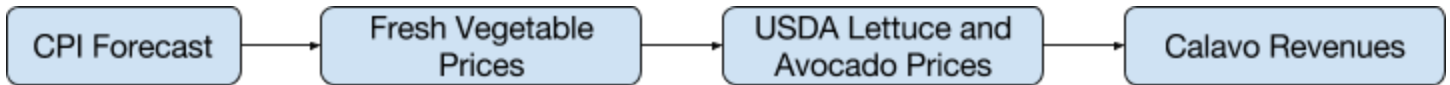


**Calavo (CVGW) - 2017Q2 Earnings Forecast (6/5/2017 - 1d before release)**  
**La Nina's lower avocado volumes brings below consensus revenue and earnings**

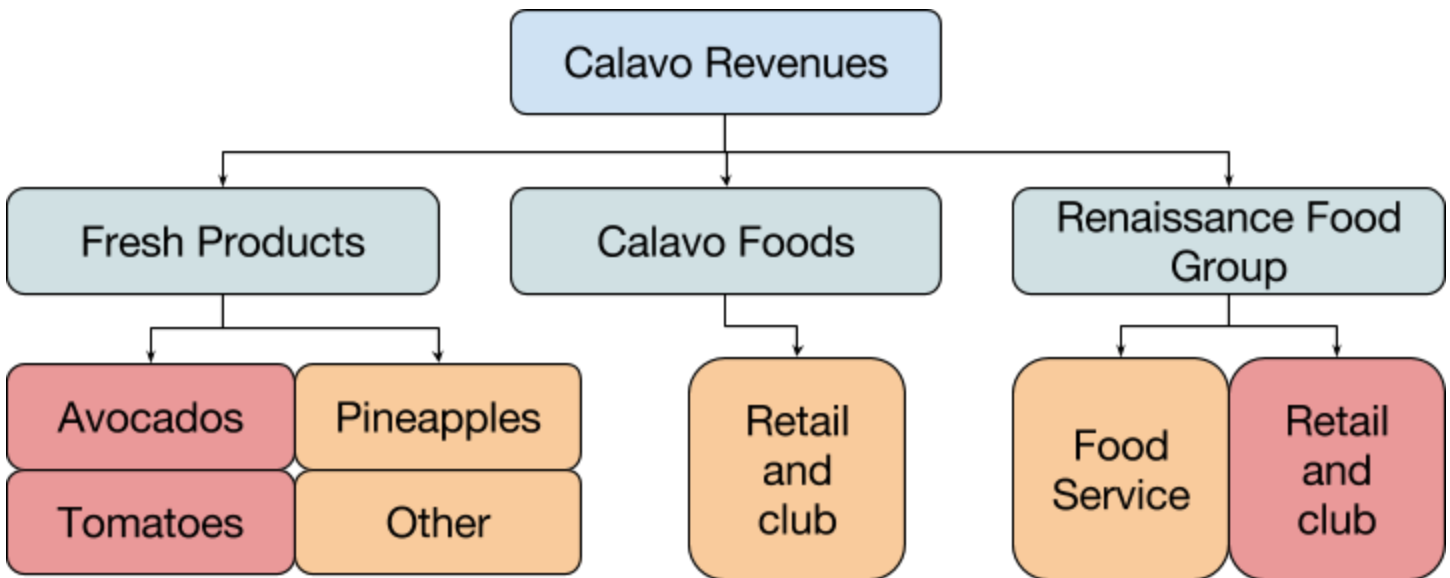
**'Connecting-the-dots':**

At Astrocyte we mostly focus on global macro data and global financial markets. However, sometimes the best expression of a trade or idea is discovered by going deep into the data to find the single, cleanest expression. In this case we have started with an alert in our AI Economist model that our CPI forecast contained high vegetable prices. By tracing the causes back to California lettuce and avocado producers who suffered due to this year's La Nina, we discovered a billion dollar avocado producer whose volumes likely dropped more than they made up for in higher prices.



