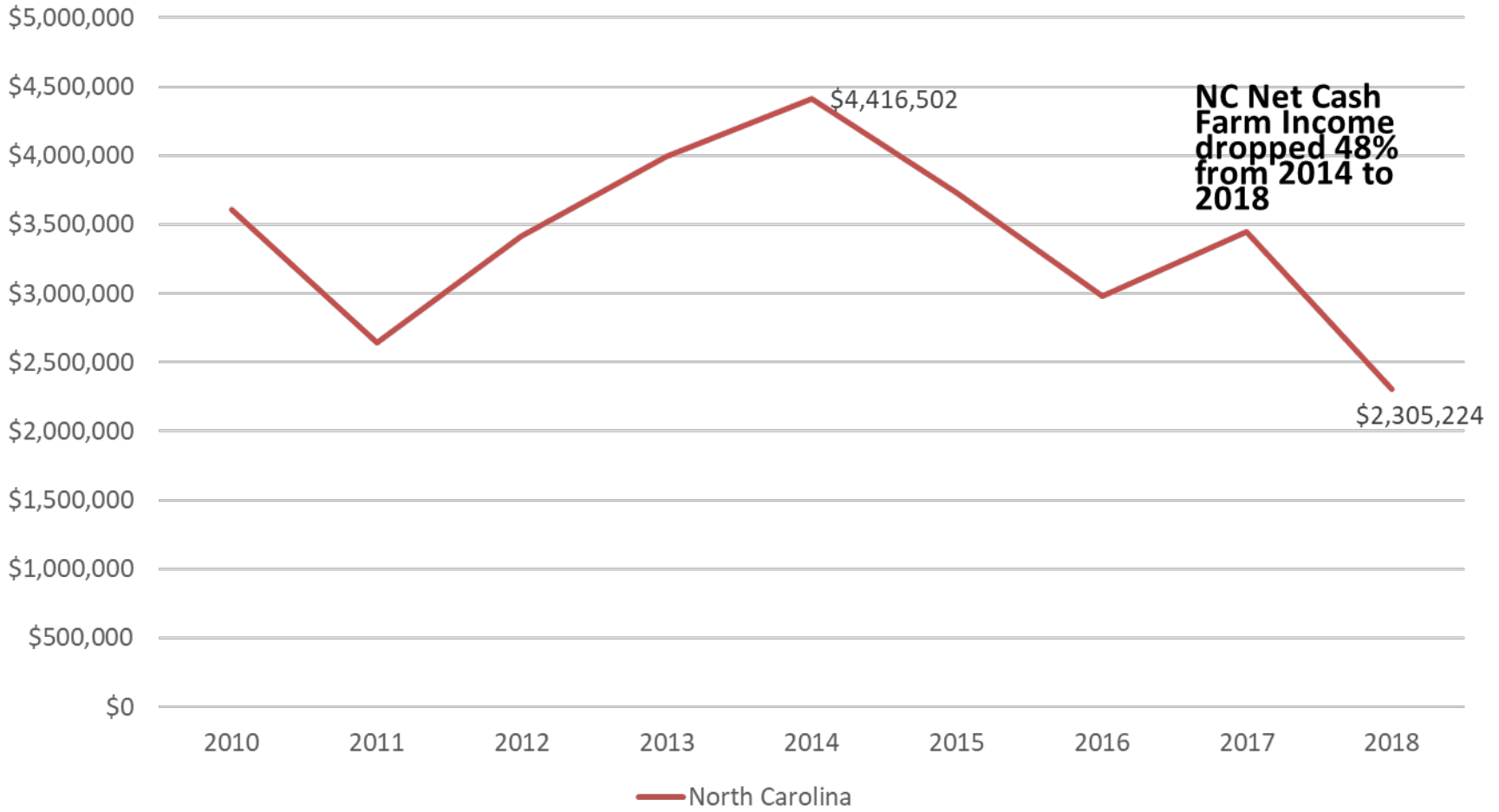


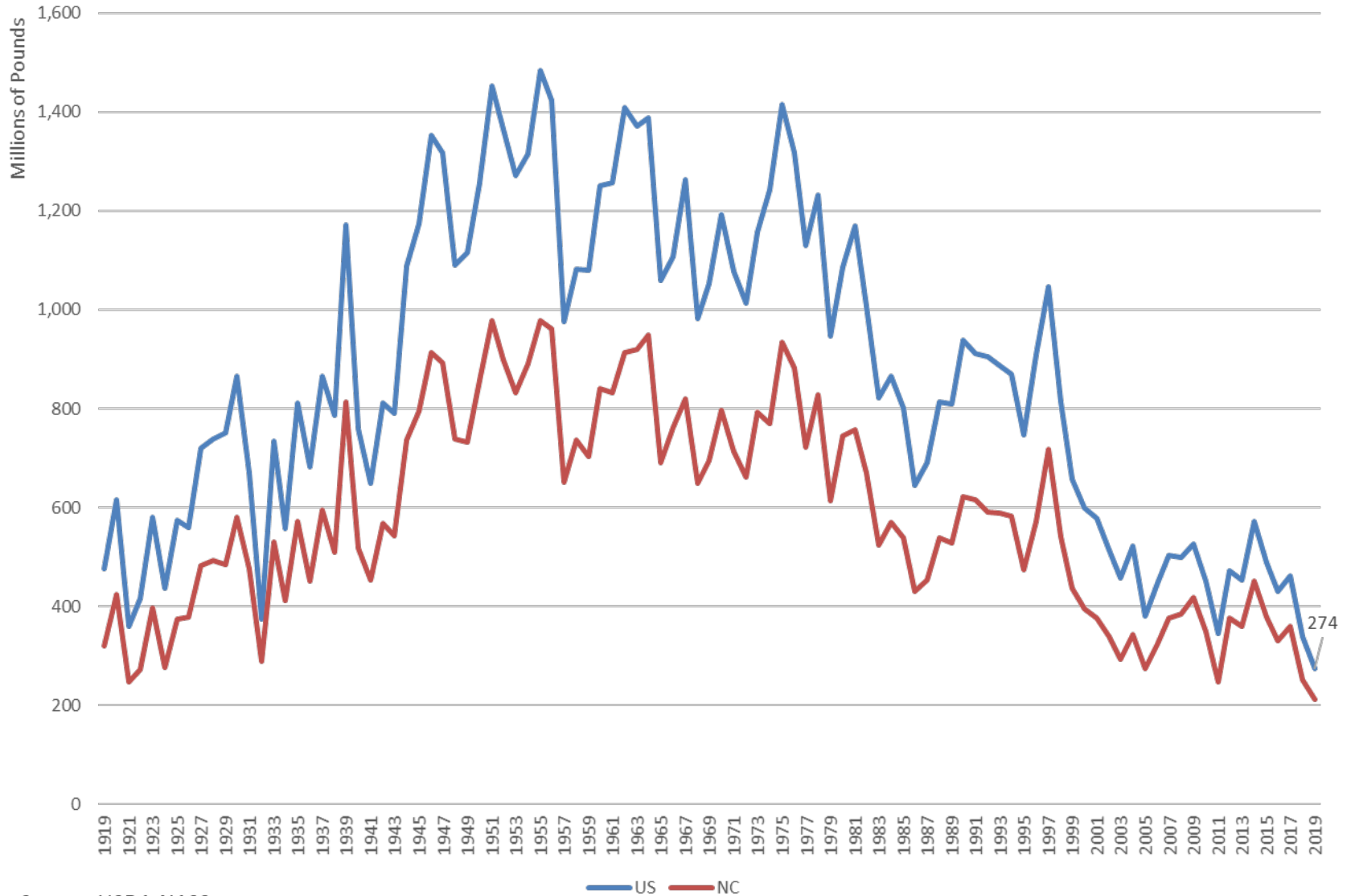
Flue-Cured Tobacco Situation and Outlook

