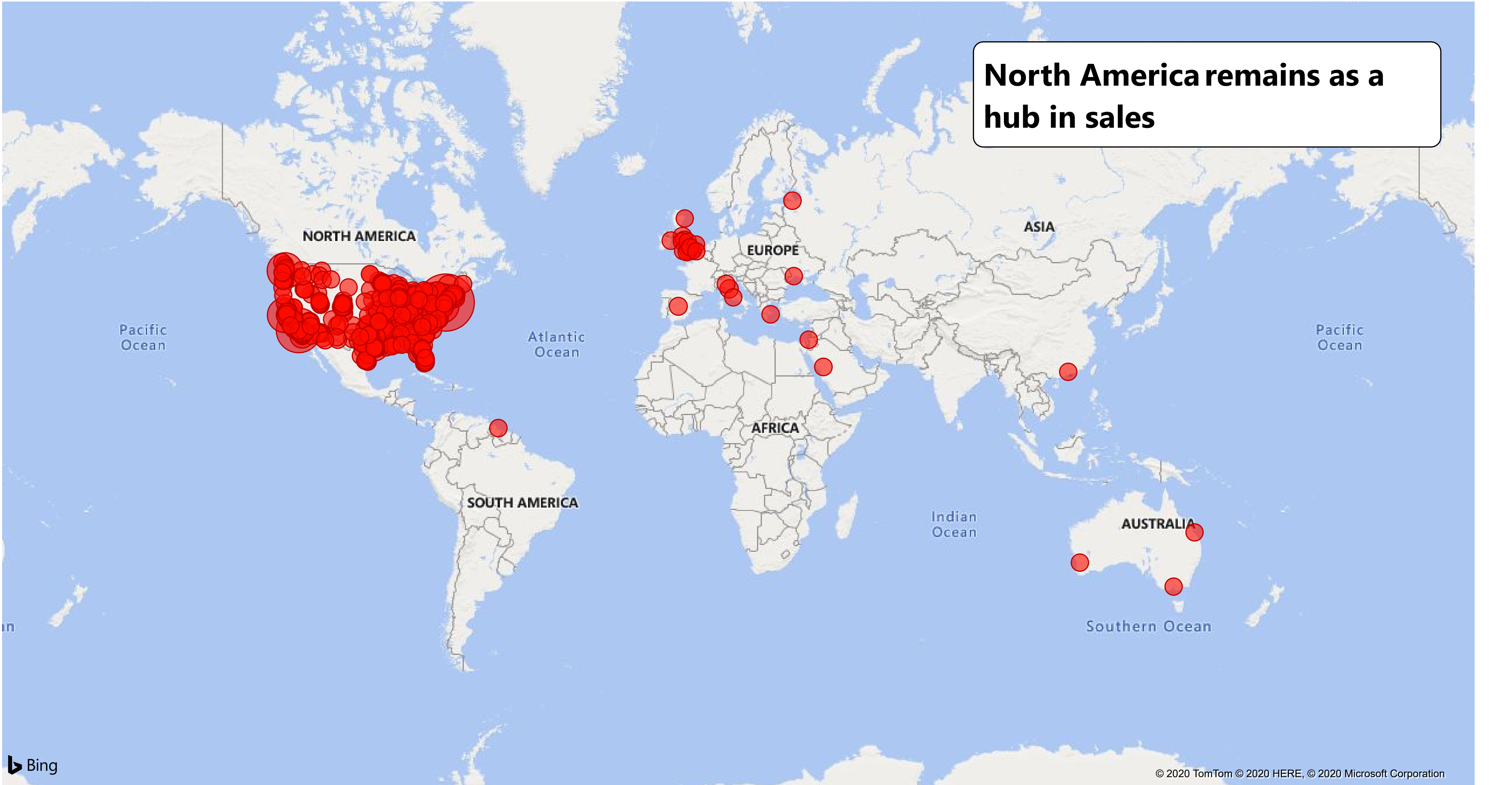


Task 5- To explore Business Analytics

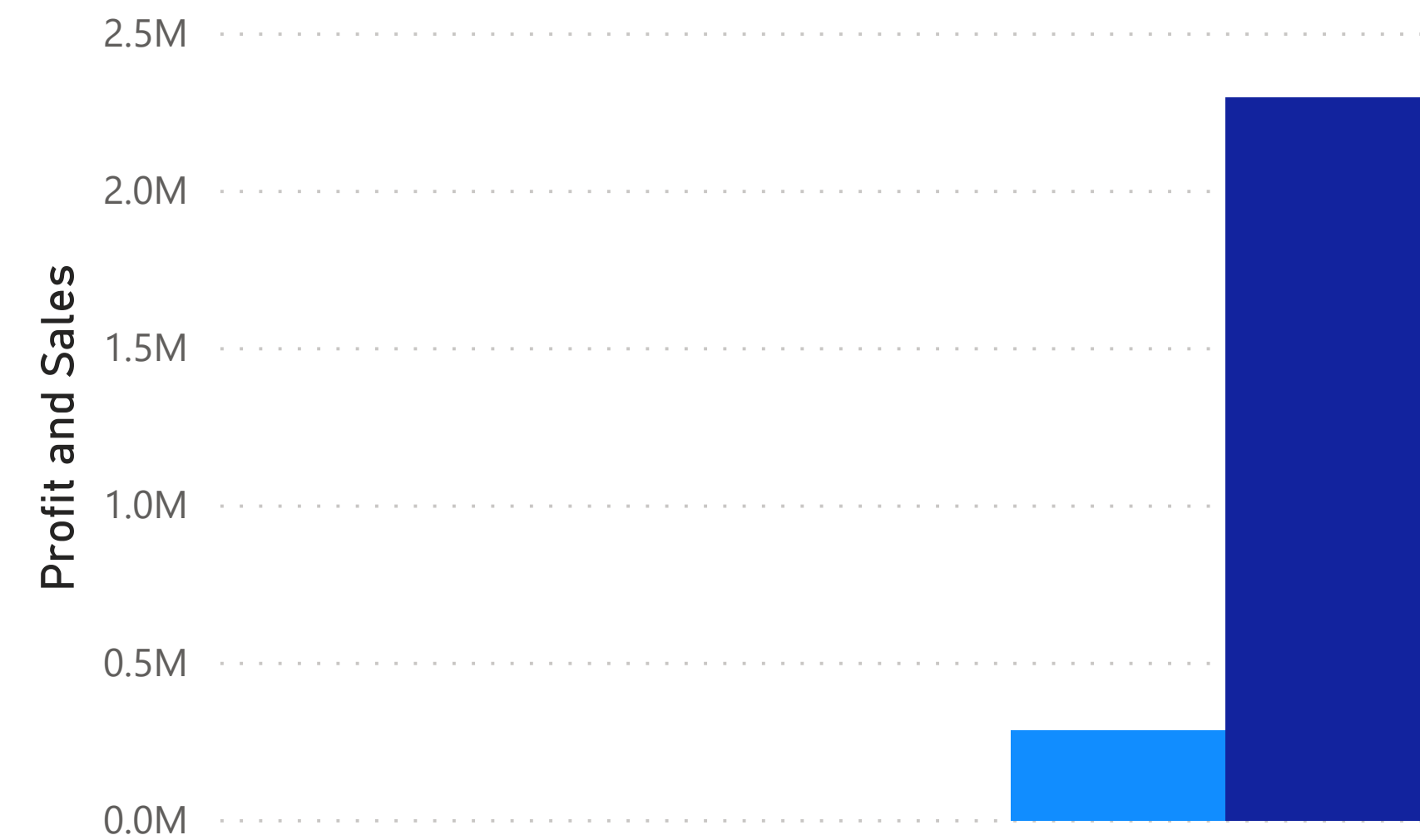
Tool used is Power BI



North America remains as a hub in sales

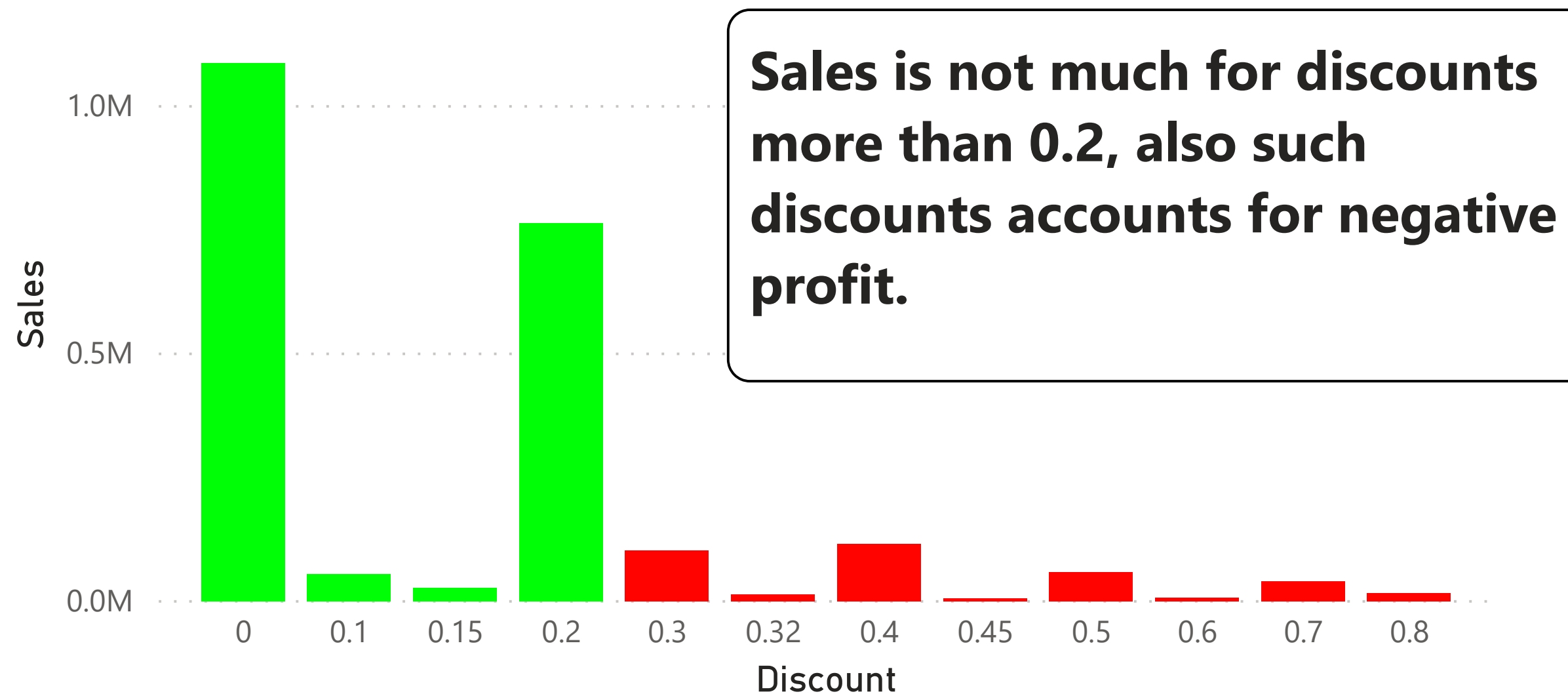
Profit and Sales

● Profit ● Sales



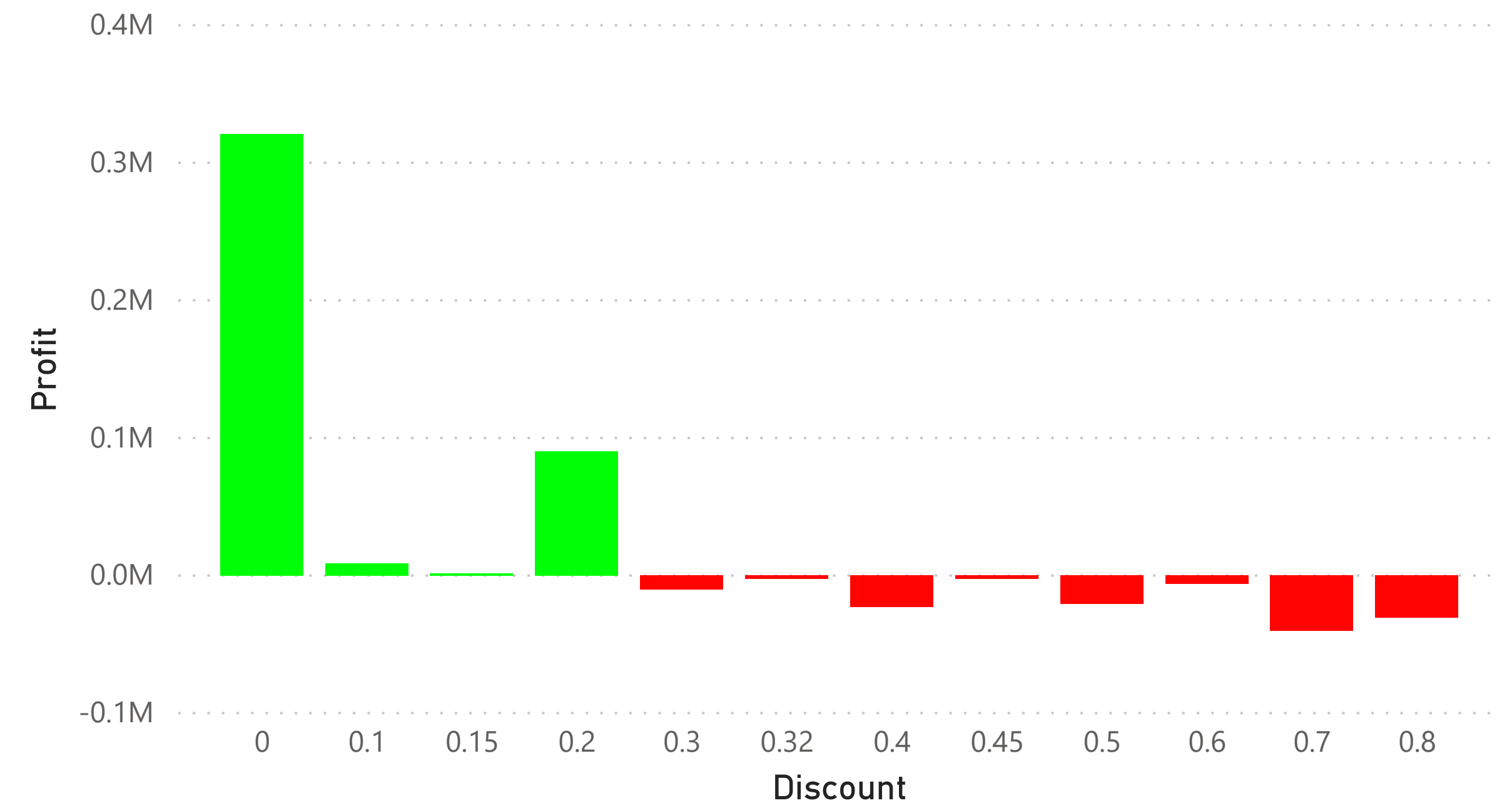
Profit is far less than the sales. Main reason is due to the discount offered. Also