

PLANNING FOR SHIFTING TRADE

PANEL: New Challenges in Trade Policy

Scott Sigman, Transportation and Export Infrastructure Lead

Illinois Soybean Association

January 30, 2019

A Case Study: New Challenges in Trade Policy

- Overview of the Illinois Soybean Association (ISA)
- Present global change is dynamic
- Commodity Economics: Drivers of supply decisions and demand pulls
 - Importance of scale;
 - Changes in direction; and,
 - Market segmentation.



Illinois Soybean Association (ISA)

Vision: The Illinois Soybean Association strives to enable Illinois *soybean producers* to be the most knowledgeable, sustainable and profitable in the global marketplace.

Mission: To ensure Illinois soy is the highest quality, most dependable, sustainable and competitive in the global marketplace.

GOALS: To achieve maximum profitability and global competitive positioning for soy from Illinois.

- Utilize 600 million bushels of Illinois soybeans by 2020.
- Produce the highest quality soybean, soybean oil and soybean meal products.
- Implement best management practices to maximize profitability.
- Increase soybean production in a sustainable manner to meet global market needs.



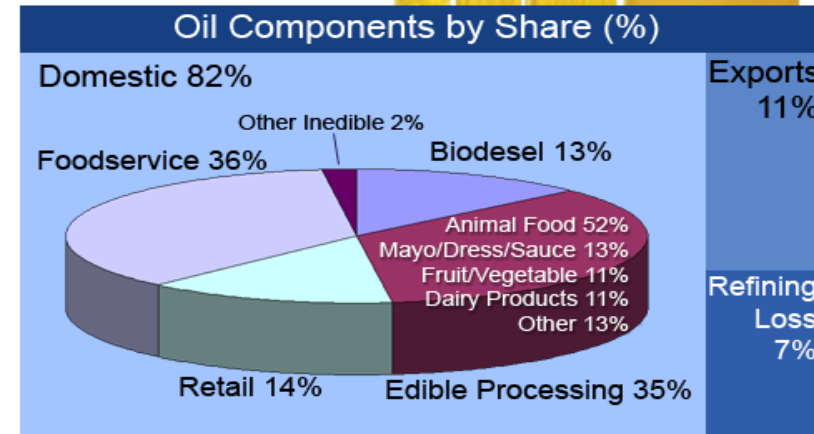
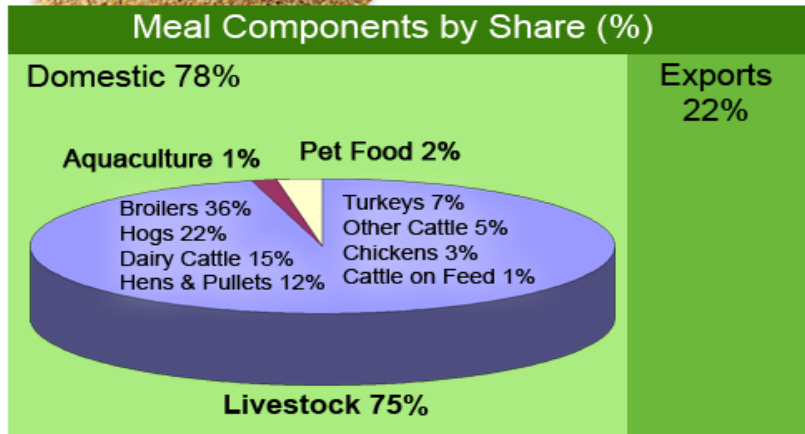
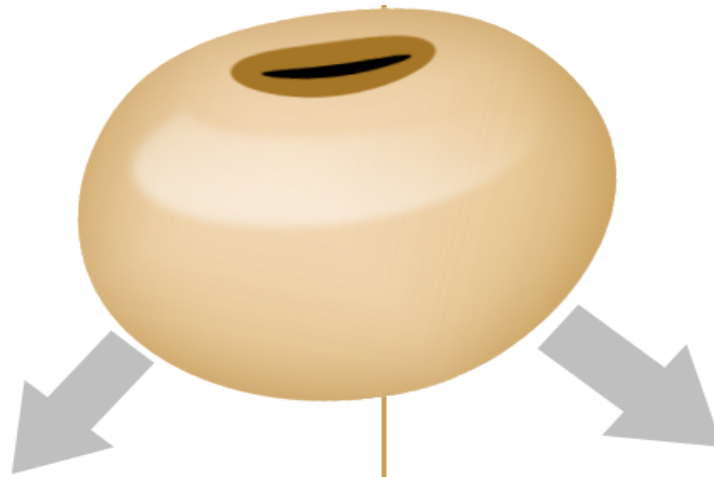
Soybean Price Components

61%

Meal Share of Soybean Price

39%

Oil Share of Soybean Price



The soybean value or price is for Central Illinois
 The individual components for meal or oil are related to national volume consumption patterns
 Livestock components based on distribution of Protein Animal Consuming Units as a proxy of soybean meal (represents > 85% of all meal consumed in the US)
 Hens and Pullets are used for eggs
 Chickens are breeding stock
 Other Cattle include non-feedlot, bulls, cows, heifers and steers

Changing Markets and Changing Trade Policy

- **U.S. Economic Expansion**
 - Appears to be slowing after 114-months, remaining on trajectory.
 - Some elements that drove growth are slowing.
- **New tax law:** Costs and benefits have not yet been fully quantified
- **Trade tariffs:** Hurt producers from the start
 - Consumer goods - nominal adverse effects, overall consumer spending negatively impacted
 - Trade still supports the general economy.
- **Illinois Soybean Production:** 14.9% of the U.S.; More than Alabama, Arkansas, Georgia, Kentucky, Louisiana, Mississippi, the Carolinas, Tennessee & Virginia ...combined.
- **Corn carryover:** ~1.9 to 2.1 billion bushels - High feed/residual estimate and corn for ethanol.
- **Census of Agriculture:** Farm structures and farmers are changing.