At Astrocyte we 'connect-the-dots' in complex financial markets to provide clients with better forecasts and alerts when our model of the world is changing. We have used this technology to model the balance sheet and income statement. We estimate how and when avocado price changes affect the earnings and revenue. The much beloved Renaissance Food Group (RFG) has seasonal that don't kick in until Q3.

The combination of lower avocado volumes and the market's misreading of RFGs revenue seasonals led to our estimates of **0.38 EPS** (vs 0.60-0.64 consensus) and revenue estimate of **\$234M** (vs \$250-\$260).



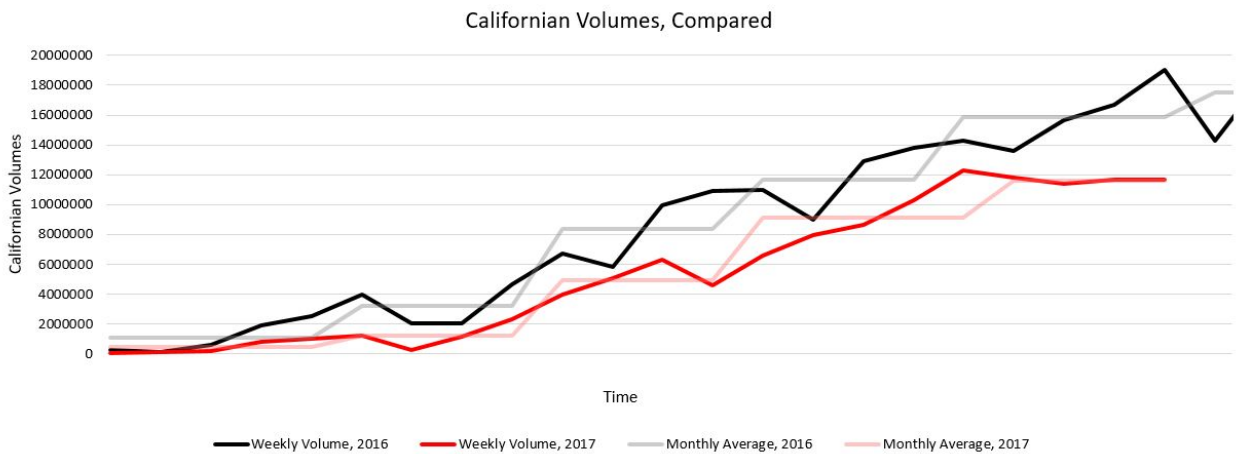
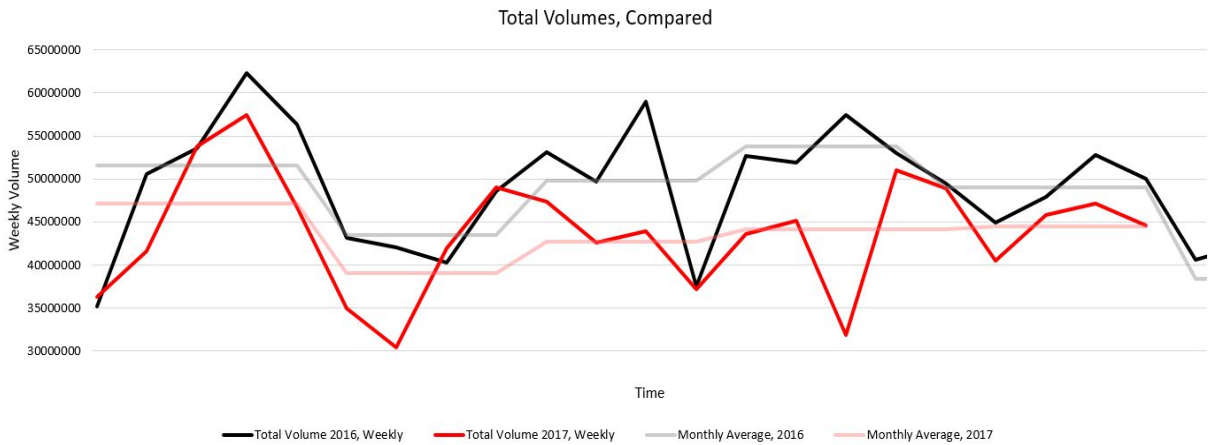
Red items above denote product groups with significant seasonals (see details below).