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

North Carolina Net Cash Farm Income



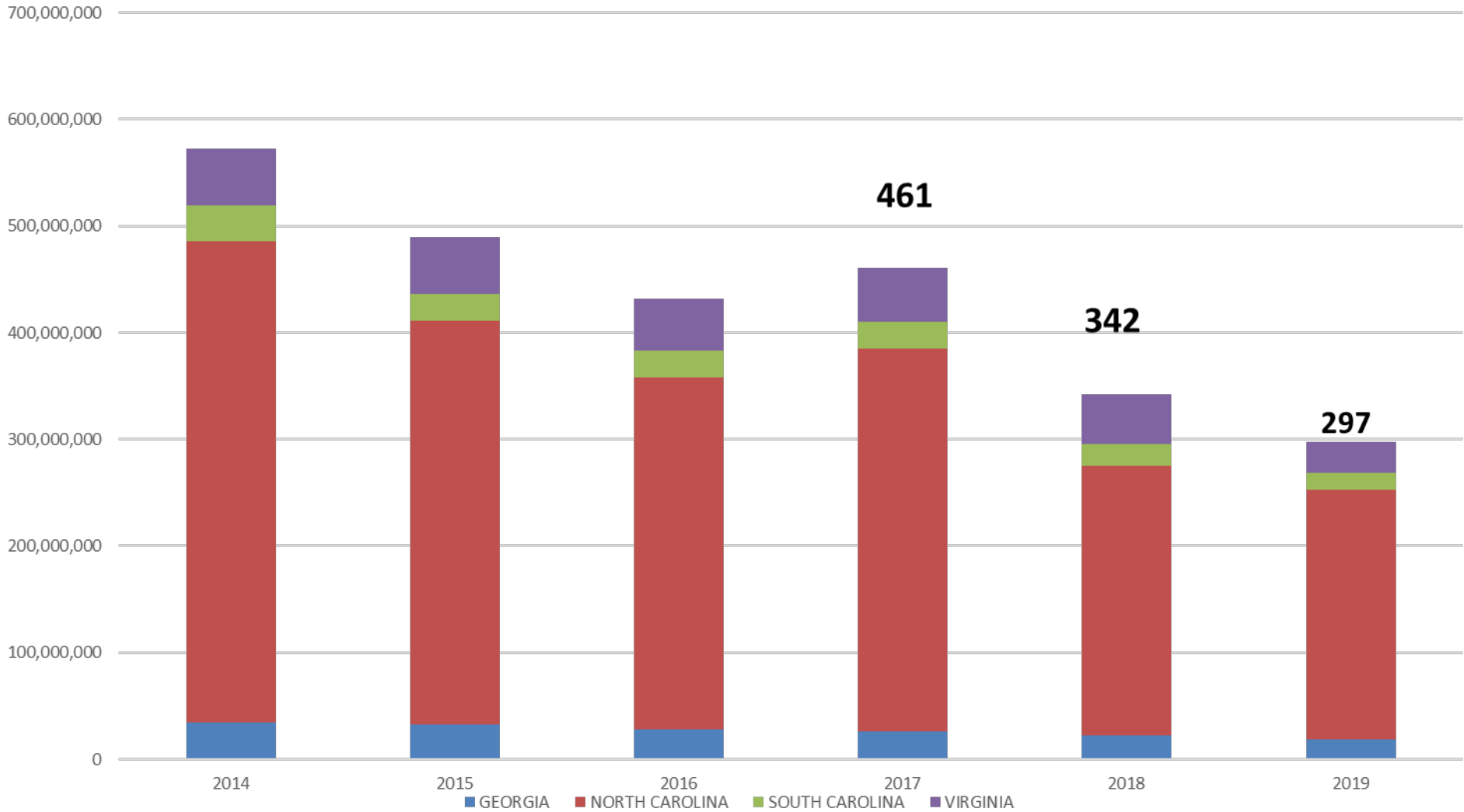
U.S. and NC Flue-Cured Tobacco Production



