

The background image is a rich, warm-toned still life featuring cocoa products. In the center, a burlap sack is filled with cocoa beans. To the left, several cocoa pods are visible. In the foreground and to the right, there are stacks of chocolate bars, some of which are broken to reveal a nutty interior. A small bowl of cocoa powder sits in the bottom right corner. The overall lighting is soft and focused, highlighting the textures of the beans, pods, and chocolate.

# Cocoa Market

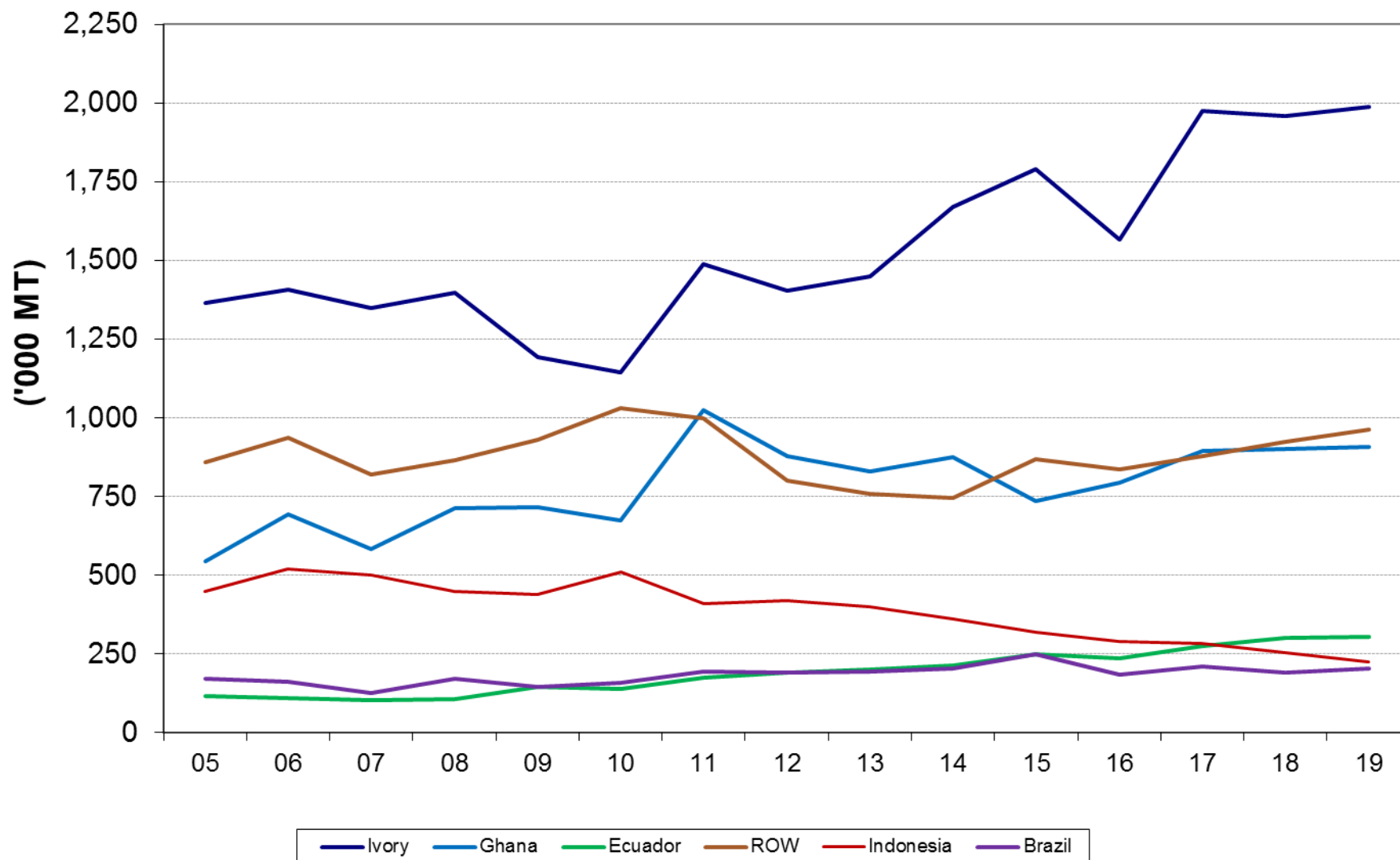
**International Sweetener Colloquium**  
**February 26, 2019**  
**Miami, FL**