US Soybean, Soybean Oil and Soybean Meal Exports

PNW 1,000 MT

SB 12,930
SBO 2
SBM 223

PSW 1,000 MT

SB 1,950
SBO 6
SBM 209

EC 1,000 MT

SB 2,823
SBO 163
SBM 648

S. LA 1,000 MT

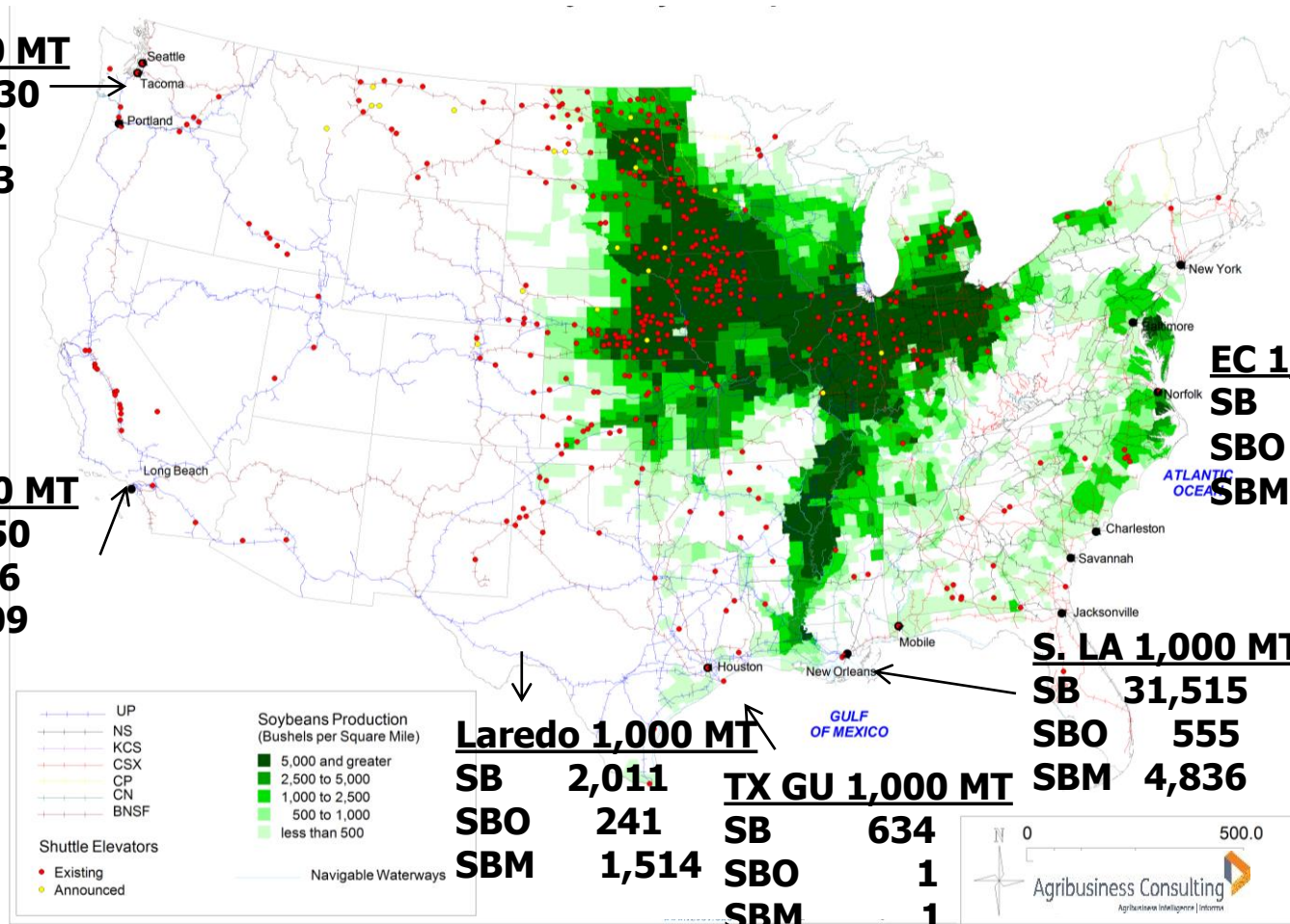
SB 31,515
SBO 555
SBM 4,836

Laredo 1,000 MT

SB 2,011
SBO 241
SBM 1,514

TX GU 1,000 MT

SB 634
SBO 1
SBM 1

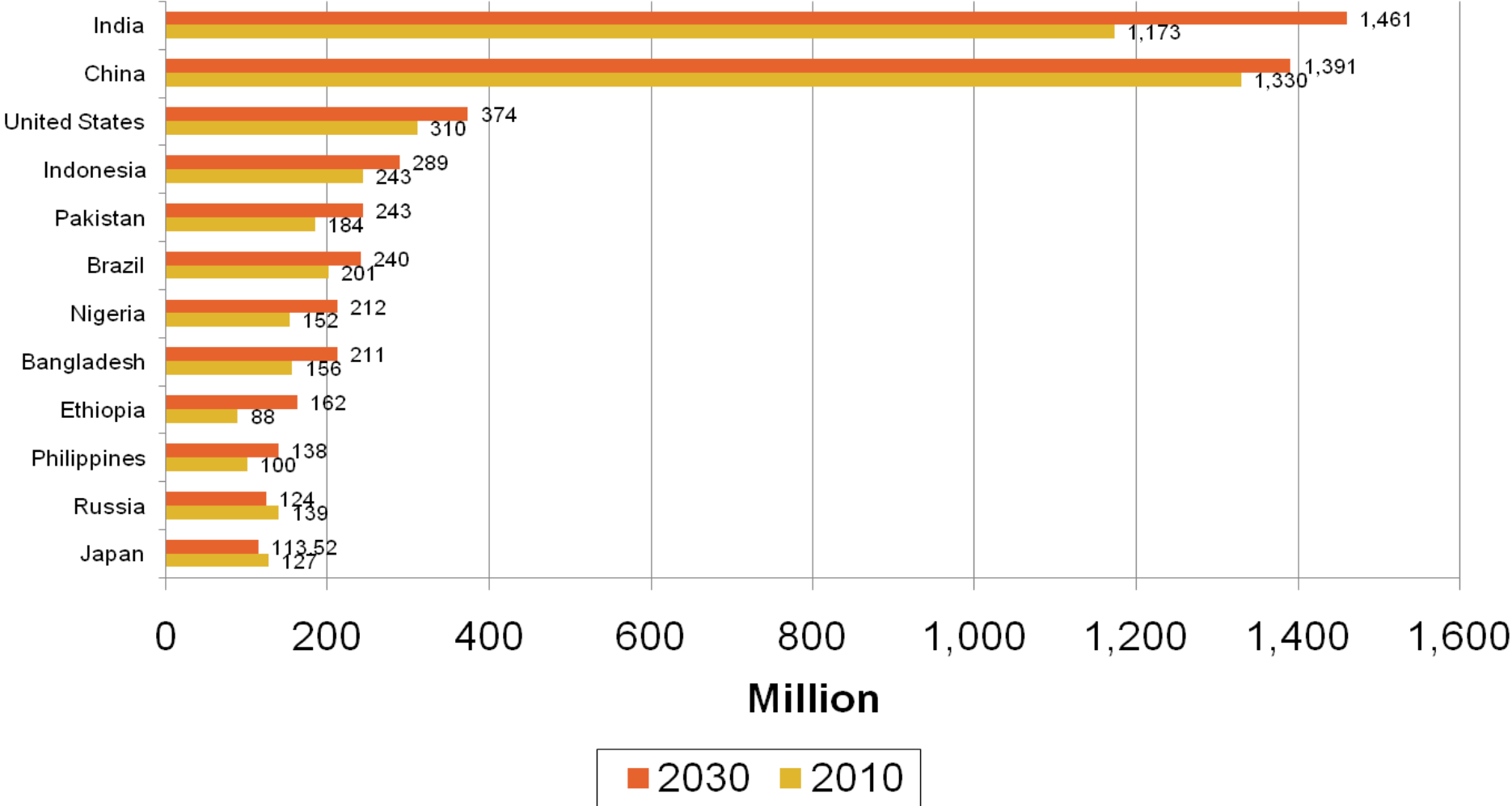


Export Region	% SB
PNW	24.0
PSW	3.6
S. Louisiana	58.6
EC	5.2
Laredo	3.7

3-Year Average 2015-2017



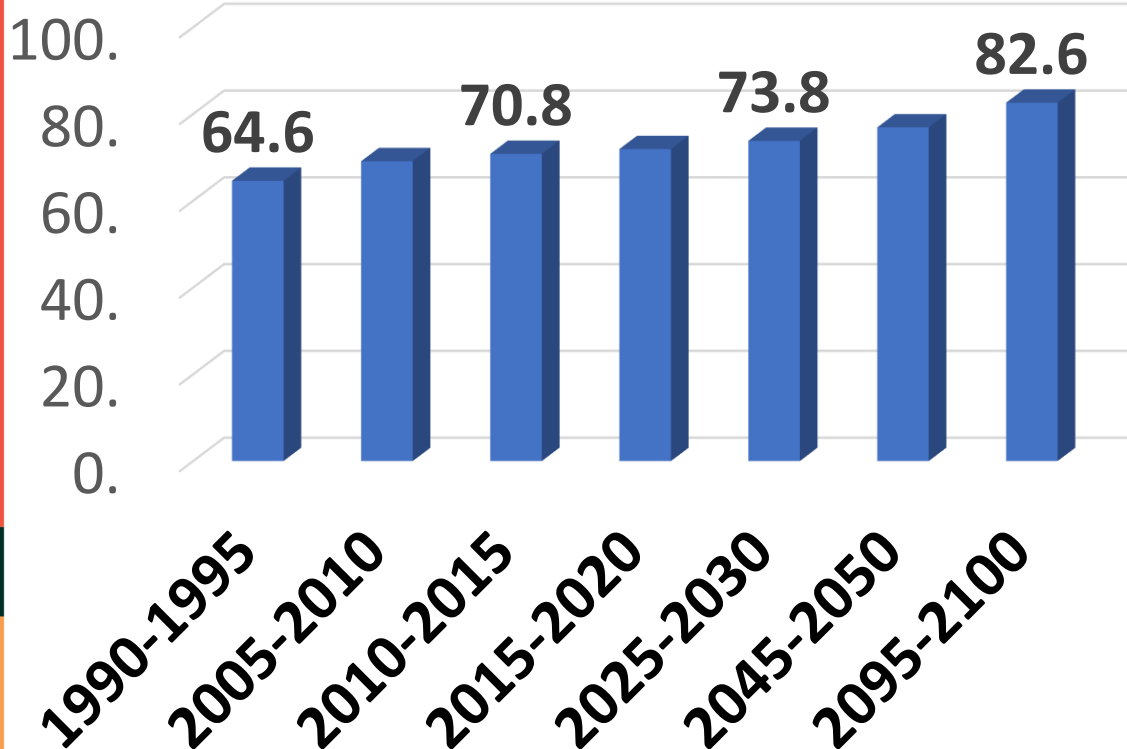
Top 12 Countries Populations 2010 and 2030



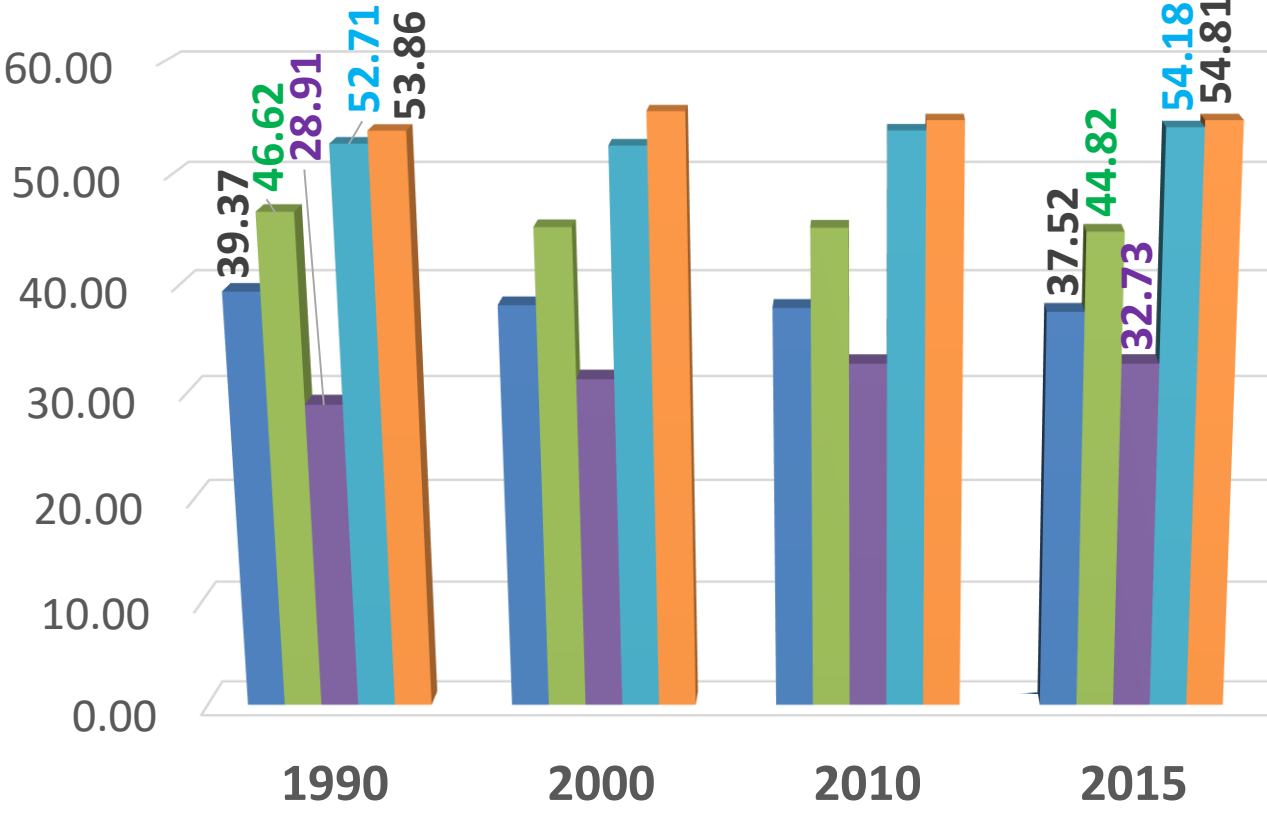
Projected global life expectancy 1990-2100

Diminishing Cropland 1990 - 2015

Life expectancy at birth in years
 1990-2020 $\Delta = +11.3\%$ 2020 - 2100 $\Delta = +14.9\%$



% Cropland 1990-2015



■ World
 ■ United States
 ■ Brazil
 ■ Argentina
 ■ China

Source: World Bank, FAO, Illinois Soybean Association

95.3%

U.S. and Illinois Soybean Farmers Really Do Care

National Harvest 2017

89.52 million acres of Soybeans (10.55 IL = 11.8%)

82.70 million acres of Corn (10.95 IL = 13.24%)

