# Modeling Consumer Intention to Revisit the Same Restaurant and a Simple Algorithm of Coupon Discount Rate 

Tin-Chun Lin<br>School of Business and Economics, Indiana University Northwest, Gary, IN, USA<br>Email: tinlin@iun.edu

How to cite this paper: Lin, T.-C. (2017) Modeling Consumer Intention to Revisit the Same Restaurant and a Simple Algorithm of Coupon Discount Rate. Theoretical Economics Letters, 7, 1179-1188.
https://doi.org/10.4236/tel.2017.75079

Received: June 19, 2017
Accepted: July 18, 2017
Published: July 21, 2017

Copyright © 2017 by author and Scientific Research Publishing Inc. This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).
http://creativecommons.org/licenses/by/4.0/

## Open Access


#### Abstract

The theory of consumer choice is applied to model consumer intention to revisit the same restaurant. Findings show that server's service quality, taste of the food, the restaurant's environment, consumer satisfaction with the price of the meal, consumer's total budget, coupon discount rate, sales tax rate, and tipping rate may influence a consumer's intention to revisit the same restaurant. A simple algorithm for determining a coupon discount rate for restaurant owners/managers also is suggested. This study's main contribution is in framing an economic theoretical model for consumer intention to revisit the same restaurant, which can be useful in constructing empirical models for further investigations of this issue.


## Keywords

Customer Revisit Intention, Consumer Satisfaction, Coupon Discount Rate

## 1. Introduction

Researchers (e.g., Bitran and Mondschein, 1997 [1]; Verhoef and Donkers, 2001 [2]) have demonstrated that in the restaurant industry retaining existing customers is actually more profitable than winning prospective customers. In other words, customers' decision to revisit the same restaurant is one of the primary factors in determining a restaurant's success. Therefore, identifying those factors that influence a consumer intention to revisit the same restaurant has become an important and interesting topic.

This topic has been studied by marketing researchers (e.g., Qu, 1997 [3]; Yan, Wang, and Chau, 2015 [4]) who have used marketing and psychological theories to identify factors that influence customers' revisit intention to restaurants. Obviously, marketing researchers have successfully used marketing and psychological
theories at the individual level to frame their studies on the topic of customer revisit intention. However, in designing and preparing for this study, we did not identify a literature that recounted efforts to use economic theories at the individual level to model a consumer intention to revisit the same restaurant. For that reason, we attempted to use the theory of consumer choice to frame a model for customer revisit intention that can be used to present how and why a customer would return to the same restaurant in the future.

In addition to modeling consumer intention to revisit the same restaurant, we suggest a simple algorithm for determining a coupon discount rate. Evidence (e.g., Qu, 1997 [3]; Chang, 2003 [5]) has verified that coupons are effective marketing strategies for retaining existing customers and attracting new customers. For that reason, methods for determining a coupon discount rate may be another interesting issue to discuss briefly in this paper.

## 2. The Theoretical Framework

Several researchers have proven that customer satisfaction is significantly associated with customer revisit intention, which means that customer satisfaction may be used as an antecedent of behavioral intention to predict a customer's actual post-purchase behavior (e.g., Fishbein and Ajzen, 1975 [6]; Westbrook and Oliver, 1991 [7]; Oh, 2000 [8]; Han, Back, and Barrett, 2009 [9]; Yan, Wang, and Chau, 2015 [4]). Consequently, researchers have applied the theory of customer satisfaction in studies of the service industry (e.g., tourism, catering, hospital, retail business, telecommunication business, etc.) to design marketing strategies for full-service operators (e.g., Almanza, Jaffe, and Lin, 1994 [10]; Andaleeb and Conway, 2006 [11]; Barsky and Labagh, 1992 [12]; Gabbie and O’Neil, 1996 [13]; James, 1995 [14]; Johns and Tyas, 1996 [15]; Oh, 1999 [16], 2000 [8]; Oliver, 1980 [17], 1981 [18]).