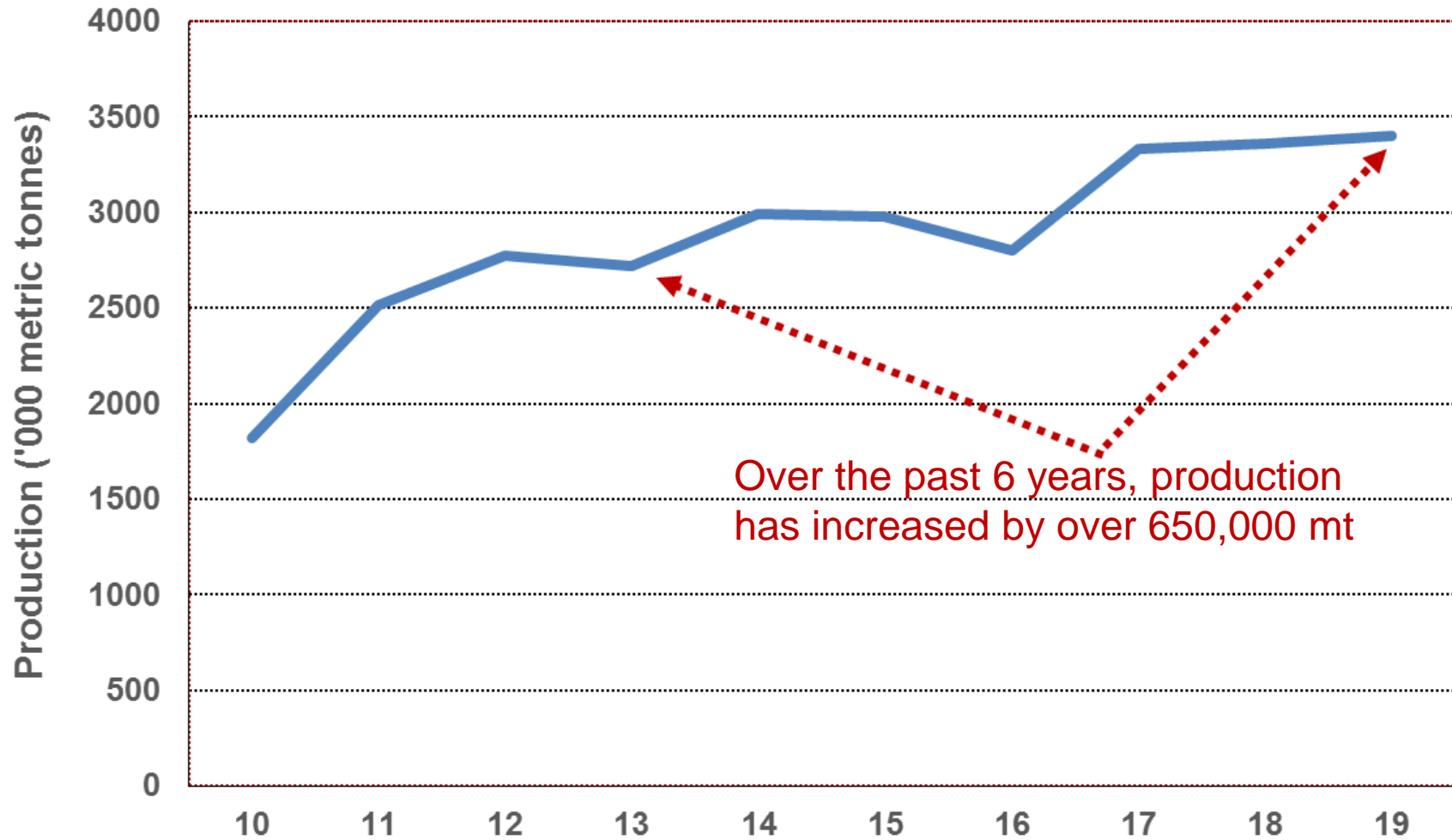
75-80% of the World's  
Production



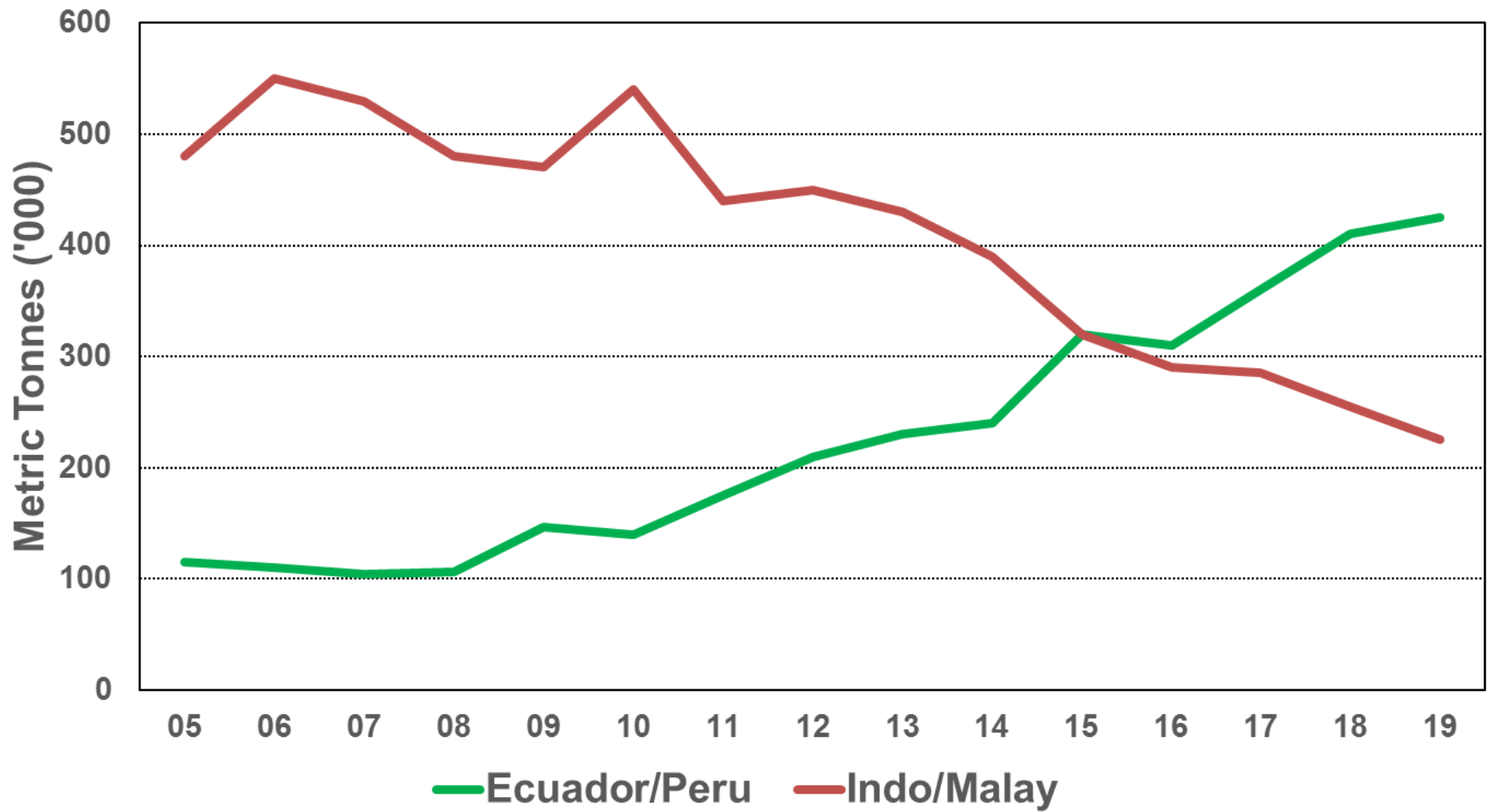
## Cocoa Bean Crop Production



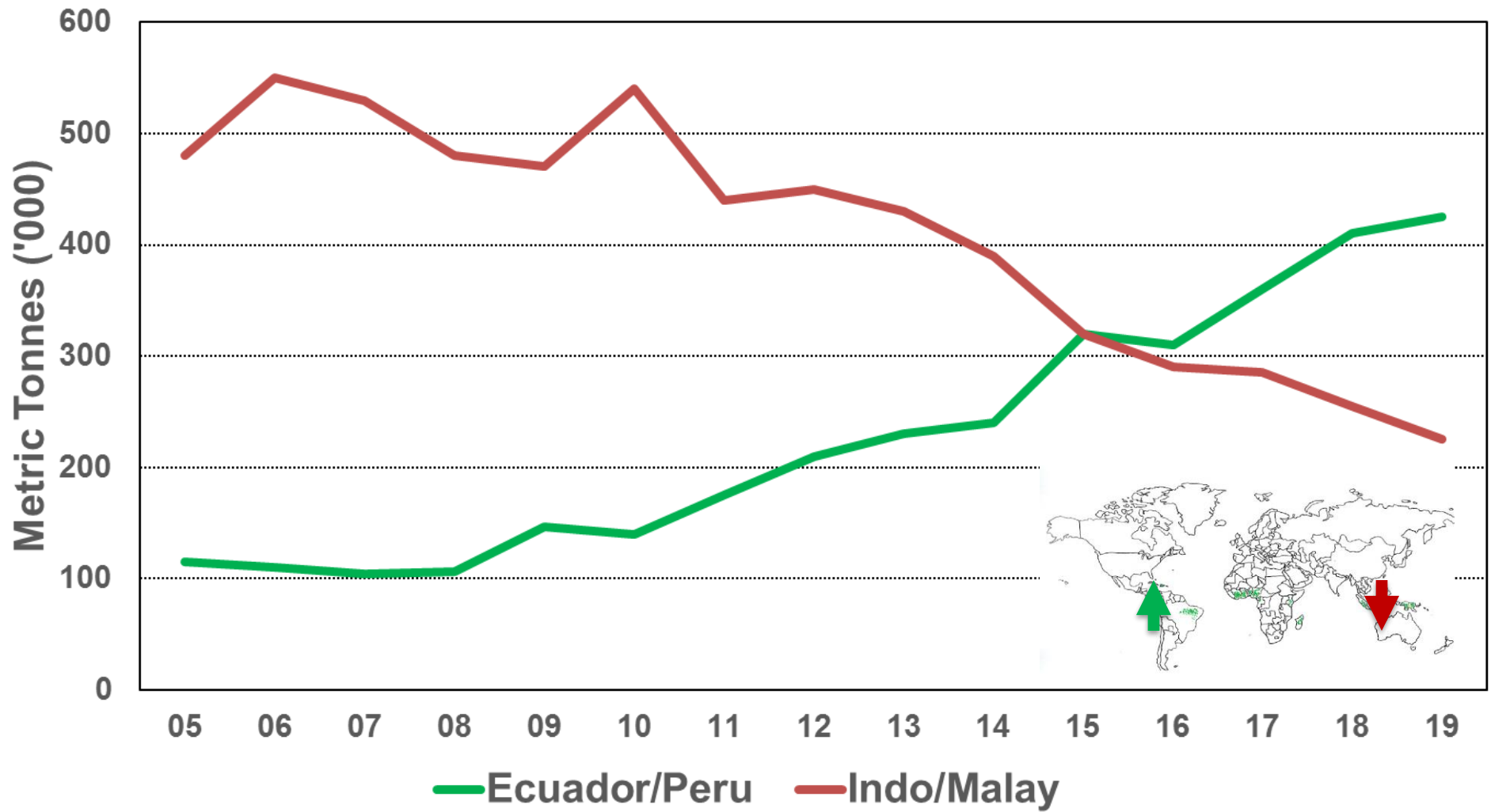