we cannot totally cut off discount as it boosts sales.

Sales by Discount



Sales is not much for discounts more than 0.2, also such discounts accounts for negative profit.

Profit by Discount

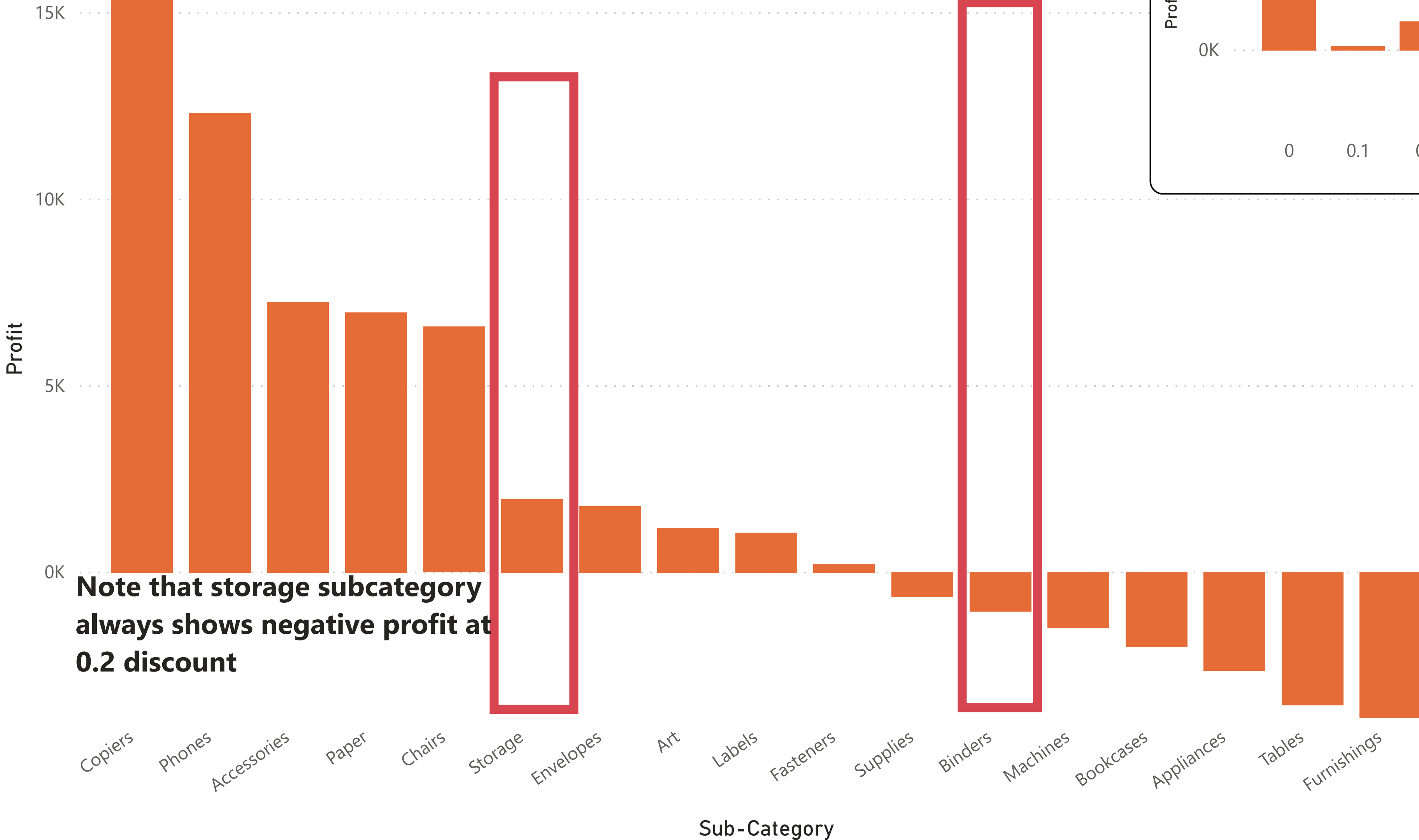


Profit can be increased by cutting high discounts (i.e.) higher than 0.3. The following shows region wise proof that high discounts leads to loss

