Wine Promotions in Restaurants

Do Beverage Sales Contribute or Cannibalize?

by BRIAN WANSINK, GLENN CORDUA, ED BLAIR, COLLIN PAYNE, and STEPHANIE GEIGER

A controlled field study of wine promotions in a mid-priced chain restaurant generated three key findings: (1) selected wine recommendations increased sales by 12 percent, (2) food-wine pairing recommendations increased sales by 7.6 percent, and (3) wine tastings increased sales by 48 percent. In general, 69 to 87 percent of the increase in sales of promoted wines come from diners who would likely have ordered a nonpromoted wine. This means that 13 to 31 percent of the increase come from diners who would have otherwise ordered liquor, beer, and nonalcoholic drinks. Specific implications for responsible restaurateurs are outlined, including the caveat to not cannibalize sales by promoting a lower-margin, lower-profit wine.

**Keywords:** wine sales; beverage sales; restaurants; recommendations; wine promotions; menu pairing; sampling

Despite the health benefits associated with drinking one glass of wine a day,1 restaurant wine sales still lag those of other alcoholic beverages.2 Given the 200 to 300 percent margins on restaurant wine sales,3 we believe that restaurateurs would like to know how on-site promotions might increase wine sales. Doing so could increase profits while reducing the likelihood of overconsumption of alcohol that is frequently associated with beer and liquor. It could also help a novice wine drinker to make a more confident, satisfying wine selection.

Our twelve-week field study with a midpriced chain restaurant explores the following three types of promotion strategies based on table-tent advertising: (1) wine recommendations (one, three, or five wines), (2) recommended wine-food pairings (one, three, or five pairs), and (3) low-price tasting portions (one
tasting or a flight of five possible tastings). All three of these promotional strategies were chosen to address risk aversion, which Spawton, Mitchel and Greatorex, and others see as a chief barrier to ordering wine in restaurants.4

Reducing the Risk of Ordering Wine

Ordering wine can be both financially and socially risky.5 Even if a diner is reasonably knowledgeable about wines, there are wide variations between varieties, vineyards, countries, and years. This can make choosing the wrong wine socially embarrassing or financially disappointing.6 In contrast, the production, control, and brand familiarity associated with beer and spirits generally guarantees that repeated experiences will be consistent with expectations.

To help diners reduce their risk of ordering wine, responsible restaurateurs might consider three ways to reduce the perceived risk of ordering wine. They could suggest a wine, suggest a food-wine pairing, or offer a relatively low-price tasting portion or flight.7

One reason why these risk-reduction promotional strategies have not been empirically tested is that it is hard to set up a control group for such a test. We did this, however, by conducting a controlled, balanced, twelve-week field study to examine how these various promotions influenced wine sales. To eliminate one source of variation, the promotions involved minimal server involvement, which allowed implementation to be accomplished consistently in two chain restaurants.

Method: The Twelve-Week Field Experiment

We introduced the three wine promotions during a twelve-week field experiment at two Rockfish Seafood Grill restaurants (twenty-two miles apart) located in Houston, Texas. The Rockfish Seafood Grill is a casual neighborhood restaurant serving lunch and dinner. With the help of management, five relatively new or unfamiliar wines were selected for promotion. We offered the promotions at different times in the two restaurants to help reduce unwanted variation that might have otherwise been attributable to weather. We provided one wine promotion in week 1 and a different wine promotion in week 2 at one location and did the same in reverse order at the second location (see Exhibit 1). We also omitted certain weeks because of holidays.

The promotions were presented on table tents. The first set of tests compared the effect on sales of a table tent recommending one, three, or five wines. Likewise, the second set of tests compared the effects of a table tent recommending one, three, or five pairings of wine and food. Finally, the third set of tests compared the effect on wine sales of a table tent offering one $2 wine tasting portion or a flight of five $2 wine tastings. Four of the promoted wines were whites and the fifth was a red.8

Other than the table tents, the restaurants’ operations continued with minimal disturbance. Once a week (Sunday after closing), the table tents were changed to reflect the new test condition, and those were used through the week until the next Sunday after closing when the next change was made. At the end of each day, the sales records for each drink and food item were collected and compiled. The key variables of interest were the sales of the target (promoted) wine, sales of all other wines, sales of beer and liquor, and sales of nonalcoholic drinks.