Since researchers have identified customer satisfaction as a critical factor in determining a customer's intention to revisit restaurants, to develop a customer's return intention function, we need to derive a customer's equilibrium utility. This is because utility is the benefit or satisfaction received by a customer from the consumption of a good or service. In this section, as background we apply the theory of consumer choice to build the theoretical framework for this study.

### 2.1. The Utility Function

We assume that each consumer is a utility maximizer. Consider that a consumer always consumes two goods: restaurant meals (denoted by $X$ ) and grocery foods (denoted by $Y$ ). The consumer can be satisfied by dining at a restaurant and shopping at a grocery store. When the consumer dines at a restaurant, the consumer not only enjoys meals, but also enjoys the server's service (denoted by $S$ ), the taste of the food (denoted by $F$ ), and the restaurant's environment (denoted by $E$ ). The numbers of restaurant meals $(X)$ and grocery foods $(Y)$ are the factors that can be determined by the consumer; thus, these two factors are variables. However, the server's service $(S)$, the taste of the food $(F)$, and the restaurant's
environment $(E)$ are factors that cannot be determined by the consumer, so these factors are constant terms. Let $K=S^{a} F^{b} E^{c}$, where $a, b$, and $c$ are constant parameters and shares of the server's service $(S)$, the taste of the food $(F)$, and the restaurant's environment $(E)$, and $0<a, b, c<1$. In addition, we assume that a consumer's utility function displays the Cobb-Douglas form, which can be expressed as:

$$
\begin{equation*}
U=\left(\left(S^{a} F^{b} E^{c}\right) X\right)^{\alpha} Y^{\beta}=(K X)^{\alpha} Y^{\beta} \tag{1}
\end{equation*}
$$

where $\alpha$ and $\beta$ are constant parameters and shares of restaurant meals $(X)$ and grocery foods ( $Y$ ); $U_{X}, U_{Y}>0 ; U_{X X}, U_{Y Y}<0$; and $U_{X X}=U_{Y Y}>0$.

### 2.2. The Budget Constraint Line

The consumer who dines at a restaurant pays not only the price of the meal (denoted by $P_{x}$ ) but also the sales tax (the sales tax rate is denoted by $\tau$ ) and tip (the tipping rate is denoted by $t$ ). We assume that the consumer has a coupon (the coupon discount rate is denoted by $\delta$ ) for the meal, which can save a few dollars. (Note that there are two types of coupons: coupon with a discount amount and coupon with a discount rate. In this study, we use the type of coupon with a discount rate that would enable us to easily solve the problem.) Therefore, the final payment on a restaurant meal is:

$$
\begin{equation*}
P_{X}=P_{x}(1-\delta)+P_{x} \tau+P_{x}(1+\tau) t=P_{x}(1-\delta+\tau+t+\tau t) \tag{2}
\end{equation*}
$$

Similarly, the consumer who shops in a grocery store pays only the price of the food available there (denoted by $P_{y}$ ). Here, we assume that there are no coupon and sales taxes for grocery foods. Hence, the final payment for the grocery food is $P_{Y}=P_{y}$.

We assume that the consumer's total expenditures on these two goods ( $X$ and $Y$ ) will be equal to his/her total budget (denoted by $I$ ). As a result, the consumer's budget constraint line can be specified as: $P_{X} \cdot X+P_{Y} \cdot Y=I$.

### 2.3. Equilibrium

Choosing $X$ and $Y$ can solve the consumer's optimization problem, which maximizes $U=(K X)^{\alpha} Y^{\beta}$ subject to $P_{X} \cdot X+P_{Y} \cdot Y=I$. The first-order conditions for the constrained maximum can be shown as follows:

$$
\begin{gather*}
\frac{\alpha K^{\alpha} X^{\alpha-1} Y^{\beta}}{P_{X}}=\frac{\beta K^{\alpha} X^{\alpha} Y^{\beta-1}}{P_{Y}}  \tag{3}\\
I=P_{X} X+P_{Y} Y \tag{4}
\end{gather*}
$$