Visual Interactions involved- Refer video

Profit by Sub-Category and Region

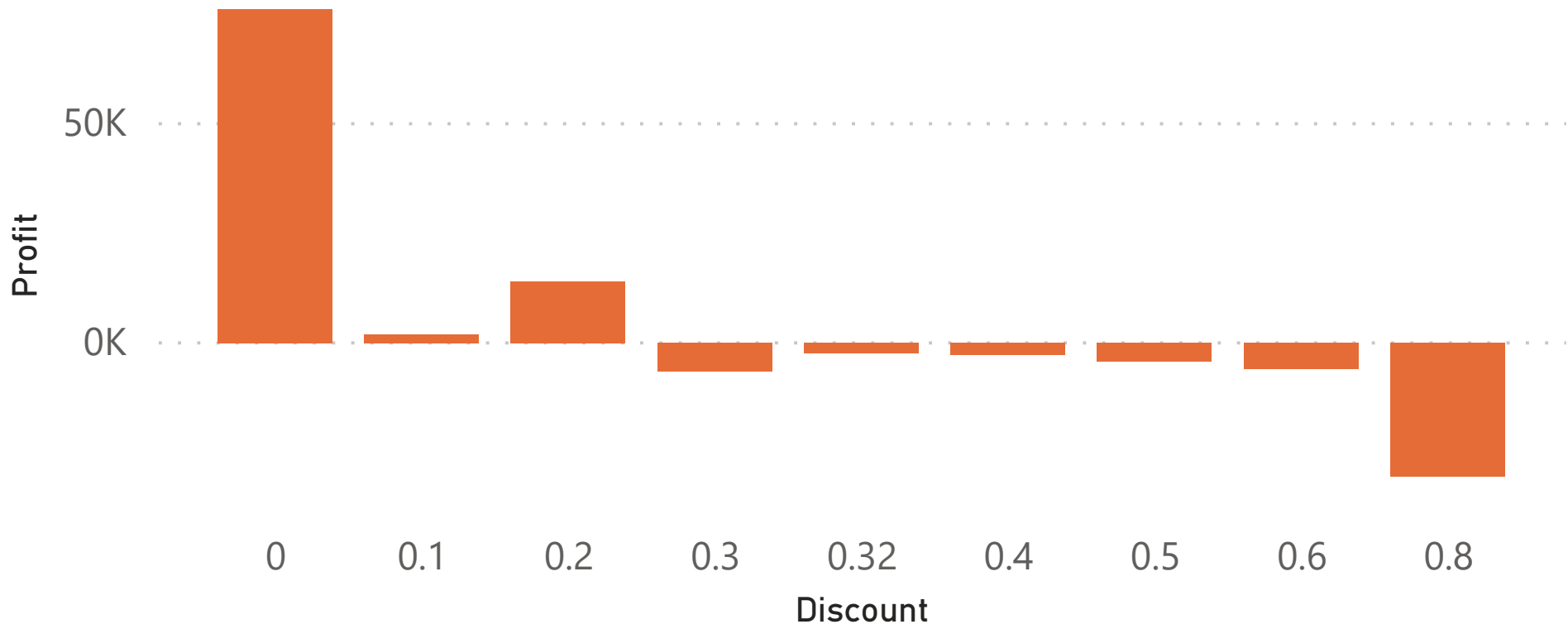
Region ● Central



Note that storage subcategory always shows negative profit at 0.2 discount

Profit by Discount and Region

Region ● Central

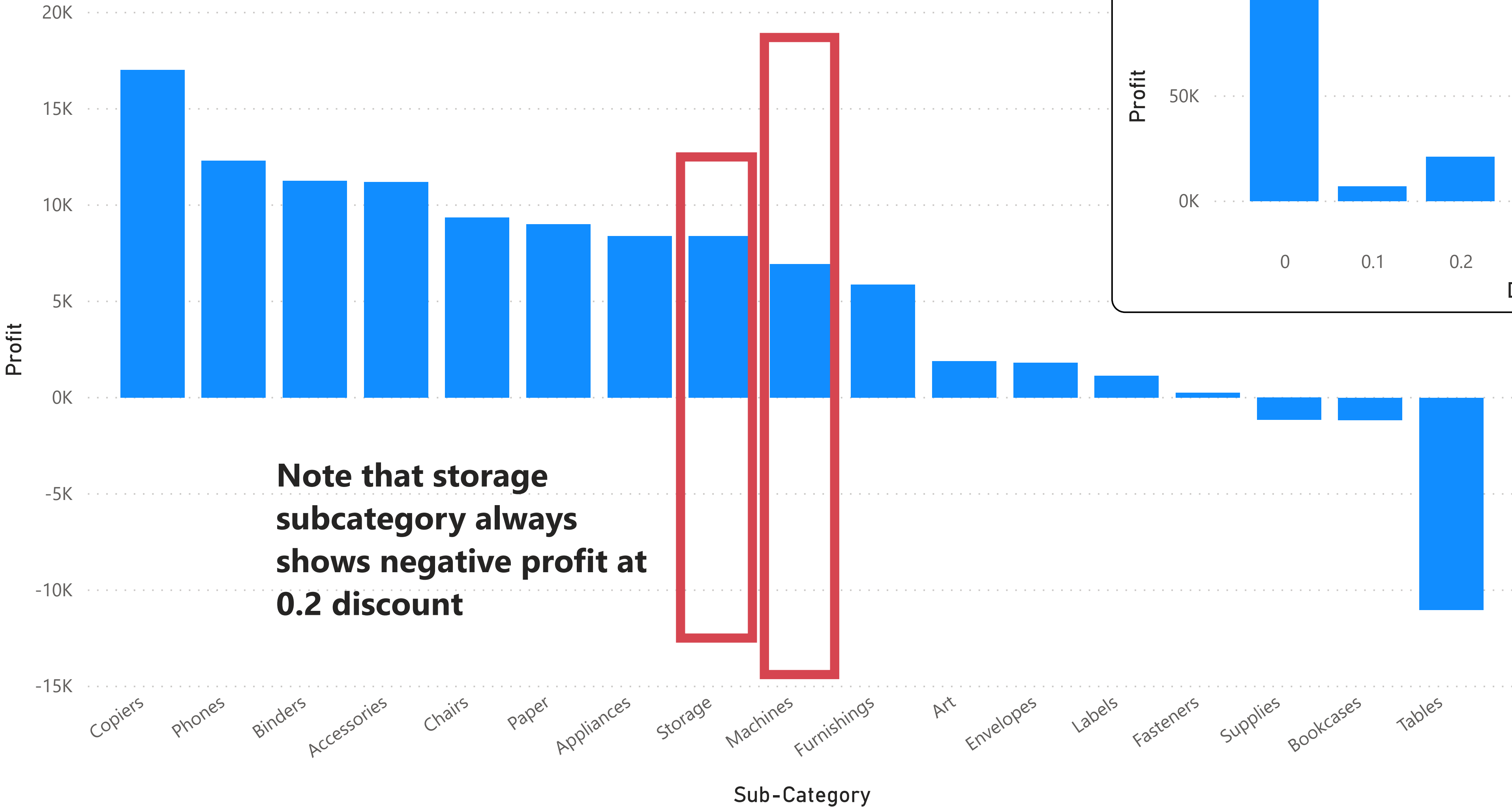


See that 0-0.2 discount gives good profit, but discount 0.7 leads to negative profit thus affecting net profit