## Total West African Production



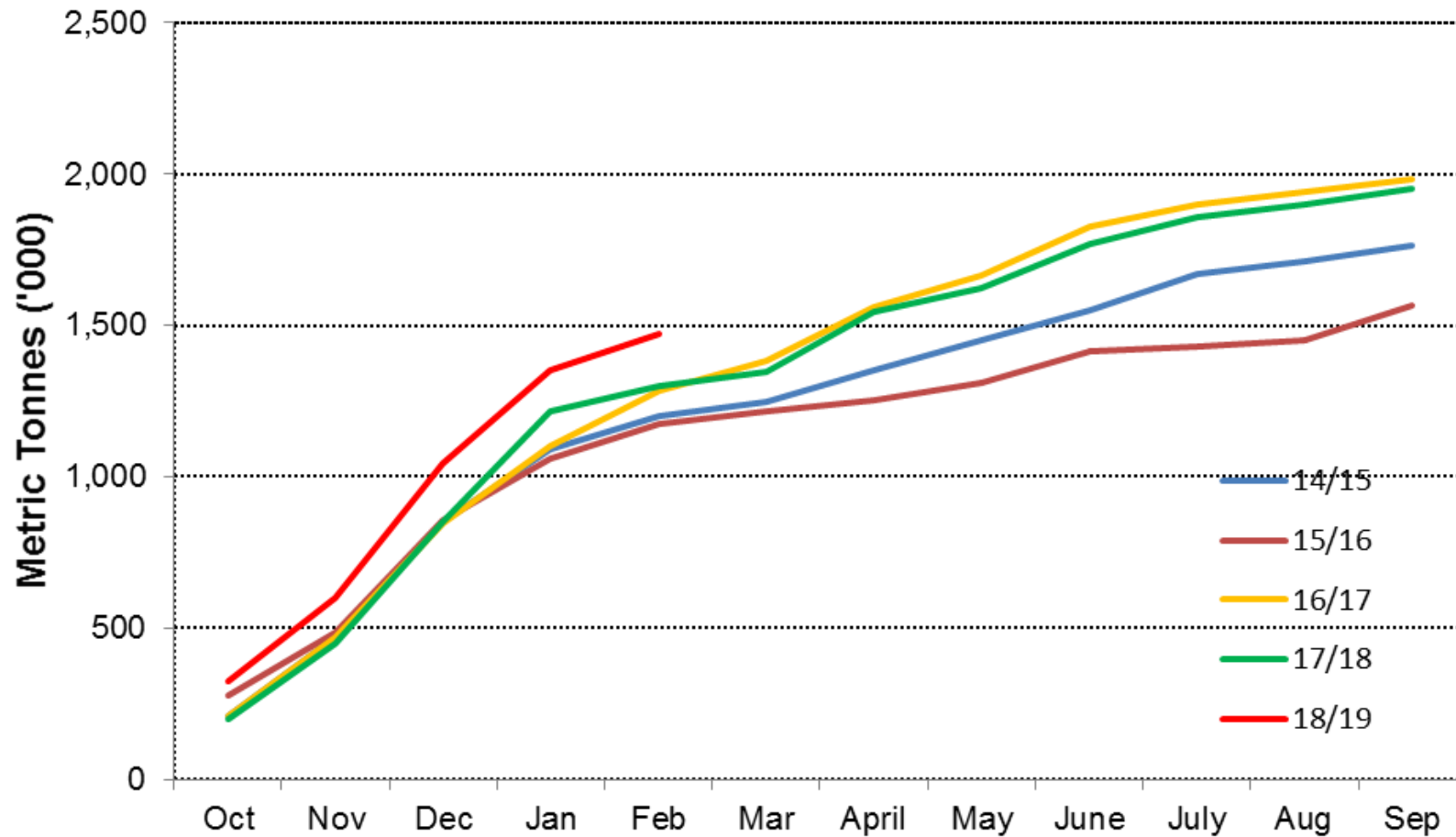
## Regional Shifts in Global Cocoa Production



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## Ivory Coast Crop Flow - Cum Arrivals