To gauge sales of beverages without wine promotions, we first collected sales records from both Rockfish restaurants for the four weeks before the study began.
**Exhibit 1:**
Wine-Promotion Schedule

<table>
<thead>
<tr>
<th>Four Week Baseline Control</th>
<th>Wine Recommendation Study plus Wine/Food Promotion Study</th>
<th>Wine Tastings Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>Week 2</td>
<td>Week 3</td>
</tr>
<tr>
<td>Restaurant 1</td>
<td>Control</td>
<td>Control</td>
</tr>
<tr>
<td>Restaurant 2</td>
<td>Control</td>
<td>Control</td>
</tr>
</tbody>
</table>
These figures were our control (or baseline) to compare the effectiveness of the wine promotions. For each of the four weeks, we combined sales for both restaurants for each beverage category and then computed an average for that beverage category. The baseline for the two restaurants’ total beverage sales without wine promotions are 28 percent wine, 46 percent beer and liquor, and 26 percent nonalcoholic drinks. In total, the wine sales baseline amounts to approximately 4.6 percent of total restaurant sales, while beer and liquor are 7.5 percent, nonalcoholic beverages are 4.3 percent, and food constitutes 83.6 percent of sales.

More Wine RecommendationsEquals More Wine Sales

Promoting wine with a table tent does improve wine sales, but as Exhibit 2 shows, the effectiveness of a promotion partly has to do with how many different wines are promoted. In this case, more is better. At the levels examined here (one, three, or five wines), the table-tent promotion of five wines increased sales of the promoted wines more than promotions recommending either three wines or one wine. Specifically, the five-wine promotion increased the sales of promoted wines by 39 percent ($473.04 to $657.06), but that
promotion also increased total wine purchases by 12 percent ($1,748.33 to $1,956.07) and total restaurant sales by 4 percent ($38,279.69 to $39,739.23). All of these increases are statistically significant.\(^\text{10}\)

Importantly, promoting the five wines did not significantly cannibalize sales of other wines. Our data shed no light on this observation, but we suspect that the table tents encouraged those not sure about wine to take the chance of choosing and buying the promoted wines. Meantime, patrons who were going to buy wine continued to do so at frequencies not significantly different from when no promotions were offered (see Exhibit 2).

That said, we caution that the data also do not let us conclude that, given that recommending five wines is good, recommending ten wines would be even better. If the list of promoted wines is too long, it might compromise the “special” nature of the promoted wines.

**Food Pairings Are Effective . . . in Small Doses**

If some people are hesitant to order wine because of the financial or social risk (including embarrassment if they appear ignorant), offering wine-food pairing recommendations should reduce this hesitancy. This restaurant’s use of food-wine promotions supports this notion (see Exhibit 2). The promotions generated an increase in sales for the target wines by 44.5 percent ($473.04 to $683.71) and increase in total wine purchases by 7.6 percent ($1,748.33 to $1,880.81). Furthermore, total restaurant sales increased by 21 percent ($38,279.69 to $46,364.47). All of these increases are statistically significant from what was expected from baseline sales figures \(p < .05\) in all cases.

However, excessive pairing suggestions do not increase wine sales. As Exhibit 2 illustrates, the promotion that paired five wines with five foods significantly decreased target wine sales by 11 percent and all other wine sales by 14 percent.\(^\text{11}\) In contrast to straight wine promotions, too many suggested wine-food combinations may confuse people or lead them to question how special the featured wine and food pairings actually are.

**Tasting Portions Increase Sales—The More the Merrier**

One week’s test was to offer one small taste of the wine for $2. In the next week, a $10 flight of five different wines was available to taste.\(^\text{12}\) We compared how the sales of the targeted wines differed in the weeks they were not offered in tasting portions with sales on the weeks when they were offered.

When there was just one target tasting of wine, the subsequent sales of full glasses of wine increased 18.2 percent, from $148 per week to $175 per week. However, when five tastes were offered, the total increase in sales for all five wines grew 47.3 percent, from a combined total of $465 per week up to $685 per week (which was an average per-wine increase of $93 to $137 per week). All of these increases are statistically significant from what was expected from baseline wine-sale figures \(p < .05\) in all cases) (see Exhibit 3).