Visual Interactions involved- Refer video

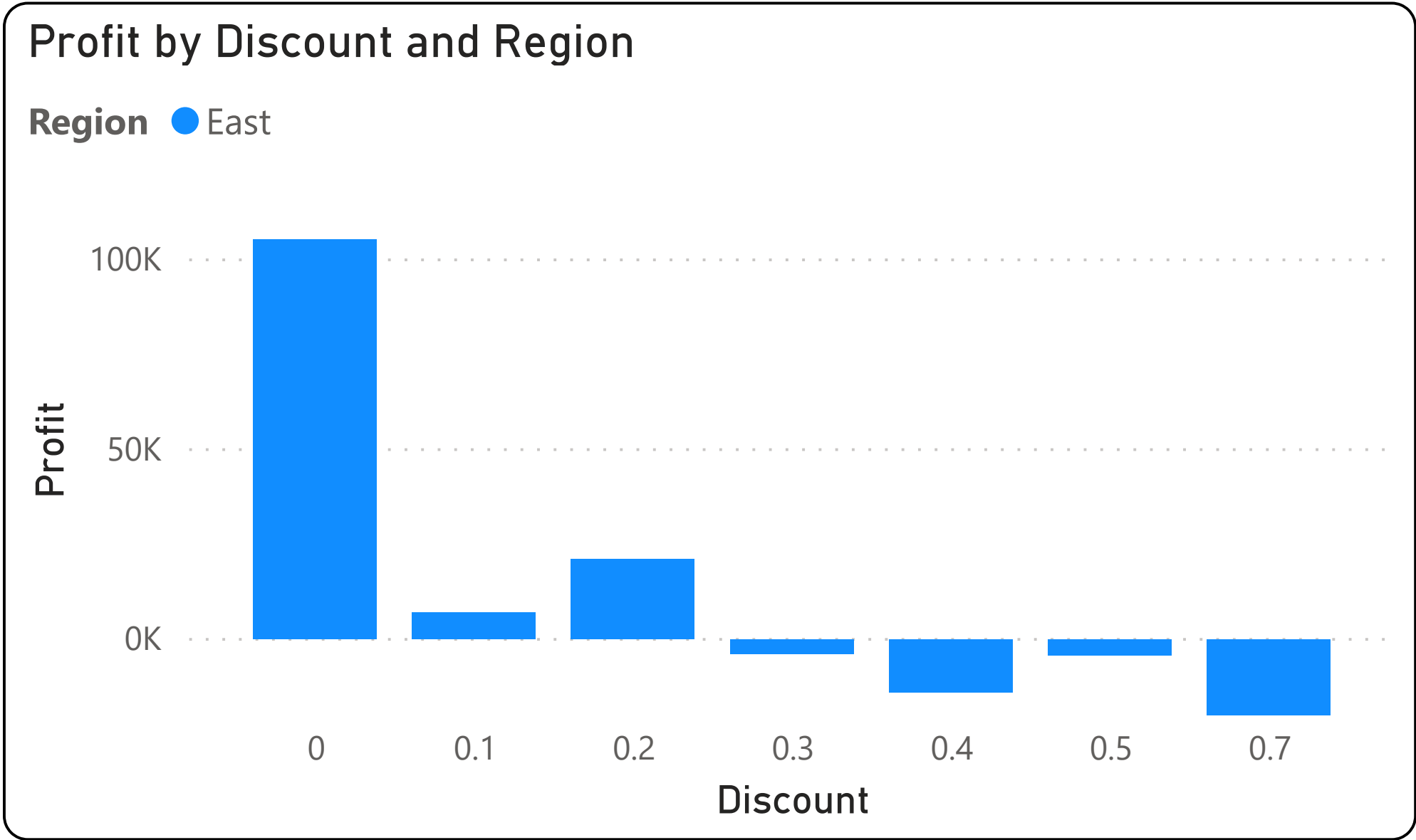
Profit by Sub-Category and Region

Region ● East



Note that storage subcategory always shows negative profit at 0.2 discount

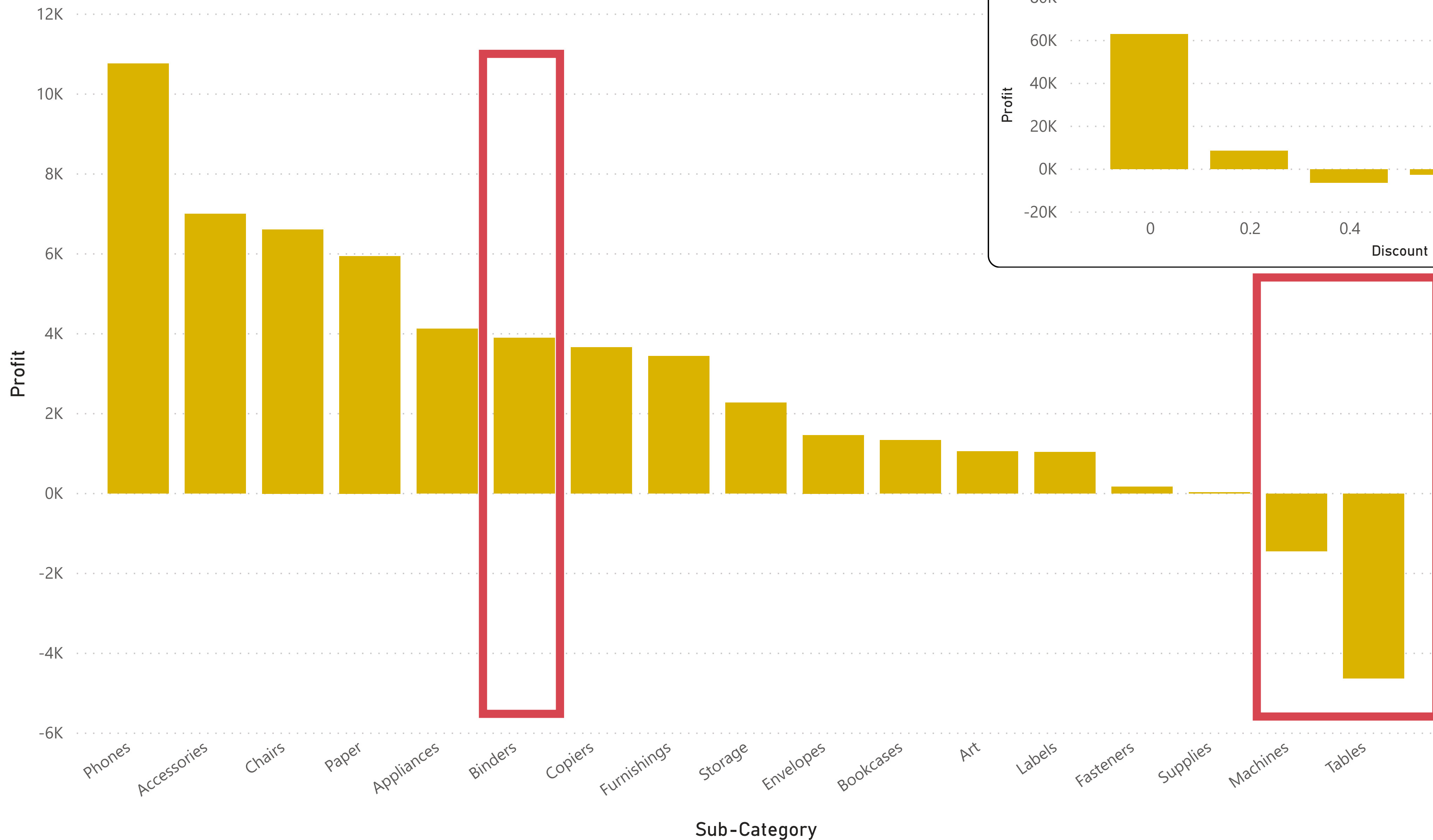
Low discounts gives high profits



Visual Interactions involved- Refer video

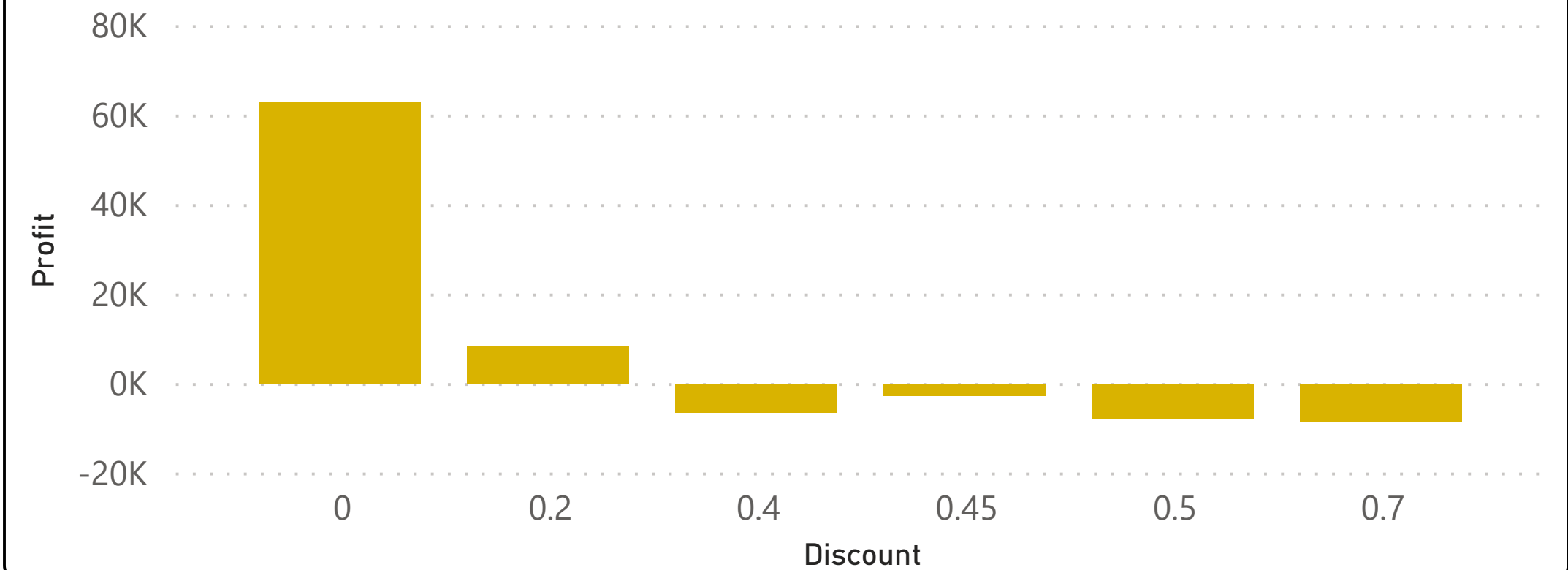
Profit by Sub-Category and Region

Region ● South