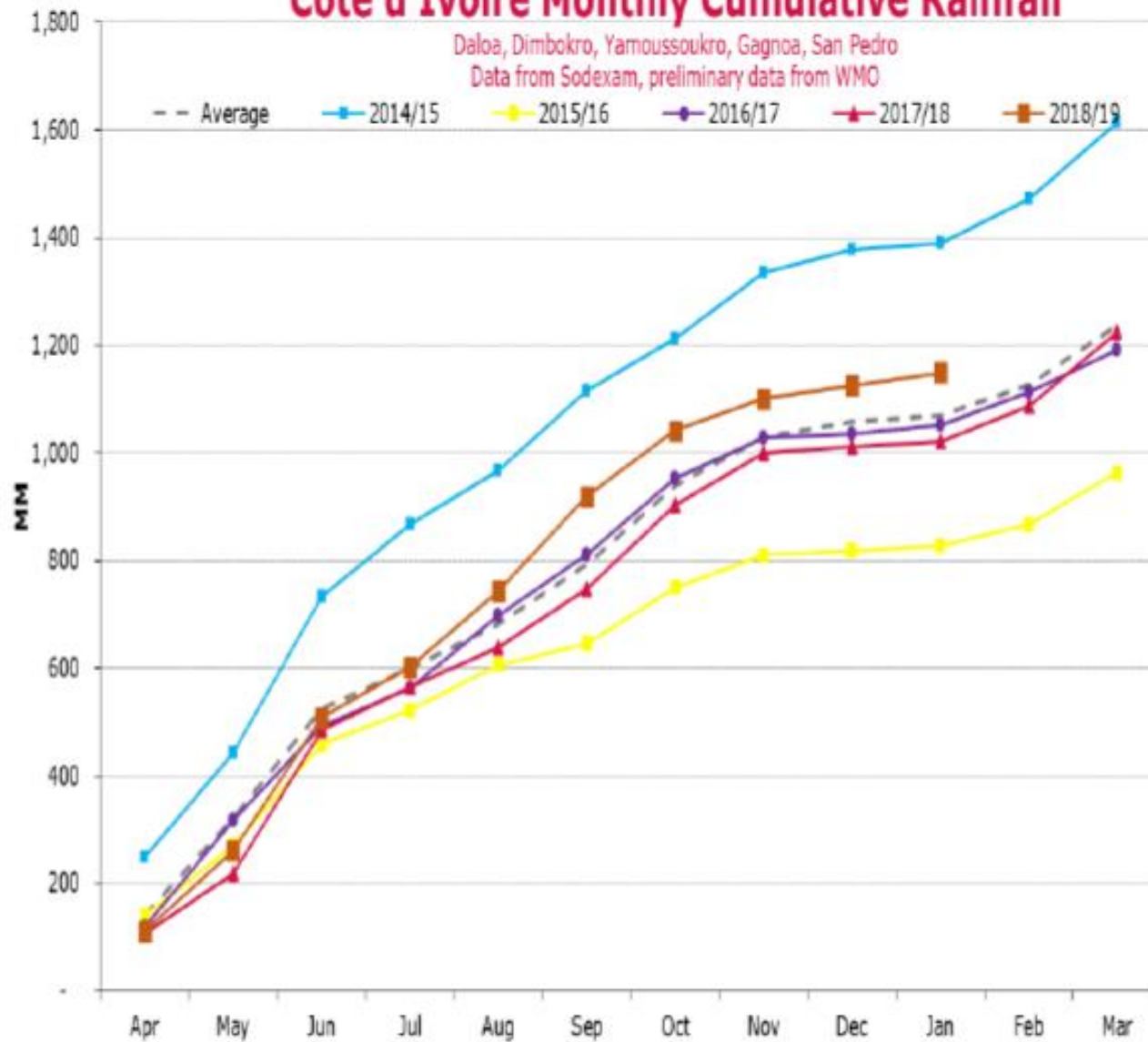




## Côte d'Ivoire Monthly Cumulative Rainfall

Daloa, Dimbokro, Yamoussoukro, Gagnoa, San Pedro

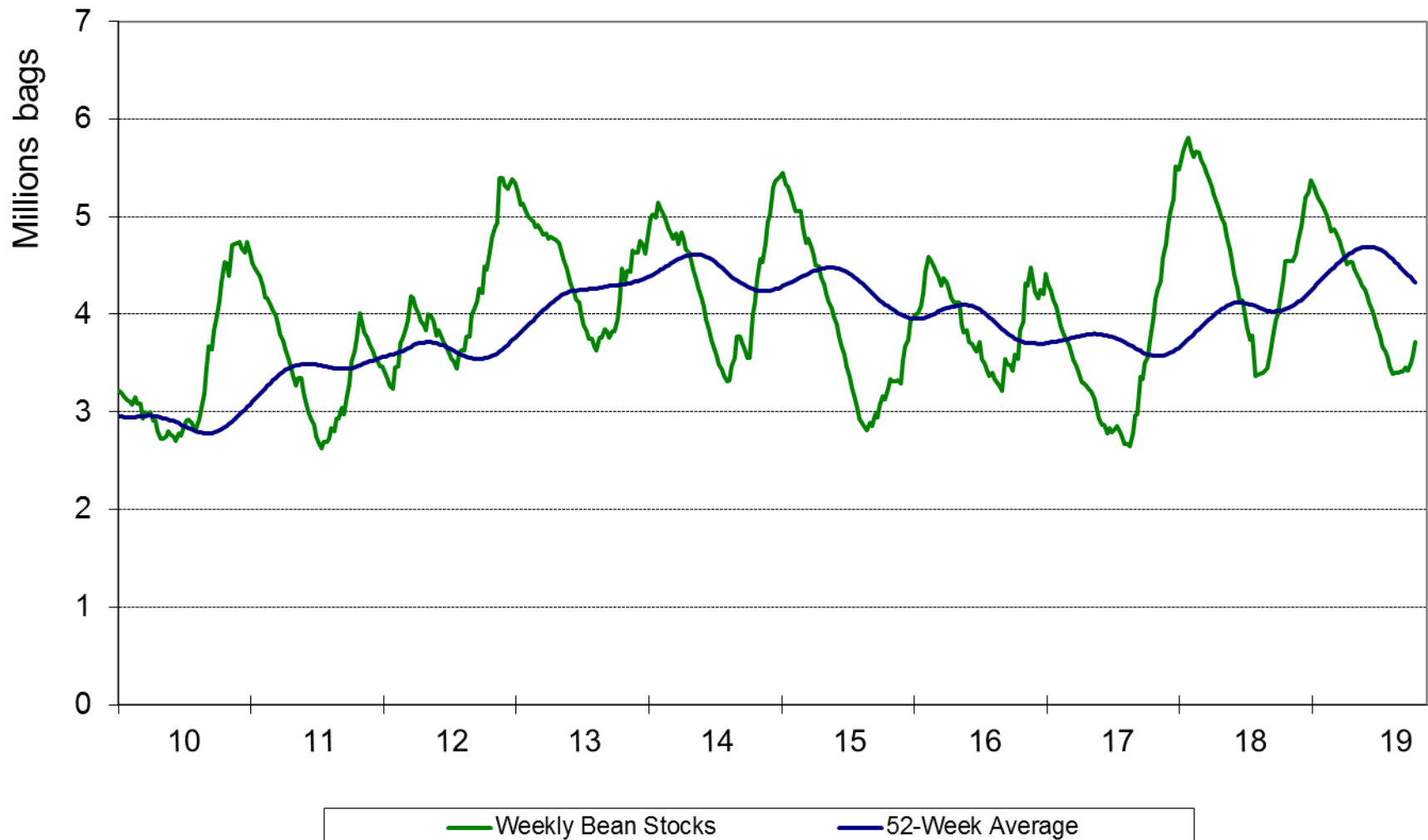
Data from Sodexam, preliminary data from WMO





## U.S. Cocoa Bean Stocks

145 lb bags



So what happened to the projected 1 million tonnes deficit by early 2020s?

