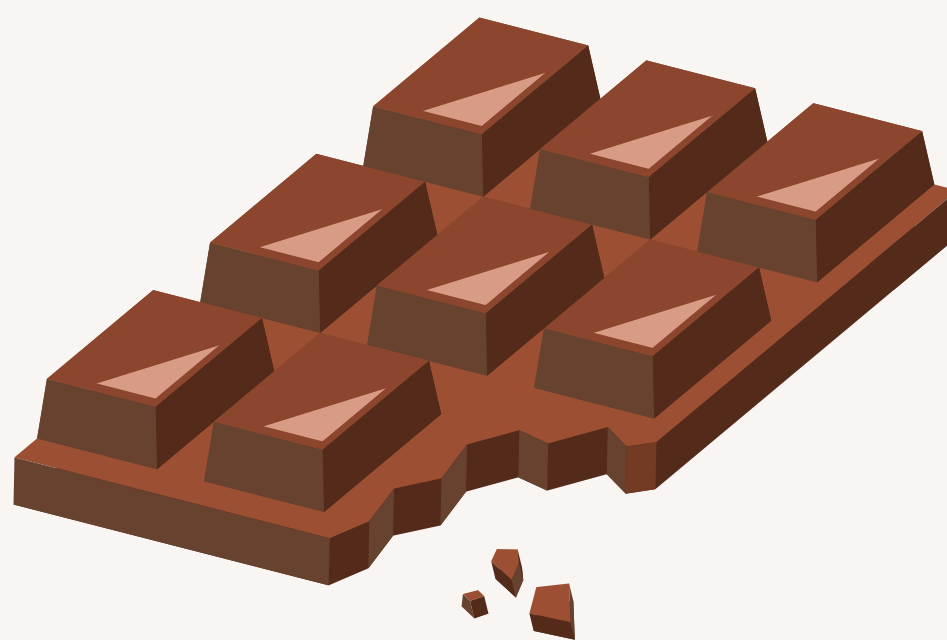


# DATA EXPLORATION THROUGH TABLEAU

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BHUMIKA SRINIVAS • 20533900



# 02

## ABOUT THE DATASET

Chocolate is the world's most popular sweet delicacy. US consumers eat 2.8 billion pounds of chocolate annually, representing nearly half of the world's supply (1). Chocolate Bar Ratings dataset is published by The Manhattan Chocolate Society. Brady Brelinski has reviewed 2,500+ bars of craft chocolate since 2006, and compiles his findings into a copy-paste-able table.

## FEATURES

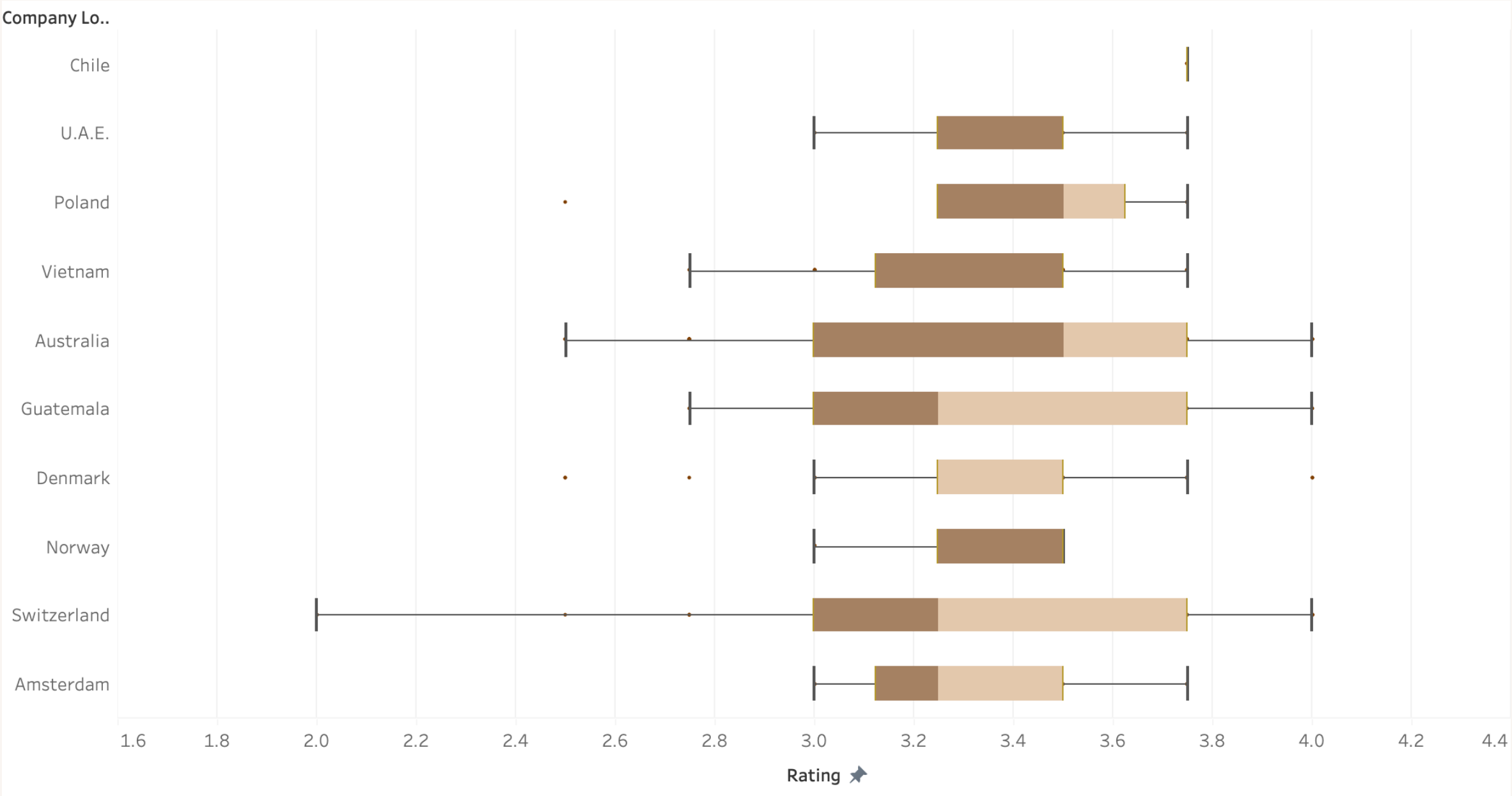
The dataset lists each bar's reference ID, company location, company manufacturer, review date, country of bean origin, percent cocoa (% chocolate), ingredients, review notes, and numerical rating.