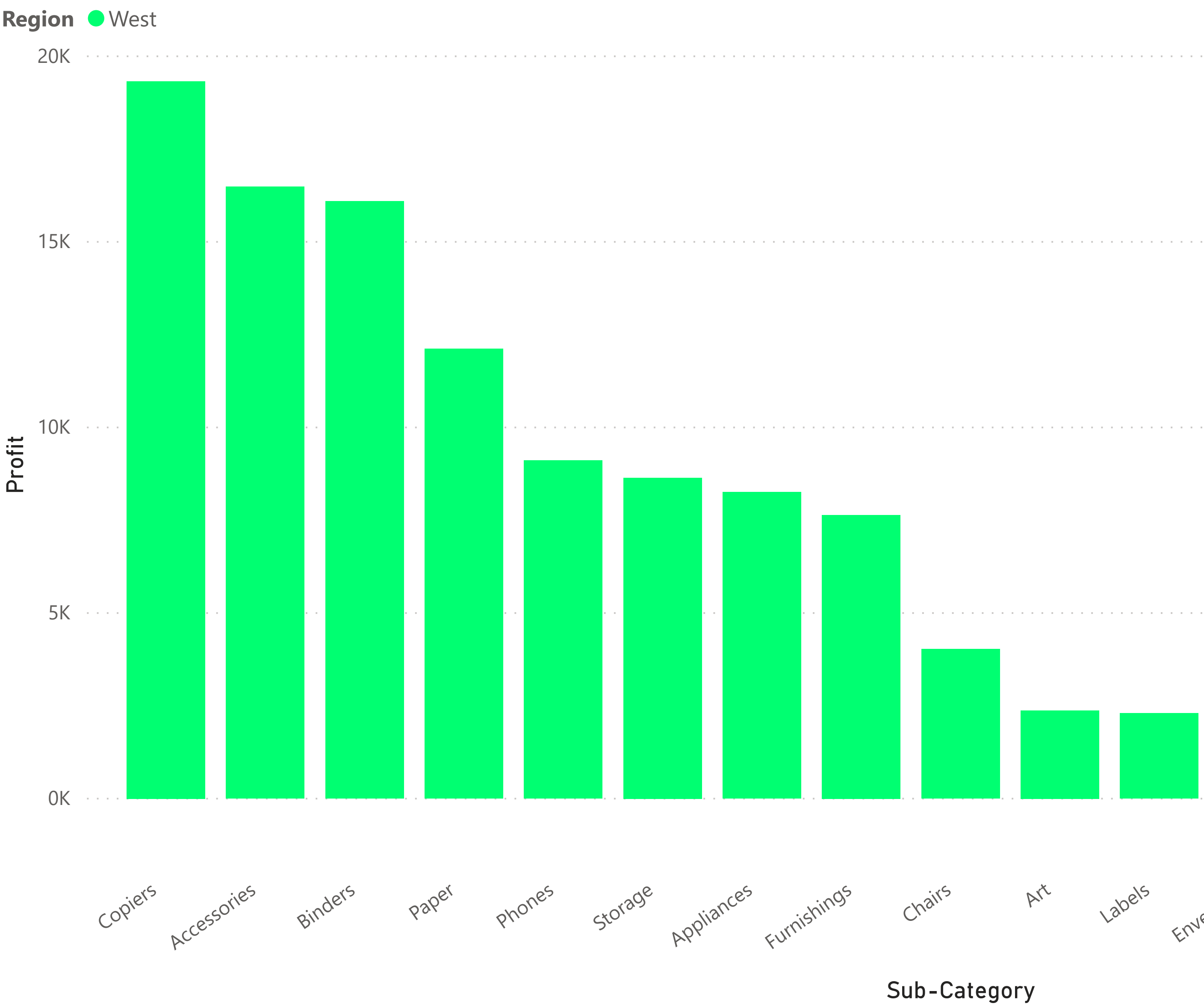
Profit by Discount and Region

Region ● South

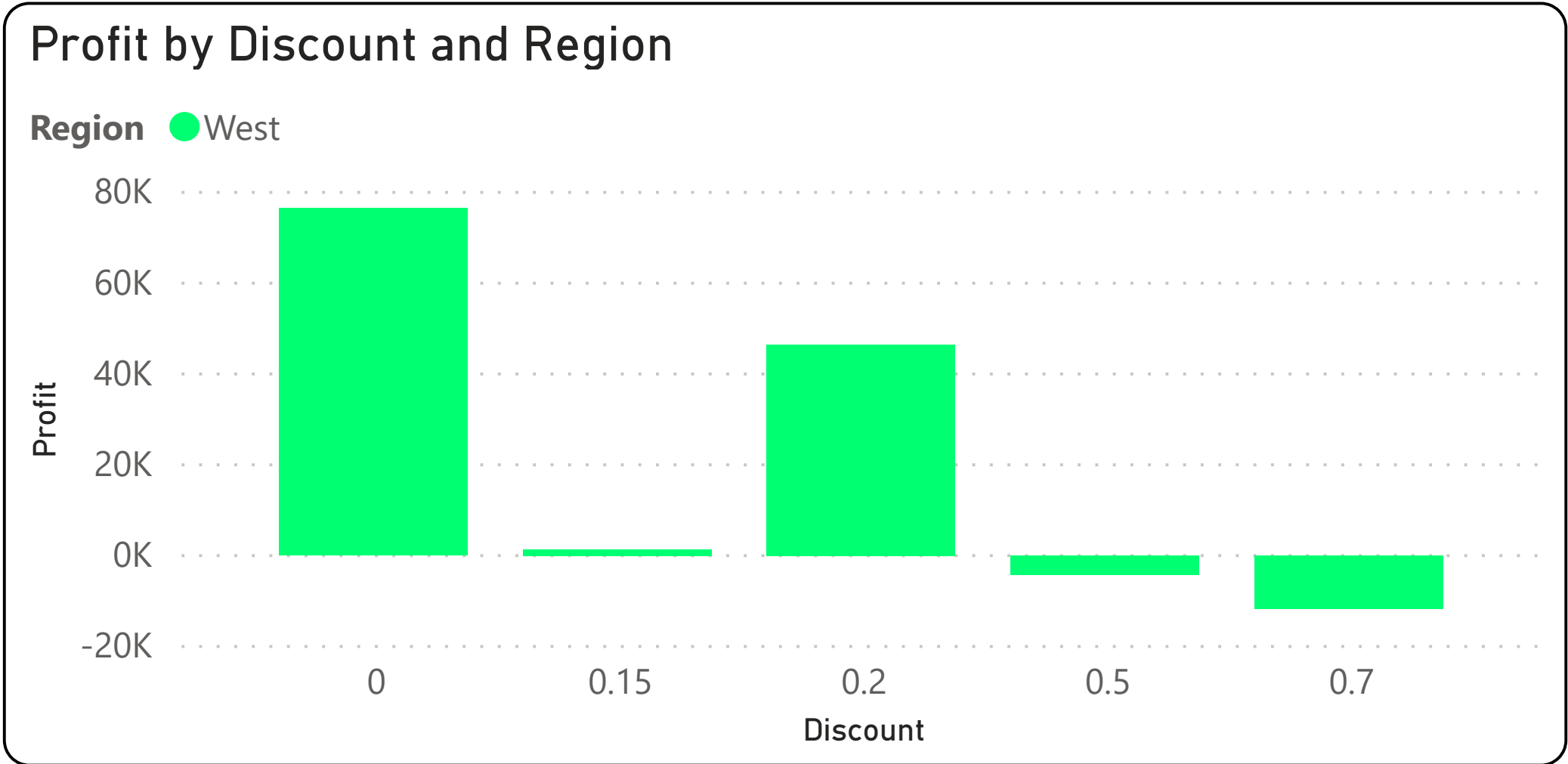


High profit is obtained by low discount sales, but it is reduced by the discounts 0.5 and 0.7

Profit by Sub-Category and Region



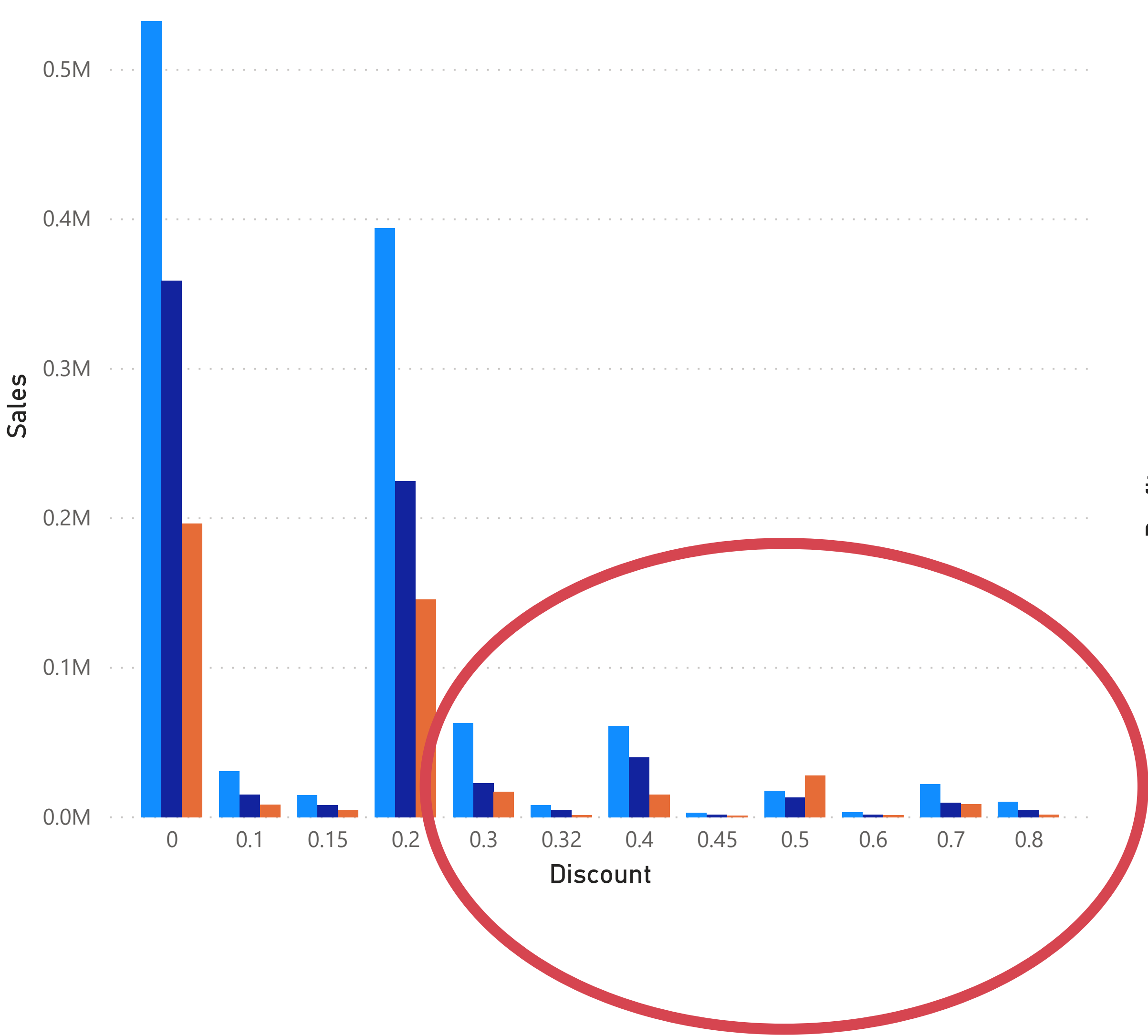
Visual Interactions involved- Refer video



Same as other regions..Profit yielded by low discount sales are reduced by high discount sales