**The  
Telegraph**

Is the world really running  
out of chocolate?

**Chocapocalypse 2020**

**THE  
Star**  
the people's paper



**The  
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Post**

Chocolate maker says world  
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### Original assumptions

Grind would continue  
to grow at +3% per year

Production would grow  
nominally around +1% per year

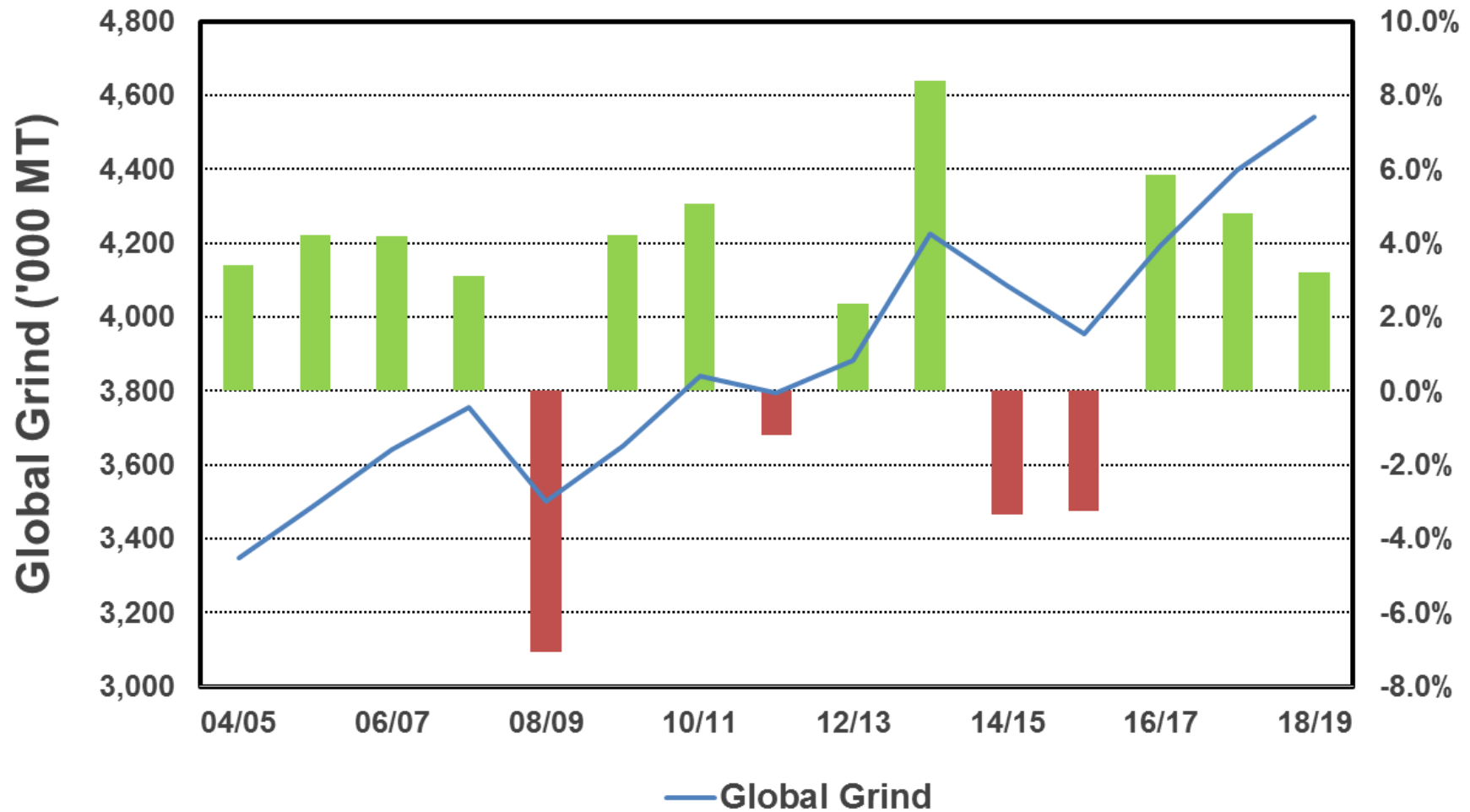
### Actual results (past decade)

Grind has continued to grow around  
+2% per year

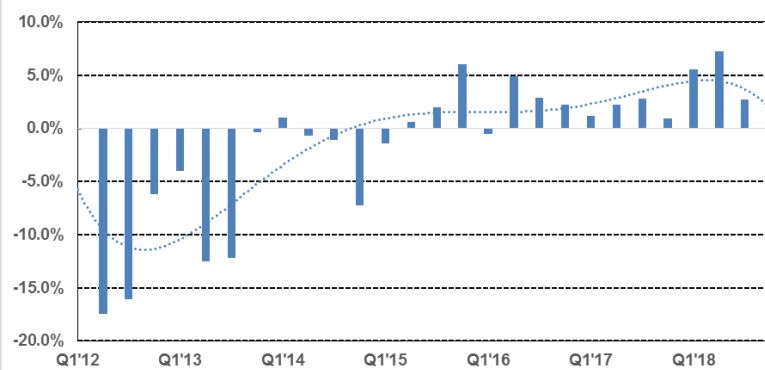
Production has kept pace and  
expanded at rate of +2.25% per year



## Global Grind

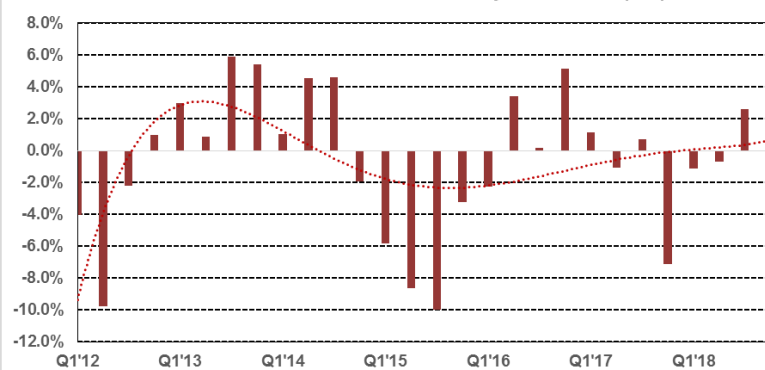


Western European Quarterly Grinds (%)



