

The Palace Foods Inc. : Production 2011-15

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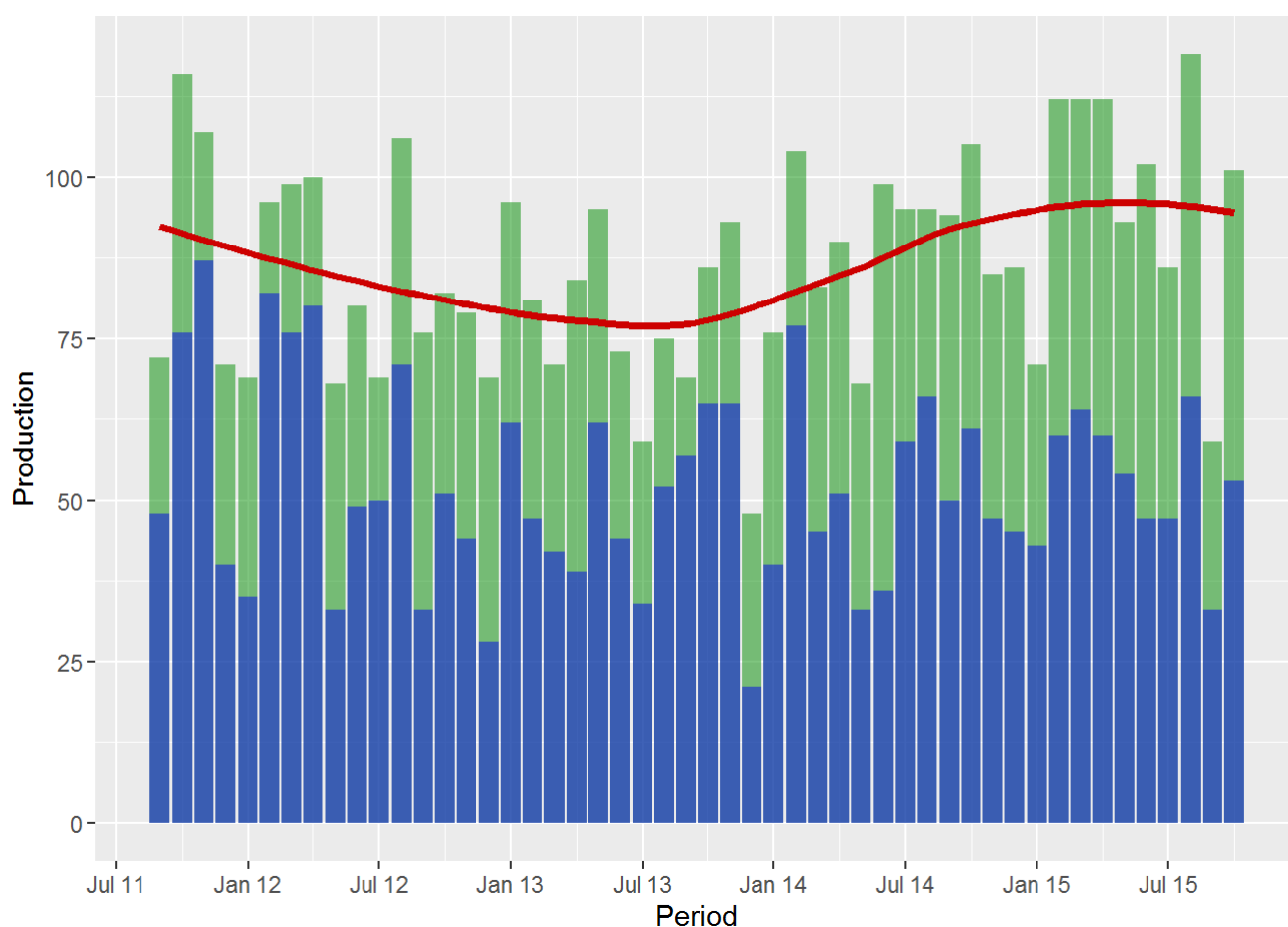
Data Source

The Data has been computed using the production records and *pH* test results of **The Palace Foods Inc.** from Sep 2011 to Oct 2015 . Notable facts about the data include:

- These findings were from test results recorded by the QA Manager over 789 days
- 4,357 batches of product were produced during this 4 year period of which 2,610 were from the SWAD Line.
- 60.0% of production from 2011-15 comprised of SWAD products.