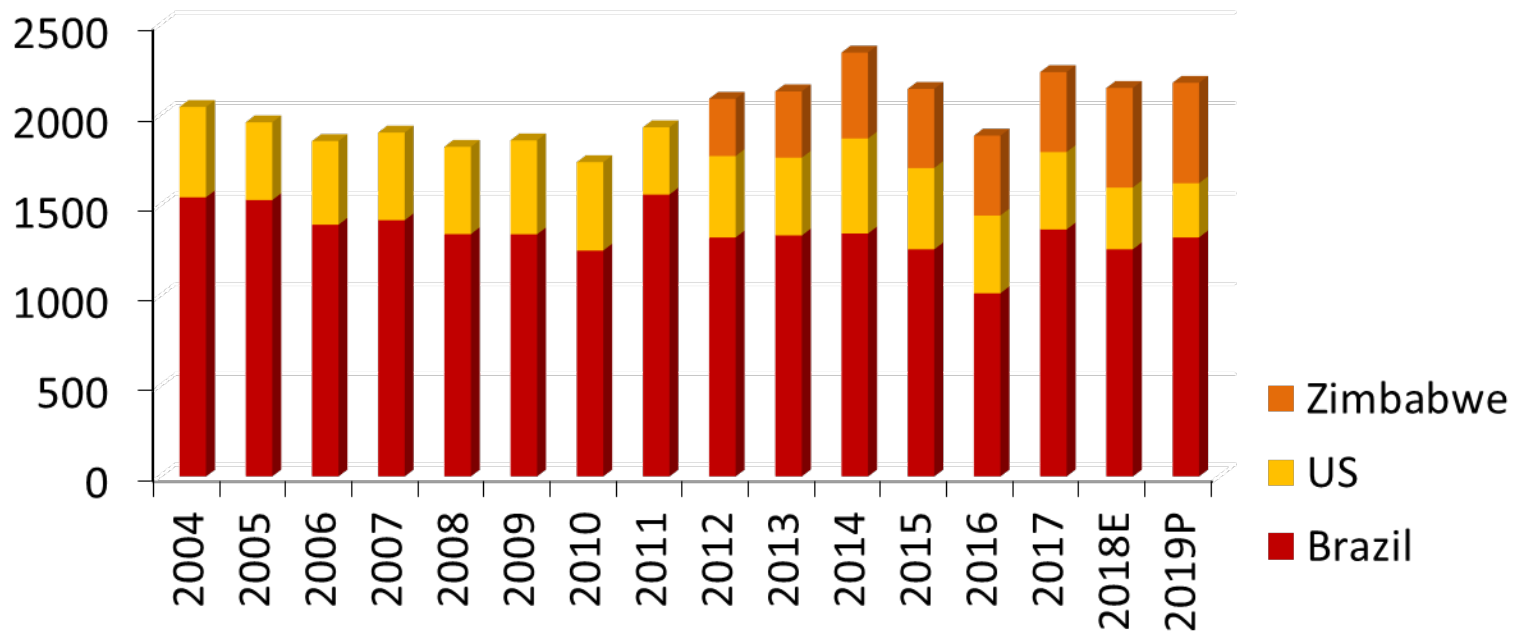
Source: USDA-NASS

U.S. Flue Cured Production

(pounds)



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

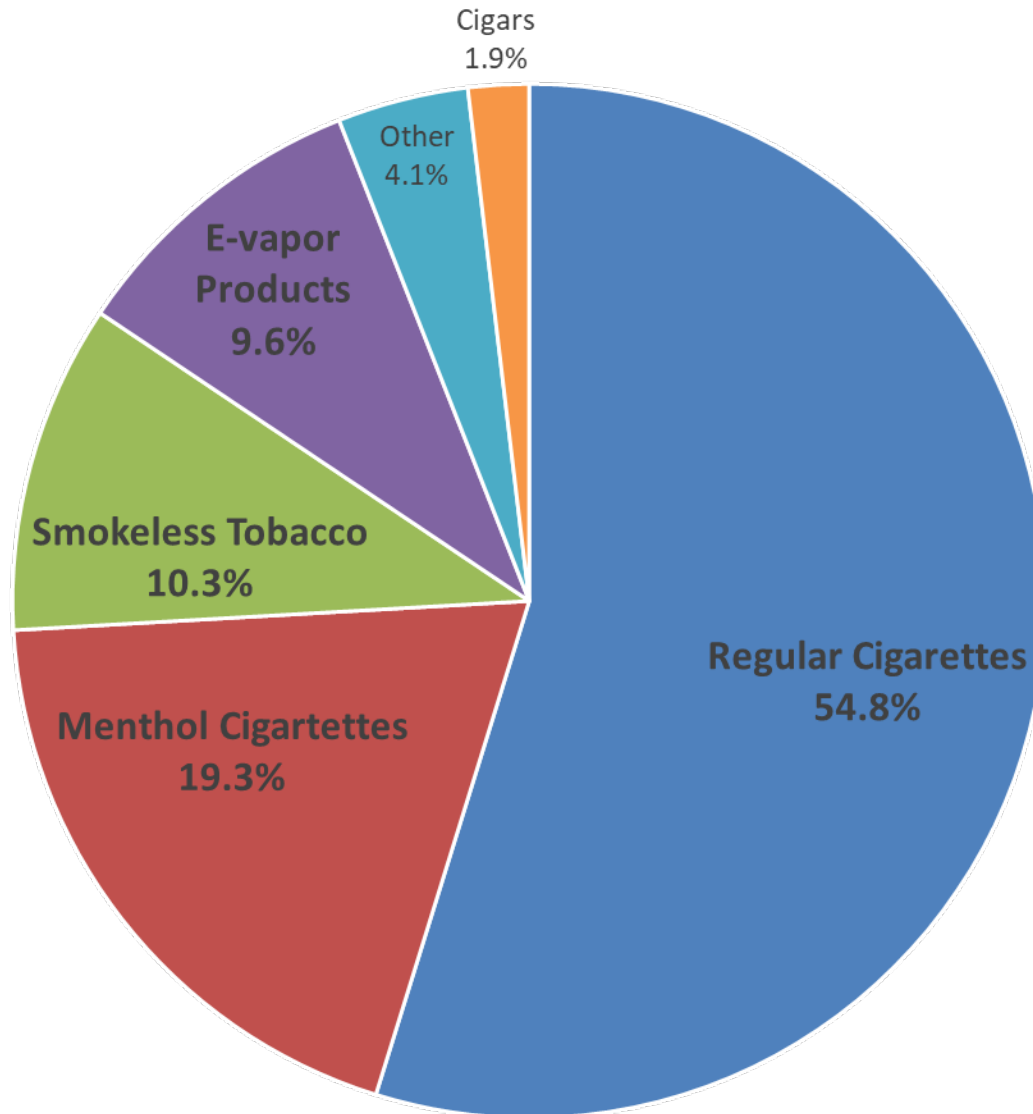


Source Brazil & U.S.: Universal Corporation. "World Leaf Production as of November 2019."
 Source Zimbabwe: Zimbabwe Tobacco Association "Weekly FCV Report 20.08.2019"

Nicotine Delivery Products...

