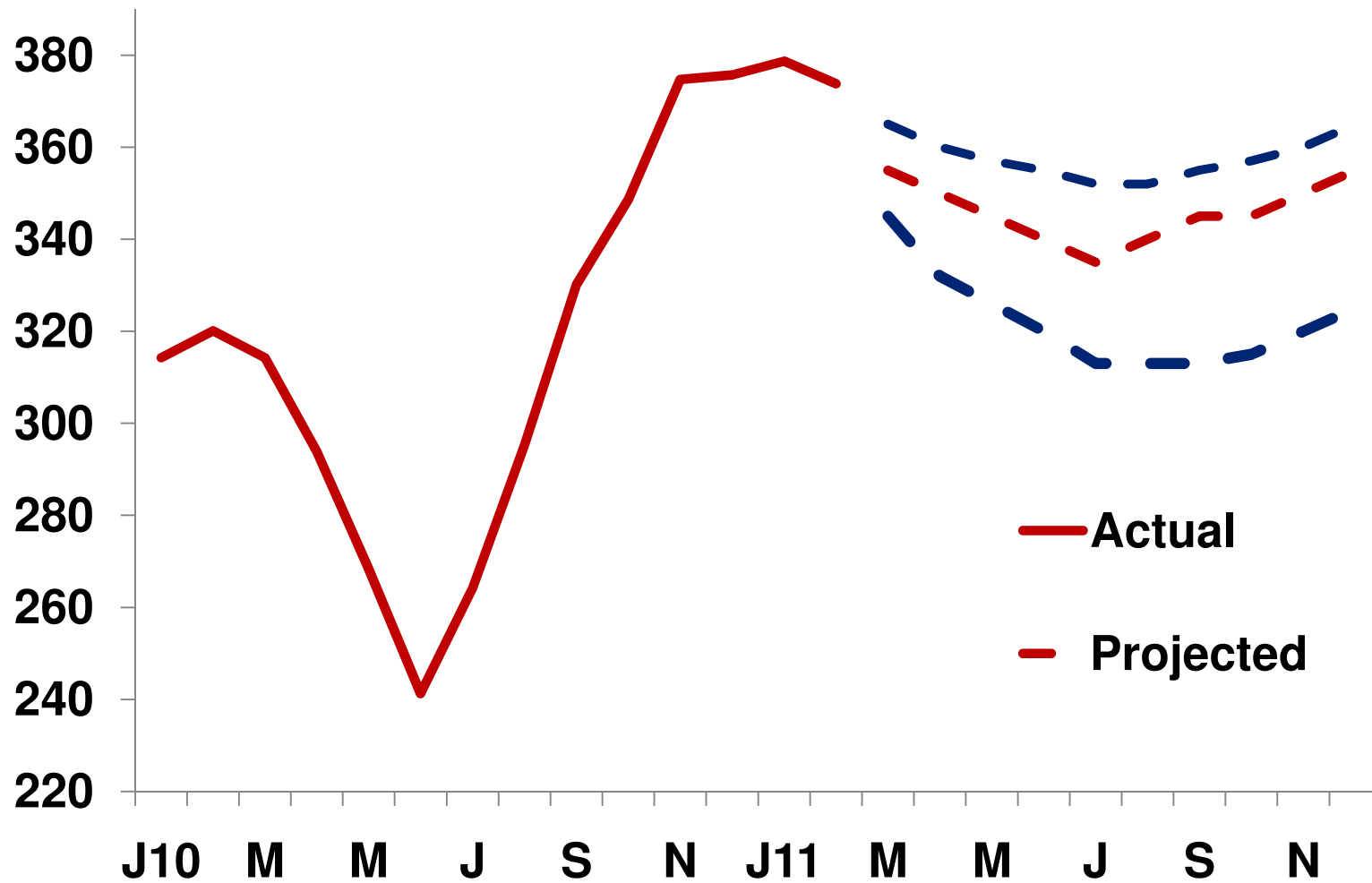


## World Urea Trade Balance (000 Tonnes)



# U.S. Gulf Urea Price Forecast

(FOB Gulf Barge - \$/Ton)