1. <https://www.thechocolatestore.com/candy-facts>

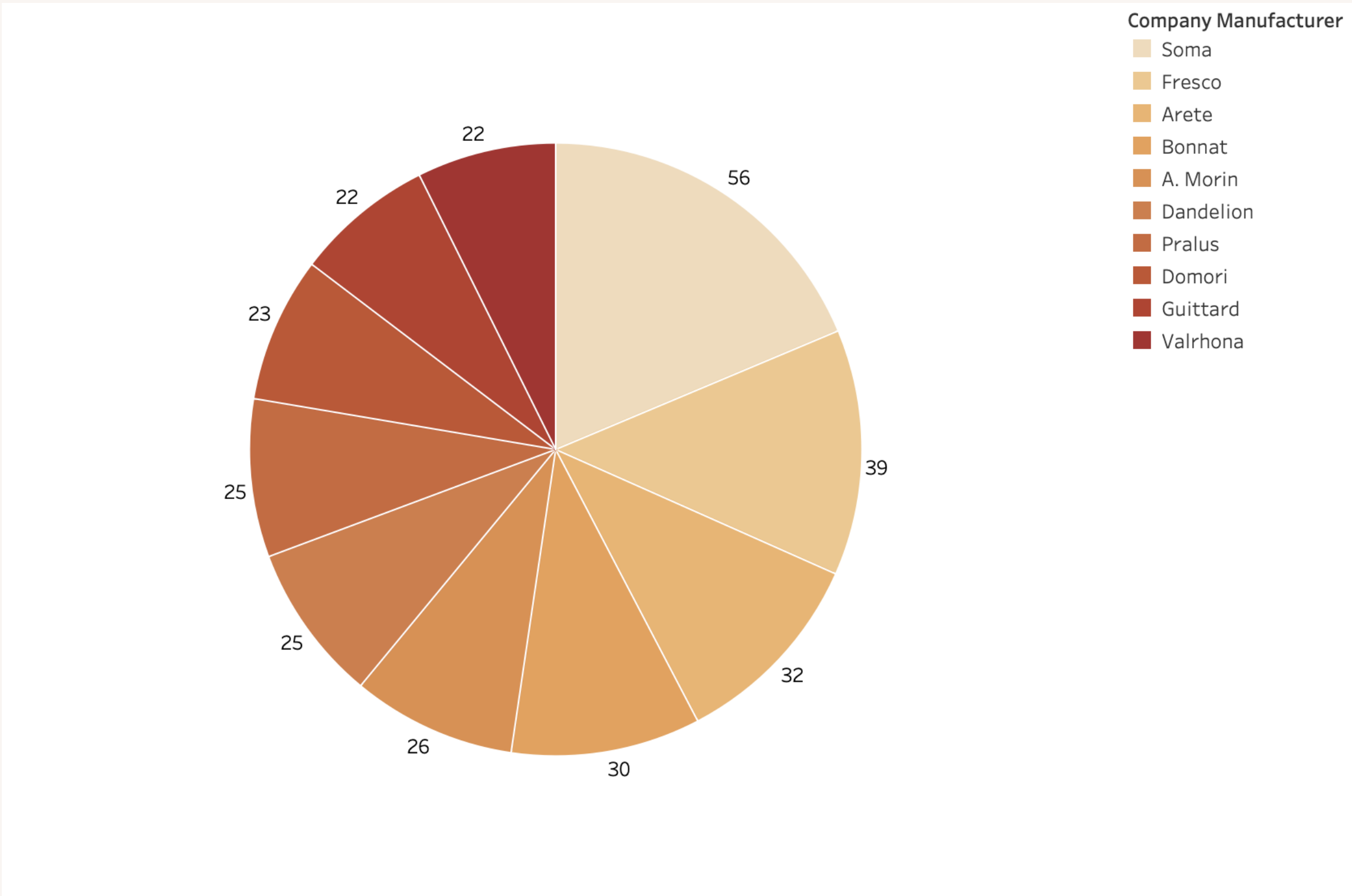
# AVERAGE BAR RATING OF COMPANY LOCATIONS

