There is large variation amongst food service operators in pricing wine, and many questions remain about how wine is priced and what objectives are used to determine wine price in restaurants. In this essay-style article, we examine the practices that the industry has adopted when pricing wine in restaurants. Beyond the basic rule of thumb – applying proportionally smaller mark-up to higher-priced wines –, pricing can be driven by the market, customer or competition. The restaurant’s characteristics as well as institutional and environmental factors can influence the price of wine at restaurants.

"Wine sales build up a restaurant’s reputation". (Barbour, 1961, p. 75)

INTRODUCTION

In restaurants, wine prices are either printed on a menu or displayed on a board for all to see. Diners generally consider that these prices are fixed and the same for all, with no possibility of bargaining (Kimes et al., 2012). How to set the correct prices and how to update them over time, for dishes as well as for beverages, is a strategic necessity for restaurants. However, there is large variation amongst food service operators in pricing wine, and defining an industry standard for marking up wine is almost impossible. Indeed, the way restaurants price wine is puzzling. Barth (2011, p. 702) notes that ‘restaurant managers use a variety of schemes and criteria to price their wine list. Perhaps the most common method is to set the price equal to two or three times the cost […]. Restauranters call this a mark-up ratio, which is not the same as the retail definition of mark-up’. In the restaurant context, the wine price markup is the amount the restaurant manager charges in addition to the cost of purchasing the wine. It is often expressed as a percentage over the purchase price at the restaurant level. Many restaurant owners also express it as gross profit percentage. Mattila and Gao (2016, p. 176) add that ‘in addition to costs, pricing can be market-driven, customer-driven or competition-driven’. The restaurant’s characteristics and positioning, as well as institutional and environmental factors, can also influence pricing strategies. Even with restaurant groups operating in the same country but in different areas (e.g. sites in London and one site in a city outside London), it is often not possible to work with one master wine list for all due to the different price point sensitivities of different locations. A different supplier mix is required too. This ‘one size does not fit all’ effect, which also exists elsewhere in the wine supply chain (Pomarici et al., 2017), reflects the necessity to adapt pricing strategies to local environments. Specific distribution systems can increase the diversity of pricing strategies for national chains or groups of restaurants, such as in the US with the three-tier system. Indeed, manufacturers or suppliers/importers (tier 1) sell to wholesalers (tier 2), who sell to licensed retailers (tier 5), including restaurants; after that comes the consumer. A federal excise tax exists between tier 1 and tier 2, a state excise tax between tier 2 and tier 3 and a state sales tax between tier 3 and the final consumer (see exhibit 1). Because each state has the opportunity to regulate sales and distribution of alcohol within its boundaries, at the wholesale as well as at the retail levels, the US has dozens of different regulatory frameworks for alcoholic beverages. Government monopolies for the distribution of alcohol in Canada, Northern Europe and India might also compel restaurants to adapt their pricing strategies.

Alcohol revenues are very important to restaurant bottom lines. Making an error in pricing can have huge implications, in particular on the restaurant’s profitability. In this essay-style article, we examine the industry practices for pricing wine in restaurants rather than providing recommendations on how restaurants should price wine (optimal wine pricing strategies for restaurants are discussed in Coqueret, 2015). Our approach relies on considerable literature review and anecdotal evidence. A PRISMA-like approach can be implemented, where PRISMA stands for Preferred Reporting Items for Systematic Reviews and Meta-Analyses. This protocol, originating from the medical field, is used to conduct systematic reviews thanks to a checklist and a four-phase diagram and is attracting growing attention of hospitality scholars (see for instance Pahle-
van-Sharif et al., 2019). Considering Google Scholar as a traditional bibliographic database (Rethliefen & Page, 2022), we use the keywords "wine price" and "restaurant" (both singular and plural) on the first hand, and "wine price" and "on-trade premise" (both singular and plural) on the other hand. If we get more than 1,200 results, it appears that the pricing of wine in restaurants is not the focus of researchers, with only a few exceptions like Amsagher (2011) or Livat and Remaud (2018). As such, mapping the intellectual territory of wine prices in restaurants must currently rely on a less formalized approach. Here, we consider research dedicated to restaurants and off-trade premises, even if wine pricing is not the core of the research but appears more as a peripheral topic or as a comment, and adopt a cherry-picking strategy. This approach seems reasonable given that we don't aim at supporting a position, but at elaborating a first state of knowledge. Three main topics have been identified and are developed here: we first show how wine pricing and a restaurant's performance are linked, then we examine the costs associated with wine for the restaurant as well as pricing strategies. Finally, we discuss the expensiveness of wines offered in restaurants. A last section concludes.