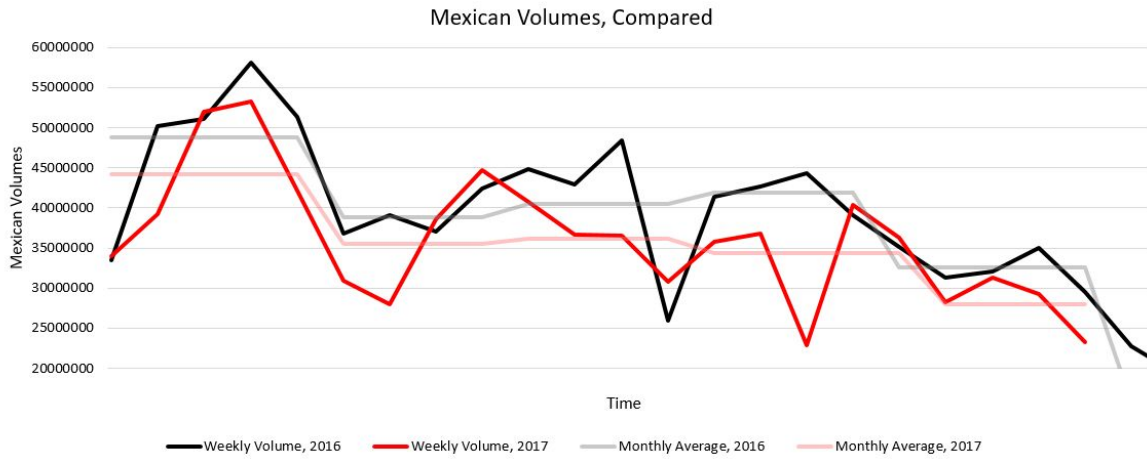
**The Story**

Avocados are living in the news. An investor sparked international controversy when he suggested first-time homebuyers should give up avocado toast to afford a down payment that has continued for weeks. The fatty green fruits continue to hit menus worldwide and transact at some of the highest prices—ever. Demand surges powered a price increase this year, hitting a 20% rise year/year this quarter [according to the Department of Agriculture](#).

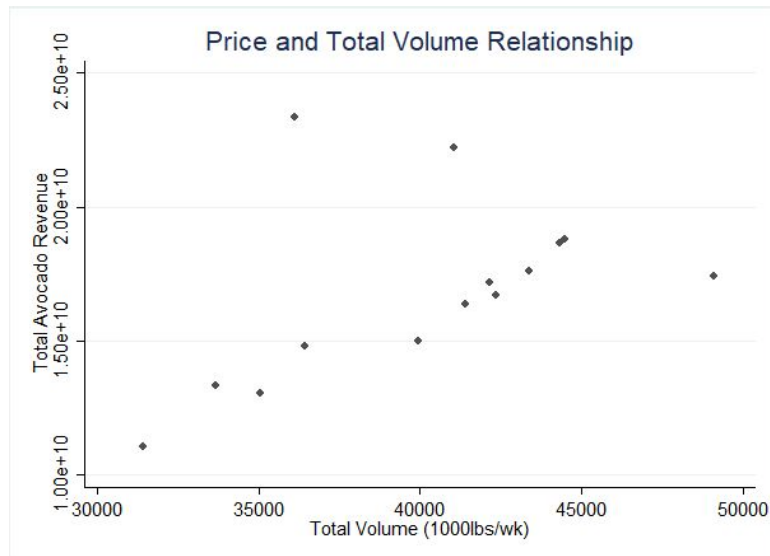


Supply, on the other hand, is having problems keeping up. An unexpected cold snap this winter led to a [worldwide collapse in avocado production](#). California avocado farms suffered the worst, dropping in production volume by almost 50% year/year according to [data released by the Hass Avocado Board](#). Mexico followed close behind with a 20% year/year decline in production quantity. Price elasticities suggest that, even with the demand spike, avocado revenues in the US could be down around 18%.