Our results suggest that offering tasting portions may be effective in increasing wine sales for promoted wines. Much like wine promotions without food pairings, it was important to note that sales increased with the number of wines offered.\(^\text{13}\) Not only do these tastings make the promoted wine more noticeable, but they also increase the likelihood that a person would purchase an additional tasting of wine.
Promoting New Wine Often Cannibalizes the Sale of Other Wines

Many investigations of trade-offs between the sales of different beverages are longitudinal and do not benefit from cross-sectional controls. With twelve weeks of data, we can offer key initial observations about what may have led to increases in wine sales and total beverage sales. In aggregate, wine promotions resulted in a 2.7 percent average increase in total beverage sales. Three wine promotions (promoting one wine, promoting five wines, and suggesting three wine and food pairings) increased total beverage sales as compared to baseline sales ($p < .05$). Two wine promotions (promoting three wines and suggesting just one wine and food pairing) made no increase or decrease in beverage sales, and suggesting five wine and food combinations led to a decrease in total beverage sales ($p < .05$).

To determine how new promotions cannibalize beverage sales, we analyzed only those situations where wine promotions did not result in a statistically significant increase or decrease in total beverage sales (that is, promoting three wines and offering a single wine and food pairing). Although there were some variations between these two different promotions, the results were consistent enough to estimate the extent to which promotion of new or unfamiliar wines cannibalizes existing wine sales. Our study put that figure at an average of 78 percent (range of 69 to 87 percent). Specifically, of the remaining 22 percent average increase in new wine sales (the range is from a 13 to 31 percent...
increase), 9 percent (0 to 18 percent) could be attributed to forgone beer sales, 8 percent (4 to 13 percent) to reduced nonalcoholic drink sales, and 4 percent (0 to 8 percent) to lost liquor sales (see Exhibit 4).

In this particular casual-dining chain, 78 percent of the sales of the promoted wine came from sales of wines people would have likely bought absent a promotion. It is critical to note that although this wine was promoted through the use of menu pairing and taste samples, it was not price promoted. If the wine had been sold at a reduced price, we believe a larger percentage of sales would have come from those who would have otherwise ordered beer, liquor, or nonalcoholic drinks.

Yet it is also critical to note that wine can have higher margins than other beverages. While a price promotion may increase sales from lower-margin beer, liquor, or nonalcoholic drink sales, it could also steal share from higher-margin wine sales.

The lesson of this analysis is that 78 percent of the sales of new wine came from people who would have ordinarily purchased nonpromoted wines. It is important to realize that these trade-off percentages may be specific for this chain only. Nevertheless, this also suggests that care be taken to not promote low-margin wines that could cannibalize the sales of higher-margin wines.

**Implications for Restaurateurs**

Because of the purported health benefits associated with consuming one glass of wine a day, restaurant operators may


### Exhibit 5: Suggested Approaches to Wine-Promotion

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table tents promoting wines</td>
<td>Can increase wine sales by 12 percent</td>
<td>Promote at least three but not more than five wines with high margins</td>
</tr>
<tr>
<td>Easy to implement</td>
<td>Too few recommendations may not influence wine sales</td>
<td>Do not change the price of the promoted wines</td>
</tr>
<tr>
<td>Does not cannibalize other wine sales</td>
<td>May be difficult to choose specific wines to promote</td>
<td>Use table tents for medium-level restaurants</td>
</tr>
<tr>
<td>May reduce risk-aversion by providing socially acceptable wine choice (“by the chef”)</td>
<td>Can cannibalize other wine sales</td>
<td></td>
</tr>
<tr>
<td>Can increase total restaurant sales</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Table tents promoting food-wine pairings        | Can increase wine sales by 76 percent              | Consider doing with two or three featured dishes |
| Easy to implement                              | Can cannibalize the sales of other wines           | Do not discount the price                       |
| May reduce risk-aversion by providing ready-made wine-food decisions | Too many pairings overwhelm customers and they default to their normal beverage | For midscale restaurants, table tents are fine |
| Can increase total restaurant sales             |                                                     |                                               |

| Offer wine tasting portions or flights          | Can provides an 18 to 47 percent boost to sales    | Test with one or two wines and work up to five when logistics and waitstaff experience allow |
| Tastings work for one to five wines, but appear to work best with four or five wines | Perhaps a logistical hassle for establishments Proper waiter education is necessary to prevent overpouring and to control costs | Use special tasting glasses to control pouring and to underscore a person has not had a full glass of wine |
| May help introduce nervous customers to wine    |                                                     |                                               |
| Can be priced at a generous margin              |                                                     |                                               |

Wish to encourage patrons to experience wine responsibly. Unfortunately, many consumers have neither the experience with wine nor the confidence to order a glass or bottle of wine.