U.S. Tobacco Products Market: 2018 Market Segmentation

Revenue:
\$45.9 billion



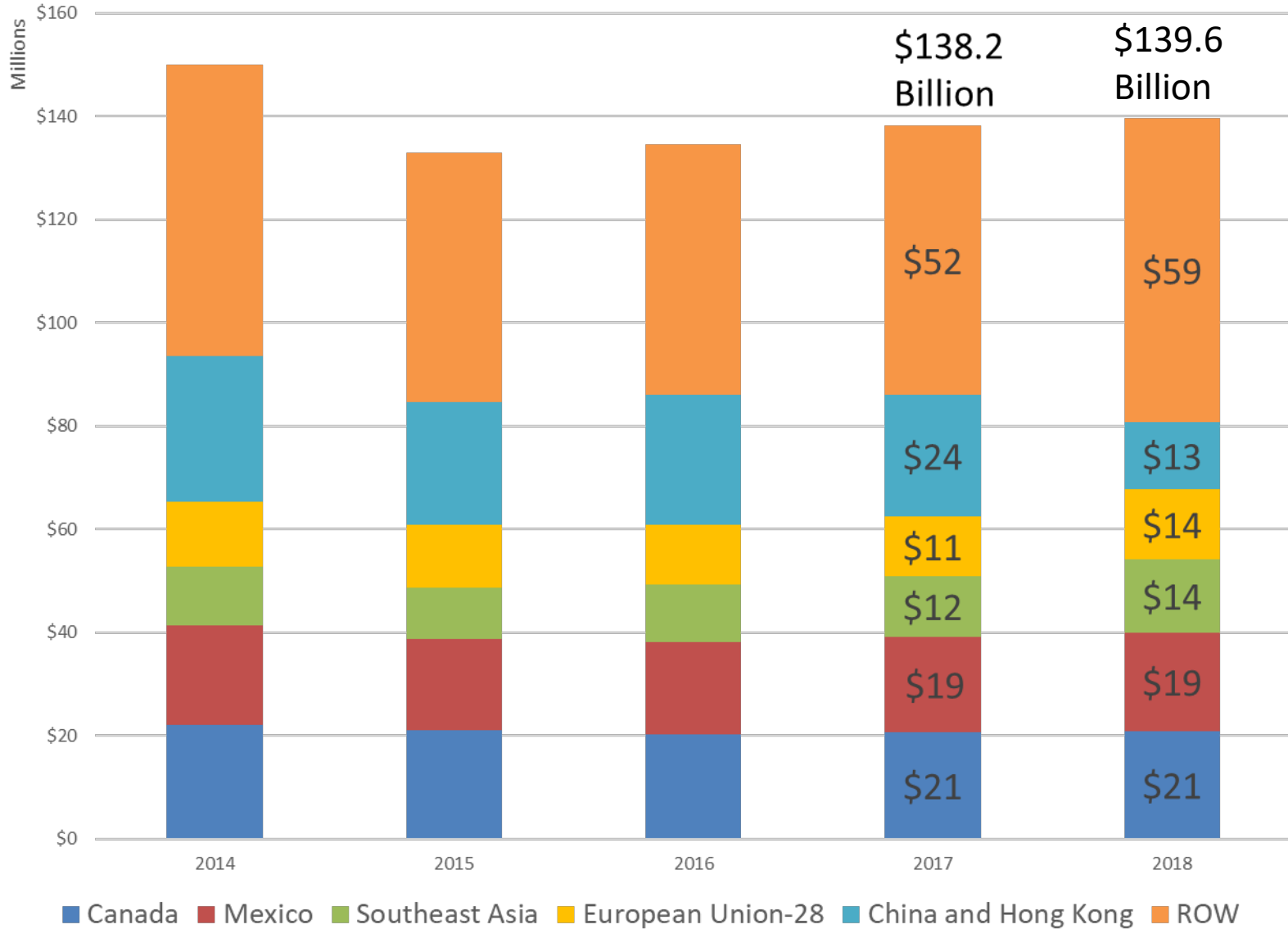
Profit:
\$19.4 billion

Heat-not-burn...

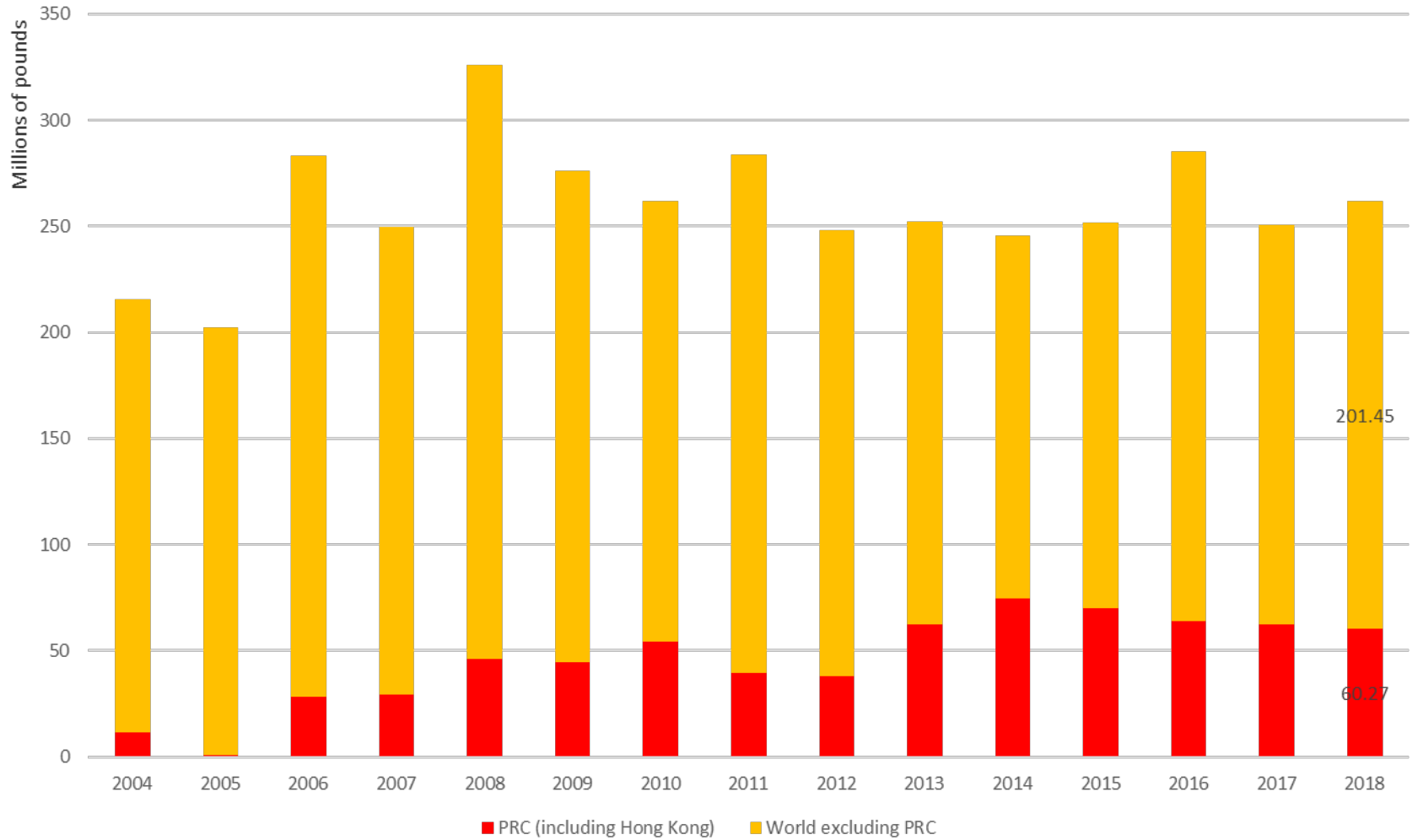
- Will HNB become a major part of the U.S. tobacco products market?
- HNB has 20% market share of Japan tobacco products
- A scenario of with HNB dominating alternative nicotine delivery is better than vaping, but still accelerates erosion of combustibles
- How will it impact U.S. flue-cured growers?