![Exhibit 1. The US three-tier regulatory system](adapted from the US Alcohol and Tobacco Tax and Trade Bureau)

### Tier 1: Manufacturers / suppliers

- Brewers, distillers, vintners
- Importers of foreign beers, wines and spirits

**Federal excise tax**

### Tier 2: Wholesalers

- Licensed importers
- Beers, wines and/or spirits distributors

**State excise tax**

### Tier 3: On-trade and off-trade retailers

- Grocery stores and convenience stores: Vary by state
- Licensed retailers: liquor stores, bars, and restaurants

**State sales tax**

Consumers who are of legal age to purchase alcohol

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WINE AND RESTAURANT'S PERFORMANCE

**Food and Wine Are Both Part of the Dining Experience**

Many elements can explain customer satisfaction with a restaurant, including the context and environment of the dining experience (Furst et al., 1996; Peters & Remaud, 2020). Within that perspective, it is widely believed that satisfaction can drive loyalty, although such a relationship is mostly found to be weak (Barnes et al., 2016; Kuo et al., 2016). Customer delight can explain a substantial part of loyalty in the full-service restaurant context (Dey et al., 2017), but customer satisfaction still is a stronger factor in the fine dining context (Bowden & Dagger, 2011). Food and wine pairing has a major influence on customer satisfaction (Choí & Silkes, 2010; Paulsen et al., 2015). Even the glassware can enhance the meal experience (Billing et al., 2008). In such a competitive environment, restaurant owners and managers look for ways to differentiate themselves to attract customers. Consumer reviews and expert opinions can also play a role in building attractiveness (Gergaud et al., 2015). Cassar et al. (2020) investigate comments that were made on TripAdvisor for the top five and the bottom five restaurants listed in the world's top 1,000 restaurants appearing on Laliste.com. The lexical analysis conducted on these comments indicates that wine is one of the top three words (in addition to food and course) to express their satisfaction with regards to restaurant visits and experiences.

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Many customers see wine as an important component of the dining experience driving their choice for a specific restaurant. A food and wine pairing suggestion displayed on the menu could reduce the financial and social risks associated with wine ordering and result in an increase in wine sales (Terrier & Jaquinet, 2016). The wines that are offered on the list become part of a differentiation strategy that some restaurant patrons clearly follow. That’s the conclusion of Berenger et al. (2009), who identify three types of upscale restaurants with one using wine as a feature of the restaurant experience and positioning.

Restaurant’s Profitability and Wine Sales

In the 1960s researchers identified wine’s contribution to restaurant profitability (Barbour, 1961; Wile, 1962). Gil et al. (2009) estimate that one third of the average check in Valencia (Spain) reflects wine sales. Using a restaurant revenue management approach (Thompson, 2010), wine is a relevant item to manage restaurant profitability. The wine list can contribute to a restaurant’s performance and success through perceived quality, customer loyalty, customer satisfaction and so forth (for a review, see Lucie Sirieix et al., 2011; Terblanche & Pentz, 2019). Wine sales can be boosted by recommendations of wine, recommendations of wine paired with food, and tasting portions (Wanskink et al., 2006). Selling a glass or a bottle of wine adds to the guest’s check and mechanically increases gratuity to the service staff (Wile, 1962).