- 2017 Record IL Soy Crop with 58 Bu./Acre (49.1 US 118.1%)
- 611.9 Million Soy Bushels Produced in Illinois
 - 20.3 Million Metric Tons of Soy
- 950 bu = 17 ac./container 26-28 MT ~\$8730 @\$9.19 each
- 52,500-57,000 Bu. / Barge = 1,600 Acres ~\$500K
- ~24K Tons = ~800,000 Bu./15 barge tow ~\$7.5MM
- ~50K Tons = 30,000 Acres per Panamax Load 45ft

Soybean Yield & Production

State	Yield (bu/ac)					Production (mil bu)				
	2015	2016	2017	2018*	Change	2015	2016	2017	2018*	Change
Illinois	56.0	59.0	58.0	64.0	6.0	544	593	612	688	76
Iowa	56.5	60.0	57.0	58.0	1.0	554	566	567	577	10
Minnesota	50.0	52.0	47.5	50.0	2.5	378	389	384	386	1
Indiana	50.0	57.5	54.0	60.0	6.0	275	324	321	356	35
Nebraska	58.0	61.0	57.5	61.0	3.5	306	311	326	345	19
Missouri	40.5	49.0	49.5	46.0	-3.5	181	207	202	266	-27
Ohio	50.0	54.5	49.5	59.0	9.5	246	257	252	294	42
South Dakota	46.0	49.5	43.0	49.0	6.0	230	256	241	275	34
North Dakota	32.5	41.5	34.5	36.0	1.5	186	249	243	247	3
Kansas	38.5	48.0	37.5	42.0	4.5	149	192	192	198	6
Arkansas	49.0	47.0	51.0	50.0	-1.0	155	146	179	163	-16
Mississippi	46.0	48.0	53.0	53.0	0.0	104	97	115	117	2
Top 12 Total						3,308	3,662	3,724	3,909	186
United States	48.0	52.0	49.3	52.1	2.8	3,926	4,296	4,411	4,600	189

122.8%

* USDA, November estimates



10 Surplus States' Corn & Soybean Container Potentials

(Twenty-Foot Equivalent Units (TEUs))

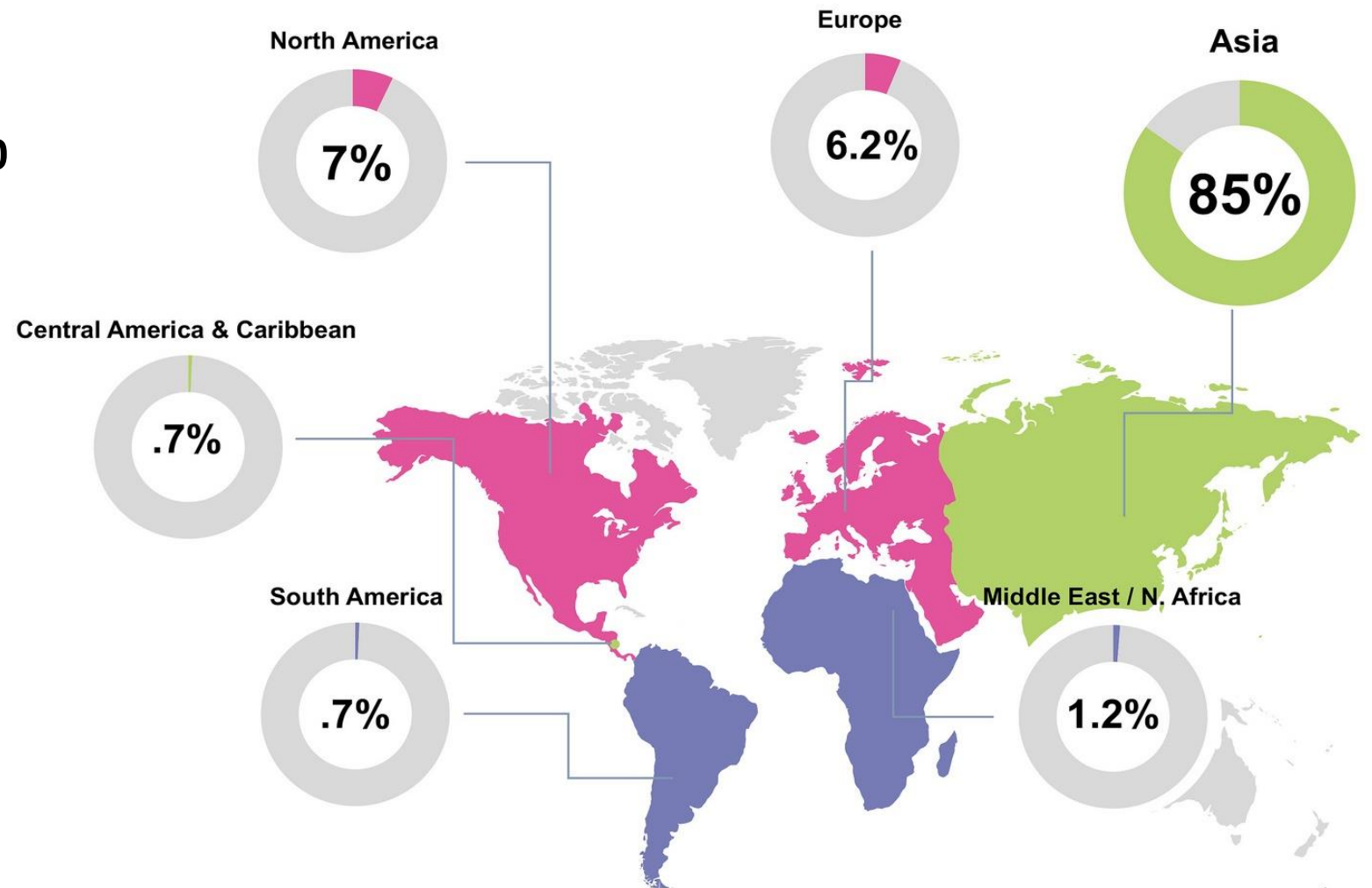
State	CORN	SOYBEANS
Illinois	1,723,529	547,059
Iowa	247,059	211,765
Minnesota	1,176,471	341,176
Wisconsin	123,529	182,353
Missouri	464,706	182,353
Kentucky	270,588	76,471
Tennessee	(194,118)	129,412
Arkansas	(52,941)	217,647
Mississippi	(17,647)	170,588
Nebraska	664,706	347,059
Sum	4,670,588	2,405,882

Note: Assumes 17 short tons per TEU



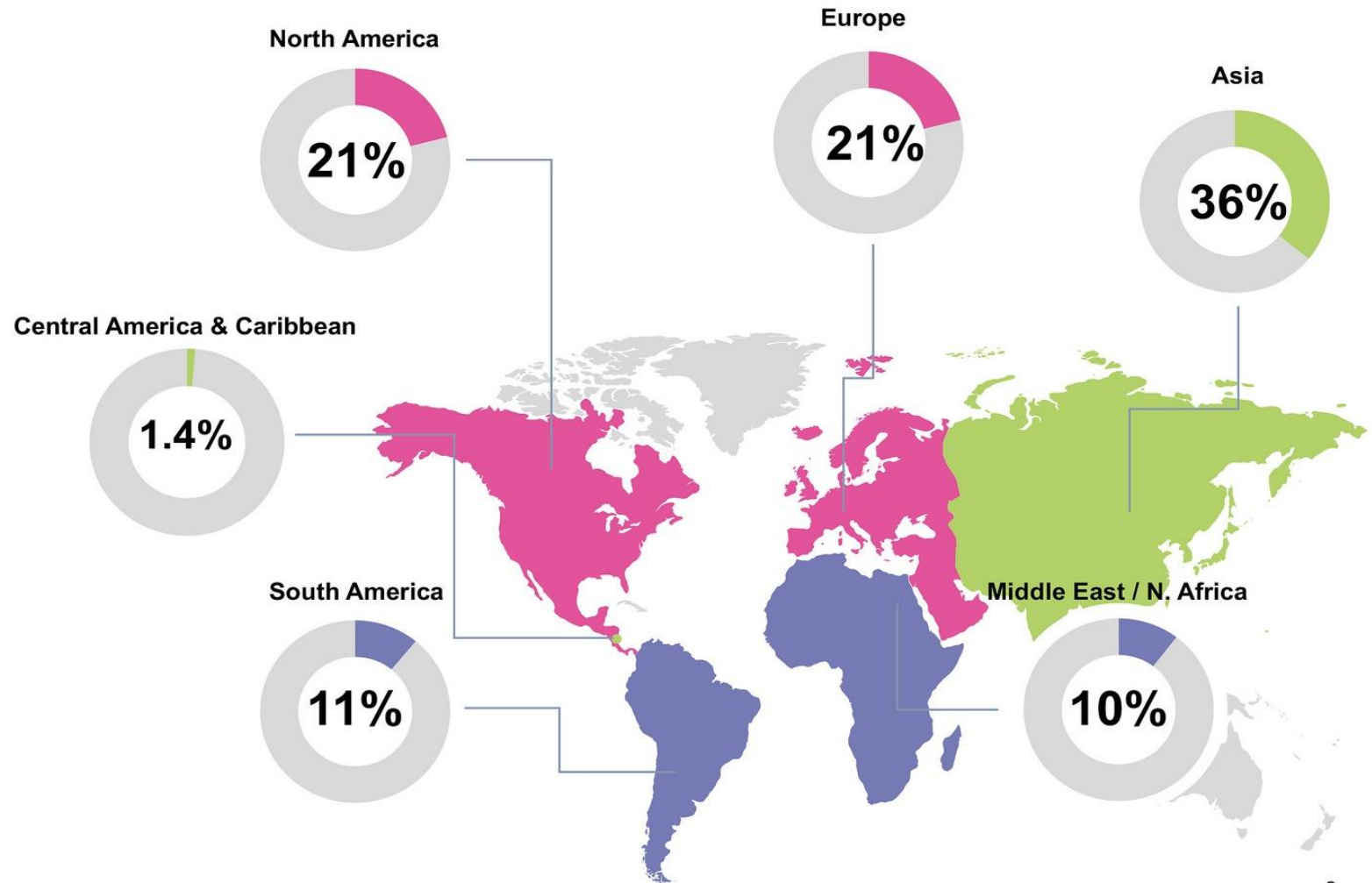
Distribution of U.S. Soy Sales, 2017

- In 2017-18 market year Asia accounted for 85% of U.S. soybean share through Nov 30
- China's share alone was 67%