According to Equations (3) and (4), we can solve the equilibriums of these two goods:

$$
\begin{equation*}
X^{*}=\frac{I}{P_{x}(1-\delta+\tau+t+\tau t)\left(\frac{\alpha+\beta}{\alpha}\right)}=X\left(\stackrel{+}{\delta}, \bar{\tau}, \bar{t}, \bar{P}_{x}, \stackrel{+}{I}\right) \tag{5}
\end{equation*}
$$

and

$$
\begin{equation*}
Y^{*}=\frac{I}{P_{y}\left(\frac{\alpha+\beta}{\beta}\right)}=Y\left(\bar{P}_{y}, \stackrel{+}{I}\right) \tag{6}
\end{equation*}
$$

We then plug $X^{*}$ and $Y^{*}$ into the utility function $(U)$, which can be solved as:

$$
\begin{align*}
U^{*} & =\left(S^{a} F^{b} E^{c}\right)^{\alpha}\left(\frac{I}{\frac{\alpha+\beta}{\alpha}}\right)^{\alpha+\beta}\left(\frac{1}{P_{x}}\right)^{\alpha}\left(\frac{1}{P_{y}}\right)^{\beta}\left(\frac{1}{1-\delta+\tau+t+\tau t}\right)^{\alpha}  \tag{7}\\
& =U\left(\stackrel{+}{S}, \stackrel{+}{F}, \stackrel{+}{E}, \overline{P_{x}}, \overline{P_{y}}, \stackrel{+}{\delta}, \bar{\tau}, \bar{t}\right) .
\end{align*}
$$

Above all, each consumer will choose his or her optimal combination of restaurant meals and grocery foods ( $X^{*}$ and $Y^{*}$ ) to maximize his or her utility at $U^{*}$ level. Therefore, equilibrium for the restaurant meal $\left(X^{\prime}\right)$ is related to the price of the restaurant meal $\left(P_{x}\right)$, sales tax rate $(\tau)$, tipping rate $(t)$, coupon discount rate for the meal $(\delta)$, and total budget ( 1 ); while equilibrium for the grocery food $\left(Y^{*}\right)$ is related to the price of the grocery food $\left(P_{y}\right)$ and total budget ( $I$. In addition, a consumer's equilibrium utility $\left(U^{*}\right)$ is related to the price of the restaurant meal $\left(P_{x}\right)$, the price of the grocery food $\left(P_{y}\right)$, sales tax rate $(\tau)$, tipping rate $(t)$, coupon discount rate for the meal $(\delta)$, total budget $(I)$, the server's service $(S)$, the taste of the food $(F)$, and the restaurant's environment $(E)$.

### 2.4. Comparative Static Analysis

In this subsection, we show the comparative static analysis. First, we further totally differentiate Equations (3) and (4) and obtain:

$$
\begin{aligned}
& {\left[\begin{array}{cc}
P_{y} U_{X X}-P_{x} \rho U_{Y X} & P_{y} U_{X Y}-P_{x} \rho U_{Y Y} \\
P_{x} \rho & P_{y}
\end{array}\right]\left[\begin{array}{c}
\mathrm{d} X \\
\mathrm{~d} Y
\end{array}\right]} \\
& =\left[\begin{array}{cccccc}
0 & \rho U_{Y} & -U_{X} & P_{x} \rho U_{Y}(1+t) & P_{x} \rho U_{Y}(1+\tau) & -P_{x} \rho U_{Y} \\
1 & -\rho X & -Y & -P_{x} X \rho(1+t) & -P_{x} X \rho(1+\tau) & P_{x} \rho X
\end{array}\right]\left[\begin{array}{c}
\mathrm{d} I \\
\mathrm{~d} P_{x} \\
\mathrm{~d} P_{y} \\
\mathrm{~d} \tau \\
\mathrm{~d} t \\
\mathrm{~d} \delta
\end{array}\right],
\end{aligned}
$$