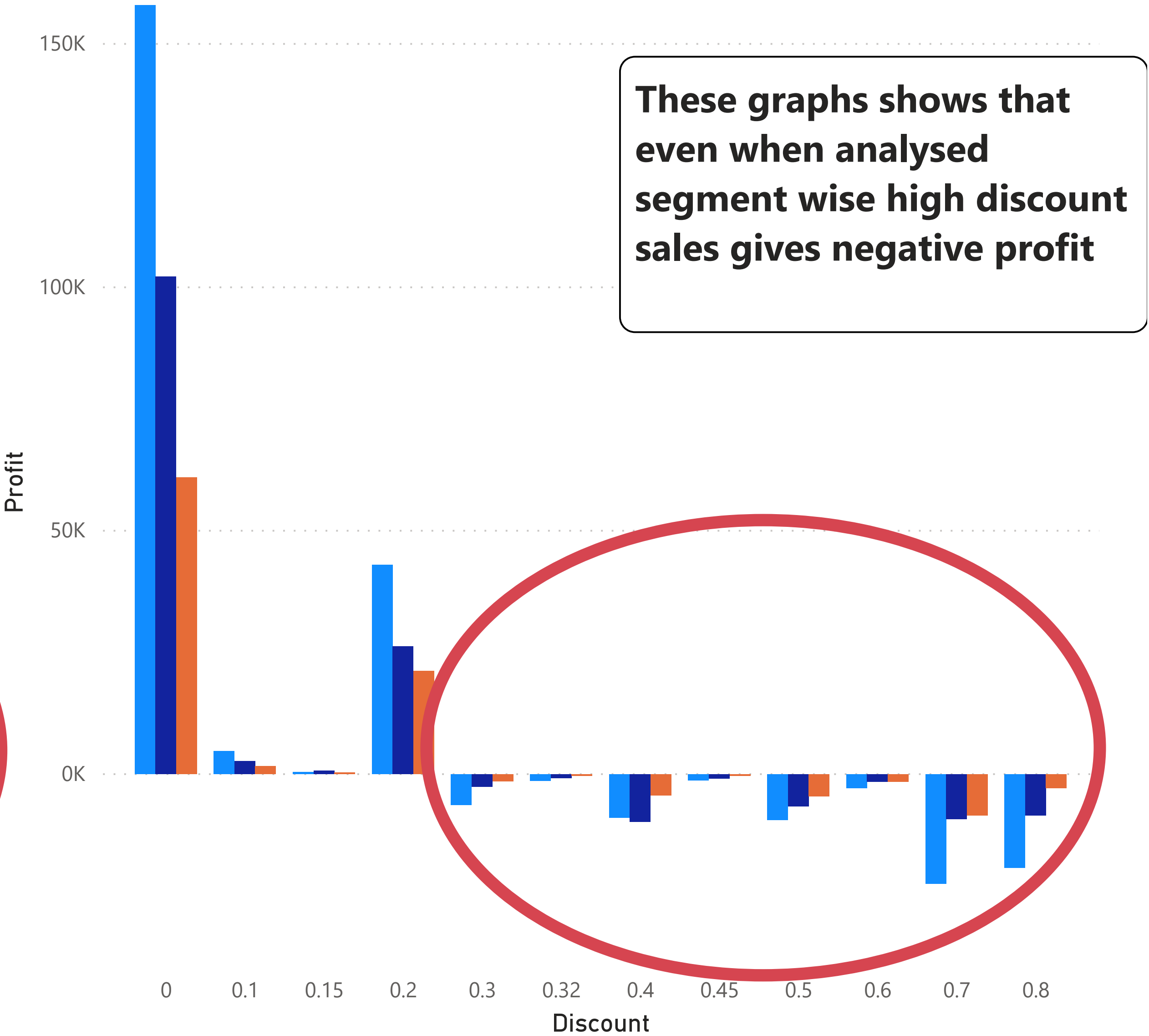
Sales by Discount and Segment

Segment Consumer Corporate Home Office



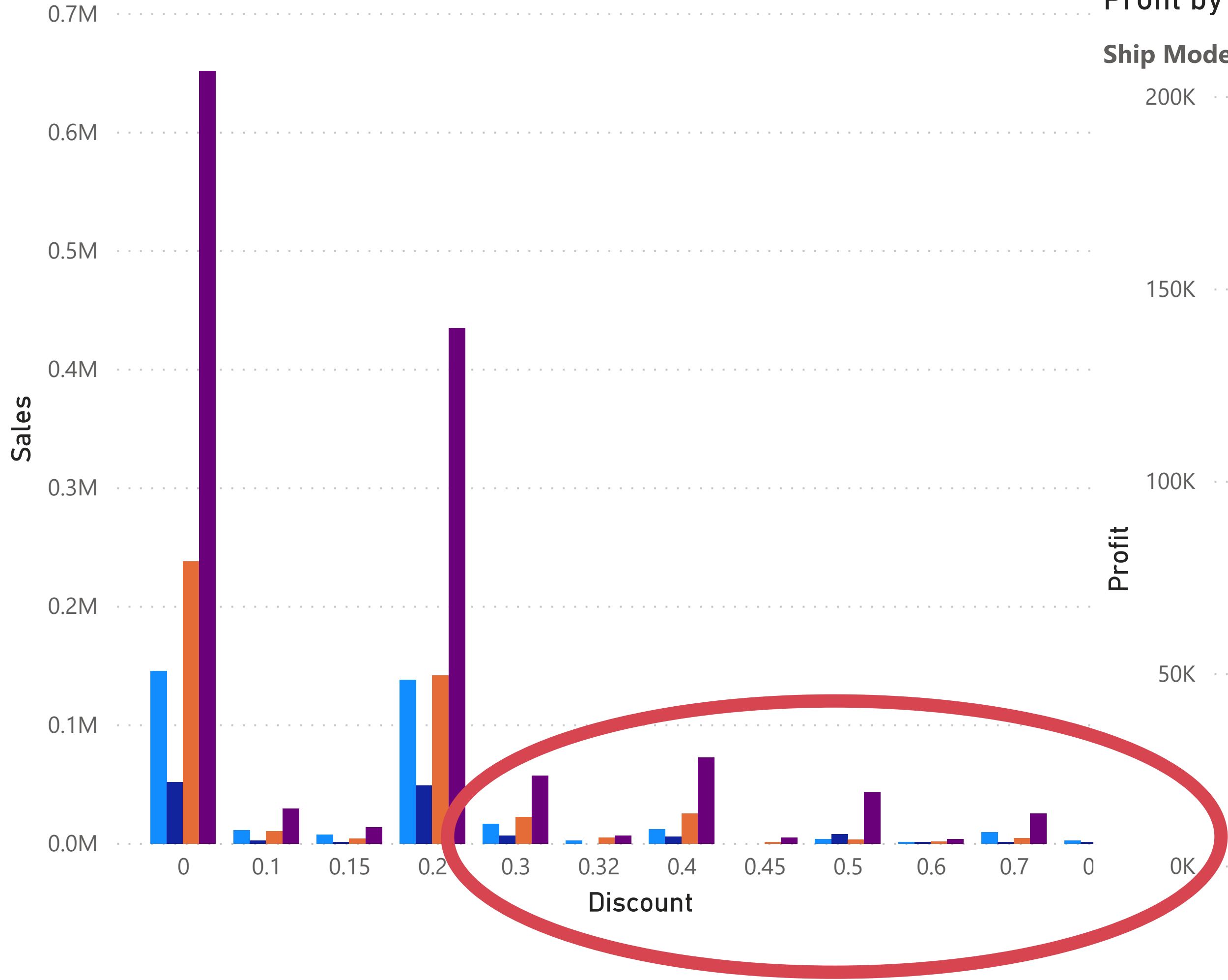
Profit by Discount and Segment

Segment Consumer Corporate Home Office



Sales by Discount and Ship Mode

Ship Mode First Class Same Day Second Class Standard Class



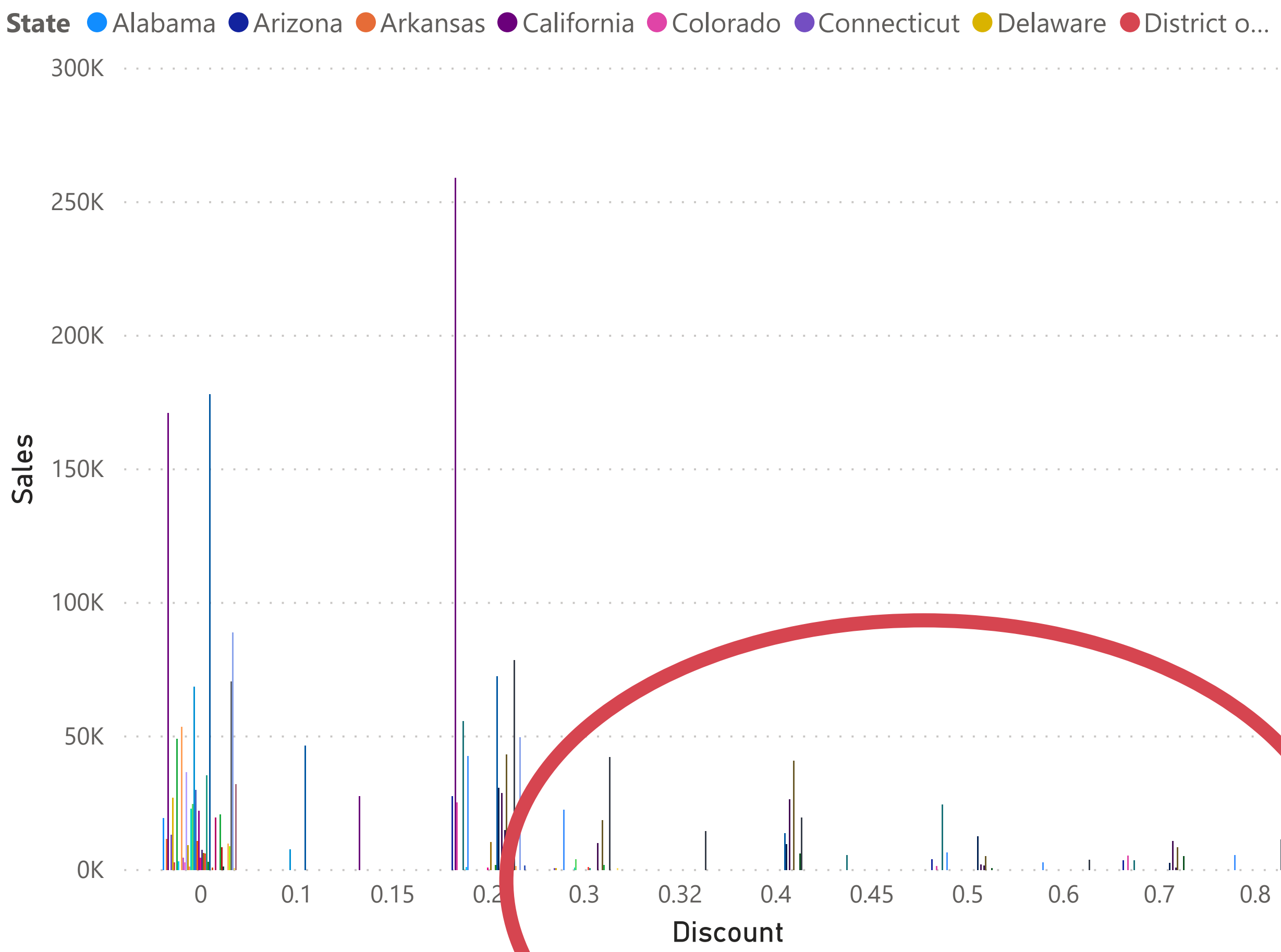
Profit by Discount and Ship Mode

Ship Mode First Class Same Day Second Class Standard Class



These graphs show that when analysed by ship mode, high discount sales gives negative profit as well