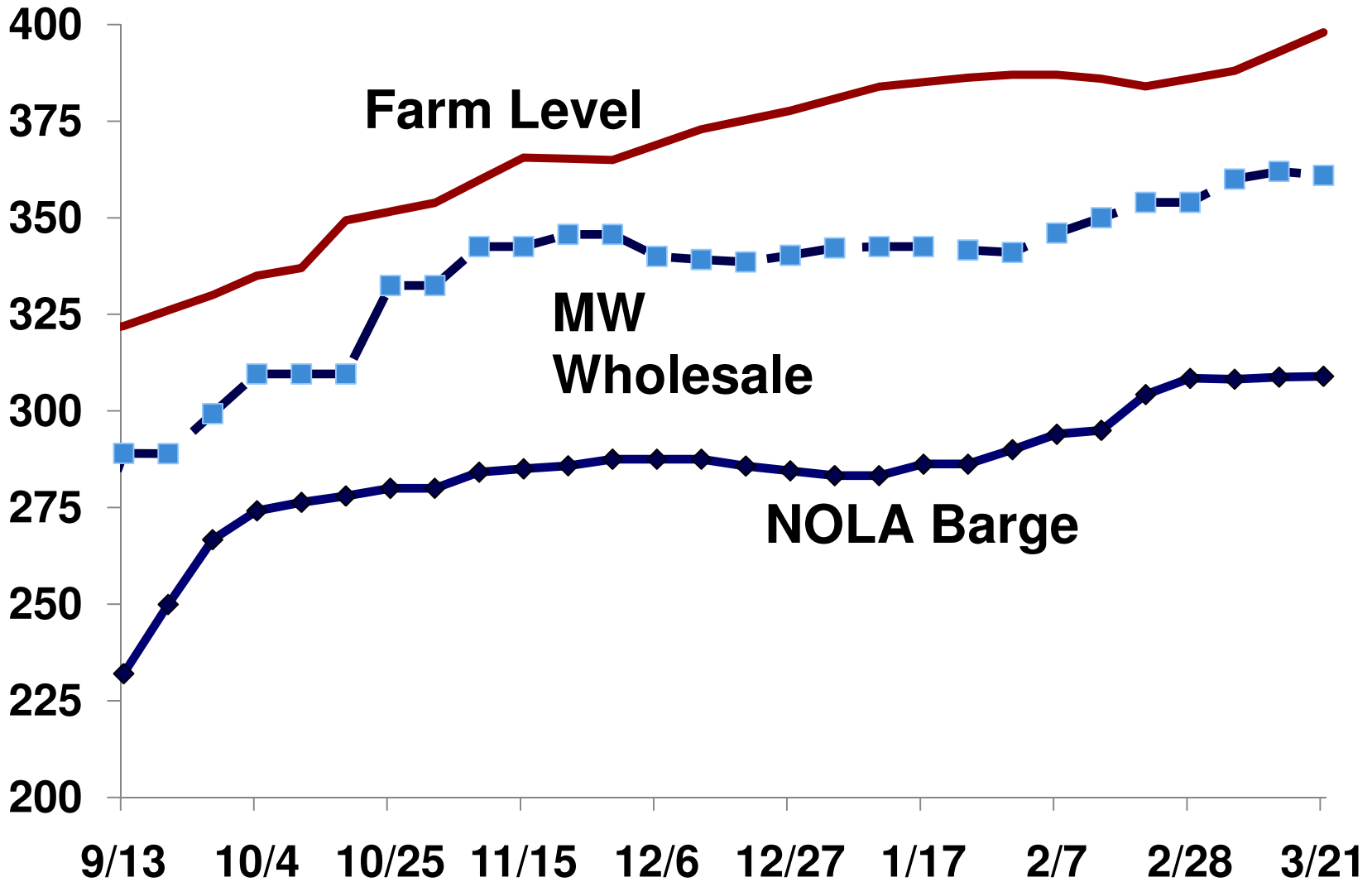


# ***UAN***

## ***Situation & Outlook***

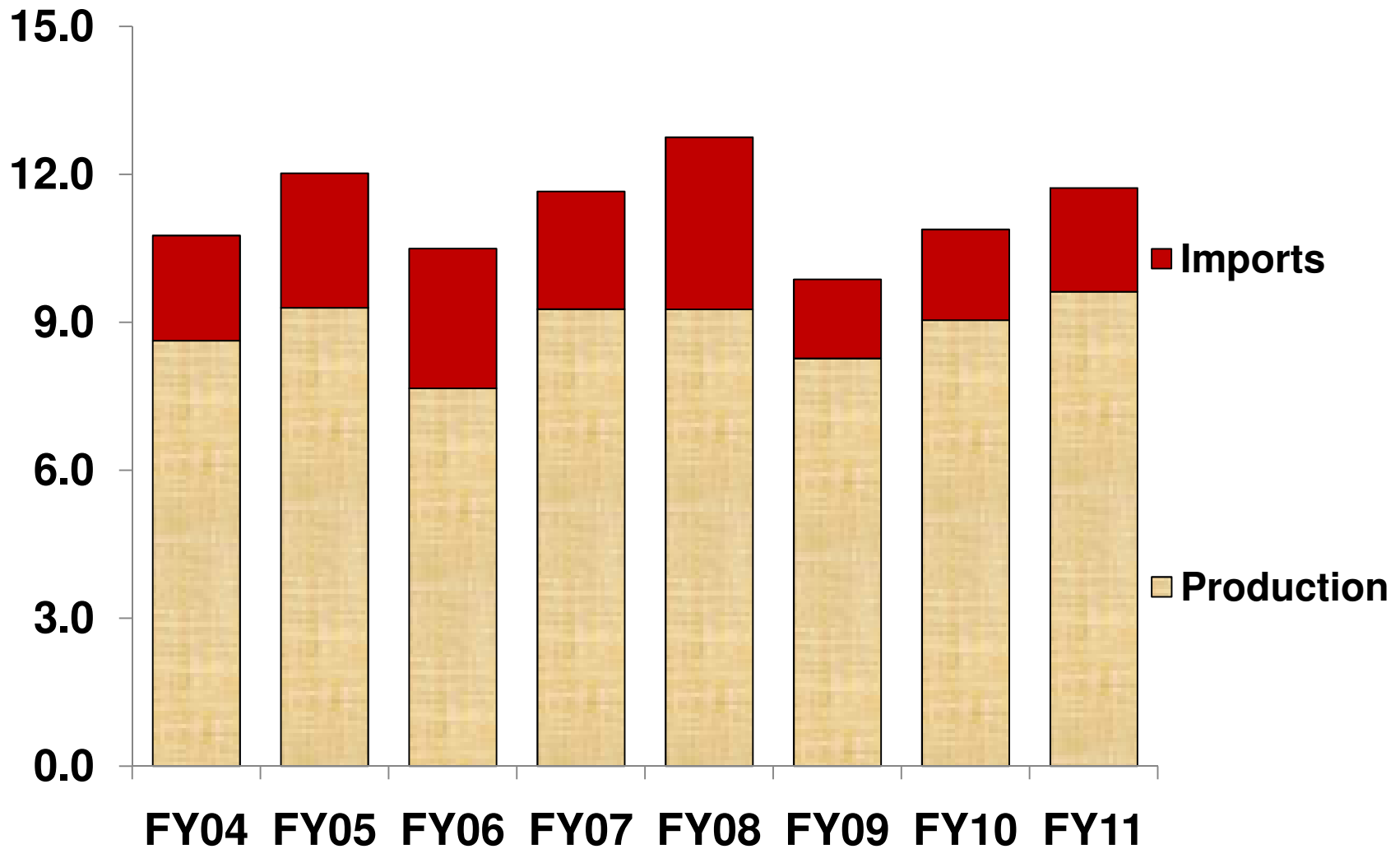
# U.S. UAN 32% Prices

(\$/ton FOB)