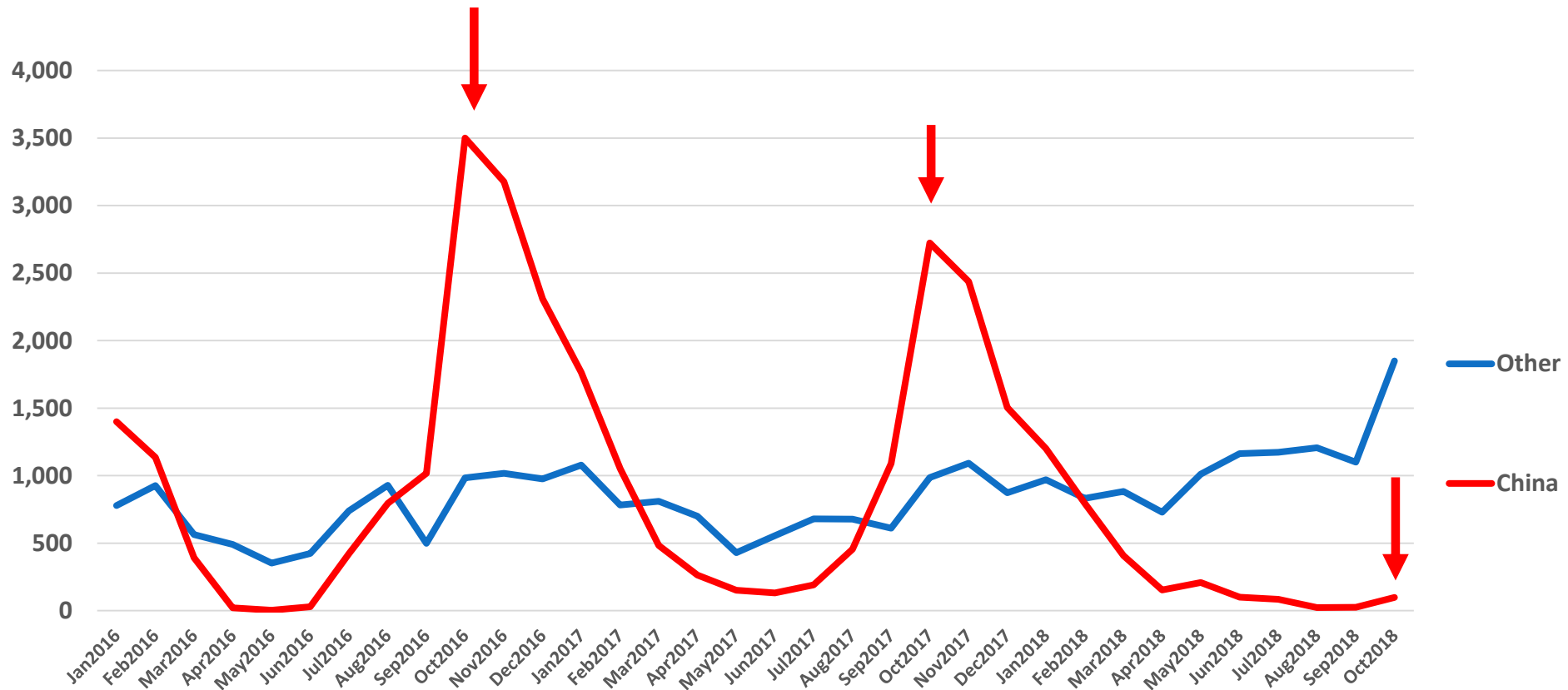


Shifting Trade for U.S. Soy Sales, 2018

- In 2018-19 Asia's market share fell to 36% through Nov 30
- China's share has slipped to just 3%
- YTD Sales to the Asia Pacific Region are down 19.2 million MT
- Sales to regions outside of Asia increased 7.7 million MT Y/Y with the Americas and Europe leading the redistribution



1201-Soybeans U.S. Exports Monthly History (\$Millions)



Year to Date October 2018 vs. 2017

China -63%

Other +59%

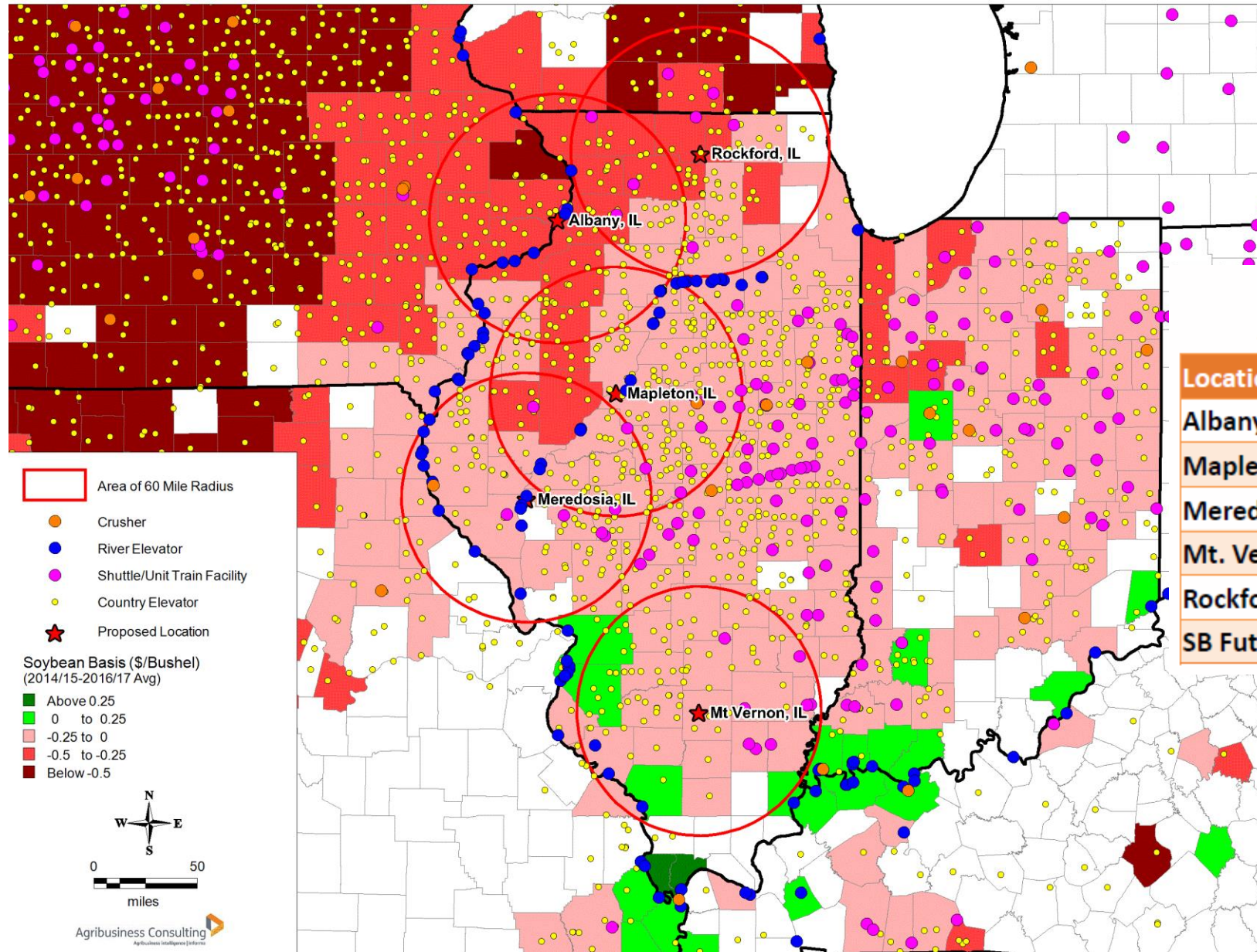


Top 10 US Soy Export Markets

	Oct-Sept '17	Oct-Sept '18	Change %		Sept 2017	Sept 2018	Change %
China	36,463,334	25,394,468	69.64%		2,875,550	67,446	2.35%
EU-28	4,602,530	6,204,259	134.80%		216,252	704,799	325.92%
Mexico	3,903,910	4,292,946	109.97%		274,951	362,612	131.88%
Egypt	939,218	2,652,124	282.38%		0	320,792	100.00%
Indonesia	2,570,998	2,572,186	100.05%		214,734	232,681	108.36%
Japan	2,409,644	2,214,379	91.90%		119,870	142,676	119.03%
Taiwan	1,509,335	2,085,996	138.21%		57,349	123,001	214.48%
Pakistan	689,350	1,798,914	260.96%		131,161	204,715	156.08%
Thailand	1,114,172	1,469,564	131.90%		100,053	61,548	61.52%
Vietnam	676,509	1,154,780	170.70%		147,392	95,276	64.64%
World Total	59,676,982	56,716,508	95.04%		4,465,443	3,237,309	72.50%
China %	61.10	44.48					

Source: USDA Foreign Ag Service

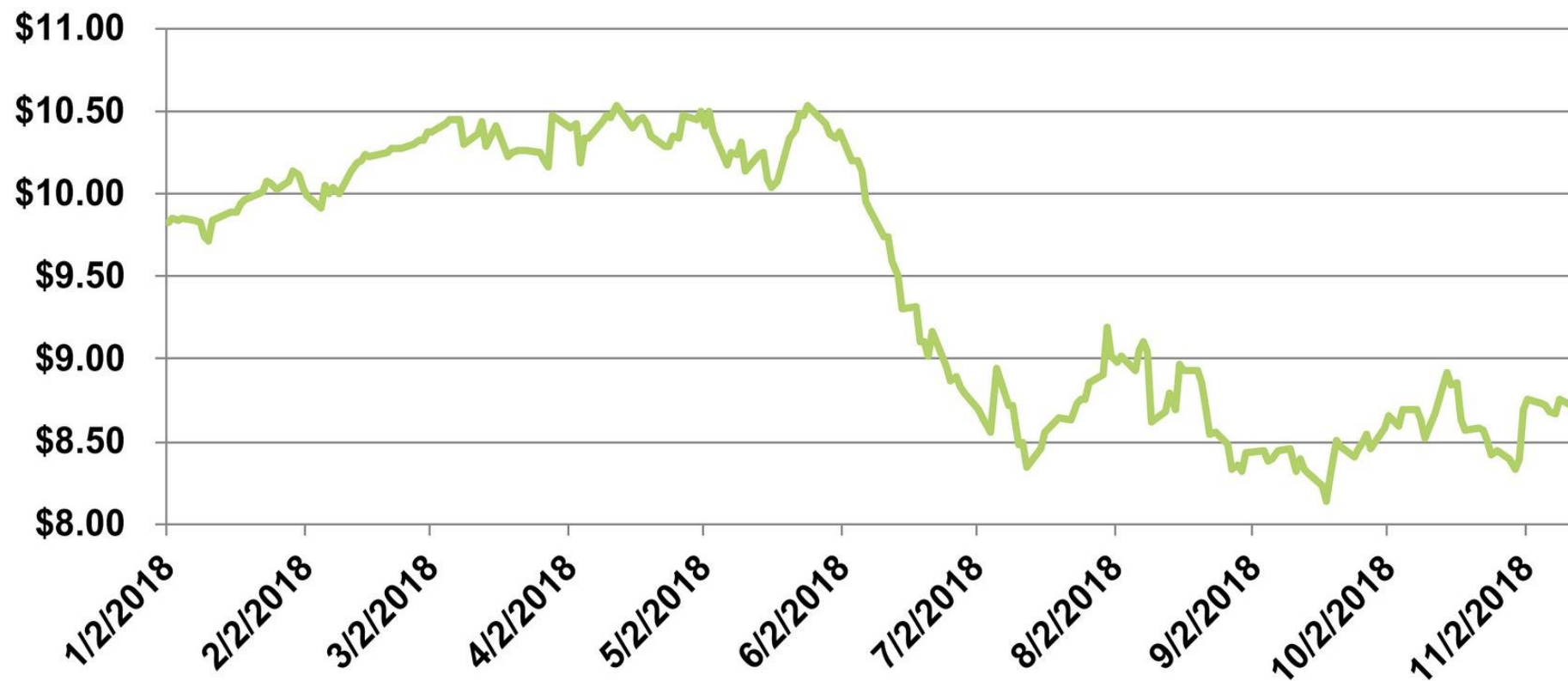
Soybean Price Basis 3-year average (2014/15 to 2016/17)