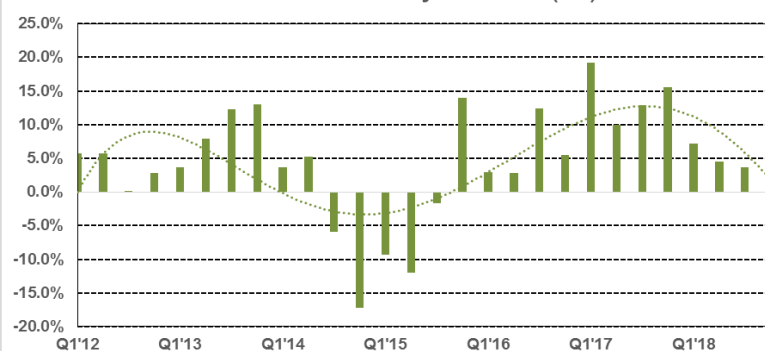
- Largest grinding regions (2 x as big as next largest)
- Growth of +4% over the past crop year
- Tremendous growth, but sets up a very high bar to meet or exceed for the current year

North American Quarterly Grinds (%)



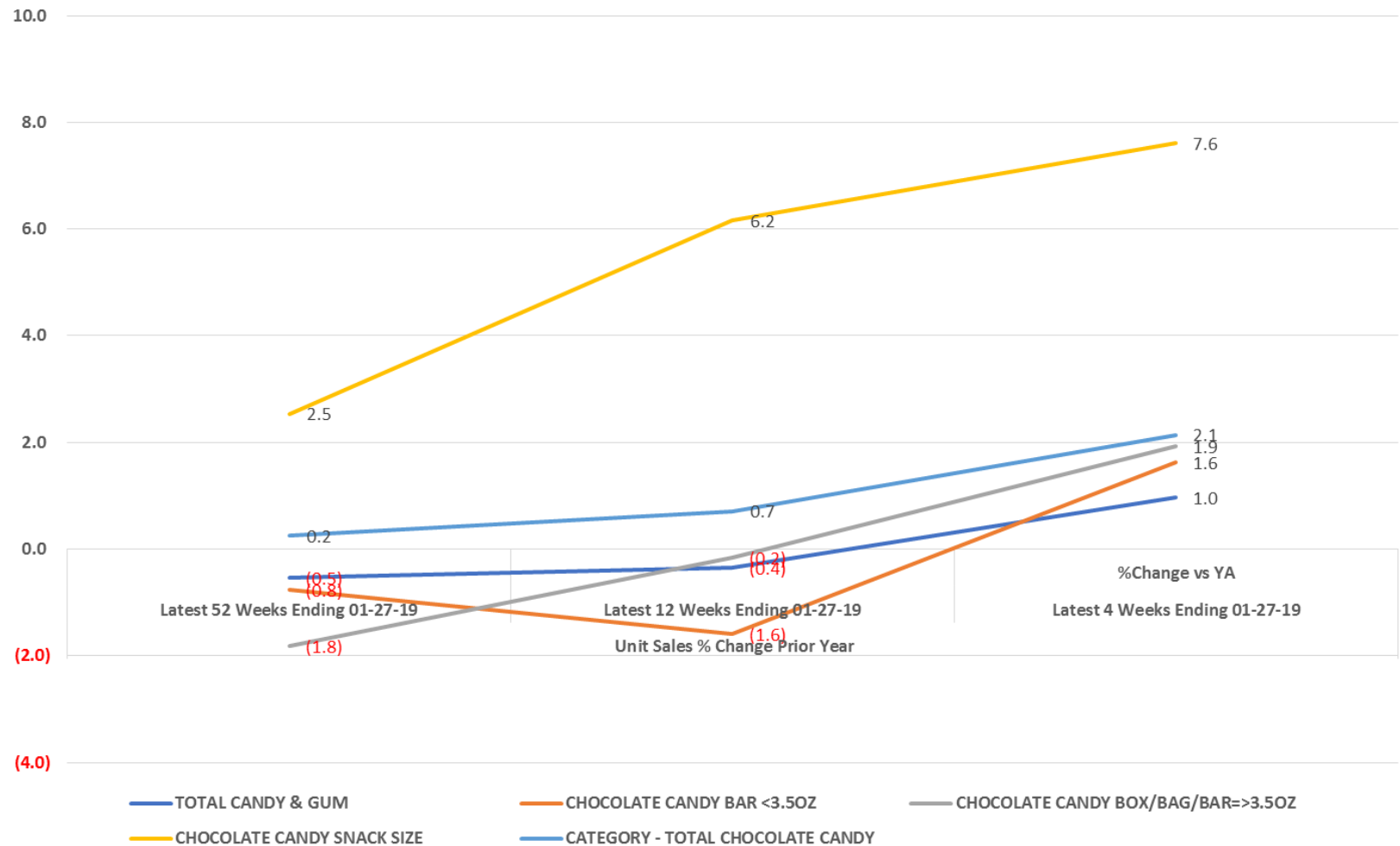
- Only major reporting region to register a decline in grind (-2.2% over the past “crop year”)
- Major restructuring underway across N. America
- Sale of ADM, entrance of Olam, Cargill acquiring ADM chocolate business
- Clasen new plant, sale of Blommer to Fuji Ingredients, Transmar bankruptcy

Asian Quarterly Grinds (%)