The box-plot below shows the top ten company locations with the best average chocolate bar rating: Chile, U.A.E, Poland, Vietnam, Australia, Guatemala, Denmark, Norway, Switzerland, and Amsterdam.

Chile tops the list with an average chocolate bar rating of 3.75 followed by U.A.E, Poland, and Vietnam with an average chocolate bar rating of 3.50.



# CHOCOLATE BARS PRODUCED BY COMPANY MANUFACTURERS



The pie chart above depicts the top 10 company manufacturers with the highest number of chocolate bars produced: Soma, Fresco, Arete, Bonnat, A. Morin, Dandelion, Pralus, Domori, Guittard, and Valrhona.

Since 2006 Soma has produced 56 different chocolate bars, higher than rest of the manufacturers. Next on the list is Fresco followed by other manufacturers having a close competition.

05

Top 5 Company Manufacturers

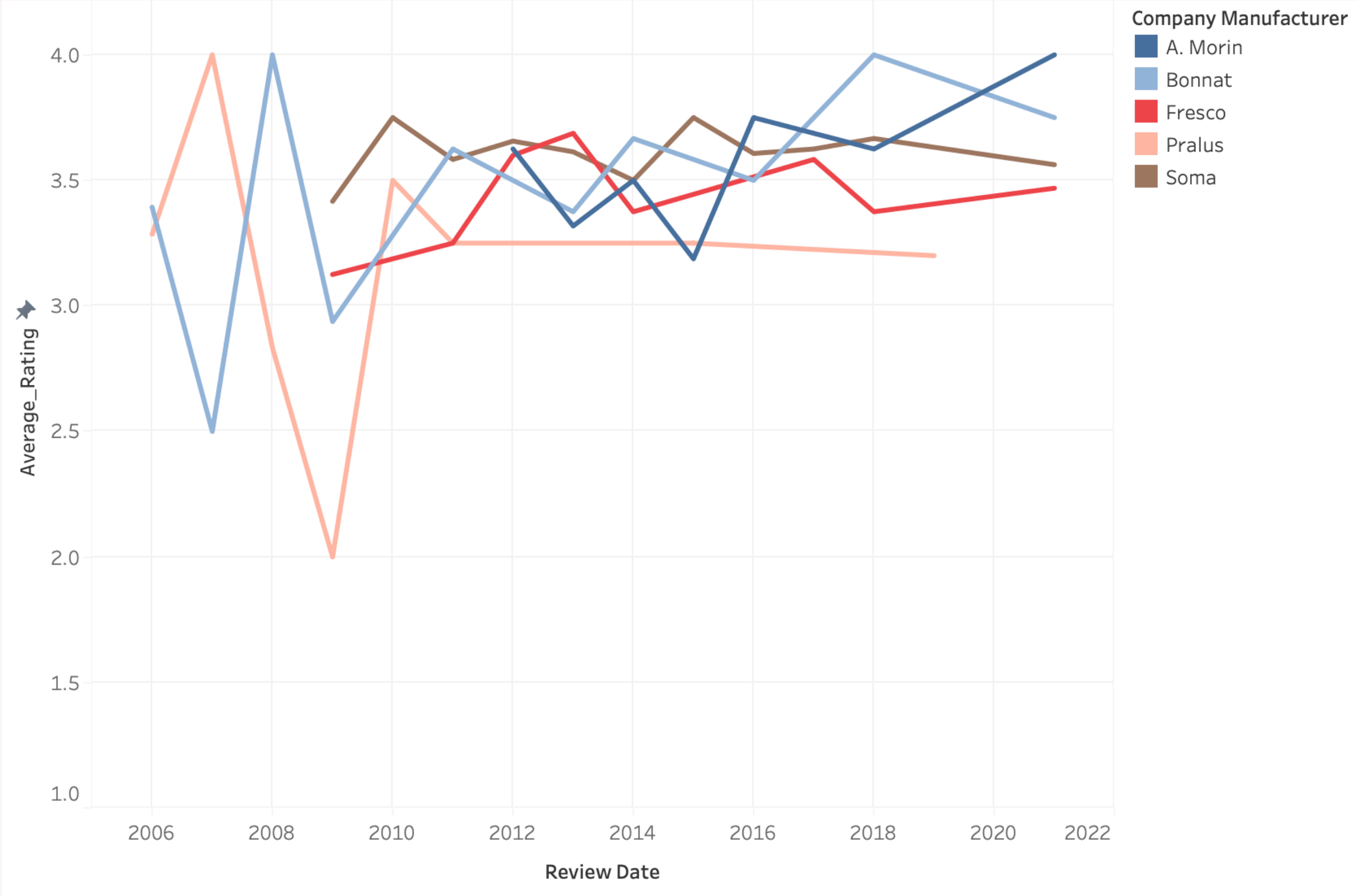
# AVERAGE RATING TIMELINE

2012

A. Morin First Reviewed

2.0

Pralus Lowest Rating

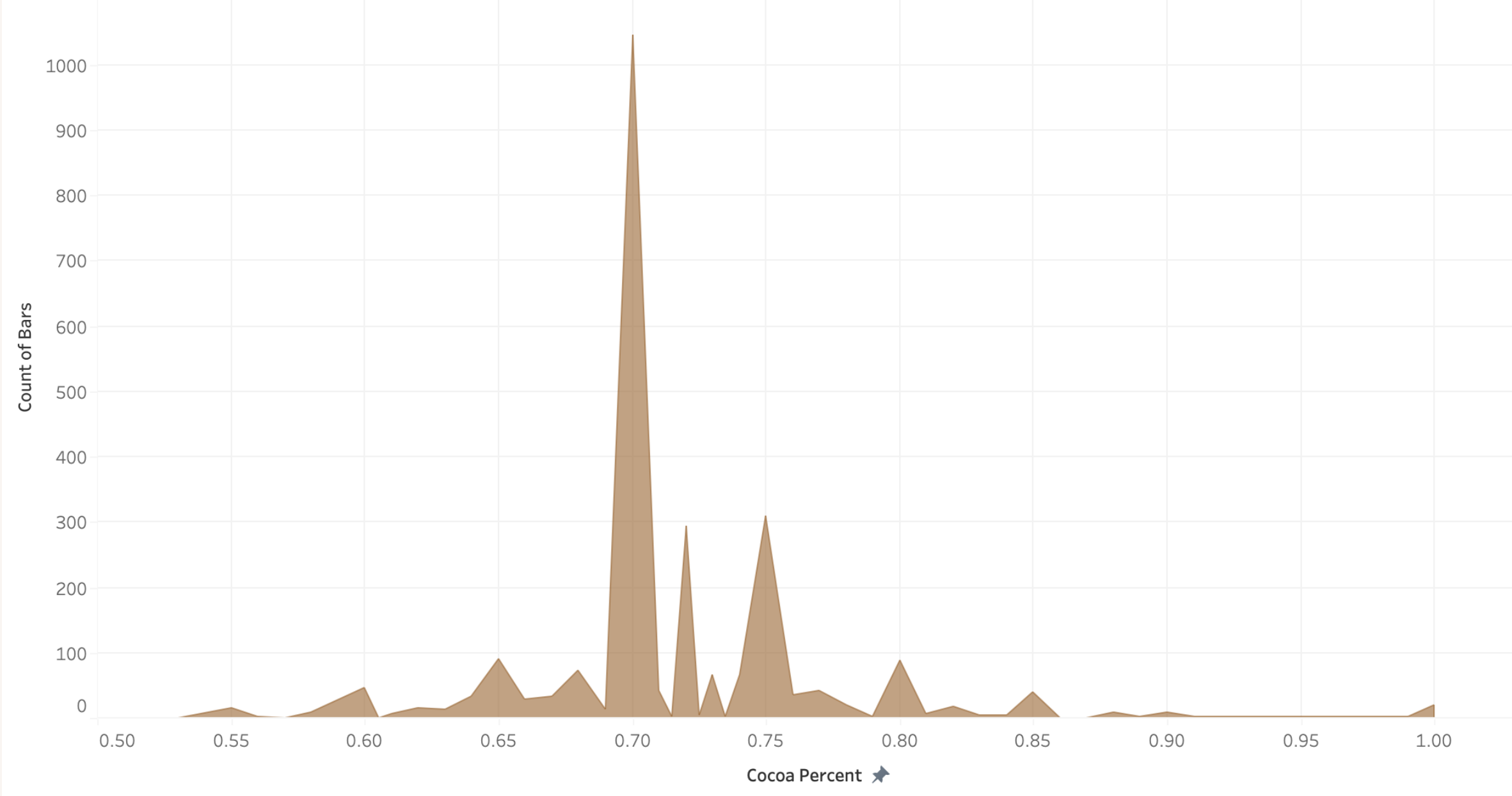


The line graph above depicts the average rating patterns over the years for the top 5 company