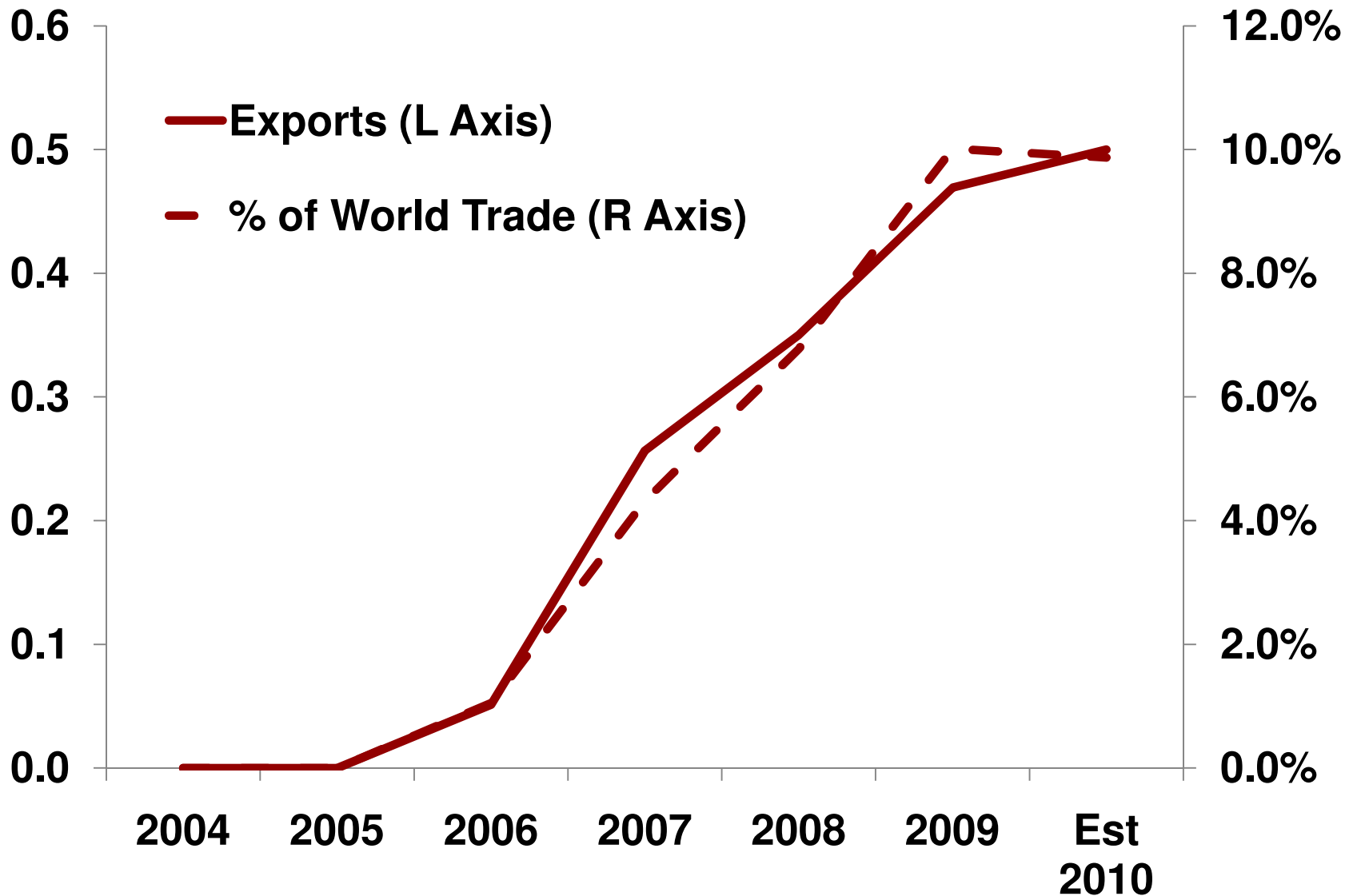
# U.S. UAN Supply

(MM Tons – 32%)



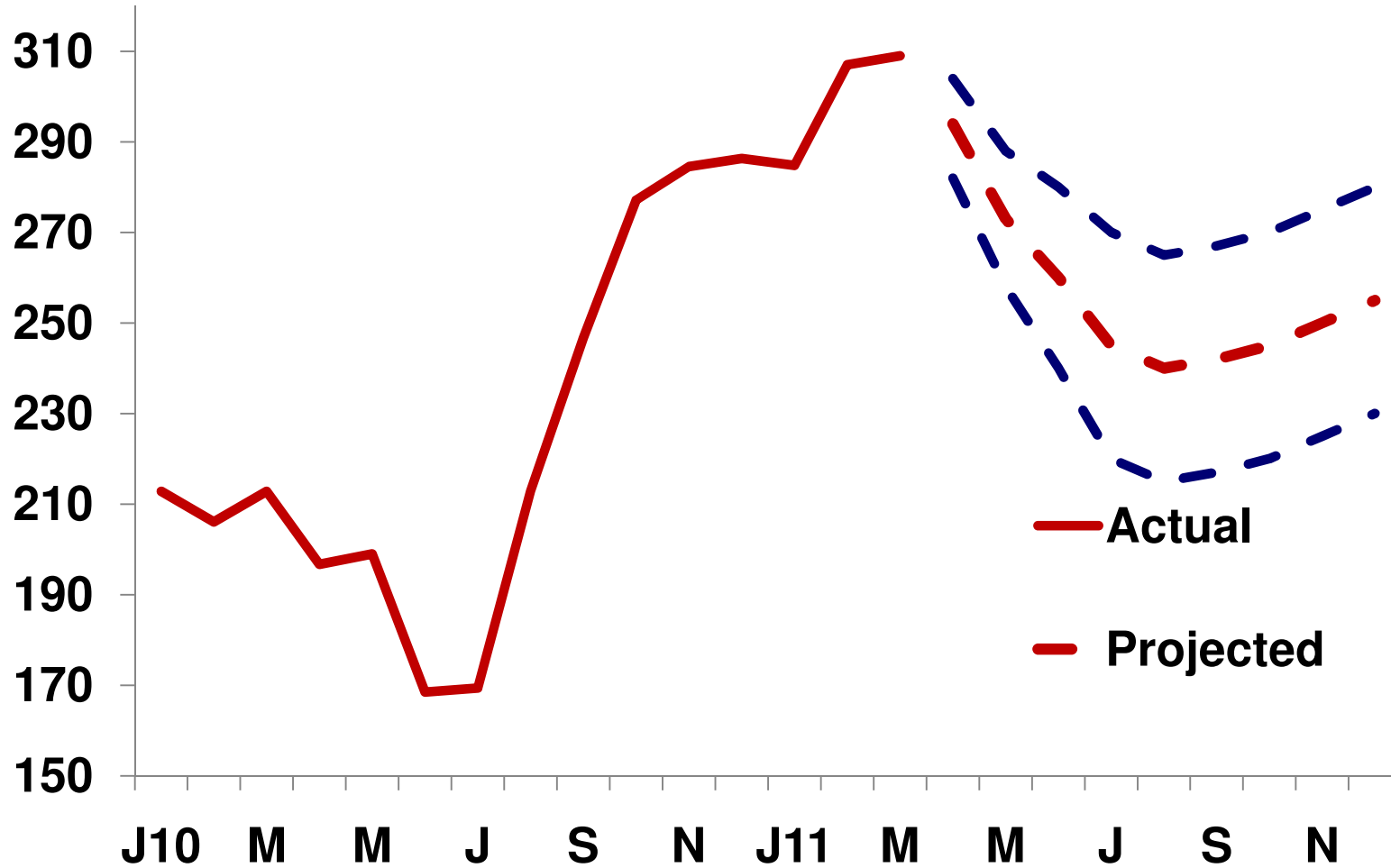
◆ Source: TFI, DOC, NPKFAS

## ***Egyptian UAN 32% Exports*** ***(MM Tonnes)***



# U.S. Gulf UAN 32%

(Barge Price \$/Ton)