where

$$
\begin{gathered}
\rho=1-\delta+\tau+t+\tau t \\
U_{X}=\alpha\left(S^{a} F^{b} E^{c}\right)^{\alpha} X^{\alpha-1} Y^{\beta} \\
U_{X Y}=\alpha \beta\left(S^{a} F^{b} E^{c}\right)^{\alpha} X^{\alpha-1} Y^{\beta-1}=U_{Y X} \\
U_{X X}=\alpha(\alpha-1)\left(S^{a} F^{b} E^{c}\right)^{\alpha} X^{\alpha-2} Y^{\beta} \\
U_{Y}=\beta\left(S^{a} F^{b} E^{c}\right)^{\alpha} X^{\alpha} Y^{\beta-1}
\end{gathered}
$$

and

$$
U_{Y Y}=\beta(\beta-1)\left(S^{a} F^{b} E^{c}\right)^{\alpha} X^{\alpha} Y^{\beta-2}
$$

Let $|D|$ be the determinant of the pre-multiplied matrix of vector $\left[\begin{array}{ll}\mathrm{d} X & \mathrm{~d} Y\end{array}\right]$, which is:

$$
|D|=\left|\begin{array}{cc}
P_{y} U_{X X}-P_{x} \rho U_{Y X} & P_{y} U_{X Y}-P_{x} \rho U_{Y Y} \\
P_{x} \rho & P_{y}
\end{array}\right|=\left|\begin{array}{cc}
- & + \\
+ & +
\end{array}\right|<0
$$

Second, using Cramer's rule, the straightforward comparative static analysis yields:

$$
\begin{align*}
& \frac{\mathrm{d} X}{\mathrm{~d} I}=\frac{\left|\begin{array}{cc}
0 & P_{y} U_{X Y}-P_{x} \rho U_{Y Y} \\
1 & P_{y}
\end{array}\right|}{|D|}>0  \tag{8}\\
& \frac{\mathrm{~d} Y}{\mathrm{~d} I}=\frac{\left|\begin{array}{cc}
P_{y} U_{X X}-P_{x} \rho U_{Y X} & 0 \\
1 & 1
\end{array}\right|}{|D|}>0  \tag{9}\\
& \frac{\mathrm{~d} X}{\mathrm{~d} P_{x}}=\frac{\left|\begin{array}{cc}
\rho U_{Y} & P_{y} U_{X Y}-P_{x} \rho U_{Y Y} \\
X & -P_{y}
\end{array}\right|}{|D|}<0  \tag{10}\\
& \frac{\mathrm{~d} Y}{\mathrm{~d} P_{x}}=\frac{\left|\begin{array}{cc}
P_{y} U_{X X}-P_{x} \rho U_{Y X} & \rho U_{Y} \\
P_{x} \rho & -\rho X
\end{array}\right|}{|D|}>\text { or }<0  \tag{11}\\
& \frac{\mathrm{~d} X}{\mathrm{~d} P_{y}}=\frac{\left|\begin{array}{cc}
-U_{X} & P_{y} U_{X Y}-P_{x} \rho U_{Y Y} \\
-Y & -P_{y}
\end{array}\right|}{|D|}>\text { or }<0  \tag{12}\\
& \frac{\mathrm{~d} Y}{\mathrm{~d} P_{y}}=\frac{\left|\begin{array}{cc}
P_{y} U_{X X}-P_{x} \rho U_{Y X} & -U_{X} \\
P_{x} \rho & -Y
\end{array}\right|}{|D|}<0  \tag{13}\\
& \frac{\mathrm{~d} X}{\mathrm{~d} \tau}=\frac{\left|\begin{array}{cc}
P_{x} \rho U_{Y}(1+t) & P_{y} U_{X Y}-P_{x} \rho U_{Y Y} \\
-P_{x} X \rho(1+t) & P_{y}
\end{array}\right|}{|D|}<0  \tag{14}\\
& \frac{\mathrm{~d} Y}{\mathrm{~d} \tau}=\frac{\left|\begin{array}{cc}
P_{y} U_{X X}-P_{x} \rho U_{Y X} & P_{x} \rho U_{Y}(1+t) \\
P_{x} \rho & -P_{x} X \rho(1+t)
\end{array}\right|}{|D|}>\text { or }<0  \tag{15}\\
& \frac{\mathrm{~d} X}{\mathrm{~d} t}=\frac{\left|\begin{array}{cc}
P_{x} \rho U_{Y}(1+\tau) & P_{y} U_{X Y}-P_{x} \rho U_{Y Y} \\
-P_{x} X \rho(1+\tau) & P_{y}
\end{array}\right|}{|D|}<0  \tag{16}\\
& \frac{\mathrm{~d} Y}{\mathrm{~d} t}=\frac{\left|\begin{array}{cc}
P_{y} U_{X X}-P_{x} \rho U_{Y X} & P_{x} \rho U_{Y}(1+\tau) \\
P_{x} \rho & -P_{x} X \rho(1+\tau)
\end{array}\right|}{|D|}>\text { or }<0 \tag{17}
\end{align*}
$$