Overall Production Trend and SWAD

To better understand how production moved with time, I constructed a stacked bar graph, documenting production vs. time . Palace foods production is captured by the **green** bars, and SWAD is denoted by **blue**, the trend line of overall production is denoted by **red**.

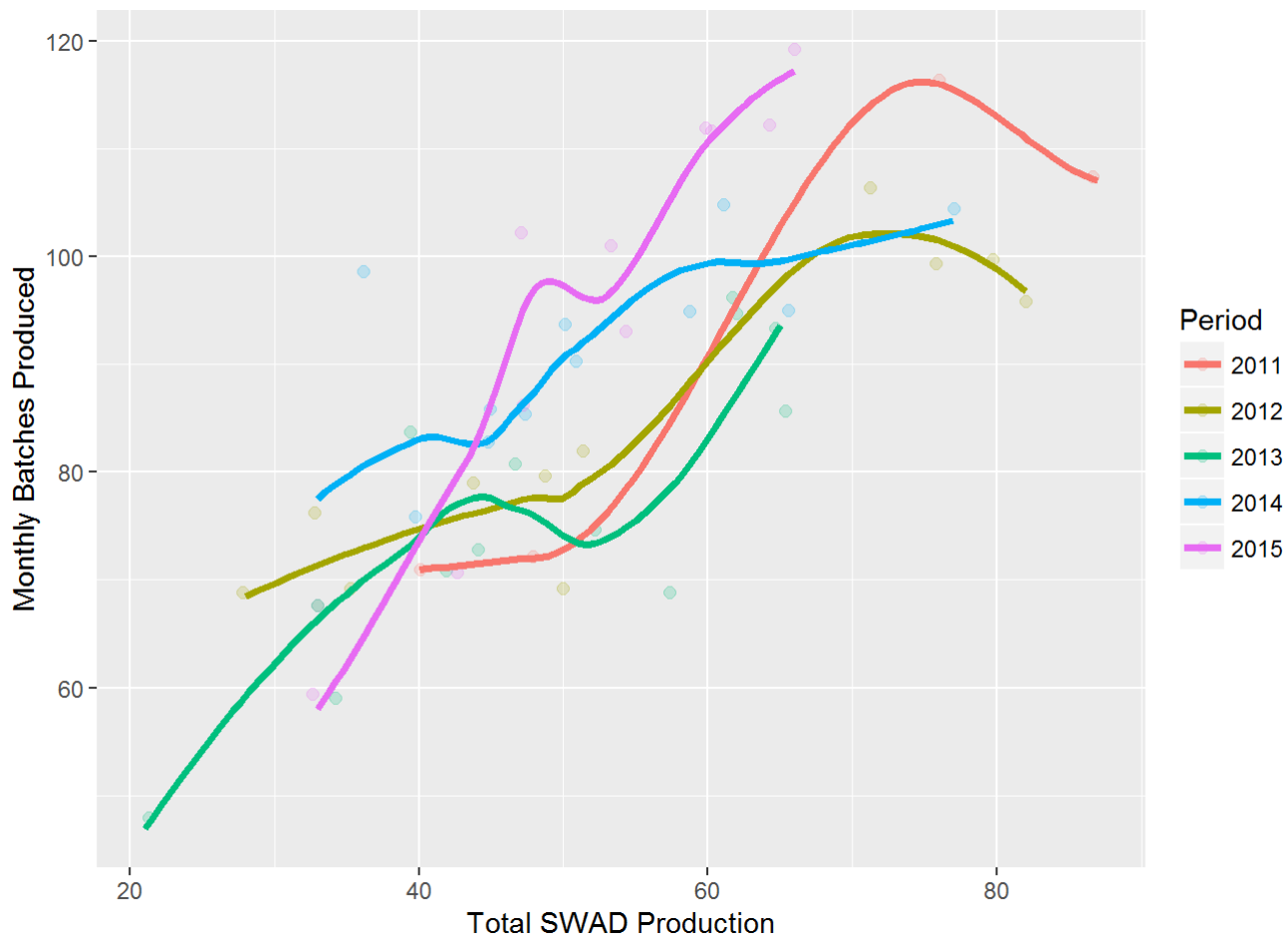
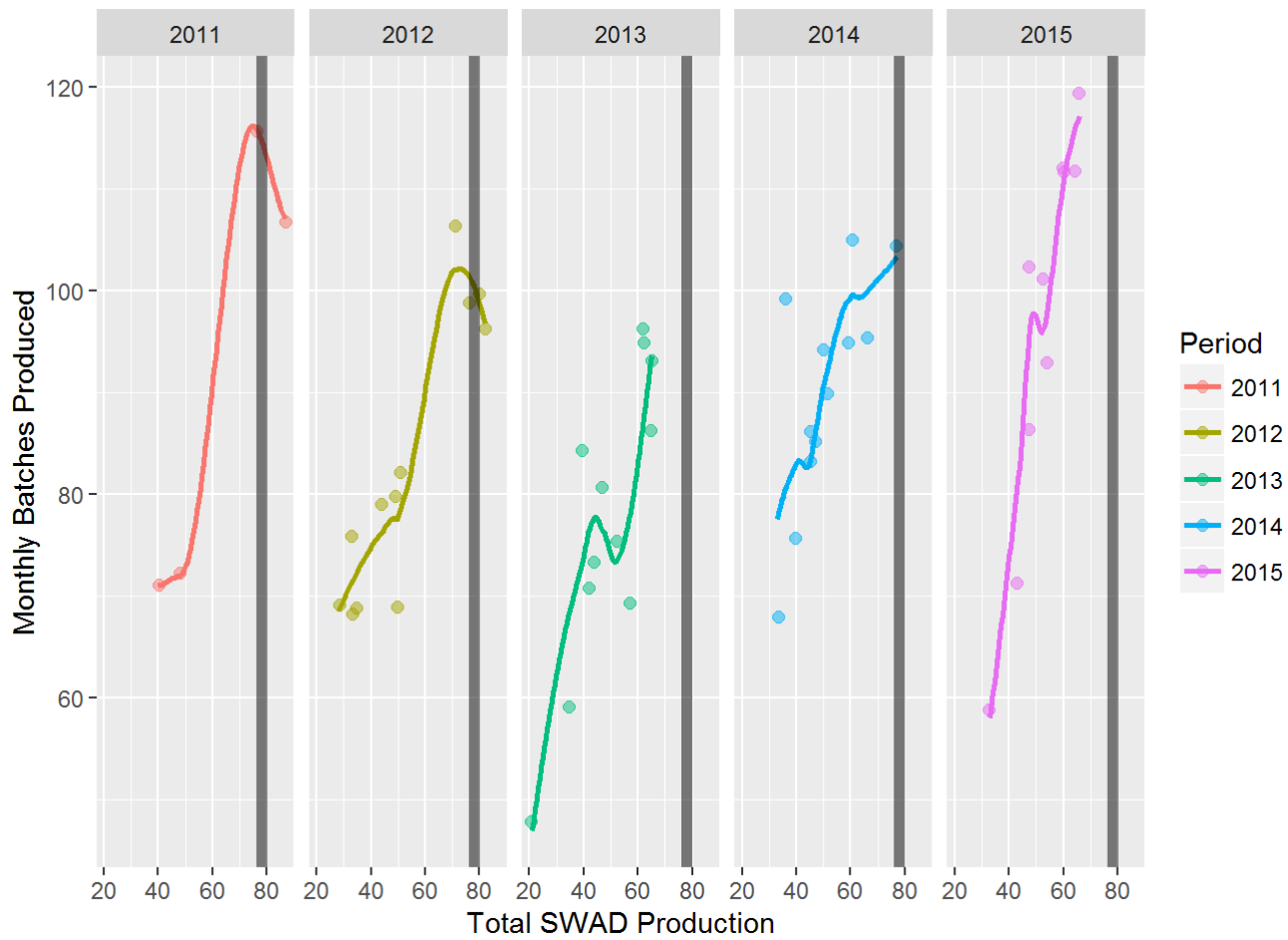