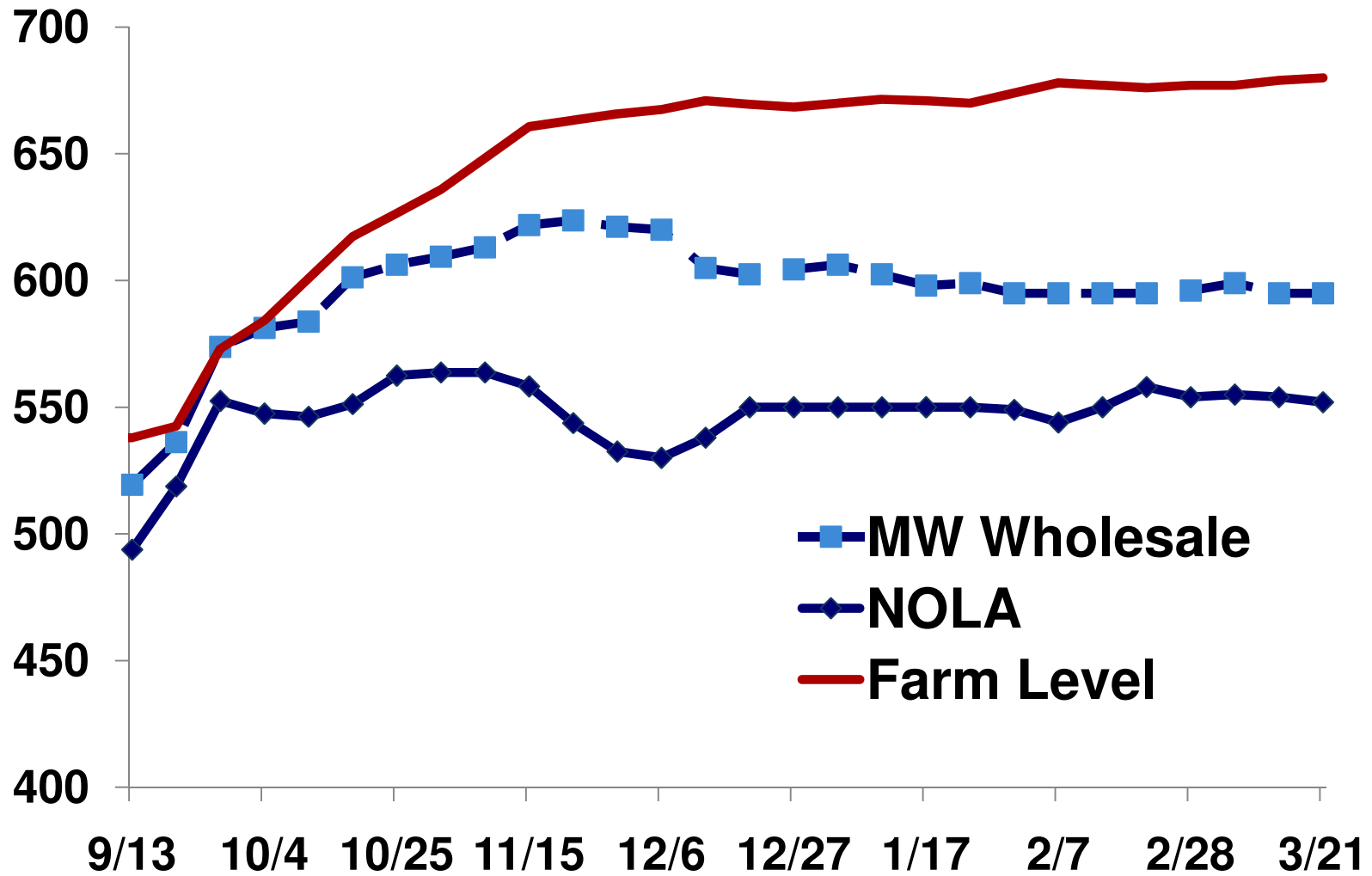




***DAP***  
***Situation & Outlook***

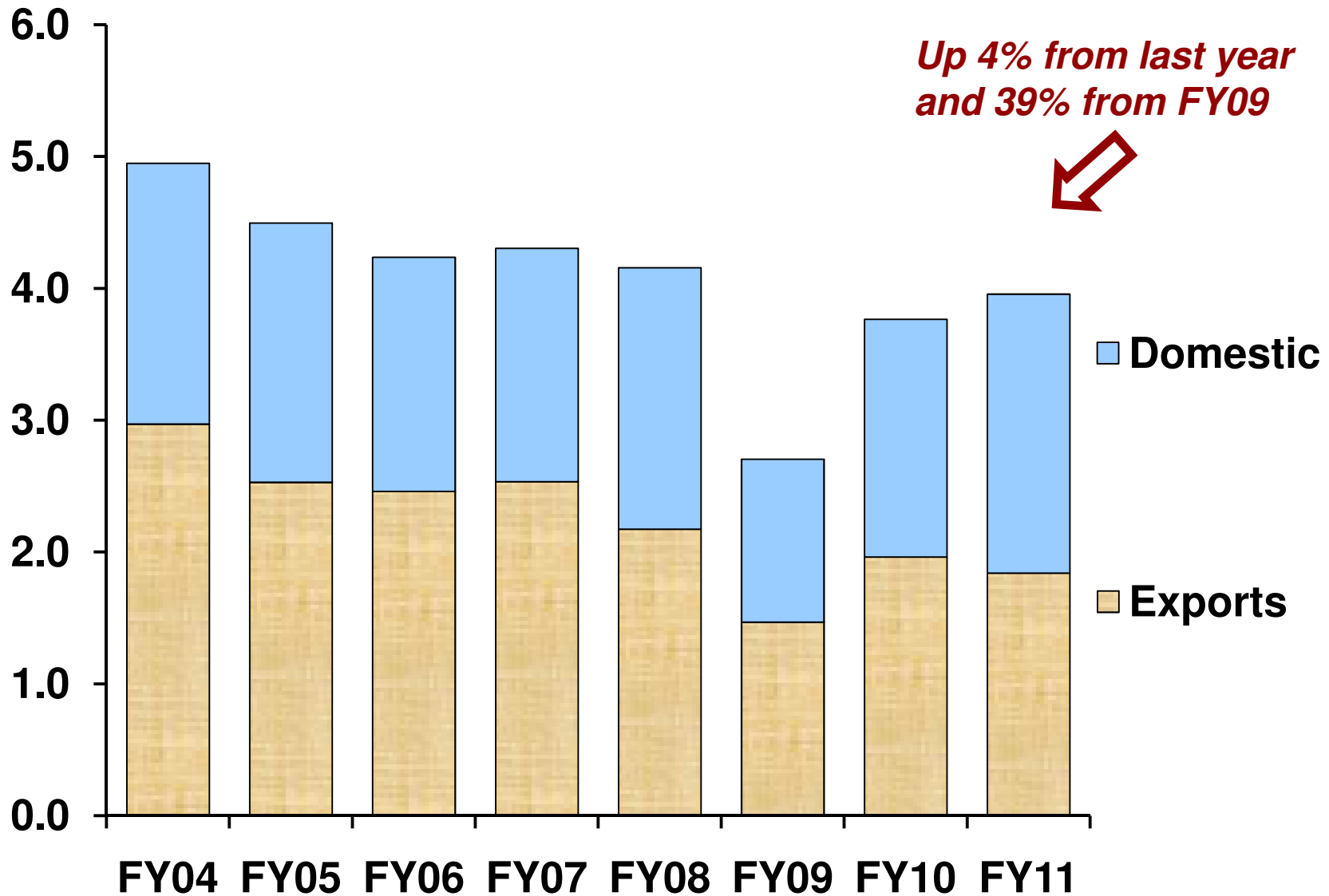
# U.S. DAP Prices

(\$/ton FOB)