This is unwelcome news for Calavo (NASDAQ: CVGW), a consumer goods company that packages and distributes fresh fruit and prepared foods. Avocado sales are the core of their business and comprised more than 57% of their topline sales this quarter last year. The sales dive, then, spells trouble for their upcoming earnings report scheduled on the 6<sup>th</sup>. We expect the avocado segment of sales to come in much lower than expected despite outward signs of success (including Calavo’s own 30X multiple at which it currently trades). Even a bullish projection puts this quarter’s figures well below this quarter’s high estimates.



Even more concerning for Calavo than the supply shortage is the origin of the shock. Some quick tests showed that Calavo’s gross margins are up to 1.5 times more susceptible to changes in California production volumes (below), suggesting that the company profits far less on the imported fruits than they do on California produce. The 50% reduction from California farms hits Calavo even harder, affecting their gross margins as well as their topline revenue. Cutting into this commodity’s margins will sound some alarms on Tuesday.

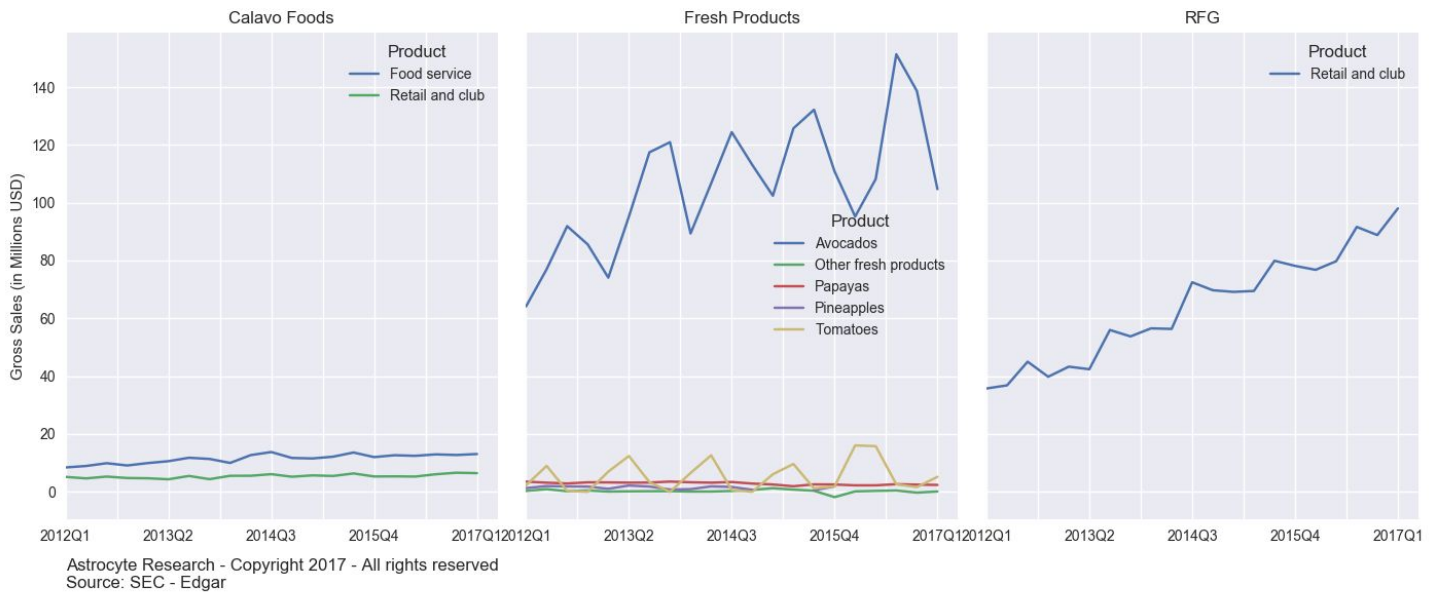
Source Volumes Effects on CVGW Gross Margins