Sales by Discount and State

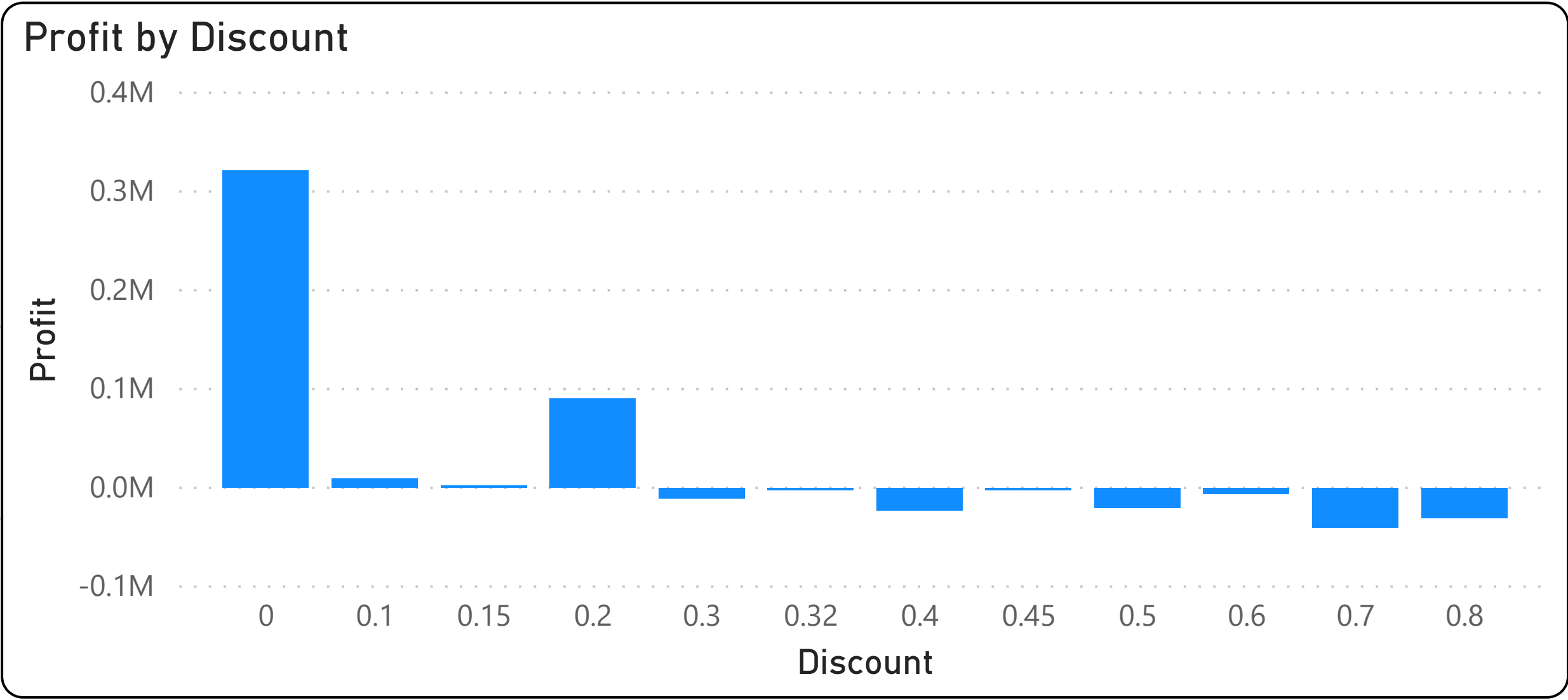


Profit by Discount and State



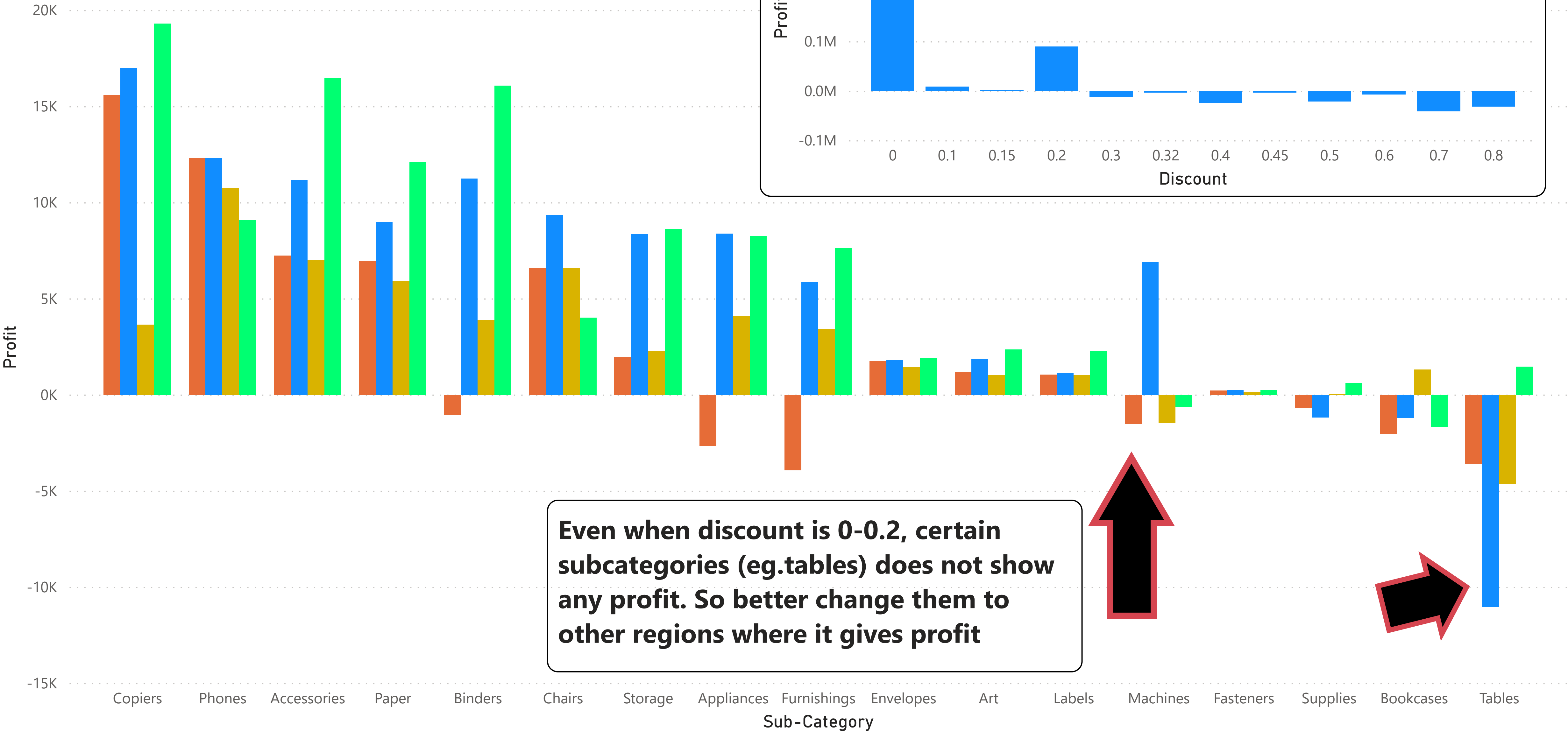
These graphs show that even when analysed by state high discount sales gives negative profit

Visual Interactions involved- Refer video

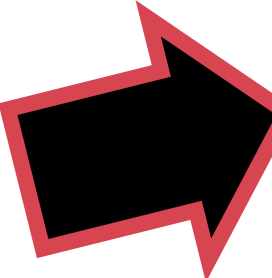
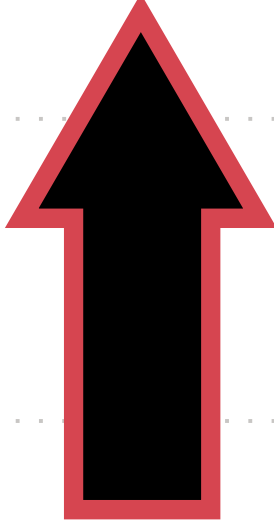


Profit by Sub-Category and Region

Region Central East South West

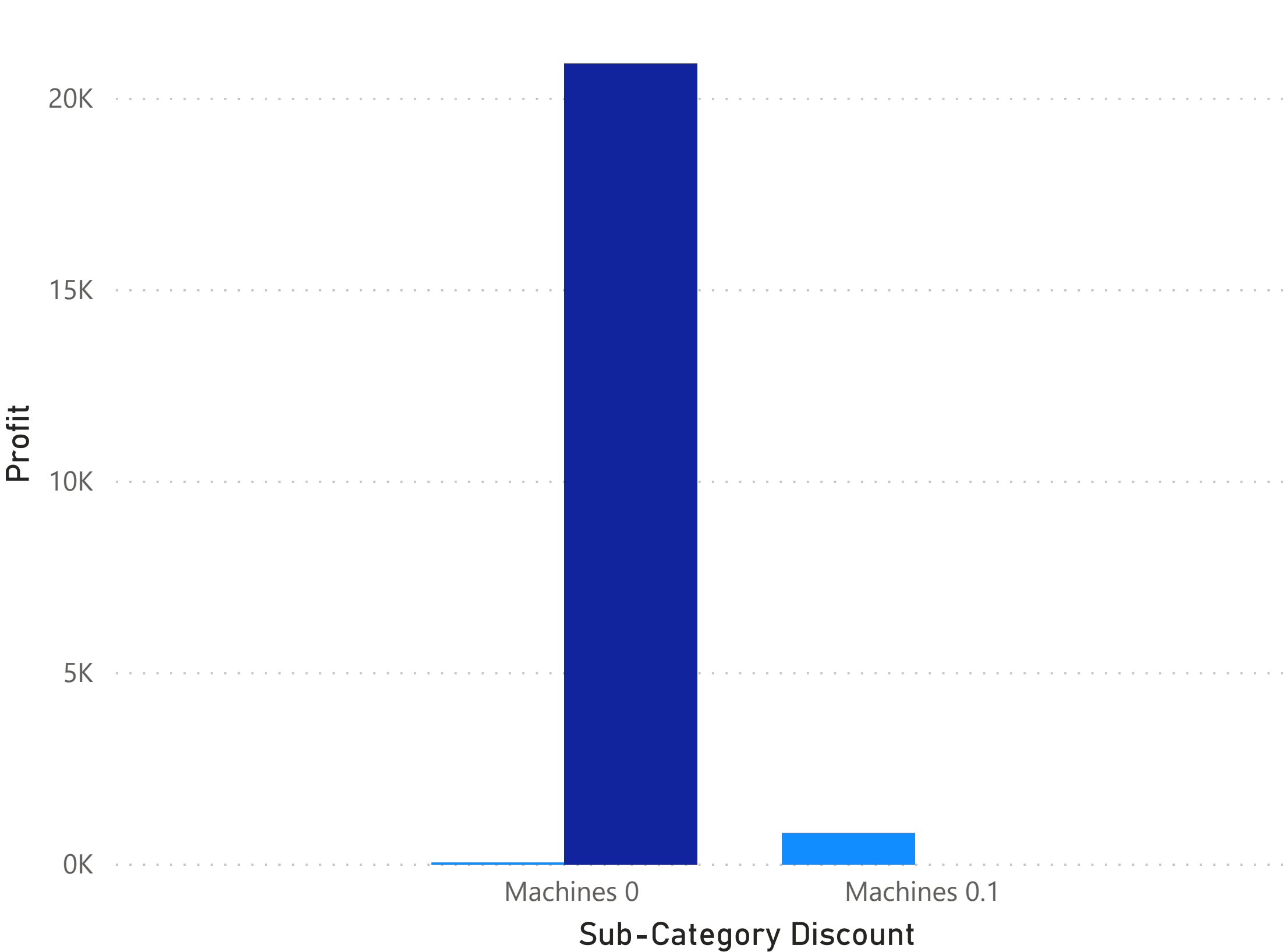


Even when discount is 0-0.2, certain subcategories (eg.tables) does not show any profit. So better change them to other regions where it gives profit