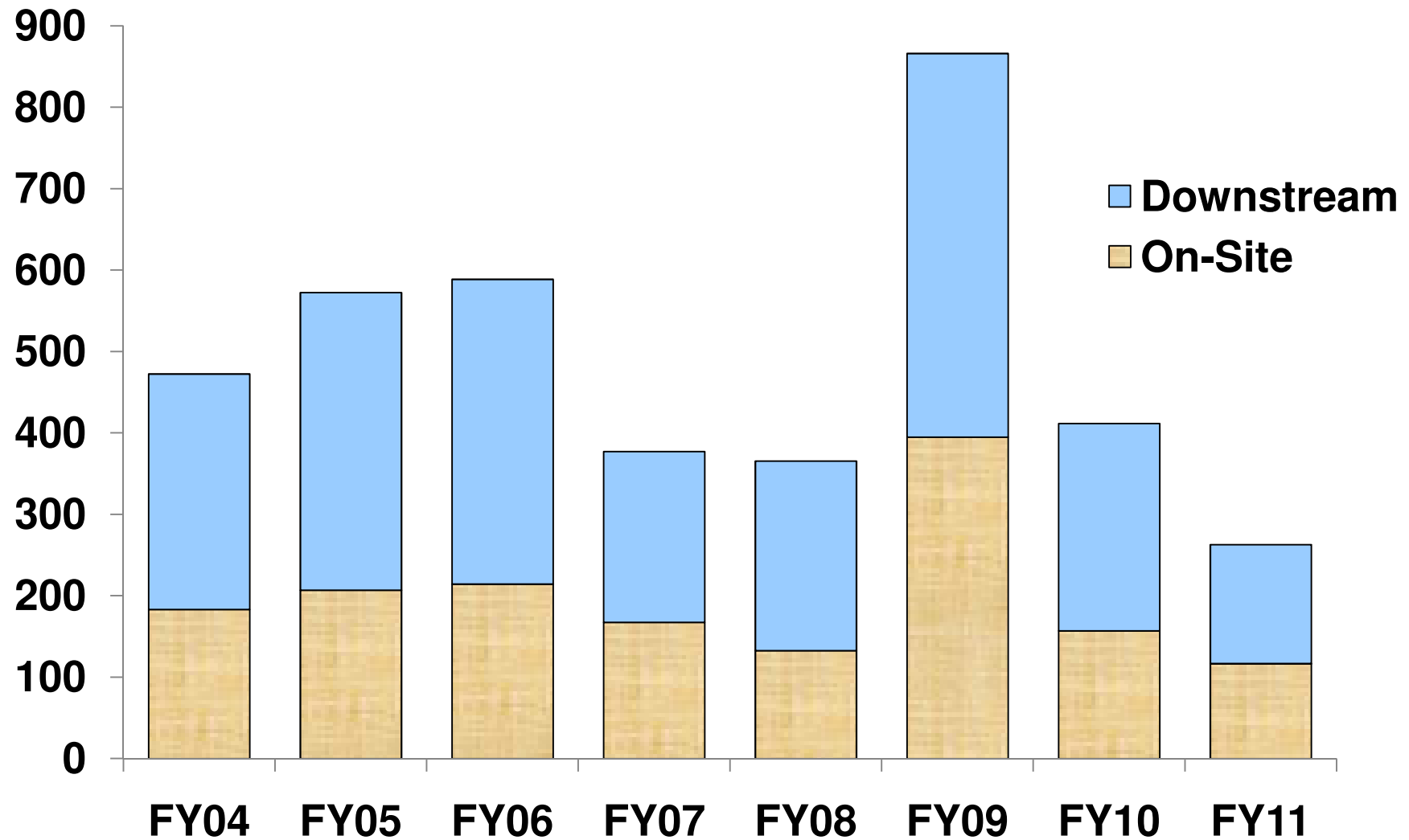


# U.S. DAP/MAP YTD Shipments

(MM Tons P2O5 – July-January)



## ***U.S. DAP/MAP Producer Inventory – End of November (000 tons P2O5)***

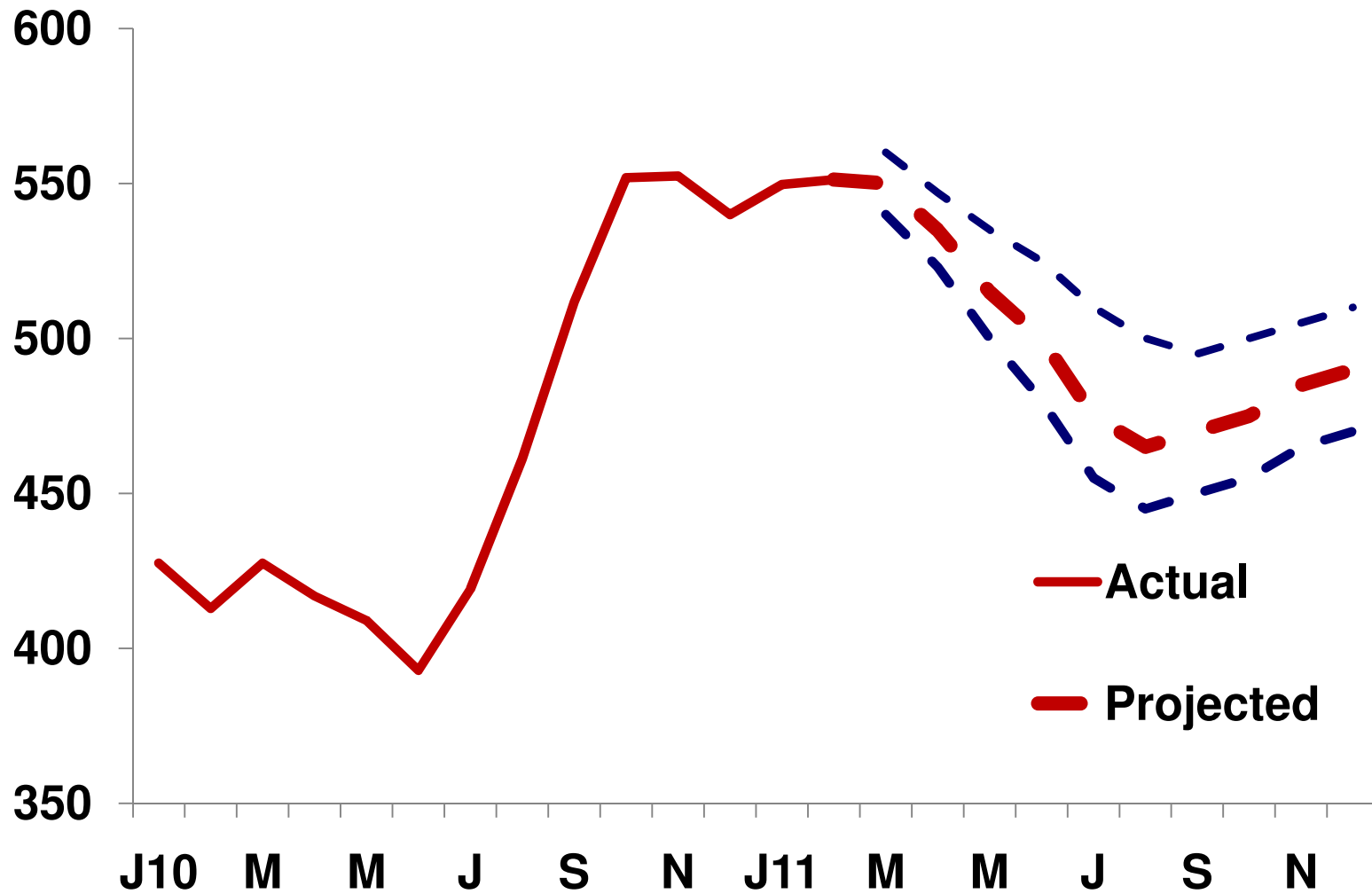


## Tunisian DAP Exports (000 Tonnes)



# U.S. DAP Price Forecast

(FOB Gulf Barge - \$/Ton)