A service is intangible, unique and does not allow easy replacement (Docters et al., 2004). As such, it is complex to price the service provided by a sommelier, a beverage manager or a wine steward in a restaurant. But this service can increase wine sales significantly. In a study of restaurants located in the Houston, Texas, area, Manske and Cordua (2005) conclude that wine service professionals increase wine sales by US$58, on average, per square foot of the restaurant. In a different study, Dewald (2008) concludes that sommeliers play an important role in generating and increasing wine sales, especially in smaller restaurants, in line with Gultek et al.’s (2006) findings on independent restaurants in Texas. However, in previous research, controlling for restaurant characteristics, wine list characteristics, and as well as sommelier characteristics, we have shown that sommeliers do not have much impact on the percentage markup (Litav & Remaud, 2018). Sommeliers or wine consultants can help keep the mark-ups in check, particularly at the upper end, where they see the merit of applying a consistent cost margin to encourage sales vs. the management/accountants who often wish to see a consistent gross profit applied across the whole wine list. They may also apply lower mark-ups further down a wine list in order to champion lesser-known styles with which they feel an affinity.

Producing the wine list

Restaurants’ wine programmes start with what is offered, that is, the listing of wines. Selecting wines can obviously be driven by food and wine pairings, often cited among the priorities of restaurants (L. Sirieix & Remaud, 2010; Lucie Sirieix et al., 2011; Terblanche & Pentz, 2019). Restaurants have to decide the length and diversity of the wine list, the selection of local wines as opposed to foreign wines, of traditional wines versus more innovative ones (organic or biodynamic wines, for instance), as potential differentiation criteria to attract patrons.

The wine list design per se (i.e. its presentation) can also affect the restaurant’s performance. Yang et al. (2009) and Yang and Lynn (2009) show that some wine list characteristics, for example, adding wines onto the food menu, printing or not the dollar sign or writing ‘dollars’, suggesting wines from the same winery or several ones, presenting a reserve category and categorising wines according to their style are all elements that influence wine sales. The appearance of the wine list is at stake here, because formal features (colour, illustrations, information structure, interplay of language, etc.) can be seen as a mirror or as an extension of the restaurant’s personality, even when paper menus are replaced by QR codes.

COST AND PRICE OF WINE

A Simple Rule of Thumb

Most of the restaurants use a simple rule of thumb: the markup, as defined in the introduction, applied to ‘cheap’ wines is larger compared to the markup that is applied to ‘expensive’ wines. As such, a progressive markup is applied to wines, which reflects a cost-based pricing strategy, because restaurants apply a multiplier to the cost and consider neither demand nor what the competition is charging (Kimes et al., 2012).

Restaurant owners or managers may have more personal reasons to decide markups: some charge a minimum markup on all wine (to give an incentive for people to ‘drink more’), others make the wine category a profit driver by applying a higher markup. In the case of wine by the glass, a growing consumption trend motivated by those seeking variety (Acuti et al., 2019), Latour (1994) identifies two main rules of pricing: (1) setting a price so the cost of the bottle is recovered in two glasses and (2) dividing the bottle price on the wine list by the number of servings per bottle. The latter rule can be used to encourage experimentation (so as not to put people off experimenting by-the-glass because the price is too high), but then added on a small surcharge so that a) customers can still see they would get better value by buying a whole bottle and b) to cover any wastage which might incur. Although this is minimised with modern preservation systems, still, these are far from perfect especially with high staff turnover and untrained staff potentially using the systems incorrectly.