China

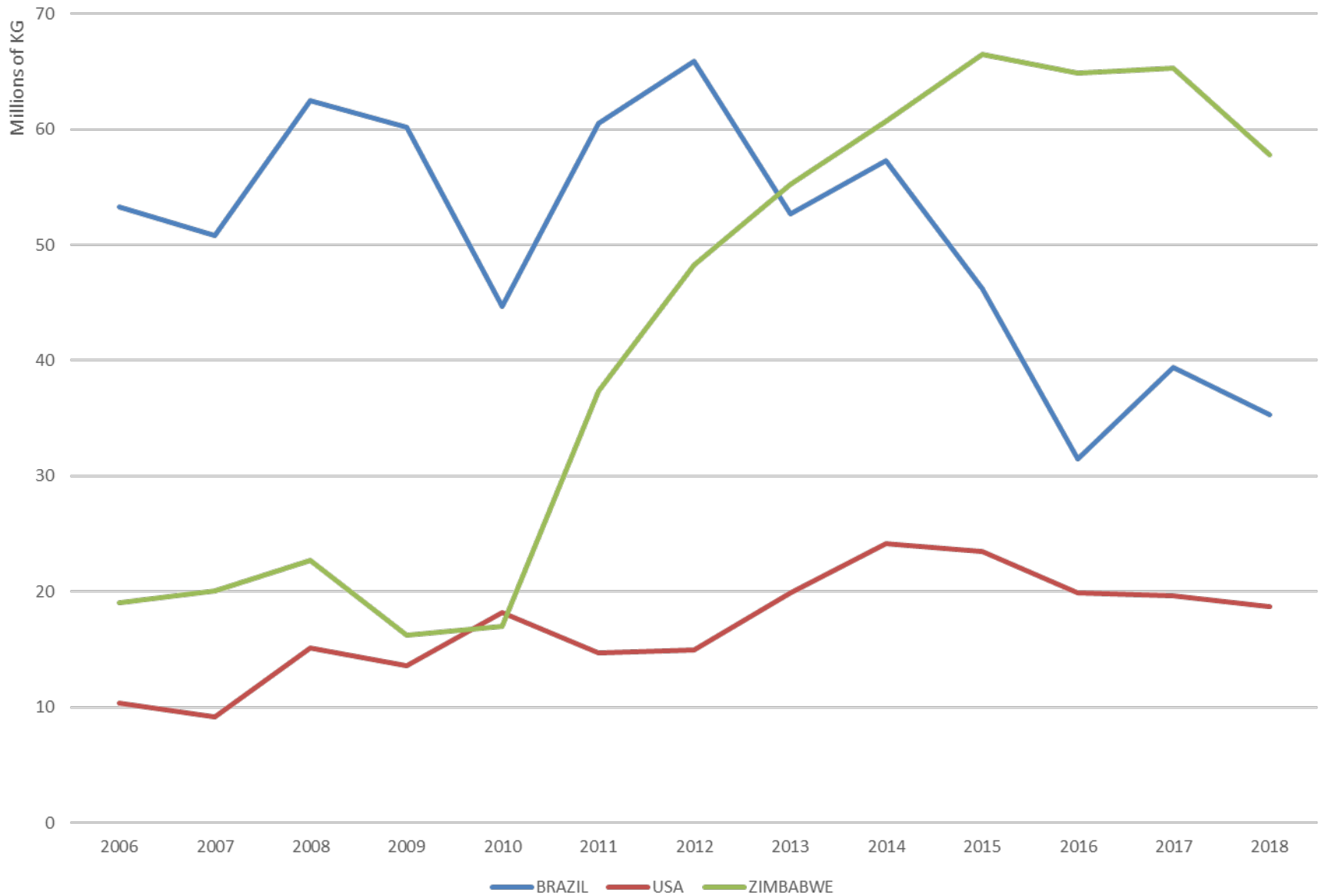
U.S Exports of Ag Products



U.S. Exports of Flue-Cured Tobacco (Unmanufactured, Farm Sales Weight)