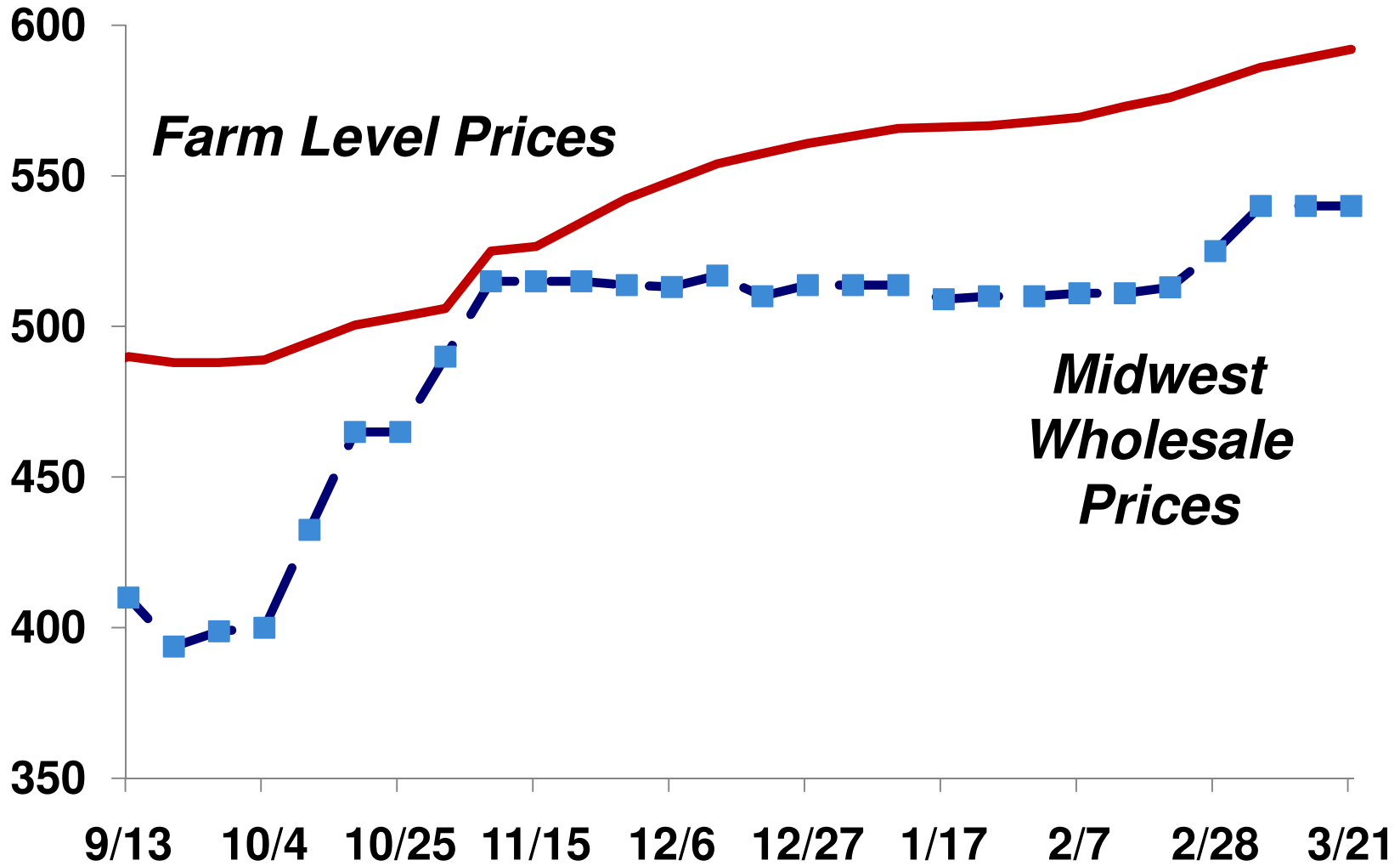


# ***Potash***

## ***Situation & Outlook***

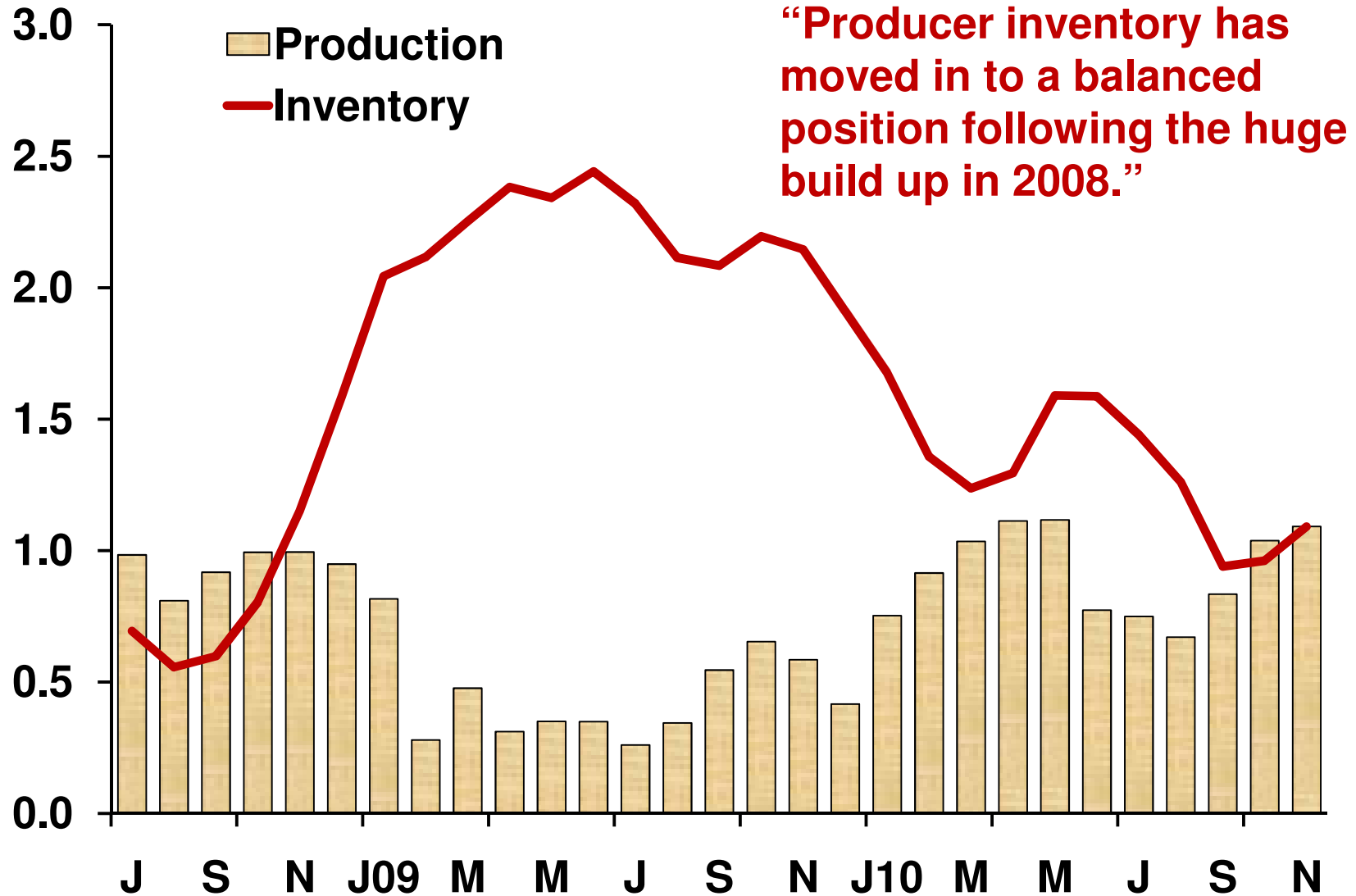
# Midwest Potash Prices

(\$/ton)