Restaurants also use decoy pricing when they put a very high-priced wine on the menu to make other wine prices seem more reasonable and affordable, which stimulate the sales of these other wines (Kimes et al., 2012). Along the same vein, restaurants will occasionally reprice a wine to make it the second-cheapest spot on the menu. Indeed, given the uncertainty and the risk associated with the choice of wine in restaurants (Lacey et al., 2009), diners
apply what is called the second-cheapest wine principle: they think they get the best deal without looking cheap. A study commissioned by the Wine and Spirits Education Trust, a global organisation founded in 1969 and headquartered in London that arranges courses and exams in the field of wine and spirits and is generally regarded as one of the world’s leading providers of wine education, shows that 19% of the British drinkers tend to implement that strategy when choosing wine at restaurant (Eads, 2014). According to Veseth (2016a), if it creates an incentive for some restaurants to raise the markup on the second-cheapest wine on the list (in that case, the logical response of diners would be to shift to the third-cheapest wine), it is also a way for others to get their diners trying interesting or lesser-known wines. It can also be seen as the identity of the sommelier: the lower-priced bottles are a way of gauging the mind-set of the sommelier or of showing what kind of wine he or she likes (Krigbaum, 2016). It allows them to recommend wines they are passionate about whilst also increasing sales of those wines and offering great value and a great experience to the customer what keeps them returning.

Pavesic (1989) notes that pricing menu items is not just a quantitative exercise and that subjective and psychological aspects of customer purchase decisions must be taken into account. Pricing strategies should differ according to the type of restaurant: fine dining, upscale casual, casual, fast casual or quick service, according to the typology presented by Kimes et al. (2012). Pricing strategies could also differ according to the type of customer, because some customers are more or less price sensitive and more or less frequent patrons.

**Cost Allocation Strategies**

When restaurants apply a rule of thumb to pricing, the way they allocate costs is central. Linassi et al. (2016, p. 1418) note that ‘the majority of restaurant businesses ignore the principles of formal cost allocation and base their decisions merely on the competition, or on an analysis of the costs of materials, ignoring other essential factors in the breakdown of total costs, such as labor, electricity and water bills, administrative costs, etc.’ Restaurant managers can lack financial and accounting skills, which can explain poor management and ultimately restaurant failure (Parsa et al., 2005). In a study conducted by Min et al. (2016), finance appears to be the least important course for restaurant professionals, because they prefer to focus on service quality and human skills, in line with the vocational nature of the industry (Kay & Russette, 2000). As a result, this deficiency of business skills is a possible explanation of the fragmentation of strategies used for wine pricing.

A basic cost-based approach that uses only food and beverage costs to determine the individual price of every individual item may not generate the return of all indirect associated costs. With the cost-plus strategy, the restaurant sets an additional charge of $2.00 added on to the 100% or 150% markup. Adding the $2.00 to the cost plus markup enables the restaurant to include overhead costs, such as glassware and labor. With activity-based pricing (Kostakis et al., 2011; Raab et al., 2009), instead of accounting just for ingredient or raw material costs, the restaurant explicitly takes into consideration raw materials plus the cost of direct and indirect labor, energy, waste and other factors. To be effective, these pricing strategies require accurate cost estimates, which can be difficult to compute in practice.

If pricing strategies typically do not consider demand, restaurants can also use demand-based pricing, which is a lever of revenue management: when offering happy hours or early bird specials, that is, when varying prices by time of the day or day of the week (weekends versus weekdays, for instance), depending on the consumer willingness to pay (Kimes et al., 2012), even if it can be perceived as unfair by consumers (Kimes & Wirtz, 2002).

Demand-based pricing strategies require that the restaurant get an estimate of how much the consumer is willing to pay, which can be hard to calculate in practice. Kimes et al. (2012) recommend using a survey-based tool or experimental pricing to estimate price sensitivity of patrons; menu engineering and measurement of price elasticities are some other options. Menu engineering is a matrix-based approach that identifies four categories of individual menu items according to their contribution to sales (or popularity) and profit (or contribution margin) (see exhibit 2). If it has been widely embraced by foodservice operators to assess the profitability of dishes, it can also be applied to wine (see, for instance, Barth, 2017). Price elasticities are more challenging to compute in practice in an on-premise or on-trade context, because they require measuring individual socioeconomic characteristics of consumers, and most studies remain at the beverage category level and do not differentiate among wine brands or wineries (see, for instance, Sousa, 2014 for the UK and Jiang et al., 2016 for Australia, both suggesting that the demand for wine on-premise is price inelastic). However, in a study of 945,000 restaurants in the United States, Kimes et al. (2012) found that only a small fraction of restaurants have developed an analytical understanding of customer response to their pricing. Last, competitive pricing is another approach. Restaurants set prices based on what their competition is charging and on how they want to position their prices relative to those other restaurants. In practice, restaurants might use a combination of approaches and rely on ‘trying and used’ methods of pricing (Kimes et al., 2012).