Initial Observations

Across the entire 50 month span observed Palace Foods has maintained an average production of 81 *batches* of product per month, although production declined in 2013, by mid-2015 production averaged 90-95 batches of product per month. Although production had risen, it can be observed that the production share of the flagship product had declined to just over 50%. This warranted further analysis.

Raja Foods Production vs. Overall Production

My goal in this excercise was to observe how heaviliy factory production relied on Palace Foods' chief client over these years. I did this by plotting No: of SWAD batches produced in the `x axis` vs Overall Monthly production in the `y axis` , and separated the results by year of prouction. The diagram below represents the consolidated results in one plane.



Further Observations

As a rule of thumb, it can be observed that the higher a curve or a point is, the greater was the overall production for the year and the further to the right the aforementioned curves or points were, the greater Raja Foods' contingent of the production scale was. As a general business goal, it would be preferable to have these production curves further to the **top-left**, indicating **high production and a diversified client base**. The vertical line constructed represents a monthly production of 78 batches of SWAD products. I constructed these into the figure because when the production curve crossed this line, a downward trend could be observed.

The likely rationale behind this is that in any given month, when over 78 batches of SWAD product are produced, an encumbrance is possibly induced on the production of other products. This could likely be due to scheduling issues or worker fatigue/rush shipments.

Overall, it can be observed that while production declined from 2011 to the 4 year low observed in 2013 (as evidenced from the annual production curves moving downward), the SWAD component remained the same. However signs of improvement could be identified in the 2014 curve, which continued into 2015, which saw Maximum production and diversification of the product (as evidenced by the production curve located higher and to the left.)