Commercial Elevator Prices and Basis
Average SB Prices 2014/15 to 2016/2017

Location	Price \$/bu	Basis
Albany	9.46	(0.26)
Mapleton	9.59	(0.13)
Meredosia	9.60	(0.12)
Mt. Vernon	9.57	(0.14)
Rockford	9.44	(0.28)
SB Futures	9.72	

November 2018 Soybean Futures per bushel

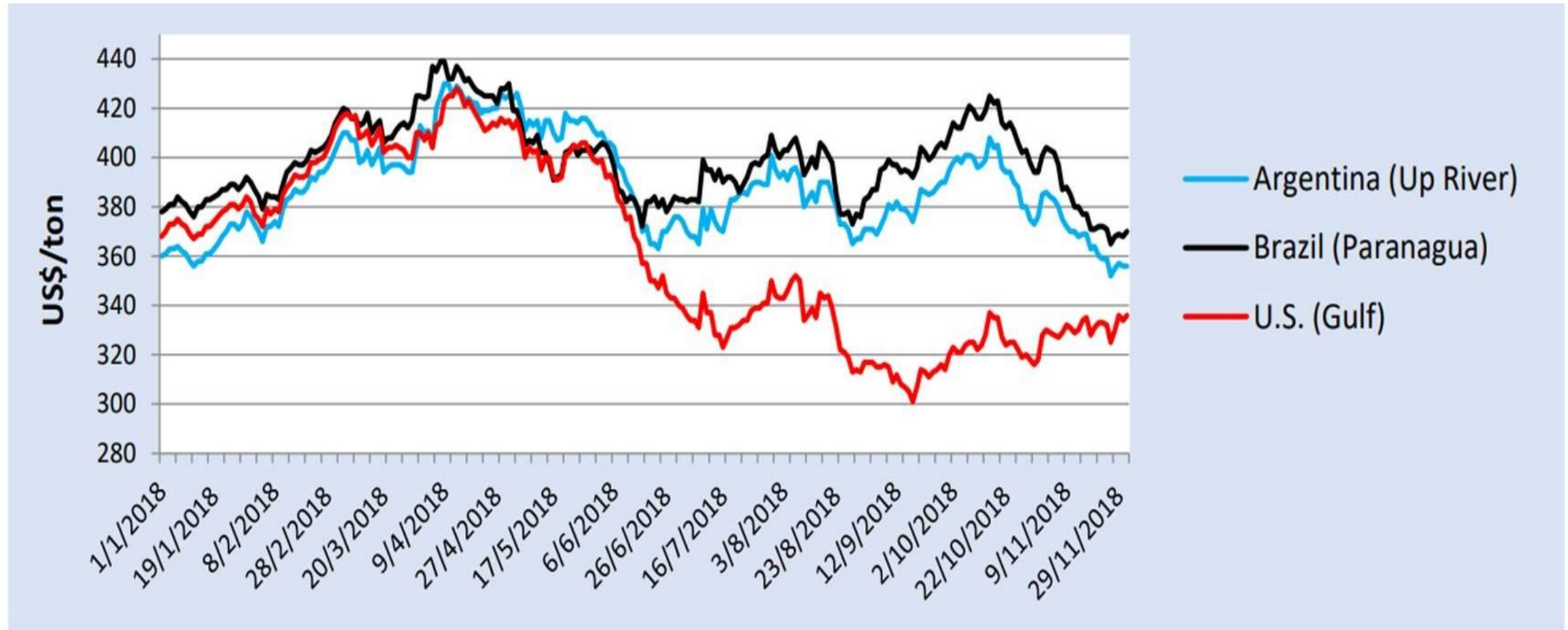


Source: CME

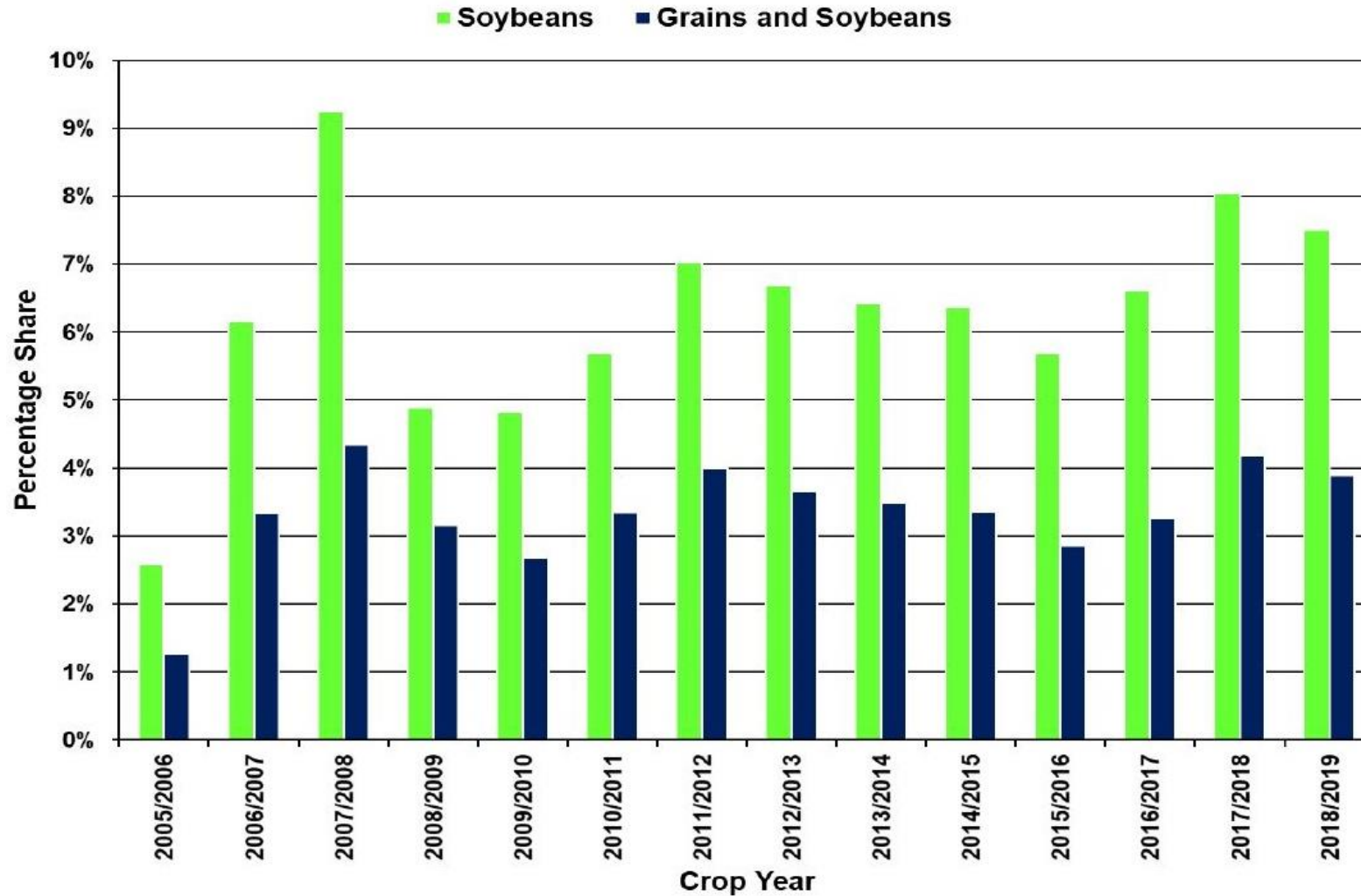


Origin Export Price Divergence, then Equilibrium

(JAN – NOV 2018)