A synthesis of the main wine pricing strategies implemented by restaurants is presented in exhibit 3.

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### Exhibit 2. Menu engineering matrix to categorize menu items

<table>
<thead>
<tr>
<th>Profitability</th>
<th>Popularity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>Plow horses</td>
</tr>
</tbody>
</table>

---

**Wine Business Journal**
### Exhibit 3. Synthesis of the main wine pricing strategies of restaurants

<table>
<thead>
<tr>
<th>Category</th>
<th>Strategies</th>
<th>Main principles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost-allocation strategies</td>
<td>Basic cost-based approach: simple rule of thumb</td>
<td>Progressive markup: the restaurant applies a decreasing multiplier to the cost of wine.</td>
</tr>
<tr>
<td></td>
<td>Cost-plus strategy</td>
<td>The restaurant sets an additional charge of $2.00 added on to the 100% or 150% markup to include overhead costs, such as glassware and labor.</td>
</tr>
<tr>
<td></td>
<td>Activity-based pricing</td>
<td>The restaurant explicitly takes into consideration raw materials plus the cost of direct and indirect labor, energy, waste and other factors.</td>
</tr>
<tr>
<td>Suggesting a good deal</td>
<td>Decoy pricing</td>
<td>Including a very high-priced wine makes other wine prices seem more reasonable and affordable, so more appealing.</td>
</tr>
<tr>
<td></td>
<td>Second cheapest wine</td>
<td>Occasionally reprice a wine to make it the second-cheapest spot on the wine list so that consumers think they get the best deal without looking cheap.</td>
</tr>
<tr>
<td>Demand-based pricing</td>
<td>Consumer willingness to pay</td>
<td>Estimate how much the consumer is willing to pay: survey-based tool, experimental pricing, price elasticity.</td>
</tr>
<tr>
<td>Wine by the glass pricing</td>
<td>Two glasses</td>
<td>The restaurant sets a price so the cost of the bottle is recovered in two glasses.</td>
</tr>
<tr>
<td></td>
<td>Servings per bottle</td>
<td>Divide the bottle price on the wine list by the number of servings per bottle.</td>
</tr>
</tbody>
</table>

### EXPENSIVE WINE IN RESTAURANTS

**Wine, a Veblen Good in Restaurants?**

In 1975, Wile identified that moderation in pricing wines was important; however, nowadays wines offered in restaurants are often seen as expensive by consumers and many of them complain about wine prices being too high in restaurants. According to Corrigan (1996) (as quoted by Bruwer & Nam, 2010, p. 84), wine is offered at high prices in restaurants because the drinks department should stand on its own in terms of making a profit. Corrigan (1996) estimates the overhead cost per bottle of wine (waiter service, refrigeration of the wine, ice and ice buckets, glassware, napkins, renting space for cellar storage and wine list maintenance) at US$6.46.

In some cases, people are not looking for value for money but are more motivated by conspicuous consumption. On his blog *The Wine Economist*, Veseth (2016b) reports comments from a high-end New York restaurant: ‘the people who come to my famous restaurant [... ] want to have a good time and they want to spend a lot of money on wine. Spending a lot of money on a bottle of wine is part of the luxury dining experience they come for. My role is to make sure that we have a lot of very expensive wines for them to buy’. In such a context, the bottle of wine is a Veblen good and becomes more desirable as it becomes more expensive. However, the reply left by a sommelier on the blog (Patrick Miner, April 6, 2016, https://wineeconomist.com/2016/04/05/wine-prices) highlights another behaviour based on a longer-term view: ‘it’s important not to always sell wine at the top of your guests’ price range. There have to be some good bargains and overlooked gems from time to time as this engenders trust, more frequent visits, and even splurge purchases in the future’. Veseth (2016b) also stresses that in many restaurants, the price of wine is not high enough and that, assuming a positive relationship between price and quality, the restaurant will gain in reputation and money from selecting better wines.