$$
\frac{\mathrm{d} X}{\mathrm{~d} \delta}=\frac{\left|\begin{array}{cc}
-P_{x} \rho U_{Y} & P_{y} U_{X Y}-P_{x} \rho U_{Y Y}  \tag{18}\\
P_{x} \rho X & P_{y}
\end{array}\right|}{|D|}>0
$$

and

$$
\frac{\mathrm{d} Y}{\mathrm{~d} \delta}=\frac{\left|\begin{array}{cc}
P_{y} U_{X X}-P_{x} \rho U_{Y X} & -P_{x} \rho U_{Y}  \tag{19}\\
P_{x} \rho & P_{x} \rho X
\end{array}\right|}{|D|}>\text { or }<0
$$

Intuitively, as Equations (10) and (11) show, an increase in the price of the restaurant meal discourages a consumer's demand for restaurant meals but does not provide consistent information about grocery foods. Similarly, as Equations (12) and (13) show, an increase in the price of the grocery food lessens demand for grocery foods and adds to uncertainty about restaurant meals. In addition, as Equations (8) and (9) show, an increase in the consumer's maximum budget increases demands for both restaurant meals and grocery foods. Moreover, as Equations (14), (15), (16), and (17) show, a rise in sales tax rate and tipping rate discourages a consumer's demand for restaurant meals but does not provide consistent information about grocery foods. Finally, as Equations (18) and (19) show, an increase in coupon discount rate increases demands for restaurant meals but causes uncertainty about grocery foods.

### 2.5. The Return Intention Function

Previously, we assumed that a consumer's utility function may be displayed using the Cobb-Douglas form, such as $U=\left(\left(S^{a} F^{b} E^{c}\right) X\right)^{\alpha} Y^{\beta}$. We take natural logarithms of both sides of the utility function, which becomes linear:

$$
\begin{equation*}
\ln U=a \alpha \ln S+b \alpha \ln F+c \alpha \ln E+\alpha \ln X+\beta \ln Y \tag{20}
\end{equation*}
$$

We divided the natural log utility (Equation (20)) into the utility directly related to the restaurant issue $\left(U^{R}\right)$ and not directly related to the restaurant issue $\left(U^{N}\right)$. That is, $\ln U=U^{R}+U^{N}$, where $U^{R}=a \alpha \ln S+b \alpha \ln F+c \alpha \ln E+\alpha \ln X$, and $U^{N}=\beta \ln Y$. We focus on the utility directly related to the restaurant issue ( $U^{R}$ ) and plug Equation (5) into $U^{R}$, as shown below:

$$
\begin{align*}
U^{R}= & a \alpha \ln S+b \alpha \ln F+c \alpha \ln E+\alpha \ln I-\alpha \ln P_{x} \\
& -\ln (1-\delta+\tau+t+\tau t)-\alpha \ln (\alpha+\beta)+\alpha \ln \alpha . \tag{21}
\end{align*}
$$