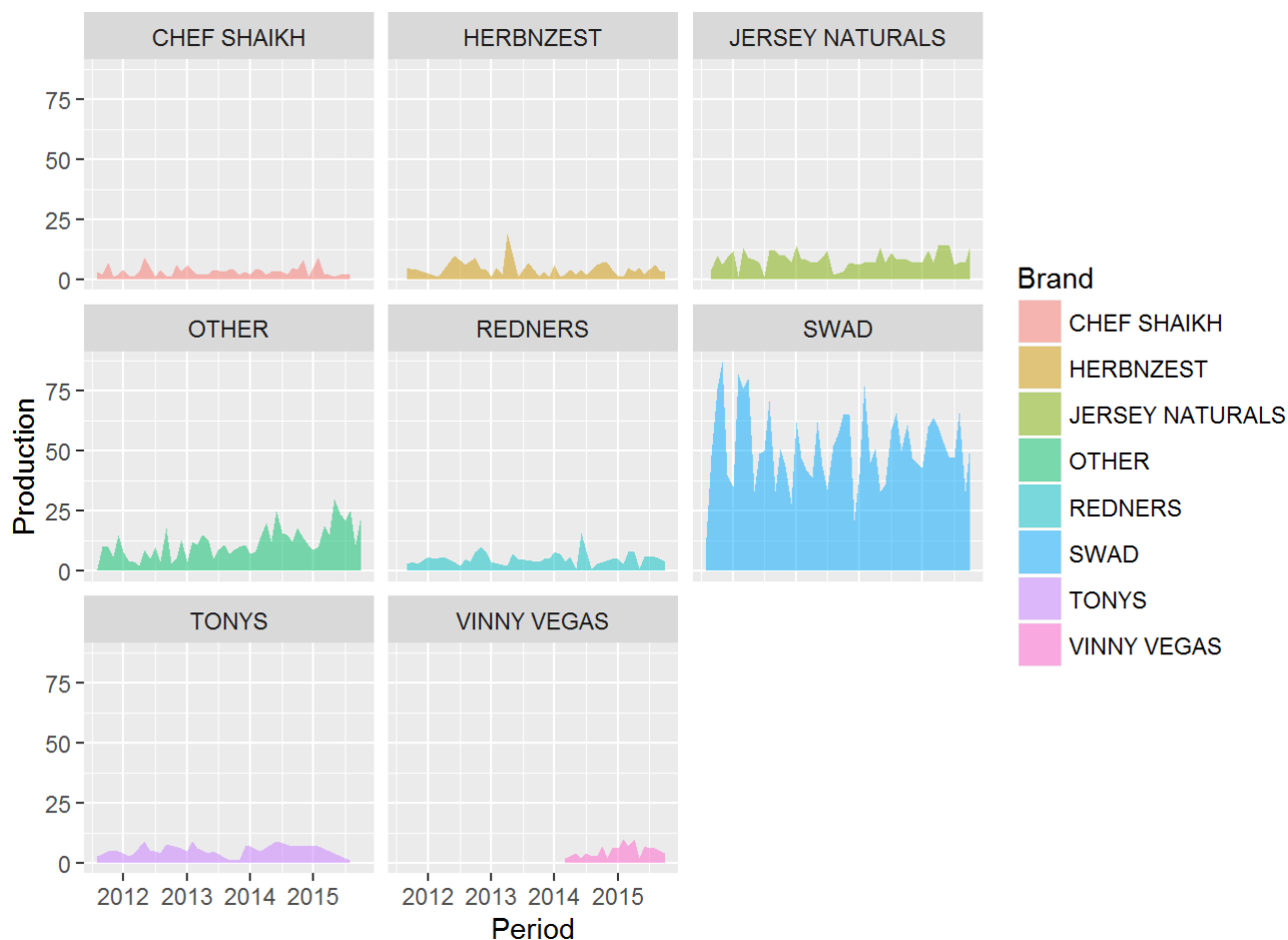
The Best 10 months

The No: of batches produced and the months they were produced in are included below, ranked by the magnitude of production, in order for the reader to draw their own conclusions.

Period	Production	SWAD Production
Aug 2015	119	66
Oct 2011	116	76
Feb 2015	112	60
Mar 2015	112	64
Apr 2015	112	60
Nov 2011	107	87
Aug 2012	106	71
Oct 2014	105	61
Feb 2014	104	77
Jun 2015	102	47

Other Products

Part of the purpose of this study was to also identify the how much product has been produced for Palace Foods' other business partners, the figure below illustrates a grid, with each individual graph covering the production density of that particular product across the 50 month span of observation.



Total Batches Produced from Sep 2011- Oct 2015(By Brand)

The following is a table documenting the **total number of batches produced** per product category by The Palace Foods Inc. over a 4-year period.

Brand	Production
SWAD	2625
OTHER	604
JERSEY NATURALS	392
REDNERS	197
HERBNZEST	169
TONYS	144
CHEF SHAIKH	137
VINNY VEGAS	91

Final Observations

While Raja Foods has consistently enjoyed a majority share of the production capabilities of The Palace Foods Inc., there is ramp-up production for other longstanding clients such as Jersey Naturals and Tonys. This might be an advisable course of action given the imminent expansion of manufacturing capabilities for The Palace Foods Inc.

Top 10 products by Production Volume from Sep 2011- Oct 2015

The following is an appendix table documenting the **Top 8 products by Production Volume** by The Palace Foods Inc. over a 4-year period.

Item	Production
SWAD GINGER GARLIC PASTE	813
SWAD CORIANDER CHUTNEY	426
SWAD MINT CHUTNEY	369
SWAD GARLIC PASTE	277
SWAD GINGER PASTE	246
SWAD TAMARIND CHUTNEY	136
JERSEY NATURALS MARINARA	125
TONYS WING SAUCE	107