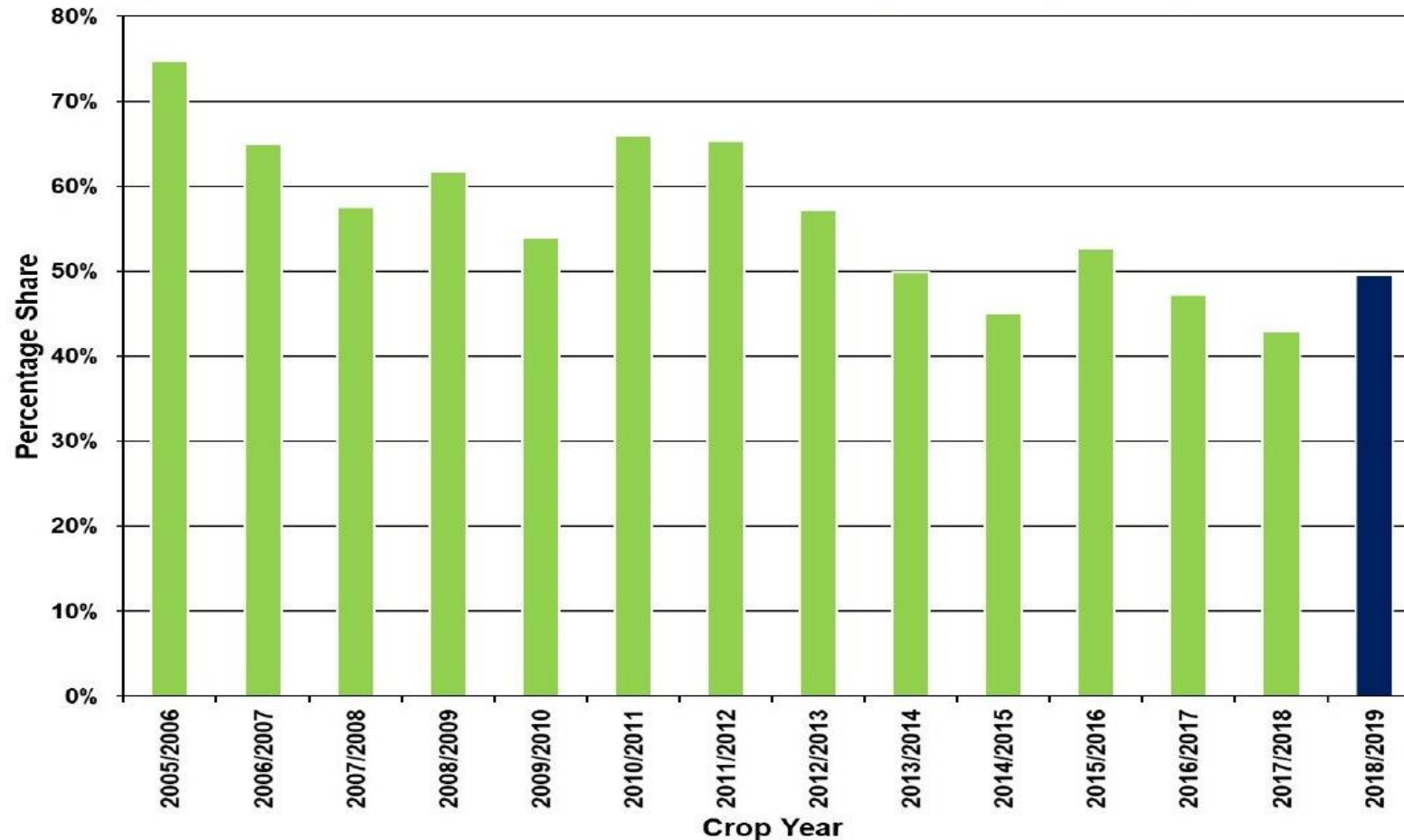
U.S. Container Share of Grains and Soybean



Source: USDA Export Inspections



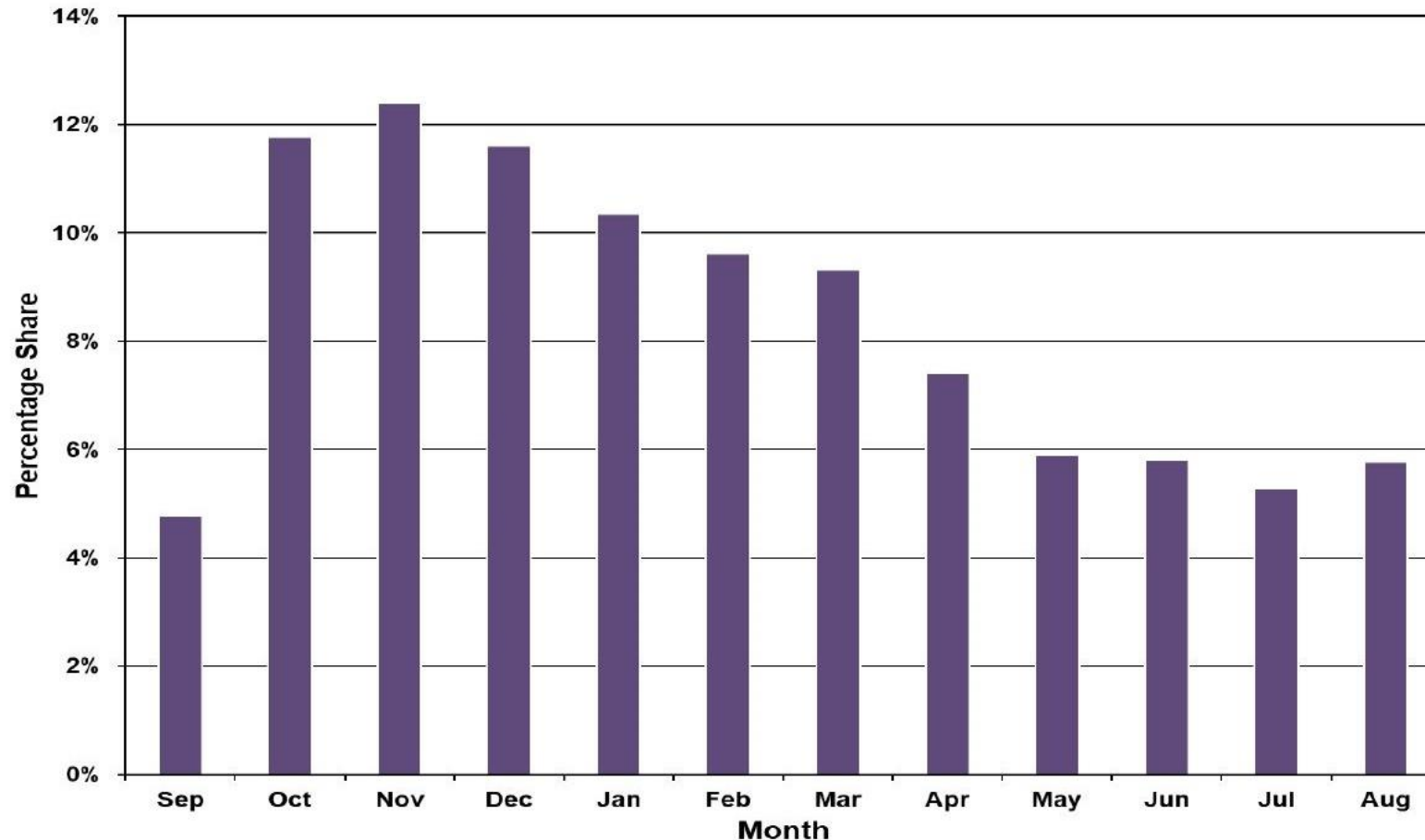
Illinois Share of US Containerized Soybean Export Inspections



Source: USDA, Informa Economics Vantage



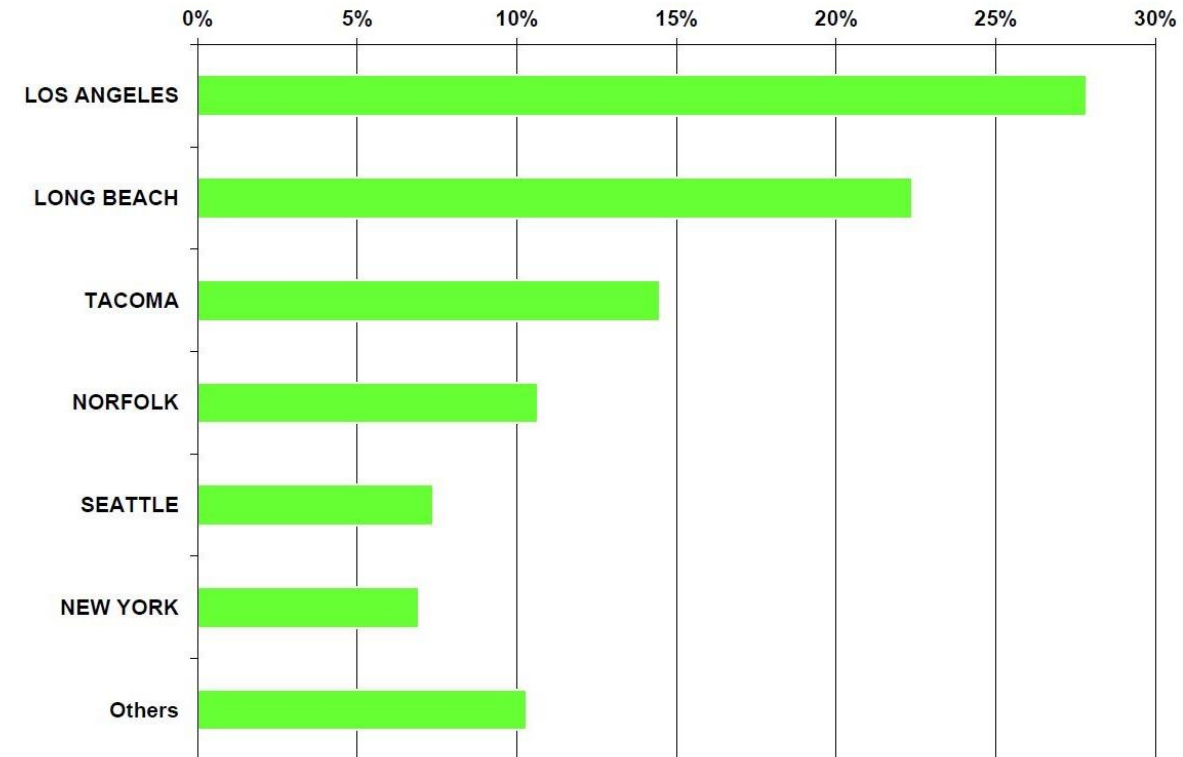
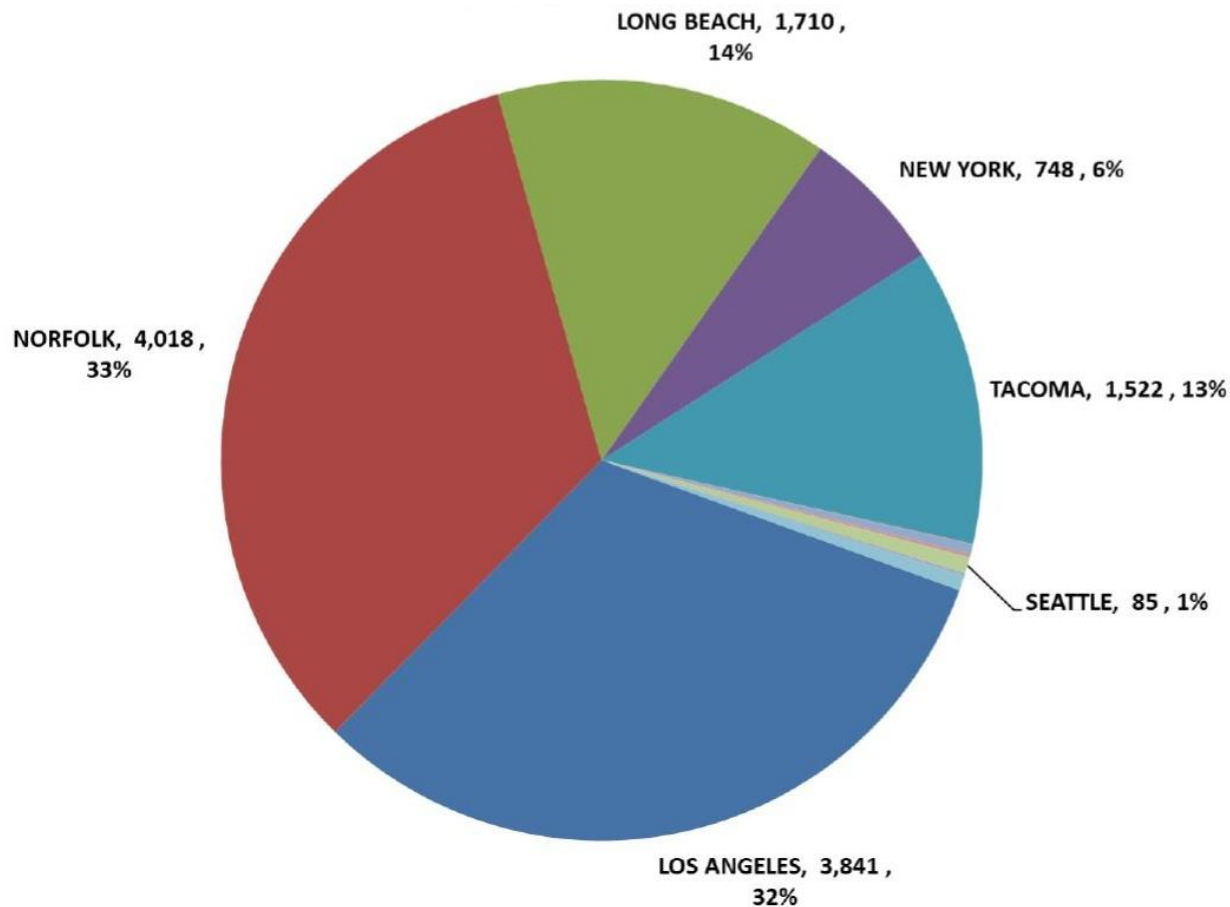
SEASONALITY: Monthly Share of Containerized Soybean Export Inspections in Illinois (since 2006/07)