manufacturers with the highest chocolate bar produce. Pralus and Bonnat were the first of the top five companies to be examined in 2006. However, in the following year, 2007, although Pralus reached its greatest ever rating of 4.00,

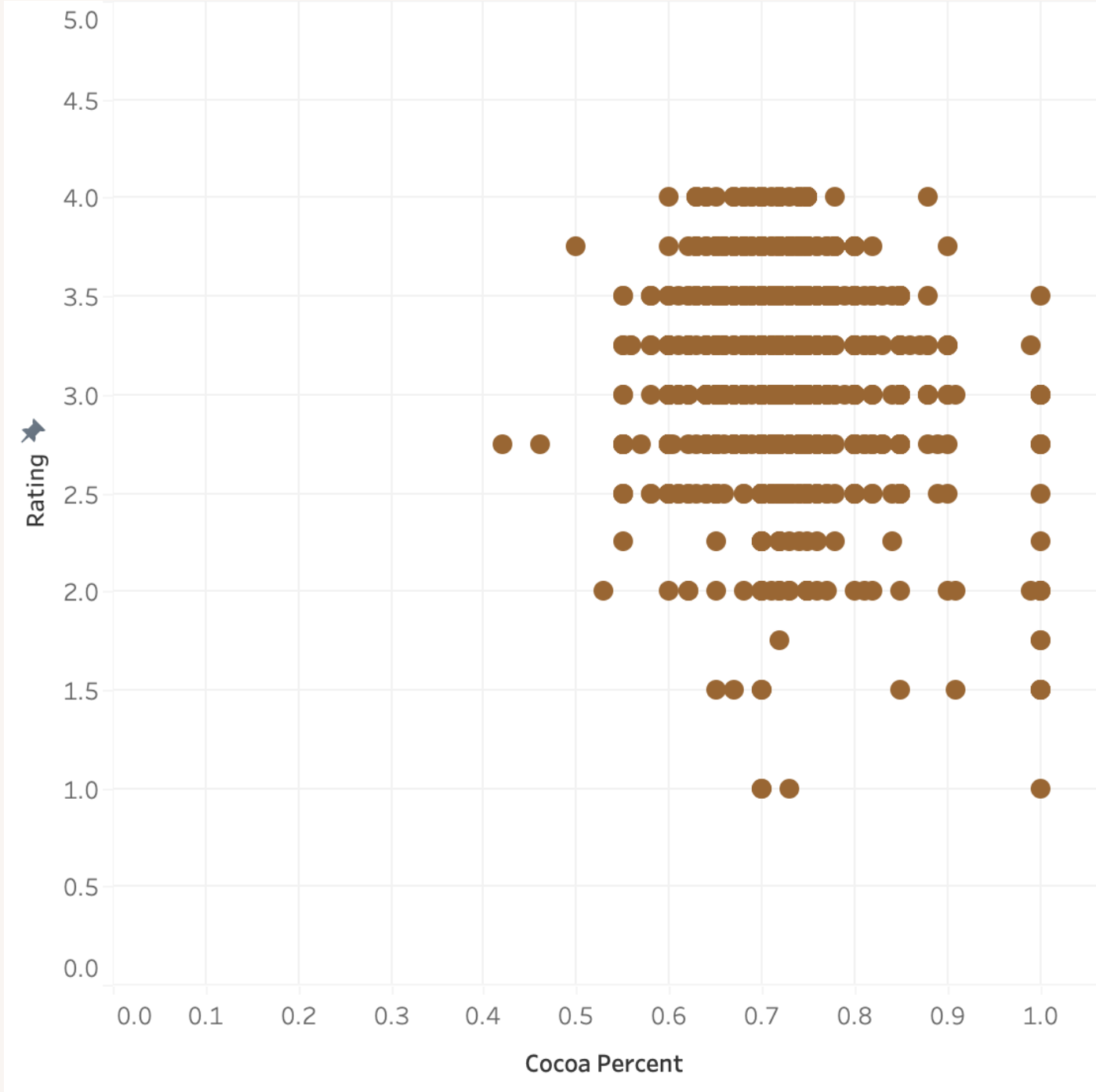
Bonnat fell to its lowest ever rating of 2.50. Since 2011 pralus has a constant rating. Soma has had the best rating compared to the rest of the companies though it hit a 3.4 in 2009. Fresco has maintained its rating between a 3.0 and 4.0 ever since it was reviewed.