China & Hong Kong Imports of Unmanufactured Tobacco : US, Brazil, Zimbabwe



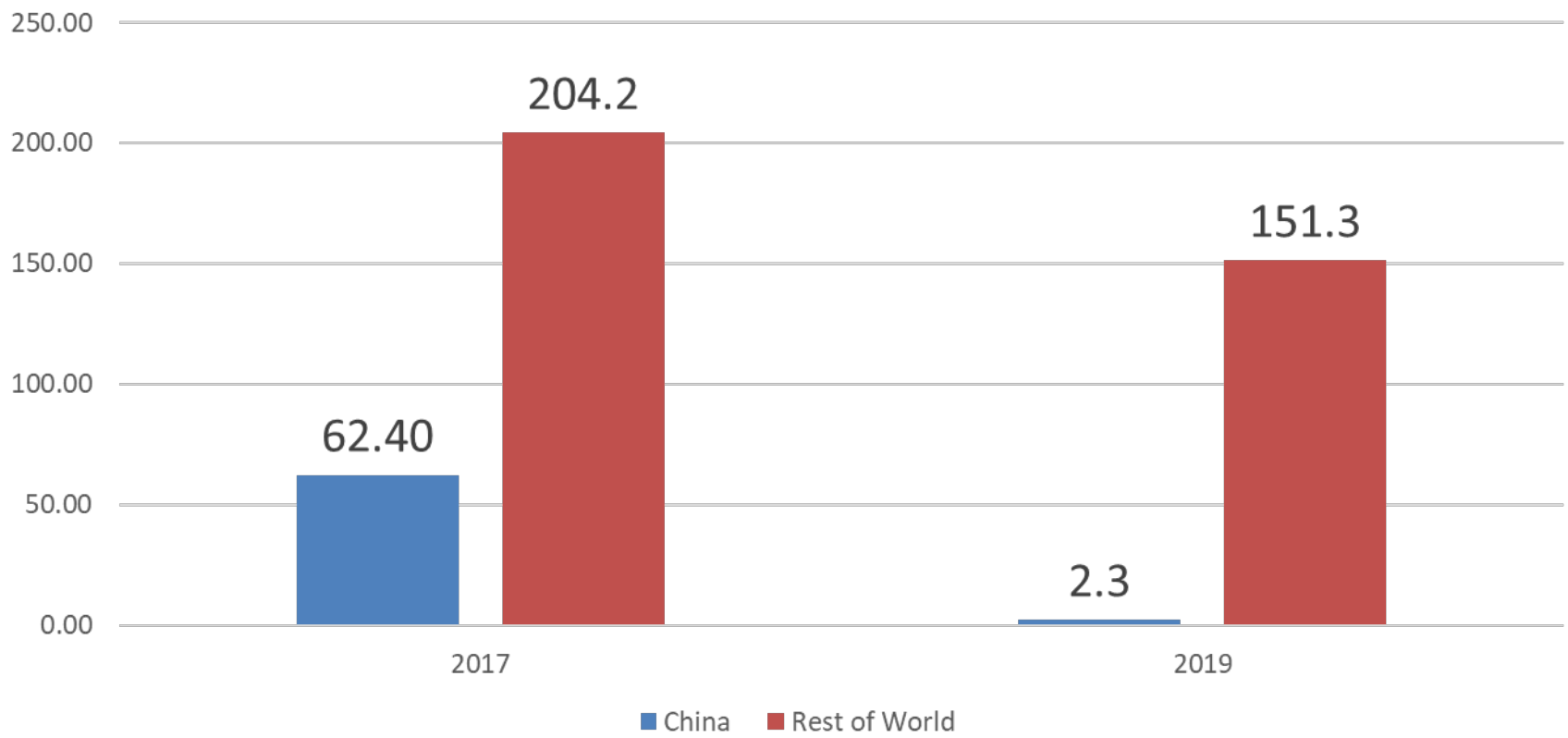
China Imports of U.S. Flue-Cured Tobacco Resume?

- **China Tobacco International (North America), Inc has not closed its Cary Office**
- **To meet \$40 billion in purchases of U.S. food, agricultural and seafood products China will need to increase purchases of many products**
- **China has substituted imports from Zimbabwe for imports from Brazil, not the U.S.**