We let $P$ be the consumer's satisfaction with the original price of the restaurant meal. The higher the price of the meal, the lower the consumer's satisfaction with its price (i.e., $\left.P=P\left(\bar{P}_{x}\right) ; \frac{\mathrm{d} P}{\mathrm{~d} P_{x}}<0\right)$. Further, we let $R$ be a consumer's intention to return to the same restaurant in the near future. Whether or not the consumer will revisit the restaurant depends on the consumer's overall utility when the consumer dines at the restaurant. Therefore, the return intention function can be expressed as:

$$
\begin{equation*}
R^{*}=R\left(U^{R}\right)=R(\stackrel{+}{S}, \stackrel{+}{F}, \stackrel{+}{E}, \stackrel{-}{P}, \stackrel{+}{\delta}, \bar{\tau},-\bar{t})=R(\stackrel{+}{S}, \stackrel{+}{F}, \stackrel{+}{E}, \stackrel{+}{I}, \stackrel{+}{\delta},-\bar{\tau},) \tag{22}
\end{equation*}
$$

Equation (22) shows that a consumer's intention to return to the same restaurant in the near future mainly depends on eight factors: (1) server's service quality $(S)$; (2) taste of the food $(F)$; (3) the restaurant's environment; (4) the consumer's satisfaction with its price $(P)$; (5) the consumer's total budget ( $I$ ); (6) coupon discount rate $(\delta)$; (7) sales tax rate ( $\tau$ ); and (8) tipping rate ( $t$ ). Since sales tax rate is constant (determined by the government) and tipping rate is also quite constant (normally $15 \%-20 \%$, and usually dominated by a worldwide custom), the factors that most likely influence a consumer's revisit intention are the other six factors. That is, the higher the consumer's satisfaction with server's service, the taste of the food, the restaurant's environment, the price of the food, and the higher the consumer's total budget and coupon discount rate, the more likely the consumer will be to return to the same restaurant. Our theoretical findings are consistent with those from previous studies, such as Qu (1997) [3], and Yan, Wang, and Chau (2015) [4].

## 3. A Simple Algorithm of Coupon Discount Rate

As shown in Equation (22), eight factors may affect a consumer's revisit intention, but only the factor of coupon discount rate can be determined by the restaurant owner/manager. That is, a coupon discount rate can be used as a marketing strategy to attract more consumers. However, the method used to determine the discount rate may be an interesting issue to raise in a brief discussion. Therefore, in this section we provide our idea and suggestion for restaurant owners/managers.

Any consumer who dines at a restaurant not only pays for the meal but also pays sales tax and tip. That is, the final payment must be always higher than the initial price of the meal. These additional payments (i.e., sales taxes and tips) would negatively influence diners' consumption behavior and thus reduce their demands for meals. For that reason, if restaurants can take these costs (sales taxes and tips) from consumers, then consumers would not decrease their demands for meals. This is because the final payment will be equal to or close to the initial cost of the meal. Based upon this idea, the coupon discount amount should equal the total cost of sales taxes and tips.

Recall that in Equation (2), the final payment for a restaurant meal ( $P_{X}$ ) is equal to the initial price of the meal $\left(P_{x}\right)$, minus the coupon discount amount ( $P_{x} \delta$ ) plus sales tax $\left(P_{x} \tau\right)$ and tip $\left(\left[P_{x}(1+\tau)\right] t\right)$. According to the earlier discussion, we may solve the coupon discount rate, which yields:

$$
\begin{gather*}
P_{x} \delta=P_{x} \tau+\left[P_{x}(1+\tau)\right] t=P_{x}(\tau+t+\tau t) \\
\Rightarrow \delta=\tau+t+\tau t \tag{23}
\end{gather*}
$$

Equation (23) shows the suggested coupon discount rate. For example, if the sales tax rate is $7 \%$ and tipping rate is $15 \%$, then the coupon discount rate will be $23.05 \%$. Therefore, the suggested coupon discount rate would be $20 \%-25 \%$. When a restaurant owner/manager adopts this algorithm to offer consumers this coupon discount rate, consumers who receive the coupon will only pay the initial price of the meal.