06

# COCOA PERCENT



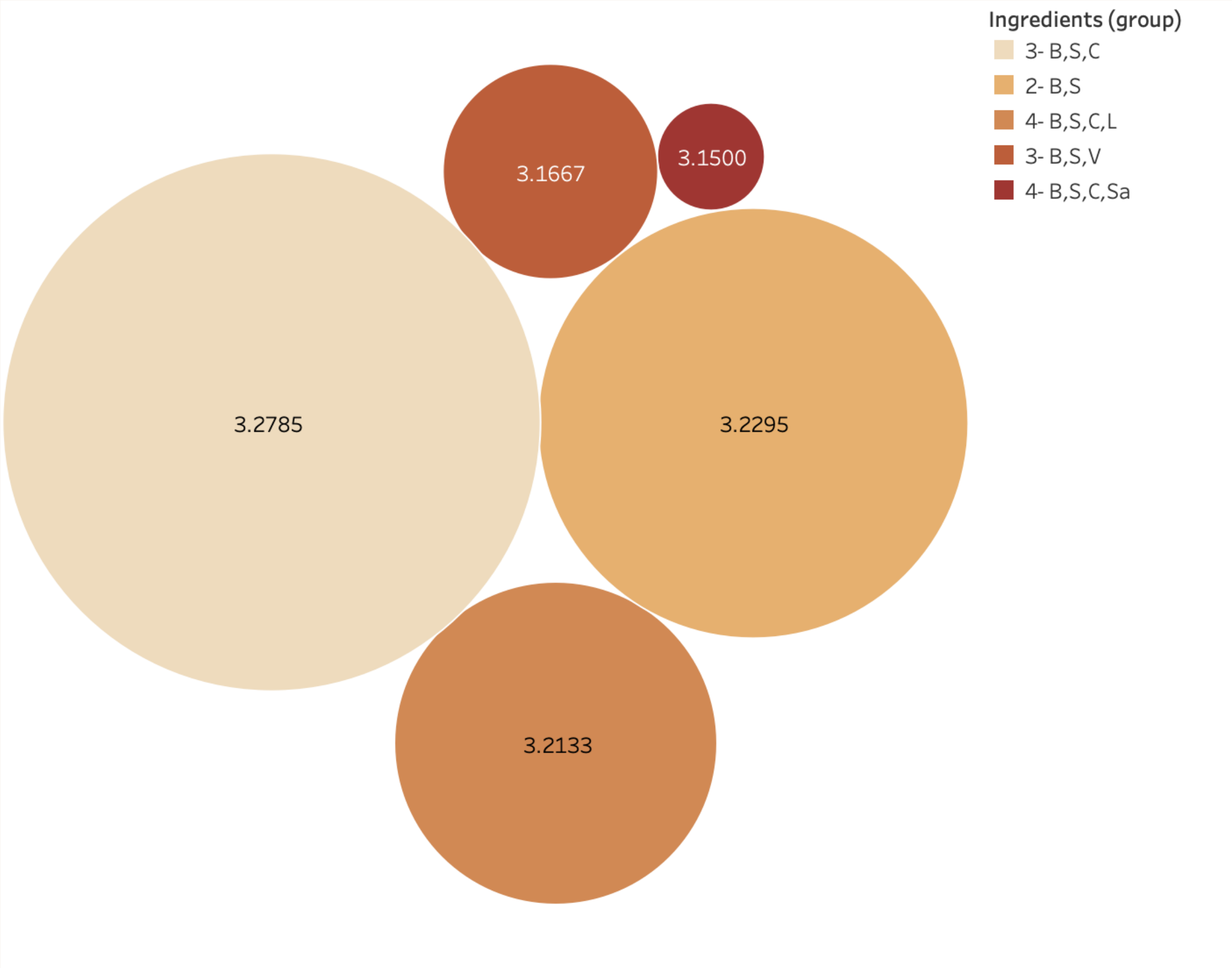
The area graph above shows the cocoa percent or the percentage of chocolate in the bars. The highest peak is at a cocoa percent of 70 with over 1000 bars in number. In general, most of the chocolate bars produced have either 70%, 72% or 75% cocoa quantity in them.



