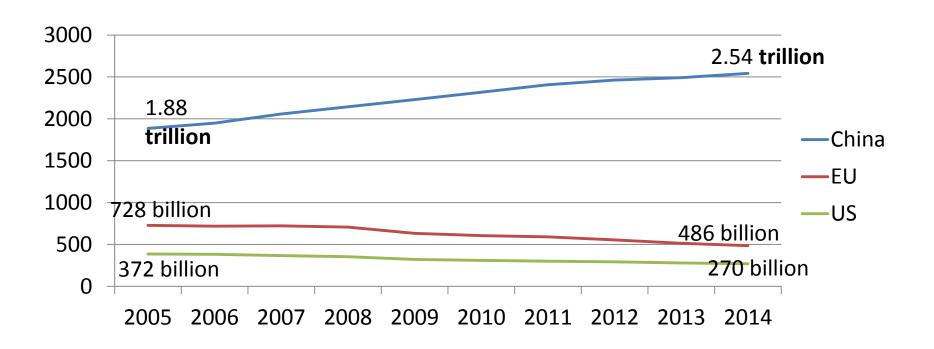
U.S. Flue-Cured Tobacco Situation & Outlook December 3, 2015

Dr. Blake Brown
Hugh C. Kiger Professor
Agriculture & Resource Economics
College of Agriculture & Life Sciences

PRC, EU & US Cigarette Consumption billions of cigarettes



Sources: Euromonitor, tobacco industry statistics

Releases for consumption of cigarettes 2002-2013. Taxation & Customs. European Commission

"A Renaissance in Combustible Cigs"

Bonnie Herzog, Senior Analyst, Wells Fargo Securities, LLC

- Rather than the historical 3-4% decline, volumes are down only slightly
- No major tax hikes or change in regulations proposed

Weaker import growth in China is a key element of the broader trade slowdown

Chinese import growth has slowed sharply

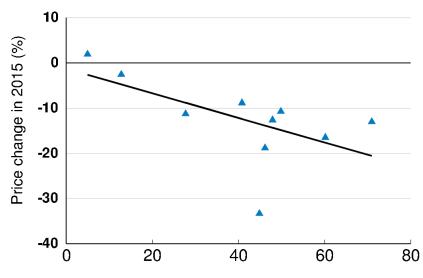
China: Real GDP and import volumes



Note: 2015 is change in the first three quarters vs 2014. Import volumes are deflated based on OECD estimates. Nominal imports during the first three quarters of 2015 were down 8 per cent. **Sources:** OECD November 2015 Economic Outlook database.

This has exerted downward pressure on commodity prices

Commodity price changes and China's share of global consumption

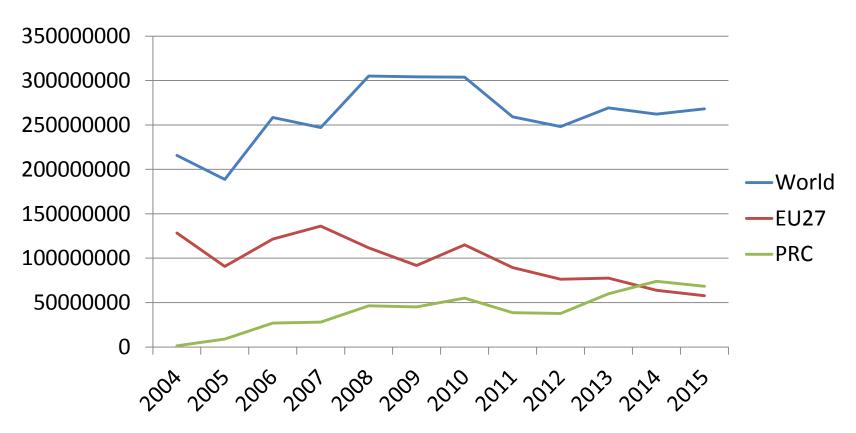


China share of world consumption in 2014 (%)

Note: Commodities shown are aluminium, coal, copper, iron ore, lead, natural gas, nickel, oil, uranium and zinc.

Sources: IMF; BP Statistical Review of World Energy; World Bureau of Metal Statistics.