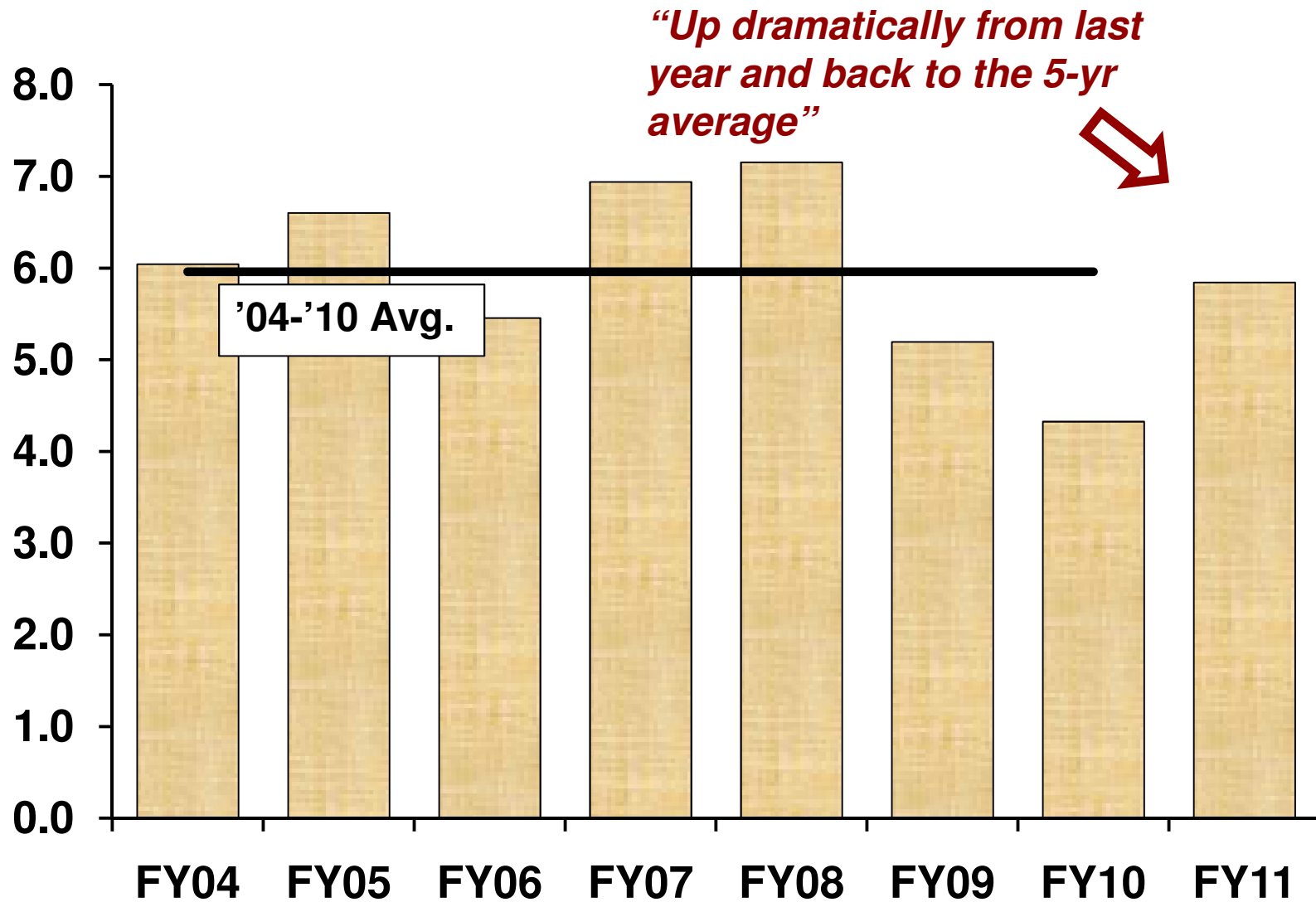


# N.A. Potash Production & Inventory

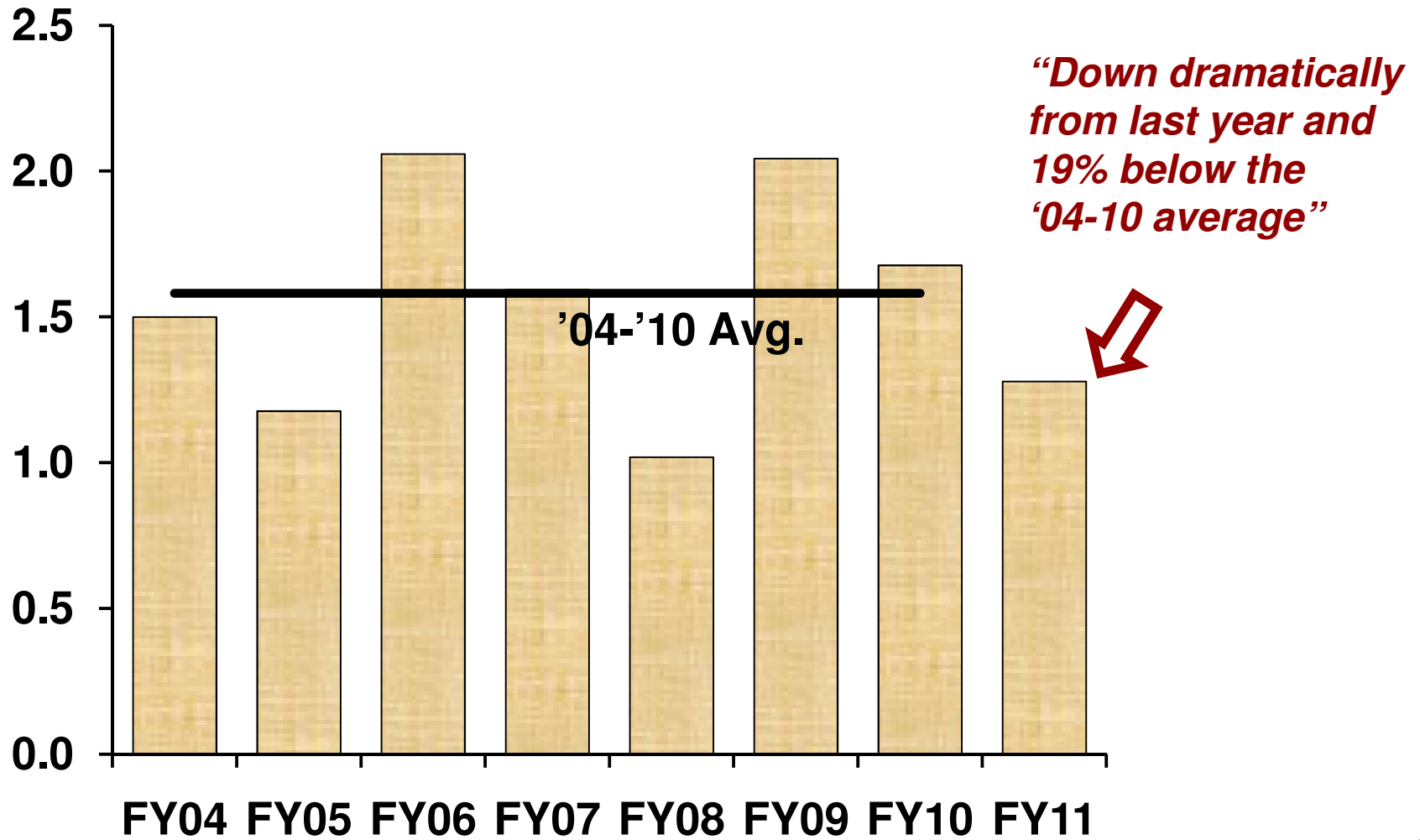
(MM Tons)