The scatterplot to the left reflects the relationship between cocoa percent in chocolate bars and their average rating.

There is seems to be no particular pattern or trend in the scatterplot. However, the scatterplot is more dense on the 70% cocoa level for a range of ratings. The lowest and the highest rated chocolate bars surprisingly have the same the cocoa percent. There is no correlation between the two features.

# INGREDIENTS

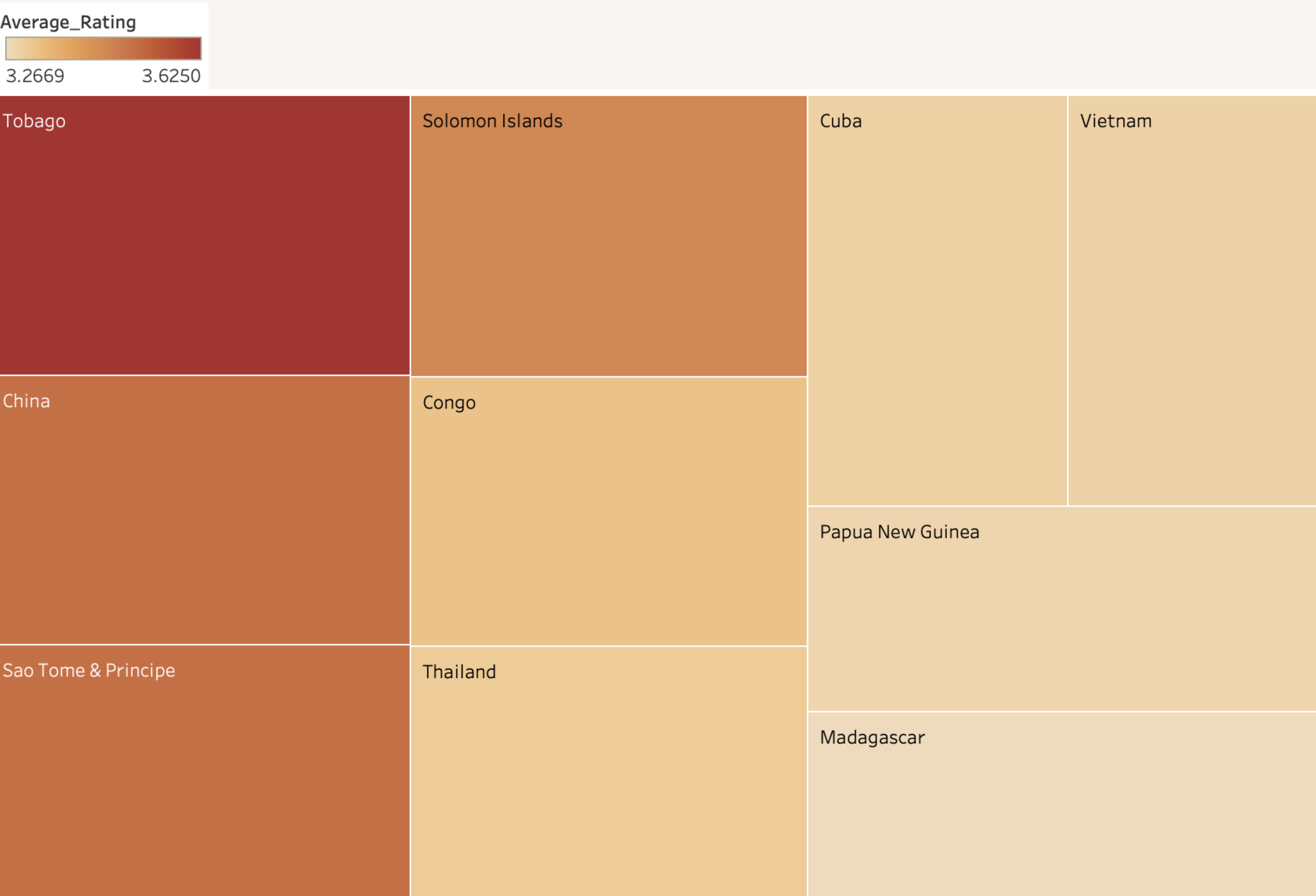


The packed bubbles on the top demonstrates the best rated ingredient combination. There is a slight difference among the different ingredient combinations. To better understand the feature, Ingredients, ("#" = represents the number of ingredients in the chocolate; B = Beans, S = Sugar, S\* = Sweetener other than white cane or beet sugar, C = Cocoa Butter, V = Vanilla, L = Lecithin, Sa = Salt). The highest rated combination is the one with Beans, Sugar, and Cocoa Butter.