This study shows that recommendations of wine, recommendations of wine paired with food, and tasting portions can all effectively boost wine sales (see Exhibit 5).

Recommending five wines can increase total wine sales by 12 percent, and making three pairing recommendations of wine and food can increase wine sales by 7.6 percent. Such promotions can be easy to implement, as indicated by our use of nothing more than table tents. Interestingly, proposing too many wine-food pairings can be overwhelming, seems to discourage wine sales,
and may actually hurt total restaurant sales. Offering wine-food pairing recommendations appears to be most effective when used with limited number of wines (say, no more than three or four).

Offering small-portion tasting menus can provide an 18 to 47 percent boost in wine sales. The tastes can be priced at a generous margin, but even so they are often accepted because they help introduce novice customers to wine. The drawback is that serving flights of wine can be logistically difficult, and to minimize overpouring, they require either special-sized pouring glasses or careful waiter education.

The chief limitation to this study is the possibility of unexpected variation. Although carefully planned, executed, and controlled, the chief limitation of this study is the possibility of unexpected variation. For instance, a large, unreported anniversary party at one location might skew one day’s data. Because the balanced design helps minimize these effects, we are confident that our study fairly indicates how these promotions can be cost-effective, as long as profit margins for wine are higher than those of other beverages. We calculate that this restaurant chain did improve its profit, because a relatively modest 21 percent of the sales of the promoted wines on average came from beverages other than wine. Those wine purchases came from people who would have otherwise have ordered a beer, a mixed drink, or a soft drink. For the other 79 percent of cases, on balance, patrons purchased the promoted wine instead of a wine they would otherwise have bought. If the forgone wine purchase had a lower margin than did the promoted wine, the promotion would have been profitable for the restaurant. In general, these findings suggest the following three points when creating wine promotions:

1. promote high-margin wines,
2. promote wines that are midpriced or above, and
3. avoid margin-cutting price promotions.

Endnotes


8. The wines paired with food were also the wines featured alone. The wines and pairings were as follows: (1) RM Coastal Chardonnay SC with Maryland Crab Cakes, (2) Hogue Riesling with Santa Fe Fish Tacos, (3) Rancho Zabaco “Dancing Bull” Zinfandel with Shrimp Parmigiana, (4) Ecco Domini Pinot Grigio with Rockfish Combo, and (5) Sterling “Vintner’s Collection” Cabernet Sauvignon with Steak.

9. To be able to statistically test these wine and food promotional results, a two-way contingency table analysis was conducted on the individual sale figures shown in Exhibit 3 (6 Wine Promotions × 7 Wine-and-Food Categories).

The overall chi-square for this contingency table was significant, \( p < .001 \). This result suggests that the wine promotions had a significant effect on sales.

10. See D. Whitlark and S. M. Smith, “Using Correspondence Analysis to Map Relationships,” Marketing Research 13:22-28. To further examine the statistical significance of individual sale figures within the aforementioned contingency table, we computed adjusted standardized chi-square residual scores, which are akin to “z-scores.” The “z-scores” pertaining to the five-wine promotion results for the promoted wines, total wine purchases, and total restaurant sales were all significantly different from what was expected from the corresponding baseline sale figures (\( p < .05 \) in all cases).

11. Both \( p \)-values related to adjusted chi-square residual “z-scores” for the decrease in sales of target wines and all other wines were less than .05.

12. The single target wine was RM Coastal Chardonnay SC.

13. This comparison was also conducted with three promoted wines, but an inventory stock-out made this condition noncomparable. This situation also did not allow us to make global evaluations of the effect of “tasting” promotions on total wine purchasing nor total sales of the restaurant.


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