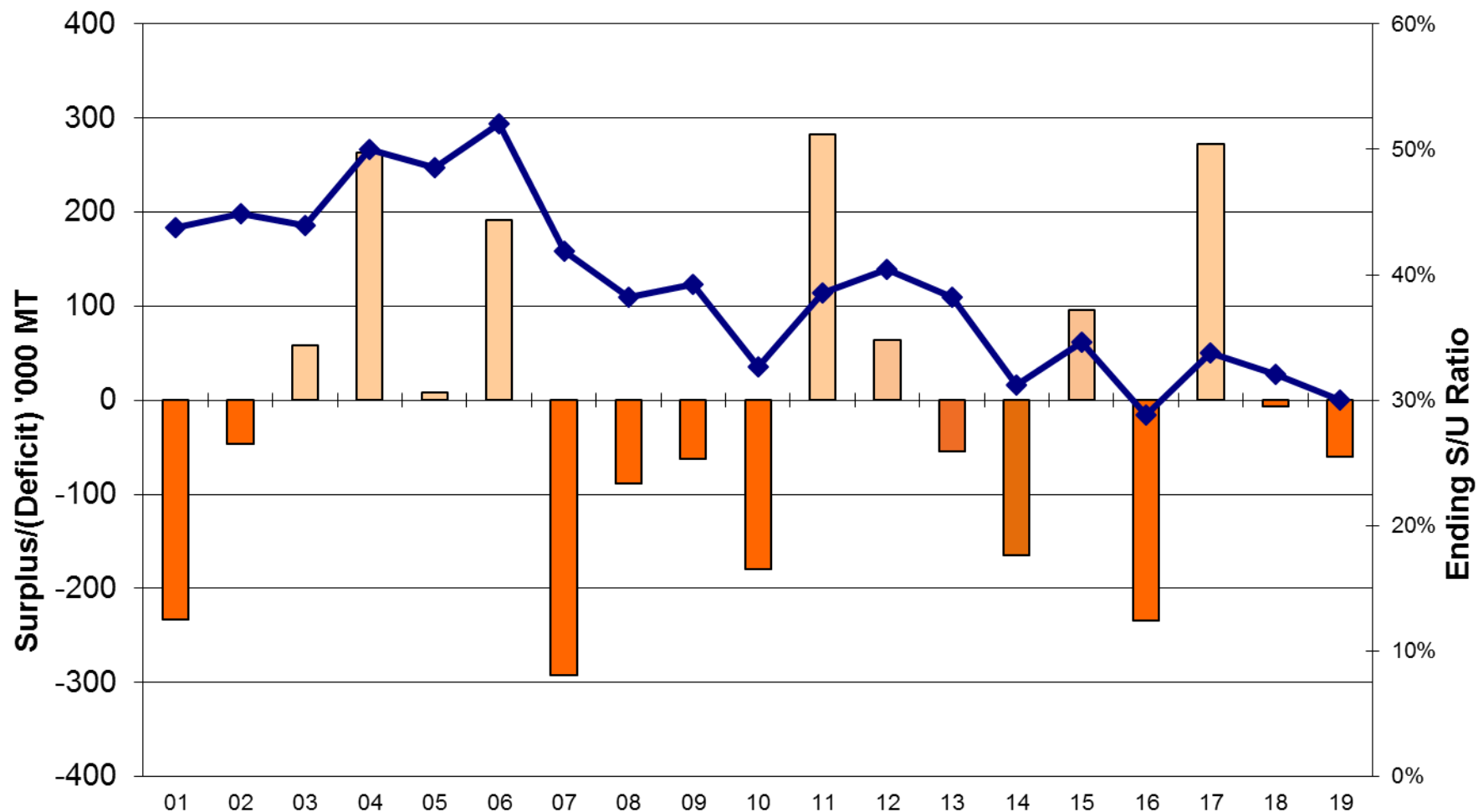
- Growing region of importance in terms of cocoa processing and population growth (up +10%)
- Major crop production issues in Malaysia (crop down -10%)
- Structural deficit region implies strong imports are necessary to run capacity

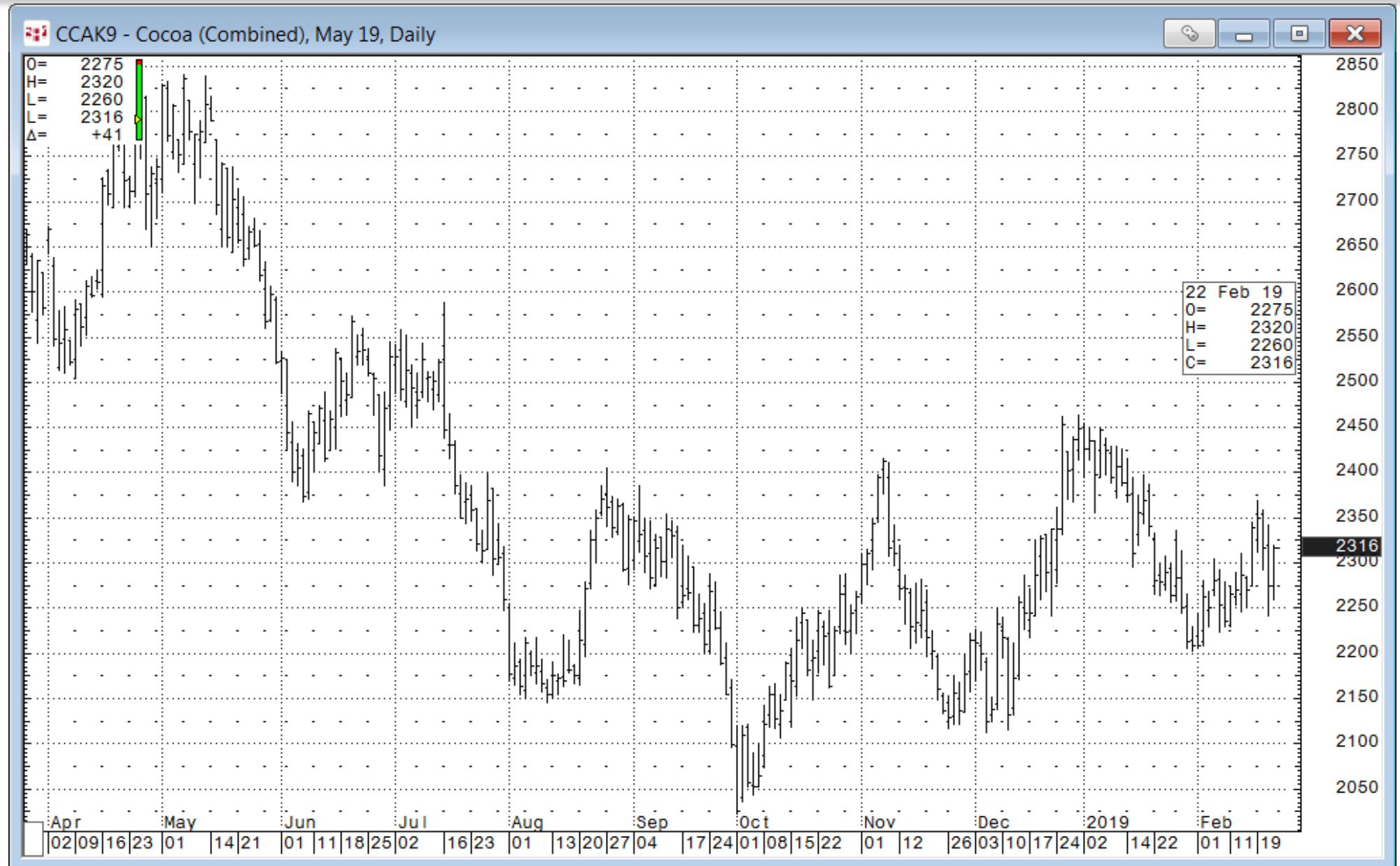
IRI Data  
Multi-Outlet/Convenience  
Unit Sales  
January 27 2019