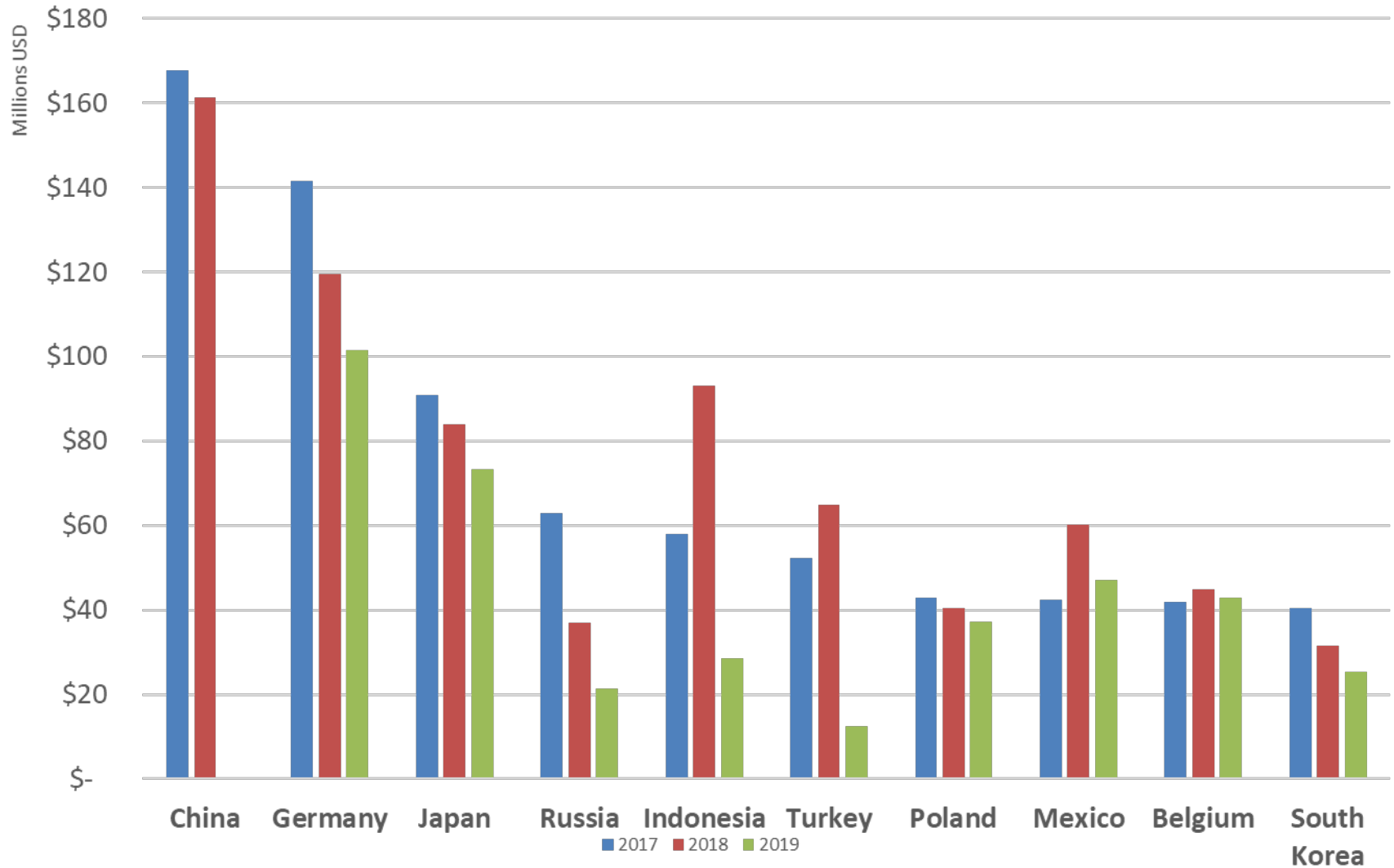
Other Export Markets for U.S. Tobacco

U.S. Flue-Cured Unmanufactured Exports: Jan-Nov China & Rest of World

(millions of lbs, FSW)



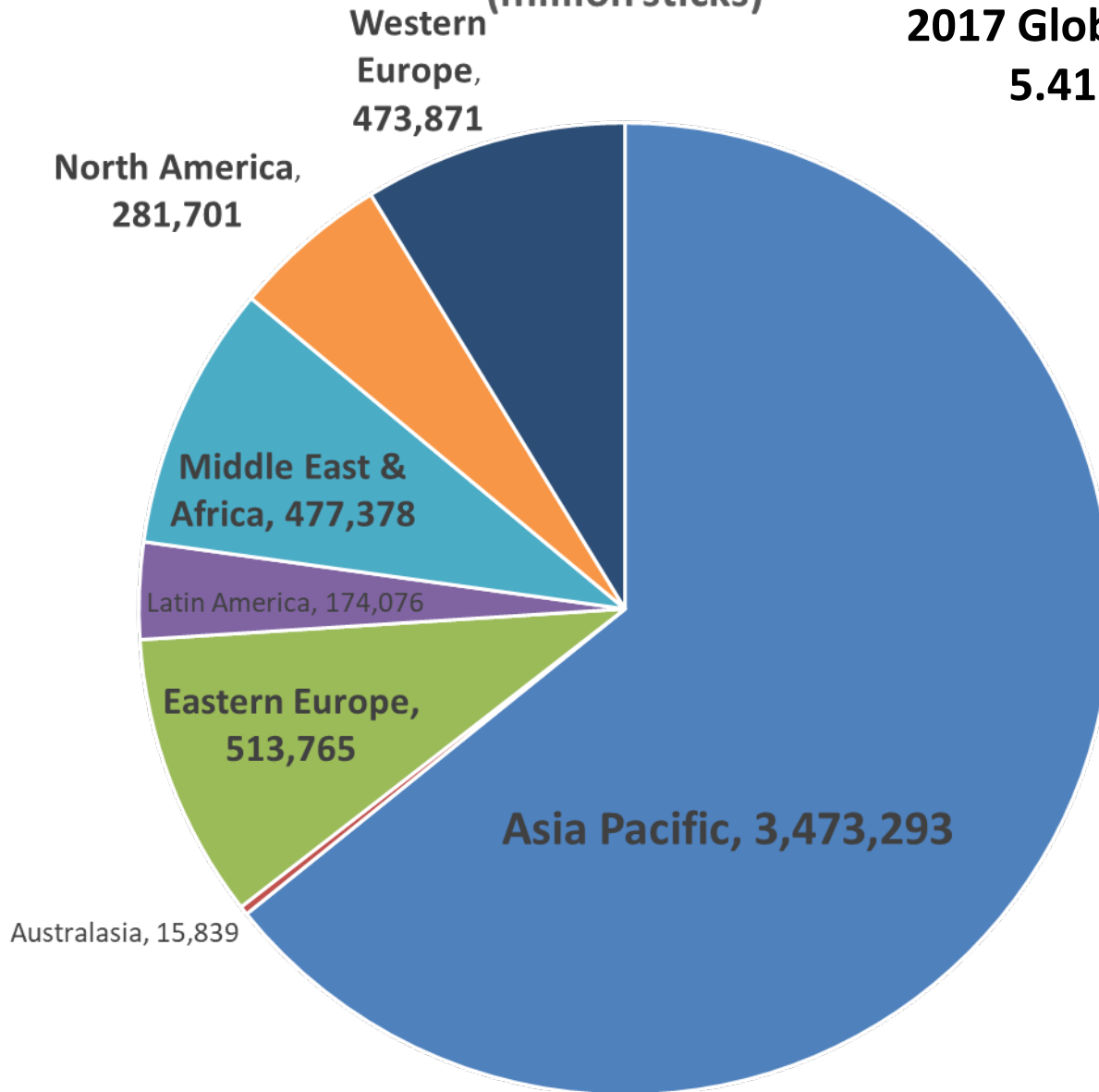
Value of U.S. Exports of Unmanufactured Tobacco



Premiumization in Asia: Important Trend for U.S. Tobacco???

Global Cigarette Sales by Region (million sticks)

**2017 Global Cigarette Sales:
5.41 Trillion sticks**



Premiumization:

The move toward more expensive premium products.