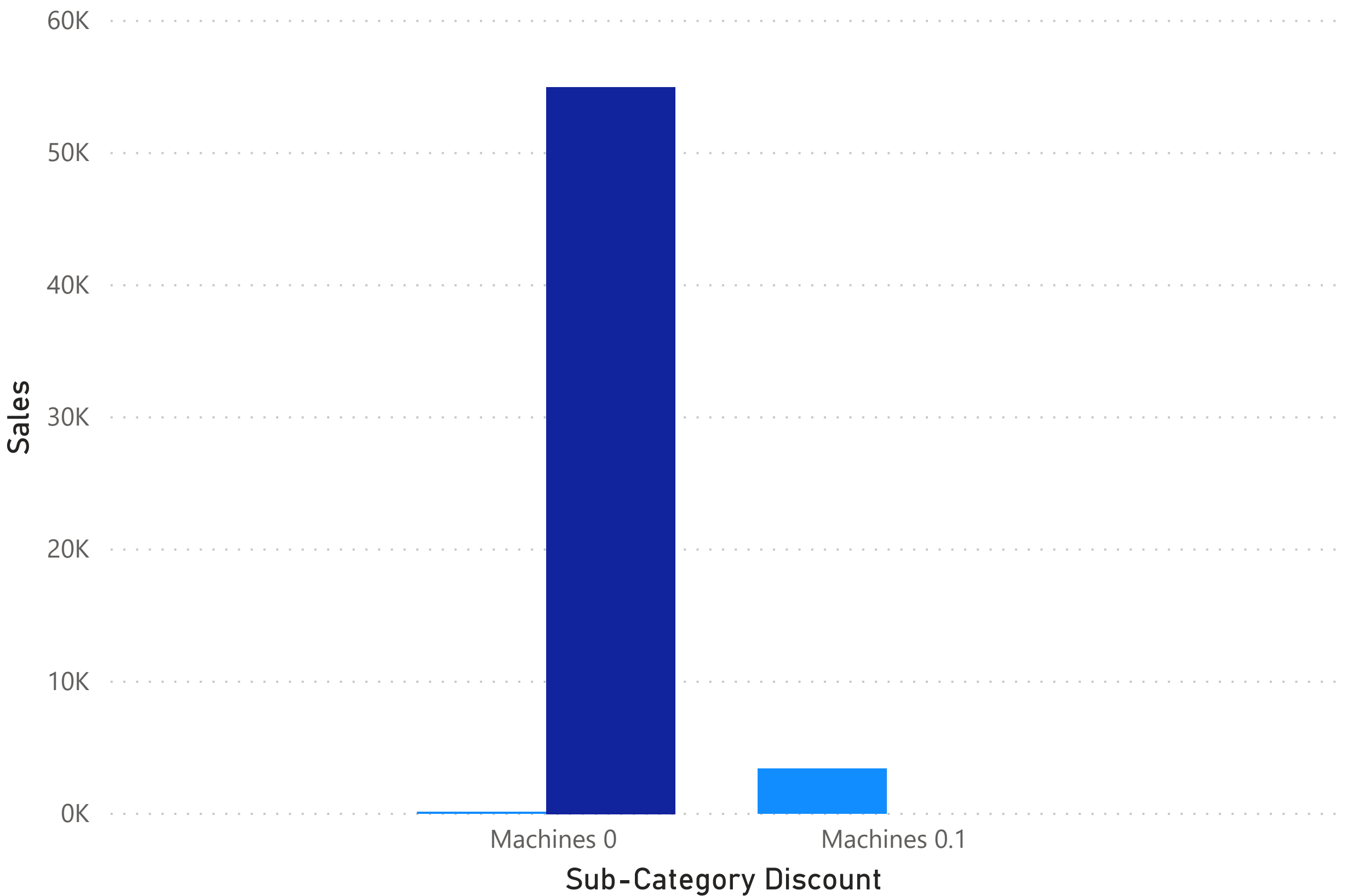
Profit by Sub-Category, Discount and Region

Region ● Central ● East



Sales by Sub-Category, Discount and Region

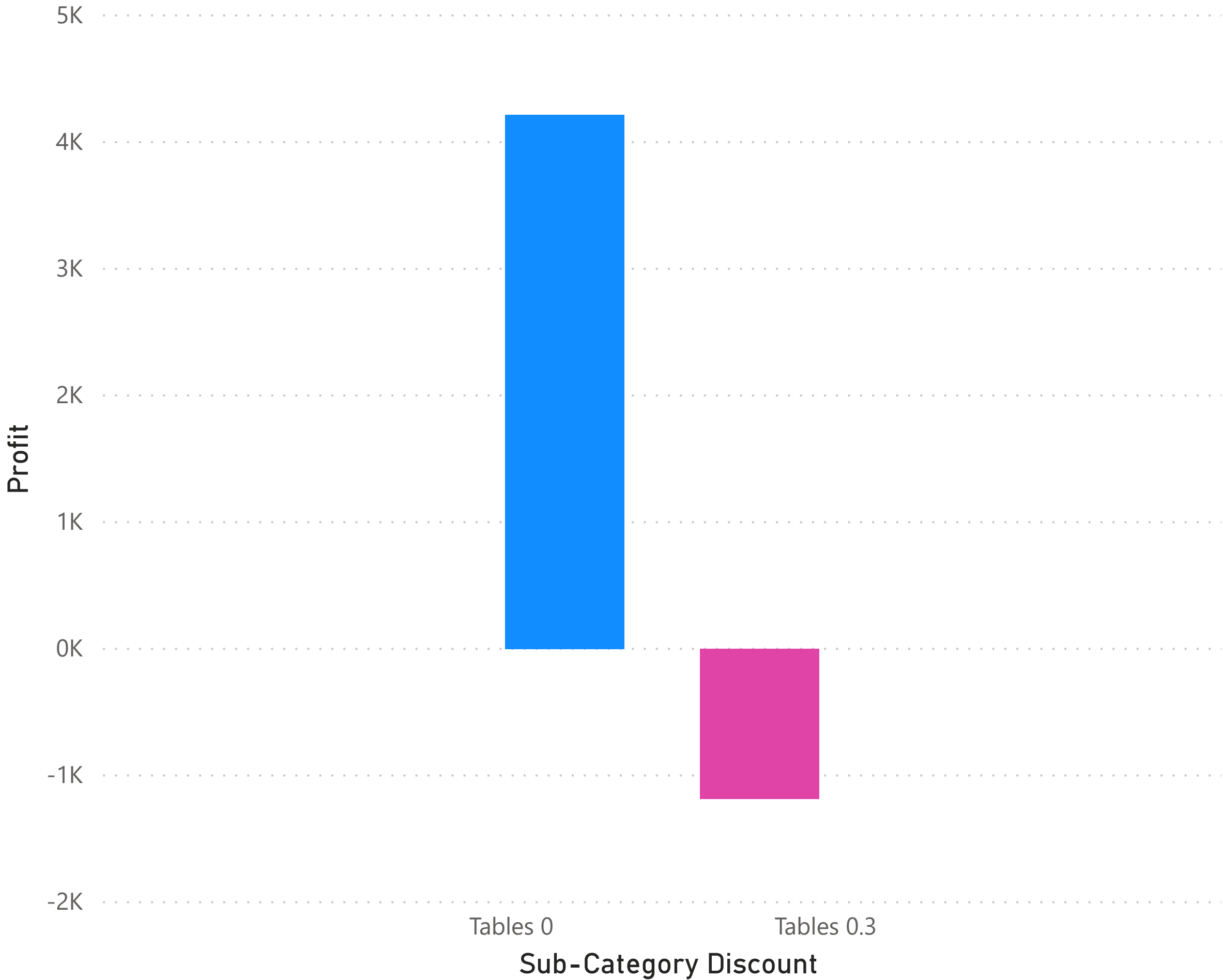
Region ● Central ● East



The column chart shows that Machines does not give expected level of profit at low discount. So sales in that region can be stopped and transferred to East where Machines sales gives good profit

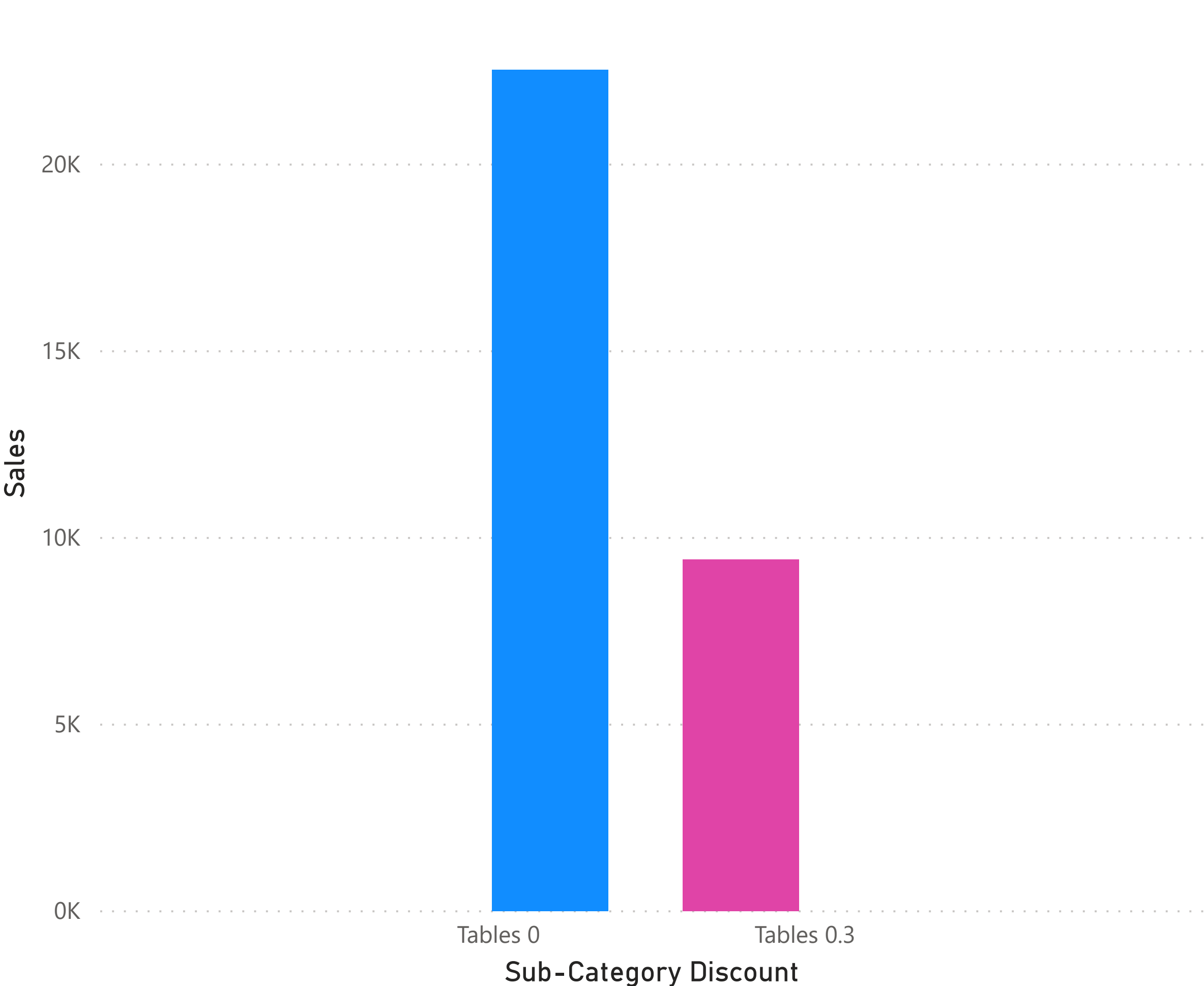
Profit by Sub-Category, Discount and Region

Region East South



Sales by Sub-Category, Discount and Region

Region East South



The column chart shows that Tables are not sold at low discount in East. This may be because there might be no sales at that discount. So sales in that region can be stopped and transferred to South where Tables sales gives good profit

Conclusion:

Thus it can be concluded that setting discounts from 0 to 0.2 gives a good profit, at the same time, there will be only a little effect on sales