## Structural Surplus/Deficit vs. S/U

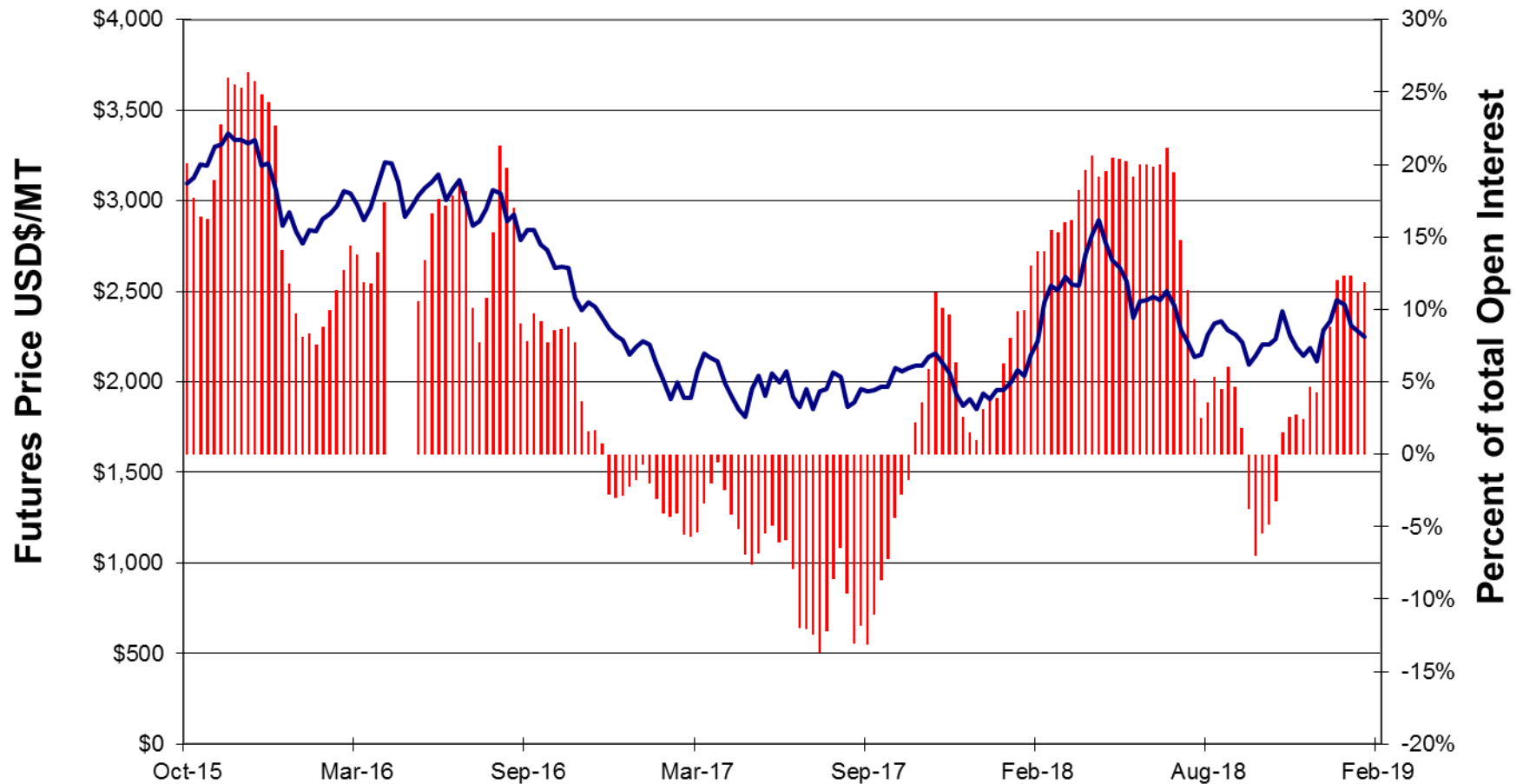






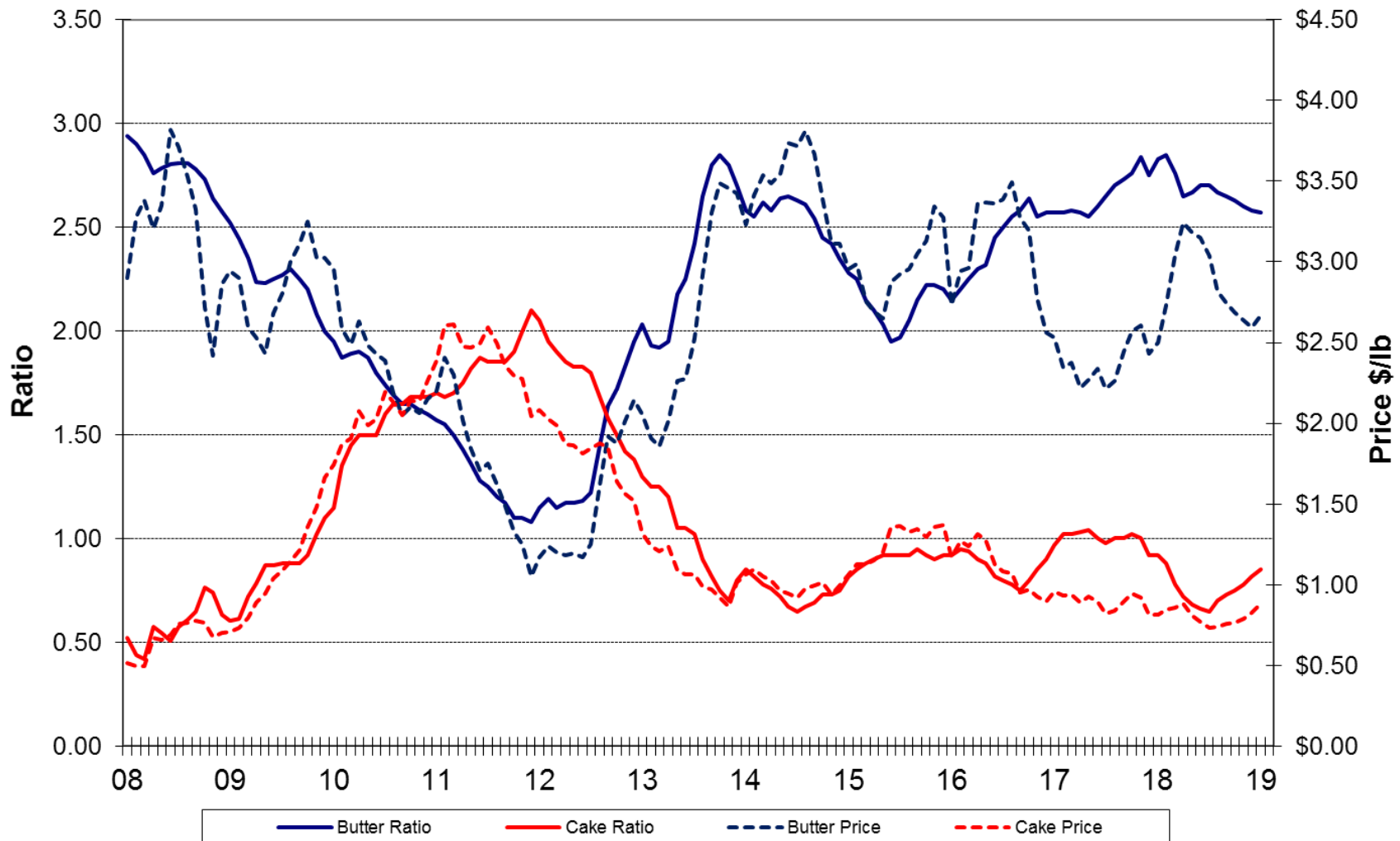


## Speculator Activity 10/01/15 - present



## Product Ratios and Prices

### Monthly Series







Questions ?

Thank You