U.S. Unmanufactured <u>Exports</u> of Flue-Cured Tobacco (lbs farm weight)



Source: USDA-FAS

Tariff Rates on Tobacco: Now and After Trans-Pacific Partnership

	Unmanufactured Flue-Cured Tobacco		Cigarettes	
	<u>Current</u>	<u>Under TPP</u>	Current	<u>Under TPP</u>
Australia	0	0	0	0
Brunei	0	0	0	0
Canada	8%	Phased out	12.5%	Phased out
Chile	6	0	6	0
Japan	0	0	WTO: 8.5%+290.7 yen/1000 Base Rate: 0	0
Malaysia	5% & RM40.00	Phased Out	RM0.20/stick	Phased out
Mexico	67%	0	67%	0
New Zealand	0	0	5%	0
Peru	9	0		
Singapore	0	0	0	0
US	various	Some 0 immediately Some Phased Out	Various	Some 0 immediately Some Phased Out
Viet Nam	80	TRQ 550MT in yr 1 increasing to unlimited after 21 yrs	135	Phased out

Flue-Cured Acres Harvested:

	2011	2012	2013	2014	2015*
US	206,900	206,000	228,800	232,000	218,300
NC	160,000	164,000	170,000	181,000	170,000

^{*}October 2015 Forecast. USDA-NASS

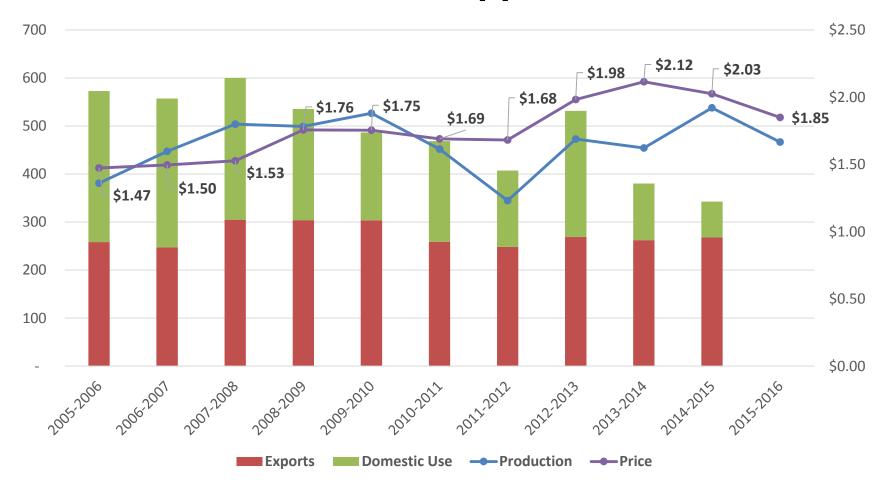
USDA-NASS Crop Estimates

Flue-Cured Production: (million pounds)

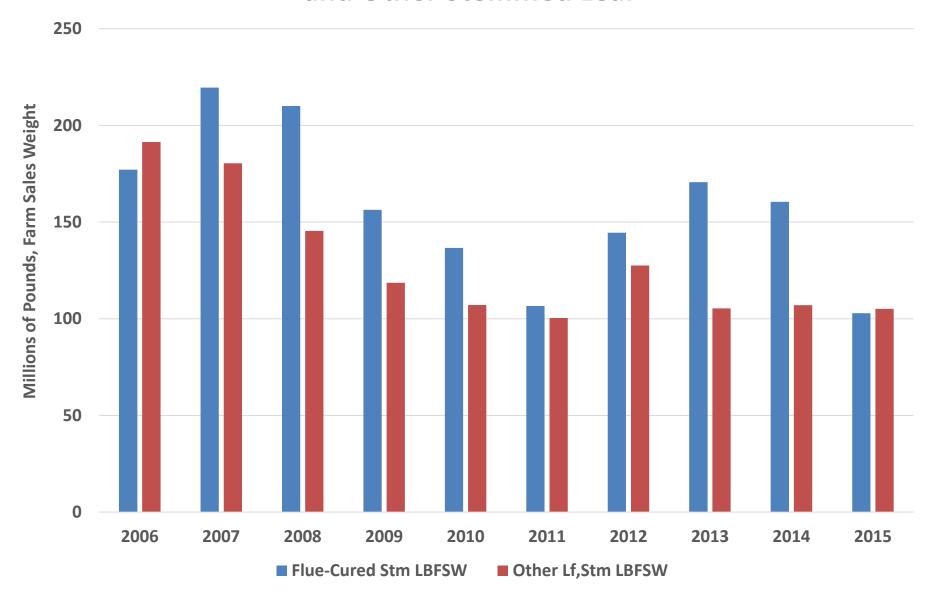
	2011	2012	2013	2014	2015*
US	345	473	454	557	468
	248	377	360	434	365
NC					