Asian affluent class to drive trends and demand for a generation

Markets by Households with Disposable Incomes of USD30,000 or more 2017/2030 (millions)

Geography	2017	2030	Growth
China	39,696.2	124,880.6	85,184.4
US	100,240.0	114,073.8	13,833.8
Japan	33,969.8	35,178.1	1,208.3
Germany	27,826.7	30,611.0	2,784.3
UK	20,021.0	23,555.9	3,534.9
France	20,443.1	23,485.3	3,042.2
India	4,507.5	18,690.1	14,182.6
Italy	14,953.7	16,971.6	2,017.9
South Korea	10,730.3	14,216.2	3,485.9
Brazil	9,346.4	13,716.2	4,369.8

US\$30,000+ Households, SE Asia

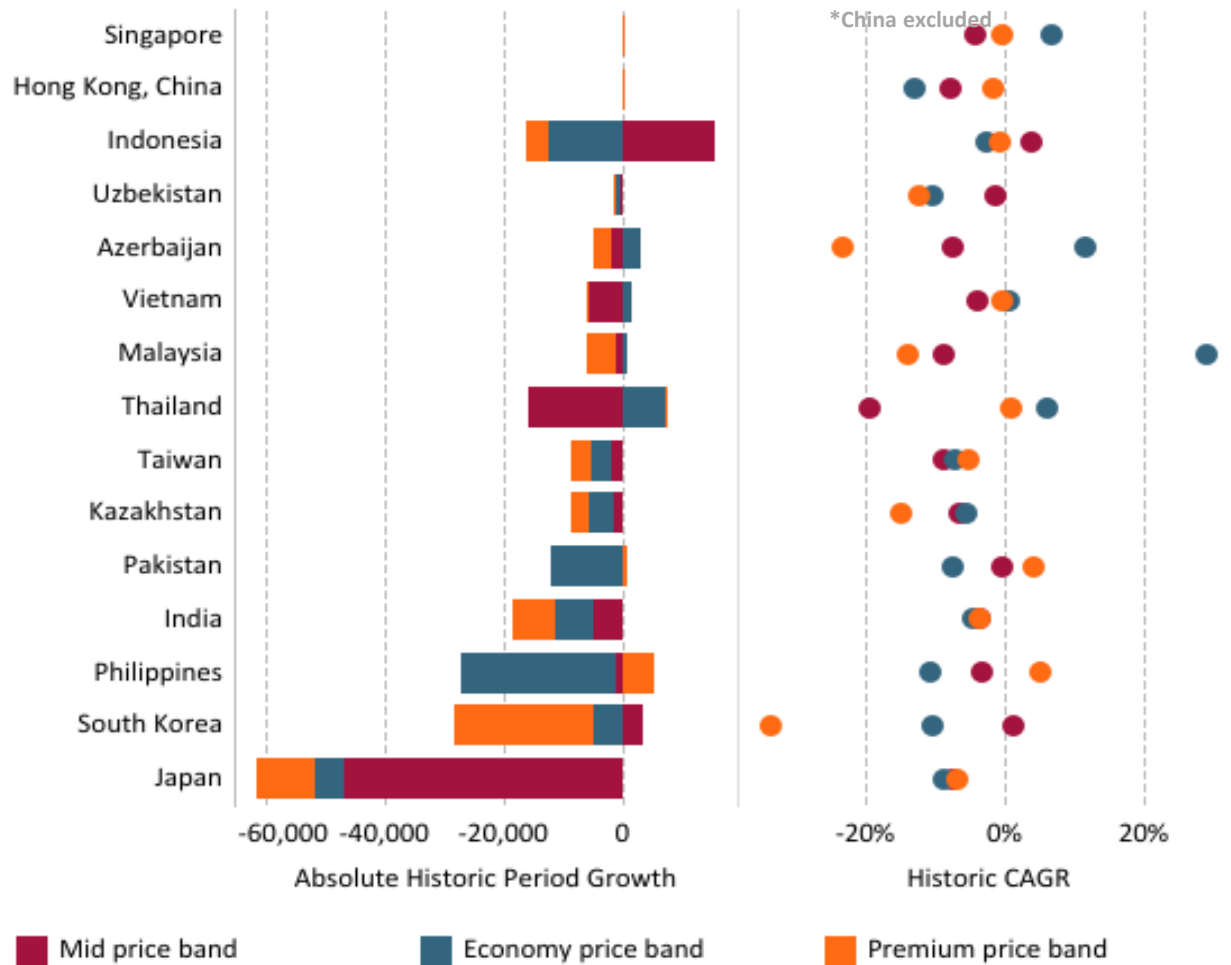
Geography	2017	2030	Growth
Taiwan	4,630.5	5,729.9	1,099.4
Indonesia	1,596.5	4,686.4	3,089.9
Malaysia	1,652.2	4,175.4	2,523.2
Philippines	703.0	2,924.0	2,221.0
Thailand	770.8	1,368.9	598.1
Vietnam	323.6	1,208.1	884.5

Source: Euromonitor International

Asia Pacific experienced declines in sales across all price bands

Asia Pacific: Breakdown of Cigarettes by price band 2013-2018

Retail Volume million sticks



Take Aways

- **Accelerated decline in demand for combustibles**

Take Aways

- Accelerated decline in demand for combustibles
- **All new technologies contain less tobacco per unit**

Take Aways

- Accelerated decline in demand for combustibles
- All new technologies contain less tobacco per unit
- **China returns...**

Take Aways

- Accelerated decline in demand for combustibles
- All new technologies contain less tobacco per unit
- **China returns...**
 - **will China's return in 2020 just be purchase of inventories from 2018 crop?**
 - **or will China Tobacco International (North America), Inc. contract directly for tobacco with growers in 2020?**
 - **or some combination?**

Take Aways

- Accelerated decline in demand for combustibles
- All new technologies contain less tobacco per unit
- China returns...how much will they buy
- **What about other buyers?**
 - **Exports to ROW are down for 2019**

Take Aways

- Accelerated decline in demand for combustibles
- All new technologies contain less tobacco per unit
- China returns
- Exports to other Buyers down...
- **Is premiumization an important trend for tobacco products in Asia?**

Take Aways

- Accelerated decline in demand for combustibles
- All new technologies contain less tobacco per unit
- China returns
- Exports to other Buyers down...
- Is premiumization an important trend for tobacco products in Asia?
- **Bottom Line: Resumption of China trade would positively impact U.S. sales, but overall trend is still declining sales.**

Take Aways

- Accelerated decline in demand for combustibles
- All new technologies contain less tobacco per unit
- China returns
- Exports to other Buyers down...
- Is premiumization an important trend for tobacco products in Asia?
- Bottom Line: Resumption of China trade would positively impact U.S. sales, but overall trend is still declining sales.
- **Regardless, tobacco will still be very important for some farmers...**