Source: USDA, Informa Economic Vantage



Top U.S. Port Market Shares for Soybean Container Exports ('18-'19 YTD and '15-'16 Marketing Year)



Top Destinations for US Ag Container Exports

(in TEUs)

Destination	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
KAOHSIUNG	66,347	228,298	294,772	136,414	130,471	152,278	145,146	112,822	104,363	111,256	104,916	97,081
SINGAPORE	21,709	27,759	37,525	35,400	31,356	25,872	24,339	45,506	34,021	39,907	24,362	37,744
LAEM CHABANG	5,635	9,802	6,232	10,822	16,760	29,859	24,806	15,597	17,919	32,604	31,777	27,814
QINGDAO	35,825	28,766	21,752	34,455	70,223	76,954	91,094	78,628	178,436	93,756	54,651	25,116
HONG KONG	16,135	21,148	11,994	13,394	16,436	16,390	18,114	25,894	30,203	26,265	26,672	19,987
BUSAN	23,740	20,106	28,265	19,674	19,241	21,940	21,842	20,632	28,301	26,409	23,344	19,332
SHANGHAI	53,505	43,343	19,311	22,992	43,420	52,891	58,695	66,039	64,645	53,379	28,562	16,005
JAKARTA	433	2,067	7,242	8,296	13,438	16,315	18,141	9,353	17,781	19,984	16,014	14,501
HAIPHONG	250	971	931	4,150	6,281	11,859	7,503	12,925	13,880	20,017	24,295	13,460
SURABAYA	155	1,321	6,207	5,207	9,282	13,815	12,128	4,948	12,329	12,201	16,301	12,076
PT KELANG	246	664	7,490	4,336	5,298	9,357	6,776	6,099	5,220	7,456	8,974	11,404
HO CHI MINH	192	1,586	4,111	6,607	10,038	11,320	9,627	8,268	11,869	20,038	16,155	7,941
VUNG TAU				124	1,909	1,393	2,462	1,038	3,005	3,640	6,846	7,697
BELAWAN DELI	115	703	2,738	4,941	4,895	7,818	7,069	3,239	6,113	7,914	6,280	7,298
NAN SHAN		123	29	113	10,983	13,289	10,755	19,358	17,284	11,861	42,677	7,232
TAIPEI			2	1,275	1,417	510	2,854	3,693	3,138	3,113	3,387	7,003
OTHER	94,311	163,575	142,923	148,971	225,992	270,566	259,577	241,553	299,903	239,107	224,050	168,739
Grand Total	318,598	550,232	591,524	457,171	617,440	732,426	720,928	675,592	848,410	728,907	659,263	500,430

Source: PIERS, IEG Vantage

Inland Waterway Competitive Pricing vs. Intermodal

Total Landed Cost to Asia Markets

Projected Price Differences via Inland River Container-on-Vessel (COV) to Gulf Coast routings

Compared Exports via Rail to LA/LB vs. All Water Routing COV to Plaquemines Port

- Transportation Savings from Memphis, St. Louis, and Kansas City - ~30 %

Compared Imports via LA/LB Rail to MidSouth/Midwest vs. All Water Routing - Plaquemines inland via COV

- Transportation Savings to Memphis, St. Louis, and Kansas City - ~40 %

http://www.soytransportation.org/newsroom/ContainerizedShippingOnInlandWaterways_FullReport.pdf

Source: Informa Economics Vantage



RECAP

A Case Study: New Challenges in Trade Policy

- Overview of the Illinois Soybean Association (ISA)
- Present global change is dynamic
- Commodity Economics: Drivers of supply decisions and demand pulls
 - Importance of scale;
 - Changes in direction; and,
 - Market segmentation.



Thank you!

Follow us on social media:

Twitter and Instagram: @ILSoybean

Facebook: Illinois Soybean Association

Scott Sigman

Transportation and Export Infrastructure Lead

sigmans@ilsoy.org +1-630-869-5304



Impact of Soy in Illinois

- The soybean value chain provided **\$28.3 billion in sales output** in 2017
 - Raising soybeans
 - Crushing beans to meal and refining soybean oil
 - Associated industries
 - Manufacturing animal feed
 - Raising livestock
 - Producing biodiesel, soy ink, lubricants, soy based plastics, and other allied goods
- The soybean value chain also contributes:
 - Nearly 99,000 FTE jobs, with 57,200 in Illinois
 - \$7.48 billion in gross state product, value added via economic processes



ISA Leadership














Board of Directors Set Priorities and Budgets

- 24 volunteer Illinois farmers
 - 18 directors from districts throughout the state
 - 6 at-large directors who represent the state as a whole
- Manage ISA use of checkoff and non-checkoff funds.
- Each serves on Production & Outreach OR Marketing Committee

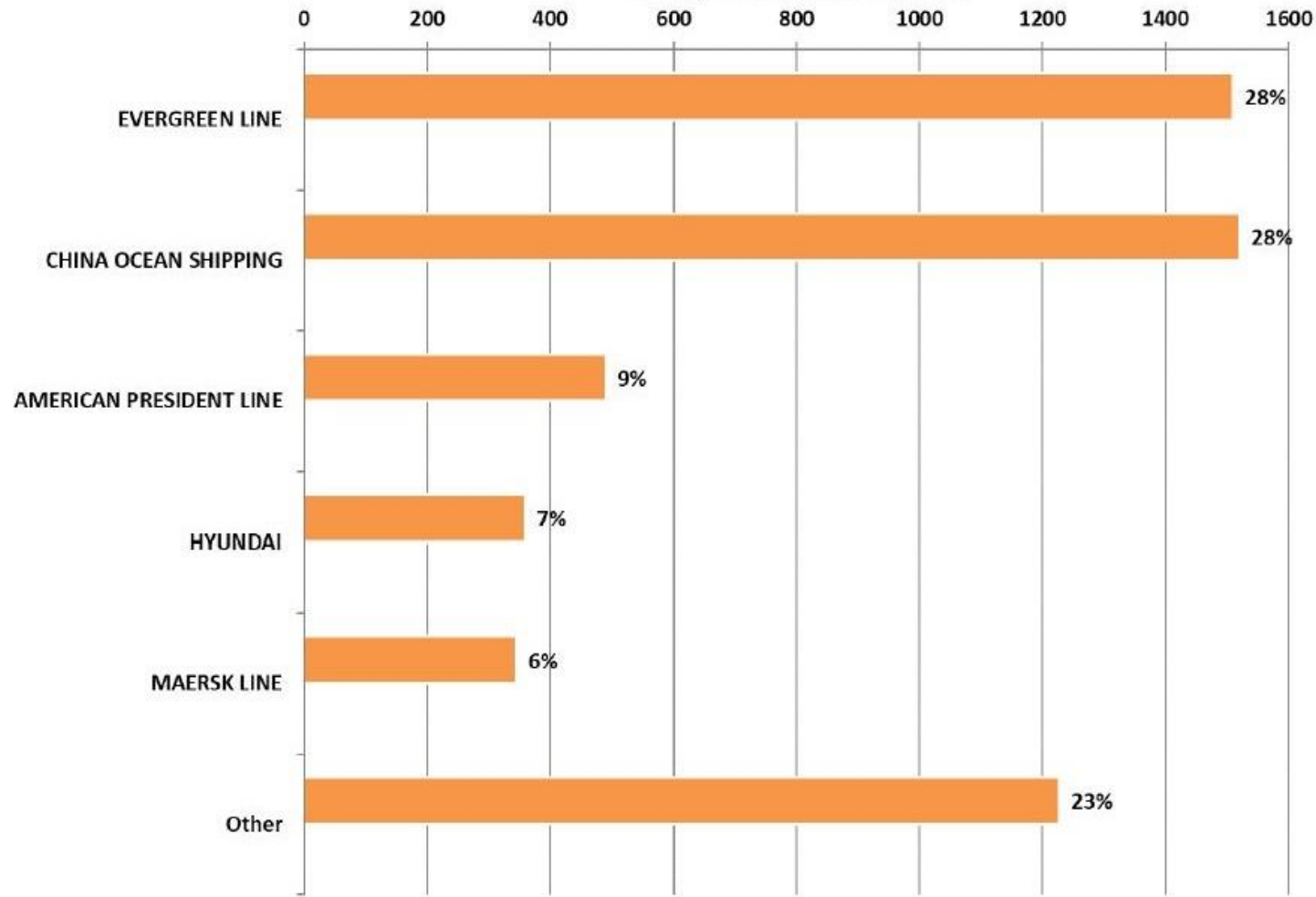


ISA Strategic Direction FY19-20

Marketplace
 Farmer Profitability
 Stakeholder Value – Efficient Product Delivery
 Organizational Excellence