^{*}USDA-NASS October 2015 Estimate

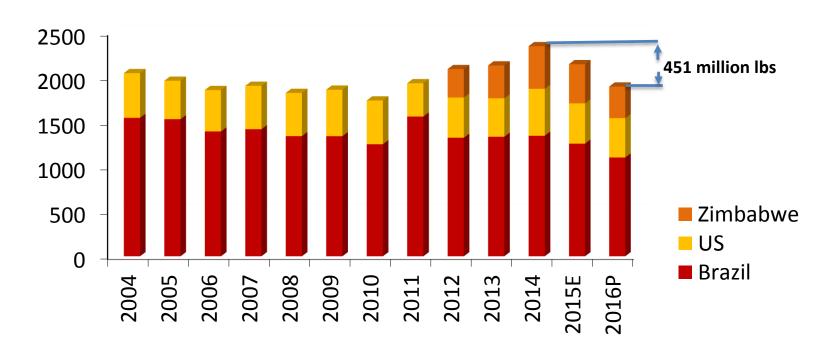
US Flue-Cured Price, Production, Exports and Domestic Disappearance



Imports into the US of Flue-Cured and Other Stemmed Leaf



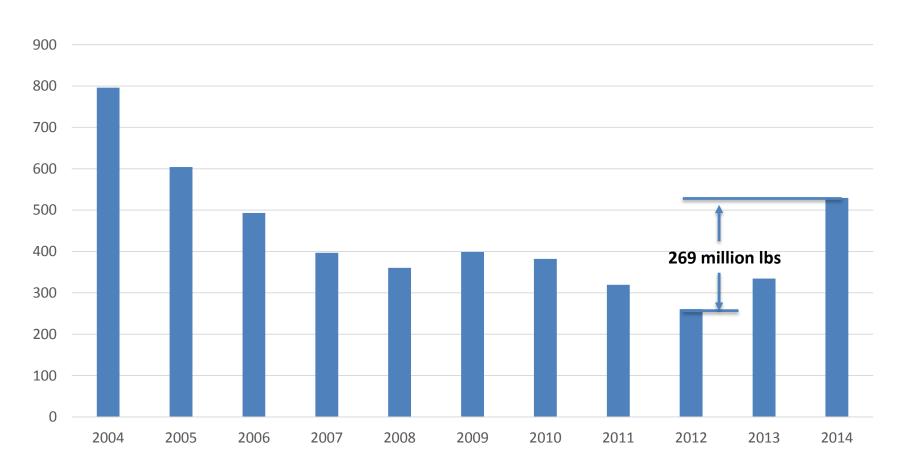
Global Supply: U.S., Brazil and Zimbabwe Flue-Cured Tobacco Production



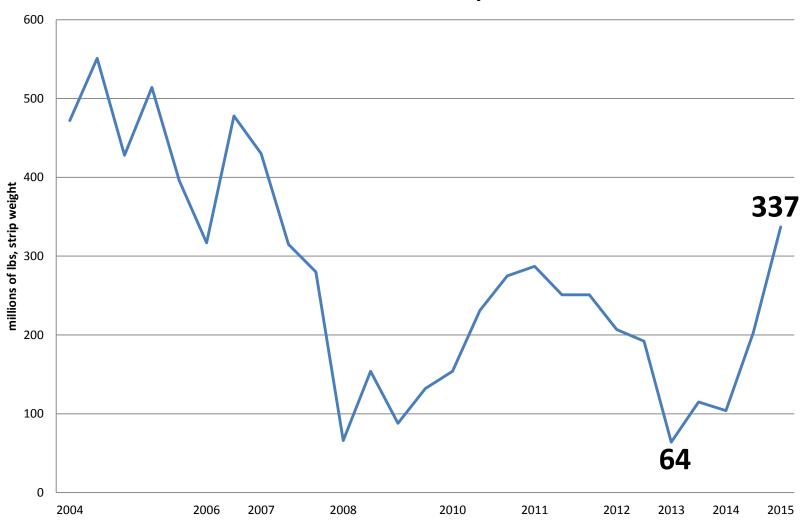
Source Brazil & U.S.: Universal Corporation. "World Leaf Production as of Nov 4, 2015." Source Zimbabwe: Zimbabwe Tobacco Association "Weekly FCV Report 10.05.2015"

Ending Stocks of US Flue-Cured

(million lbs)