Some restaurants do offer their customers this type of discount rate ( $20 \%$ $25 \%)$. A successful example is the BC Osaka Restaurant located in northwest Indiana. According to our informal interview with the manager, since 2015, the restaurant has been offering consumers monthly coupons with a $25 \%$ discount rate and some limitations and conditions. Since doing so, the restaurant's sales and profits have gone into the black and consistently increased. In addition, based upon the manager's rough estimates, more than $50 \%$ of his customers are continuing customers. They frequently revisit the restaurant weekly or monthly, and all always use coupons when they return. This example demonstrates that the restaurant's marketing strategy-offering customers a $25 \%$ coupon discount rate on a monthly basis-works successfully.

Certainly, our suggested algorithm may be not perfect-it is purely buy-er-based and ignores the seller, who increases his/her costs due to offering the coupon. A seller who cannot afford the cost is less likely to offer coupons to consumers or may set a smaller discount rate (say, $5 \%-10 \%$ ). We leave this issue for future investigations and detailed discussions.

## 4. Conclusions

In this paper, we use the theory of consumer choice to model consumer intention to revisit the same restaurant. The theoretical analysis suggests that eight factors (server's service quality, taste of the food, the restaurant's environment, consumer satisfaction with the price of the meal, consumer's total budget, coupon discount rate, sales tax rate, and tipping rate) may influence a consumer's intention to revisit the same restaurant. We also suggest that restaurant owners/ managers use a simple algorithm to determine a coupon discount rate. The main idea of the algorithm is that the restaurant takes the costs of the sales taxes and tips from consumers so that consumers only pay the initial price of the meal.

In conclusion, the main contribution of this study is in framing an economic theoretical model for consumer behavior of revisit intention to the same restaurant, which can be useful in constructing empirical models for further investigations of this issue. Therefore, the innovation of this article is that we are the first to use an economic theory to model consumer intention to revisit the same restaurant, which means that we start a dialogue for economists to continue investigating this topic that has been studied by marketing researchers in the past many years. Certainly, this article still consists of some deficiencies. For example, the model only considers the type of coupon with a discount rate rather than a discount amount. In fact, both types of coupon do exist in the restaurant market at the same time. If both types of coupon are considered in the model, what will it happen? We leave that issue for future investigations and detailed discussions.

## Acknowledgements

The author would like to thank Ms. Joy Deng for her editorial assistance and the anonymous referee for his/her feedback and suggestions.