VARIABLES	Effect of Increase in 1000lbs from Source
California Production Volume	0.63***

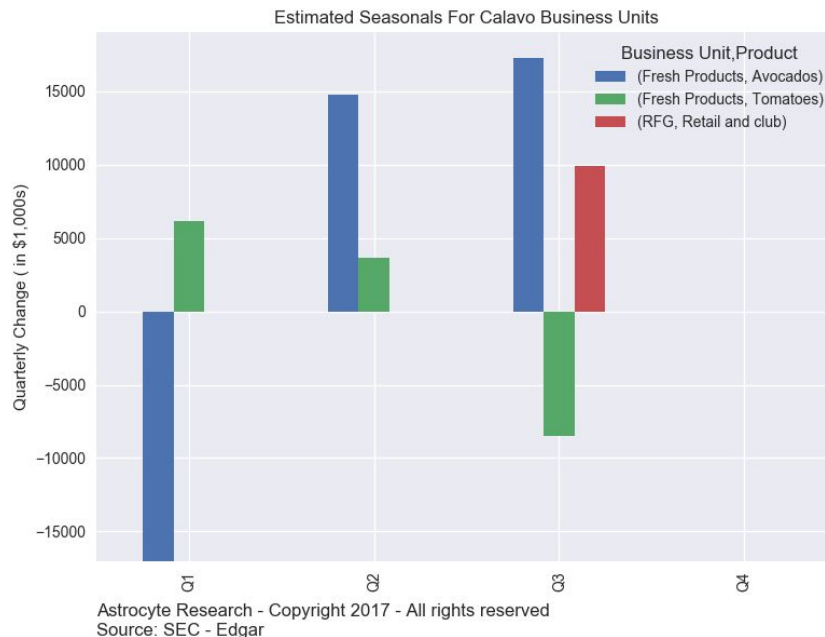
\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**The Model**

Calavo breaks apart their business into three segments ‘Fresh Products’, ‘Calavo Foods’ and Renaissance Food Group, LLC (RFG). Below are the gross sales from each of these business segments, broken out by product



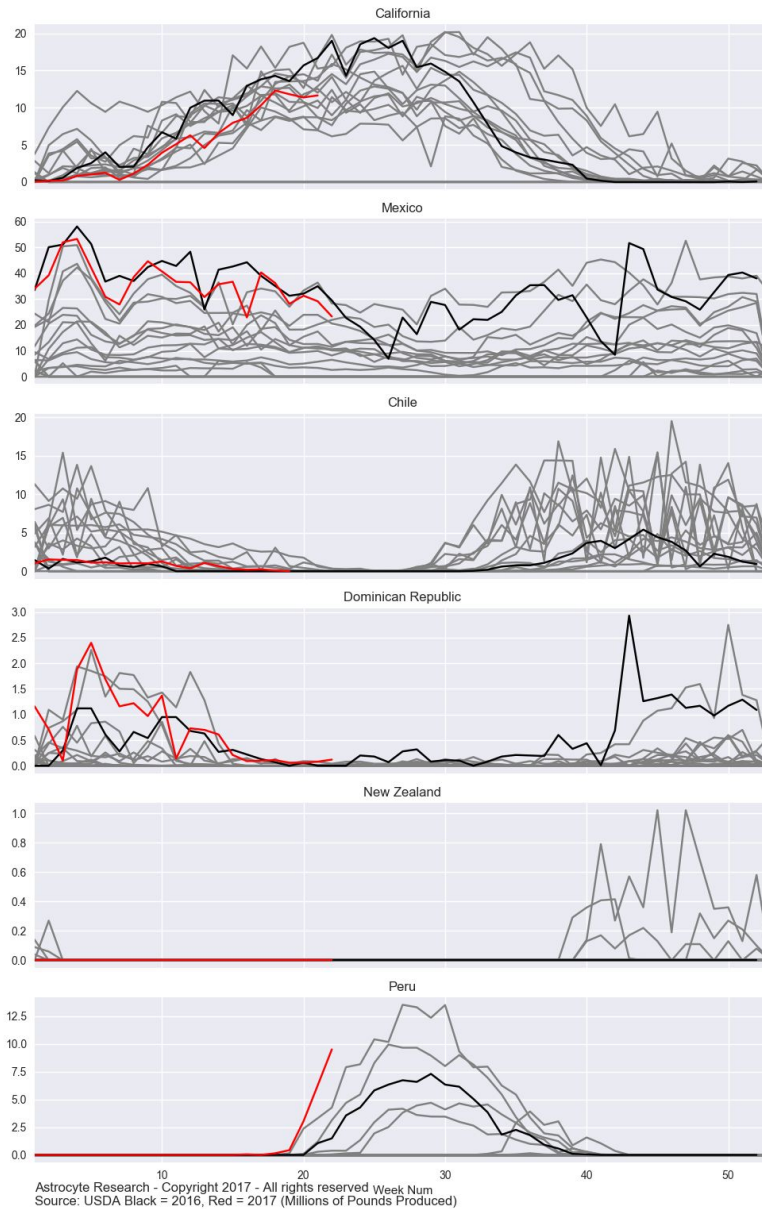
What is clear from this picture is the steady growth in RFG and the heavy seasonality of their revenues. A key thing to note is the seasonality in three key products: Avocados, Tomatoes and RFG.