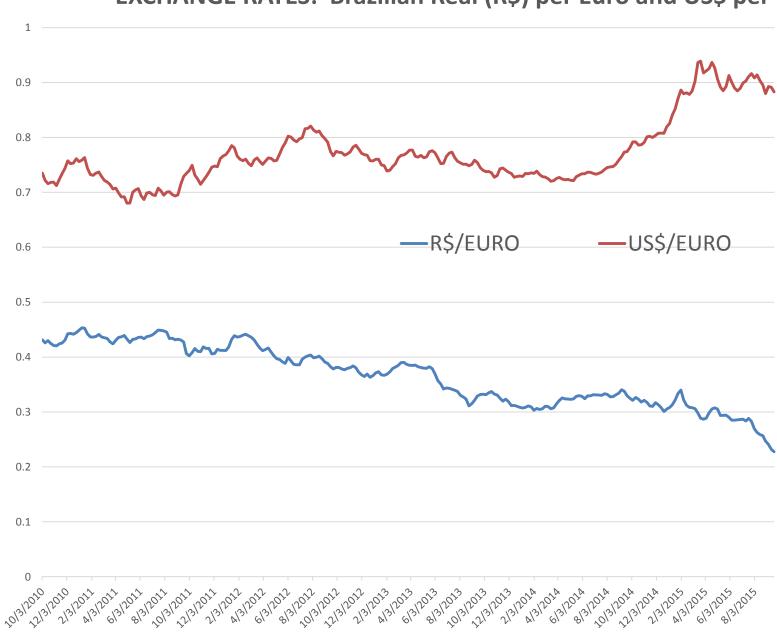
Uncommitted Flue-Cured and Burley Global Inventories



"The combination of lower crop production and expected reduced plantings should result in a largely balanced global leaf market in fiscal 2017."

Davenport & Company, LLC. November 6, 2015

EXCHANGE RATES: Brazilian Real (R\$) per Euro and US\$ per Euro



Soybean Price/bushel: US\$ vs Brazilian Real (R\$) 2013 vs 2015

	US\$ Price	Exchange Rate: R\$/US\$	R\$ Price
Nov 2013	12.70	2.2795	28.95
Nov 2015	8.73	3.8417	33.57

Tobacco products will undergo a technological revolution over the next 5-10 years....yes, but how big will it be???

- Expected 2015 US Vapor Market: \$3.5 billion
 - Vapors/Tanks/Mods & Personal Vaporizers continue strong growth, but growth is slowing
 - E-Cigarettes continue growth but decelerating quickly
 - FDA has proposed deeming regulations
 - States have started taxing
- What about heat-not-burn technology?
- Innovation in the smokeless experience needed to continue growth

Market Challenges to US Flue-Cured

- Large flue-cured inventories in the global tobacco supply chain
- Unfavorable exchange rates
- Continued erosion of cigarette consumption in developed countries due to health concerns
- Hostile regulatory and tax environment for cigarettes in EU & US
- Changes in nicotine delivery technology;
 e.g. E-cigarettes & heat-not-burn???

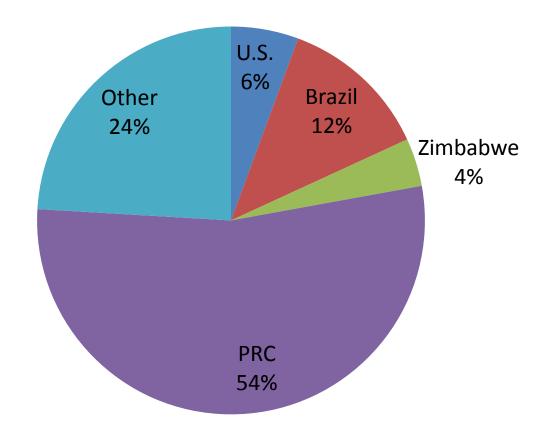
Market Opportunities for US Flue-Cured Farmers

- Increased demand for high quality flavor style flue-cured
 - bans on flavorings in cigarettes
 - growing market in China for "higher end" cigarettes
- Ability of US farmer for strict adherence to both production and social protocols

What is needed for a US recovery in 2016?

- Reduction in inventories... <u>likely</u>
- More favorable exchange rates…<u>probably not</u> <u>much improvement in 2016</u>
- Growth in China market to offset continued declines in US and EU markets...<u>some modest</u> <u>improvement in 2016</u>
- Favorable Weather for US Growers; a good <u>quality</u> crop

2015 World Flue-Cured Production 8.8 billion pounds



Quality is the strategic advantage of U.S. flue-cured producers