## References

[1] Bitran, G. and Mondschein, S. (1997) A Comparative Analysis of Decision Making Procedures in the Catalog Sales Industry. European Management Journal, 15, 105116. http://www.sciencedirect.com/science/article/pii/S0263237396000801 https://doi.org/10.1016/s0263-2373(96)00080-1
[2] Verhoef, P.C. and Donkers, B. (2001) Predicting Customer Potential Value: An Application in the Insurance Industry. Decision Support Systems, 32, 189-199. https://pdfs.semanticscholar.org/d2e7/a95f1fb8ca8a56f5ea0fb9f9bf2428e2610e.pdf https://doi.org/10.1016/S0167-9236(01)00110-5
[3] Qu, H. (1997) Determinant Factors and Choice Intention for Chinese Restaurant Dining: A Multivariate Approach. Journal of Restaurant and Foodservice Marketing, 2, 35-49. http://download.xuebalib.com/xuebalib.com.22812.pdf https://doi.org/10.1300/J061v02n02_03
[4] Yan, X., Wang, J. and Chau, M. (2015) Customer Revisit Intention to Restaurants: Evidence from Online Reviews. Information Systems Frontiers, 17, 645-657.
http://or.nsfc.gov.cn/bitstream/00001903-5/356154/1/1000007211452.pdf https://doi.org/10.1007/s10796-013-9446-5
[5] Chang, J. (2003) Analyzing the Impact of Sales Promotions on the Sources of Category Expansion. Northwestern University, ProQuest Dissertations Publishing, 1-446.
[6] Fishbein, M. and Ajzen, I. (1975) Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research. Addison-Wesley, Boston.
[7] Westbrook, R.A. and Oliver, R.L. (1991) The Dimensionality of Consumption Emotion Patterns and Consumer Satisfaction. Journal of Consumer Research, 18, 84-91. http://www.geocities.ws/matthew_lau2002/Downloads/Westbrook_satisfaction.pdf https://doi.org/10.1086/209243
[8] Oh, H. (2000) Diners' Perceptions of Quality, Value, and Satisfaction: A Practical Viewpoint. Cornell Hotel and Restaurant Administration Quarterly, 41, 58-66. http://journals.sagepub.com/doi/abs/10.1177/001088040004100317 https://doi.org/10.1177/001088040004100317
[9] Han, H., Back, K. and Barrett, B. (2009) Influencing Factors on Restaurant Customers' Revisit Intention: The Roles of Emotions and Switching Barriers. International Journal of Hospitality Management, 28, 563-572.
https://www.deepdyve.com/lp/elsevier/influencing-factors-on-restaurant-customers -revisit-intention-the-Q7QX0Jm7Cl https://doi.org/10.1016/j.ijhm.2009.03.005
[10] Almanza, B.A., Jaffe, W. and Lin, L.C. (1994) Use of the Service Attribute Matrix to Measure Satisfaction. Hospitality Research Journal, 17, 63-75. http://journals.sagepub.com/doi/abs/10.1177/109634809401700207 https://doi.org/10.1177/109634809401700207
[11] Andaleeb, S.S. and Conway, C. (2006) Customer Satisfaction in the Restaurant Industry: An Examination of the Transaction-Specific Model. Journal of Services Marketing, 20, 3-11.
http://www.emeraldinsight.com/doi/abs/10.1108/08876040610646536 https://doi.org/10.1108/08876040610646536
[12] Barsky, J.D. and Labagh, R. (1992) A Strategy for Customer Satisfaction. Cornell Hotel and Restaurant Administration Quarterly, 33, 32-40.
http://journals.sagepub.com/doi/abs/10.1177/001088049203300524 https://doi.org/10.1177/001088049203300524
[13] Gabbie, O. and O'Neil, M. (1996) SERVQUAL and Northern Ireland Hotel Sector: A Comparative Analysis. Managing Service Quality, 6, 25-32. http://www.emeraldinsight.com/doi/abs/10.1108/09604529610149194 https://doi.org/10.1108/09604529610149194
[14] James, L.W. (1995) Service Encounter Satisfaction: Conceptualizes. Journal of Service Marketing, 9, 5-14.
http://www.emeraldinsight.com/doi/abs/10.1108/08876049510079844 https://doi.org/10.1108/08876049510079844
[15] Johns, N. and Tyas, P. (1996) Investigation of the Perceived Components of the Meal Experience, Using Perceptual Gap Methodology. Progress in Tourism and Hospitality Research, 3, 15-26. https://doi.org/10.1002/(SICI)1099-1603(199603)2:1<15::AID-PTH22>3.0.CO;2-E
[16] Oh, H. (1999) Service Quality Customer Satisfaction and Customer Value: A Holistic Perspective. Hospitality Management, 18, 67-82.
http://www.sciencedirect.com/science/article/pii/S0278431998000474 https://doi.org/10.1016/s0278-4319(98)00047-4
[17] Oliver, R.L. (1980) A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions. Journal of Marketing Research, 17, 460-469.
https://lms.ctu.edu.vn/dokeos/courses/KT321/document/LUOC_KHAO_TAI_LIE U/satisfaction_OLIVER_1980.PDF https://doi.org/10.2307/3150499
[18] Oliver, R.L. (1981) Measurement and Evaluation of Satisfaction Processes in Retail Settings. Journal of Retailing, 5, 25-48. http://psycnet.apa.org/psycinfo/1984-10995-001

## Submit or recommend next manuscript to SCIRP and we will provide best service for you:

Accepting pre-submission inquiries through Email, Facebook, LinkedIn, Twitter, etc. A wide selection of journals (inclusive of 9 subjects, more than 200 journals)
Providing 24-hour high-quality service
User-friendly online submission system
Fair and swift peer-review system
Efficient typesetting and proofreading procedure
Display of the result of downloads and visits, as well as the number of cited articles
Maximum dissemination of your research work
Submit your manuscript at: http://papersubmission.scirp.org/
Or contact tel@scirp.org