What's important to note here is that Calavo typically has a \$30 Million dollar revenue swing in Fresh Products in Q2 but that is in jeopardy based on la Nina. We forecast to continue to be strong but the \$10M / year growth typically come in Q3.

### Global Avocado Production:

When we look at global avocado production, we can clearly see the seasonality of avocado production across the globe. The underperformance of avocado production in California (YtD down 32% vs last year) and Mexico is down YtD 11% is striking.



Given these shortages in California production, the US has seen a sharp rise in the price of avocados prices:

### Year on Year Avacado Price Changes



Astrocyte Research - Copyright 2017 - All rights reserved  
 Source: USDA

### Detailed Projections\*:

	Calavo Foods				Fresh Products					RFG			Total
	Food service	Retail and club	Sales Incentives	Net Sales	Avocados	Tomatoes	Others	Sales Incentives	Net Sales	Retail and club	Sales Incentives	Net Sales	Net Sales
2016Q2	12,431	5,258	2,336	15,353	108,197	15,765	2,525	498	125,989	79,762	801	78,961	220,303
2017Q1	13,052	6,437	2,701	16,788	104,716	5,158	2,459	274	112,059	98,047	340	97,707	226,554
2017Q2	13,772	6,244	2,795	17,221	108,197	8,775	2,334	262	119,044	98,598	258	98,340	234,604
Q/Q	720	-193	94	433	3,481	3,617	-125	-12	6,985	551	-82	633	8,050
Y/Y	1,341	986	459	1,868	0	-6,990	-191	-236	-6,945	18,836	-543	19,379	14,301

\*Clients of Astrocyte Receive Detailed Distributions and Risks

### Trading Structuring:

- **Event Style:** Clients of Astrocyte Receive Detailed Event Breakdown
- **Basket Trade:** Clients of Astrocyte Receive Detailed Basket Trade Breakdown

### **Author Bios**

#### **Sean Kruzel**

Founded Astrocyte Research to better address the intelligence and forecasting needs of professional investors.

He is a former Quantitative Global Macro Portfolio Manager and graduated from MIT in 2008 with Mathematics and Economics Degrees.

#### **Peter Wright**

Is an Economics and Statistics student at Harvard University, where he focuses on industrial organization.

#### **Disclosures:**

Sean Kruzel intends to initiate a short position in CVGW within 24 hours.

Peter Wright does not have a position in CVGW.

Sign up for newsletter and more updates at: <https://astrocyte.io>

Contact Sales for more information at [sales@astrocyte.io](mailto:sales@astrocyte.io)