### Response from Consumers

One response from consumers to high markups charged for wines by restaurants is the BYOB strategy, an acronym used for ‘bring-your-own-bottle’ of wine to the place of consumption, such as a restaurant. The lower cost of wine to consumers does not appear to be the primary driver for bringing their own wine (Bruwer & Nam, 2010) and is more often observed being practiced by more-involved wine consumers (Bruwer & Huang, 2012). Risk reduction is the primary strategy associated with BYOB by consumers: reasons to bring their own wine include celebrating an occasion, not having the wine available at the restaurant or the consumer being aware of retail prices and refusing to pay the inflated prices charged (Taylor & Barber, 2014). Some restaurants allow consumers to bring their own wine but most charge a corkage fee for opening and serving the bottle, partly recovering the income lost when patrons do not purchase from the restaurant wine list. This can even be negotiated informally with restaurants who don’t offer it, by calling and offering to pay the price of the house wine as corkage. Taylor and Barber (2014) note that corkage fees vary depending on the location: in the US, some states have imposed corkage bans and consider this practice illegal, whereas others allow corkage only at restaurants with no liquor license. The authors also report that although some restaurants waive corkage fees, with some positive and negative effects, other restaurants can charge exorbitant fees, such as USD 95 per bottle.

### CONCLUSION AND DISCUSSION

Despite the general view that wine can be a profit centre for restaurants, many questions remain about how wine
is priced and what objectives are used to determine the price. For many reasons, customers may not be loyal to one restaurant, but they certainly have some particular restaurants in mind depending on the occasion. For many of these occasions, wine is one component (contributing among others to the decision) explaining why they chose to have dinner in a specific location. Within that perspective, wines offered on the wine list contribute to the restaurant’s positioning and differentiation strategy. Because sommeliers tend to play a positive role in generating greater wine sales, restaurateurs would gain to have one member of the staff trained to give advice to customers (not all restaurant owners can afford a proper sommelier) and reinforce the attractiveness and distinctiveness of the restaurant with regards to wine.

Pricing wine is more difficult than it seems. For many restaurateurs, a coefficient of two or three is applied to the cost of one bottle of wine as a proxy of all associated costs with buying, storing and selling that bottle of wine. A proportionally smaller markup is applied to higher-priced wines (Amspacher, 2011; Livat & Remaud, 2018). Beyond that basic rule, pricing can be driven by the market, customer or competition. The restaurant’s characteristics as well as institutional and environmental factors can influence the price of wine at restaurants. More elaborated mark-up pricing policy should take into account the willingness for restaurateurs to sell specific wines compared to others, including learning more about the ways customers think and react to the different wine prices offered on the list, even the time during the day the wine is sold by the glass. In recent years, this wine-by-the-glass strategy has grown in popularity in many mid- to upscale restaurants. It provides an opportunity to taste expensive wines at a lower fixed cost for customers, as well as to drink only one glass without having to purchase an entire bottle. Another major trend, although not taking place in all countries, is the BYOB phenomenon, again with various objectives in mind from the customers’ perspective. During periods when restaurants are under strong and critical financial pressure, it could be a strategy to develop partnership with local wine shops and to still generate revenue with corkage fees while minimising expenses on purchasing wine.

Several avenues exist for future research. This article highlights the fragmentation of wine-pricing strategies, but cultural-specific behaviors could also emerge. More research dedicated to inter- and intra-country analyses and to wine-producing regions and non-wine-producing regions analyses would be useful. Moreover, if this article investigates real strategies, it doesn’t discuss optimal wine-pricing strategies for restaurants. Coqueret (2015) offers some insights, but more research is needed, in particular because wine plays a growing critical role in the dining out experience but also to nurture hospitality curricula. Further research could also apply the PRISMA protocol to the literature dealing with the place and role of wine in restaurants and on-trade premises.

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