MARKETPLACE		STAKEHOLDER VALUE	
Promote Marketplace Preference: Promote preference of Illinois soy for export markets, biodiesel and animal agriculture.		Influence and Reach: Expand the influence and reach of ISA through member, corporate, industry and advocacy efforts that positively impact Illinois soybean farmers.	
 MEAL	<ul style="list-style-type: none"> Retain and grow animal agriculture in Illinois and in close proximity to Illinois. (Hog, Beef and Poultry) Ensure and grow export markets for meat products. Increase overall volume of soy in tuna feeds. 	 RELATIONSHIPS	<ul style="list-style-type: none"> Build relationships and engage key stakeholders and opinion leaders to develop and influence opportunities for Illinois soybean farmers.
 INDUSTRIAL USES	<ul style="list-style-type: none"> Shift consumption of biodiesel from B11 to B20. 	 ADVOCACY	<ul style="list-style-type: none"> Advocate for equitable public policies and generate opportunities for clear pathways to markets.
 VALUE	<ul style="list-style-type: none"> Improve the quality of soybeans and promote the highest quality soybean, soybean oil and soybean meal products. 	Efficient Product Delivery: Ensure Illinois soybeans and soybean products reach their intended destination efficiently.	
 FOOD EXPORTS	<ul style="list-style-type: none"> Increase exports of Illinois soybeans and soybean meal via containers. Increase volume of U.S. soy exports where Illinois has strategic advantage. 	 INFRASTRUCTURE	<ul style="list-style-type: none"> Foster alternative financing support for road, bridge, rail and river systems. Focus on Illinois logistics infrastructure optimization.
FARMER PROFITABILITY		ORGANIZATIONAL EXCELLENCE	
Profitability: Optimize farmer profitability through business management, yield and sustainable production practices.		Leadership: Increase effective, progressive leadership in the organization.	
 SUSTAINABLE PRODUCTION	<ul style="list-style-type: none"> Increase the adoption of sustainable production practices. 	 LEADERSHIP	<ul style="list-style-type: none"> Grow the strategic focus of ISA through an effective performance management system. Continuous improvement of board member knowledge, understanding and involvement in ISA's role as a global leader.
 TECHNOLOGY	<ul style="list-style-type: none"> Leverage tools and technology to help farmers improve yield and profitability. Provide business management support to Illinois soybean farmers. 		
 ENGAGEMENT	<ul style="list-style-type: none"> Build support, recognition and engagement with producers for ISA programs. 		

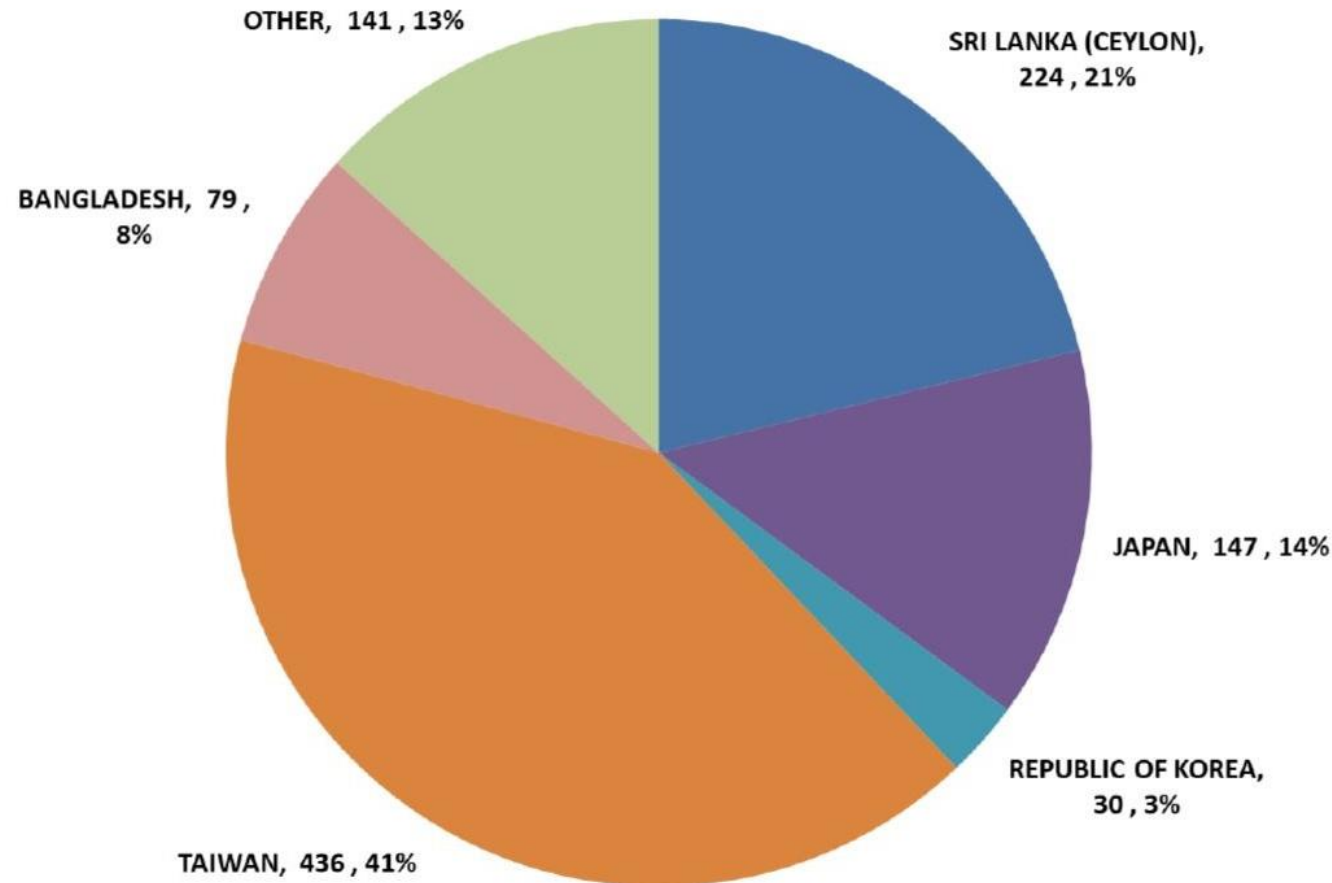
Top Container Carriers Handling US Soybean Meal Container Market Exports Share (in TEUs)



Source: IHS Markit PIERS, Informa Economics Vantage



U.S. Soy Meal Container Exports: Top Country Destinations (2018-19 Marketing Year)

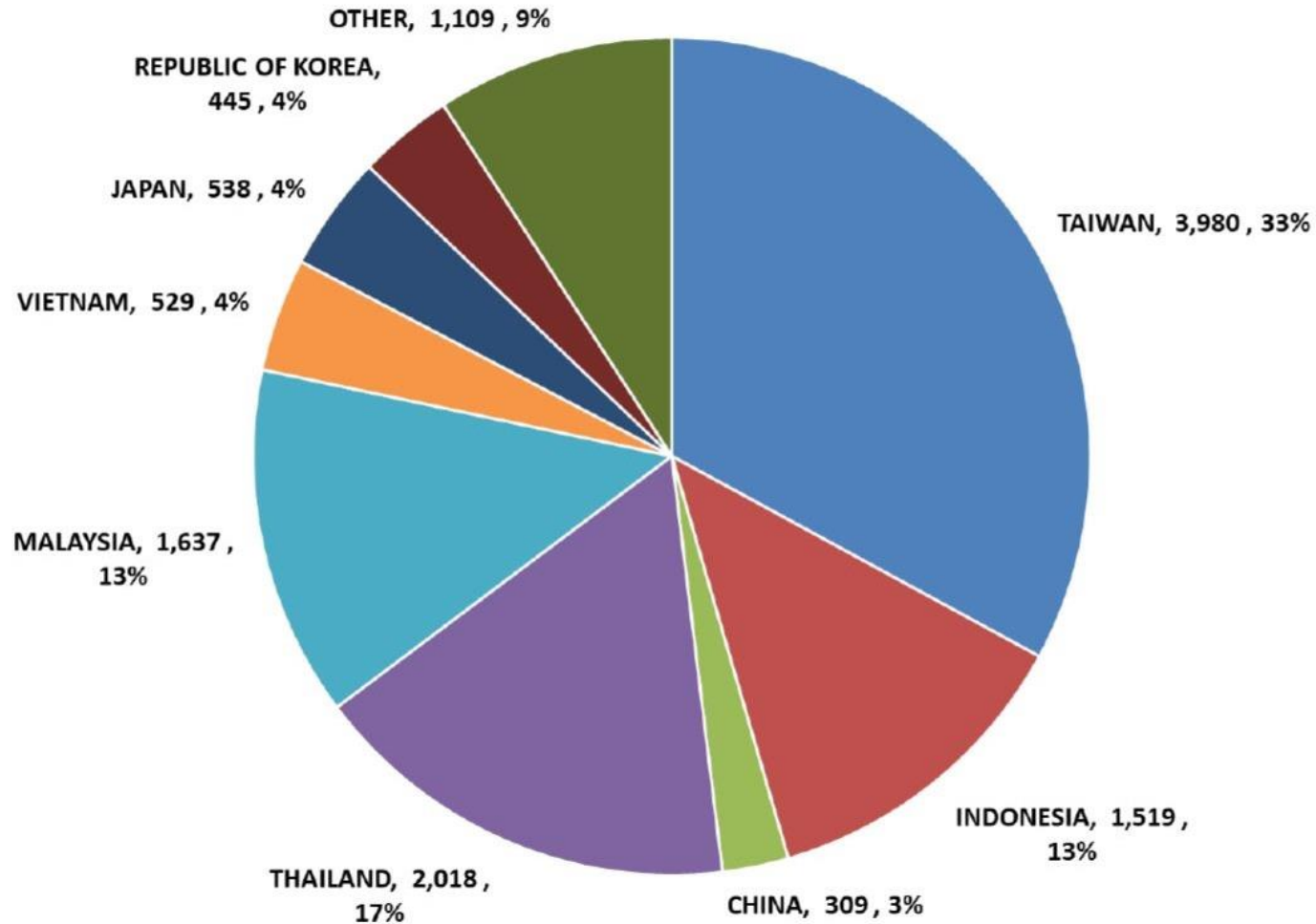


Source: IHS Markit PIERS, Informa Economics Vantage



U.S. Soybean Container Exports:

Top Country Destinations (Sept-Oct-Nov '18-'19 Marketing Year)



Source: IHS Markit PIERS, Informa Economics Vantage