08

# COUNTRY OF BEAN ORIGIN

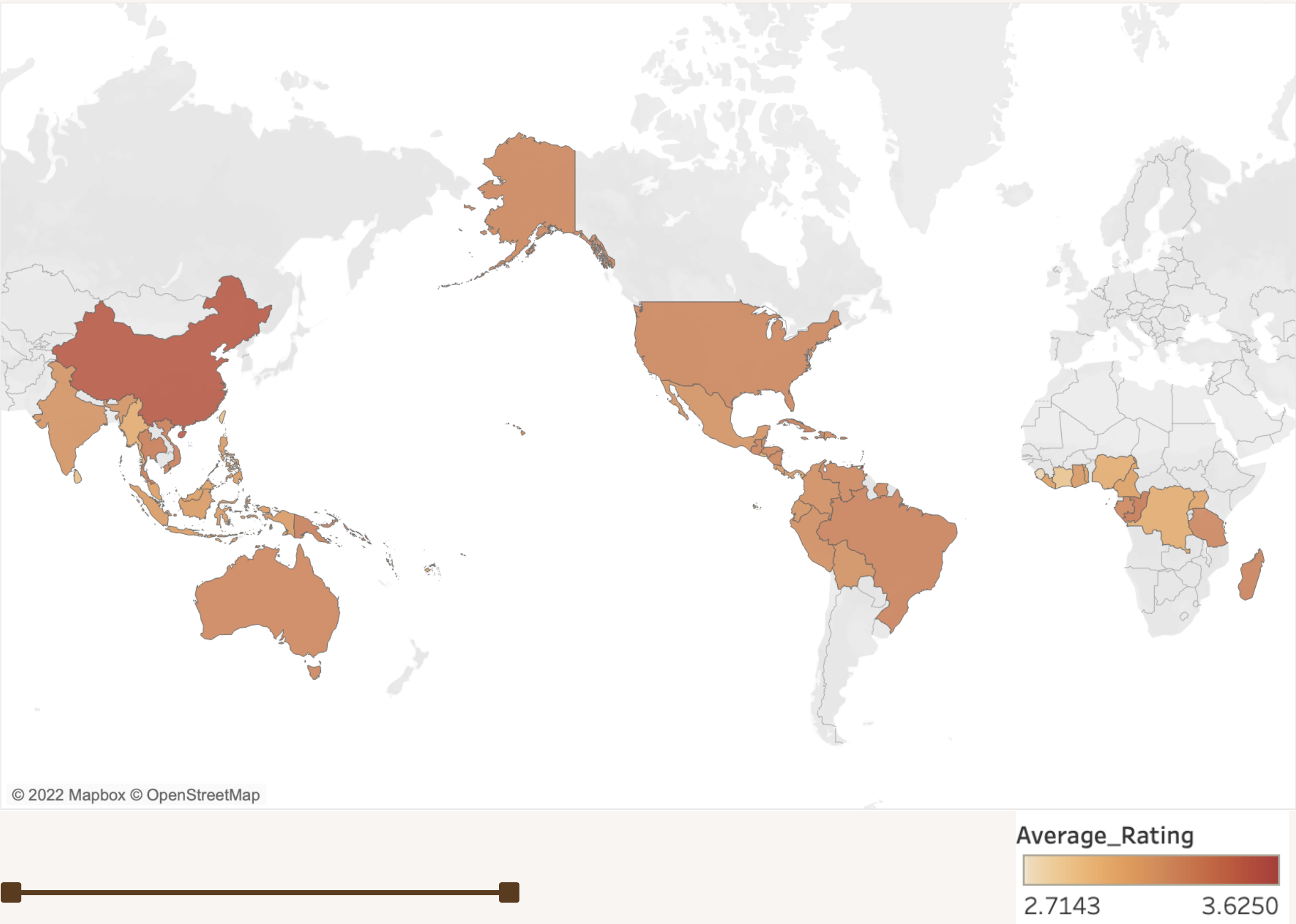
The treemap below shows the top 10 countries of bean origin based on their average rating ranging from 3.2 to 3.7. Trinidad and Tobago is made up of two Caribbean islands. Tobago is the smaller of the two. It has the best average rating of 3.625 followed by a tie between China and Sao Tome and Principe with an average of 3.50.





09

# DISTRIBUTION OF BEAN ORIGIN



The geomap displays the distribution of the bean origin in the world. The origin is color coded based on its average rating. As we can see, the map is highly concentrated in southern Asia, Australia, South America, and certain regions of Africa. Tobago the highest rated origin is from the South America region. The main factor behind these distributions is weather conditions. Cocoa beans require consistent warm temperatures, as well as high humidity and enough of rain. Cocoa is harmed by extremes of temperature, drought, and wind.