# ***N.A. Potash YTD Producer Shipments*** ***July-January (MM Tons)***

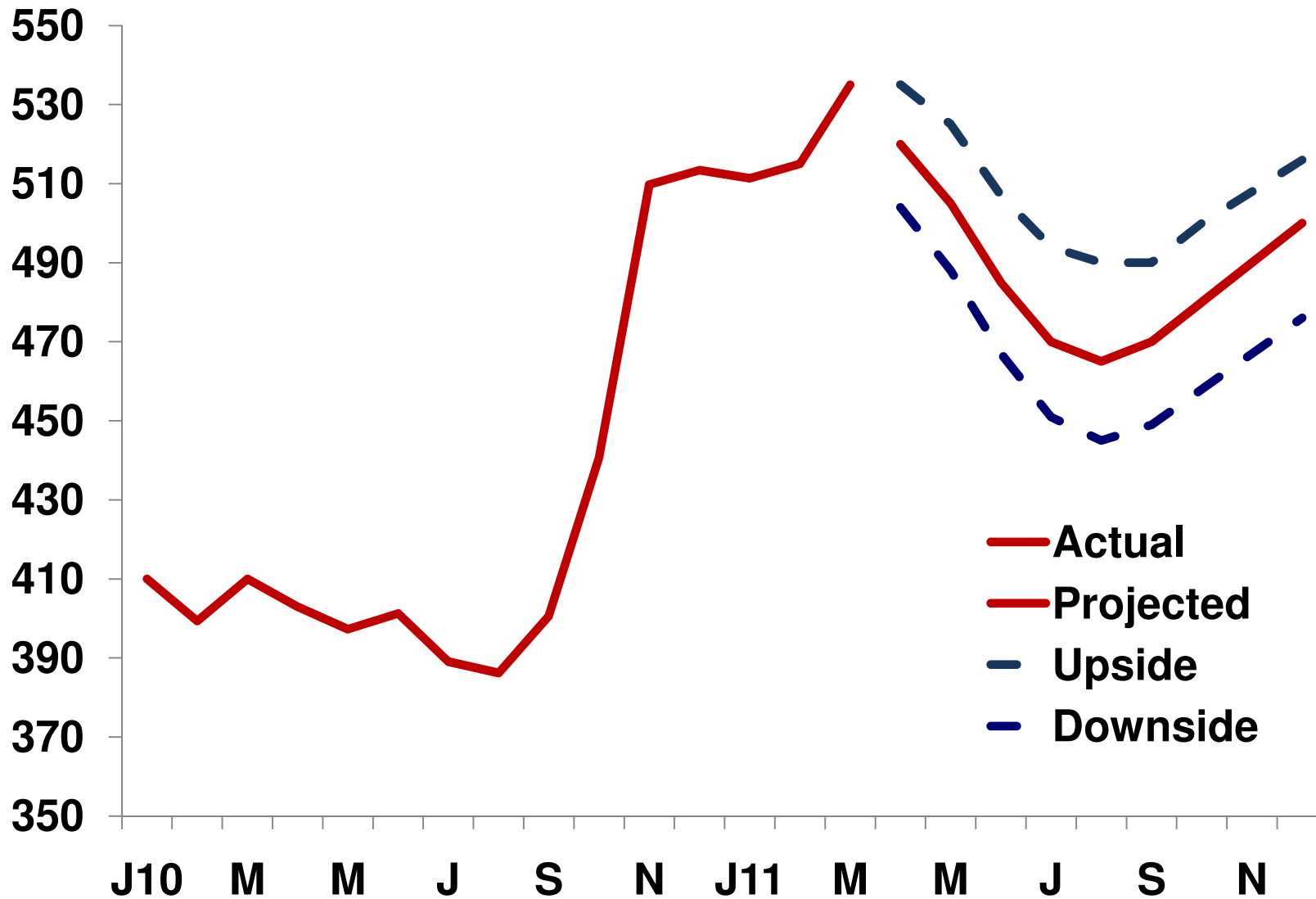


# ***N.A. Potash Producer Inventory*** ***End of January (MM Tons)***



# U.S. Potash Price Forecast

(Midwest Wholesale - \$/Ton)



## **Market Price Outlook**

Product	Week Beginning:				End of Month Projections				Q3	Q4
	2/28	3/7	3/14	3/21	Mar	Apr	May	Jun		
<b>Ammonia</b>										
Midwest Dlr.	669	667	667	666	665	655	645	625	587	600
Midwest Farm	786	788	790	793	790	755	740	700	642	665
<b>Granular Urea</b>										
Gulf Barge	372	366	367	347	355	350	345	340	340	350
Midwest Dlr.	418	418	415	414	415	393	386	377	372	387
Midwest Farm	507	508	509	509	509	451	436	427	419	436
<b>UAN 32%</b>										
Gulf Barge	308	308	309	309	305	294	273	260	246	250
Midwest Dlr.	354	360	362	361	361	344	321	305	283	288
Midwest Farm	386	388	393	398	393	389	371	350	320	326
<b>DAP/MAP</b>										
Gulf Barge	554	555	554	552	554	535	515	500	470	483
Midwest Dlr.	596	599	595	595	596	595	577	560	518	541
Midwest Farm	677	677	679	680	679	655	632	610	568	591
<b>Potash</b>										
Midwest Dlr.	525	540	540	540	540	520	505	485	468	490
Midwest Farm	581	586	589	592	589	565	550	525	509	539

**Note: Prices are based on midpoints for the particular markets and can vary widely from location to location. As a result, the quoted prices should be used either as an index and/or used in conjunction with an estimated/established basis for an individual product and location.**

## ***Some Final Observations***

- ◆ **Higher crop Prices are here to stay**
  - **Especially for corn and soybeans**
- ◆ **World grain demand will continue to rise, pushing world production higher and supporting prices.**
- ◆ **Total world crop area and yield will increase to keep pace with demand growth but growth will mostly come from Brazil, but also in Argentina and Africa.**
- ◆ **There will be a continuing battle for acreage based on demand growth and returns to the farmer.**

## ***Implications for Major Producers***

- ◆ **Higher fertilizer demand should lead to relatively strong prices and margins compared to historical levels.**
- ◆ **However, foreign nitrogen producers will have to compete with cheap natural gas in U.S., favoring U.S. producers such as CF and PotashCorp.**
- ◆ **World phosphate markets will have to absorb new Saudi plant bringing 10% more phosphate on line this year pressuring CF, Mosaic and PotashCorp.**
- ◆ **Potash production could increase sharply if BHP and others bring on planned new production, causing prices to fall from current levels, impacting PotashCorp, Mosaic and Agrium.**