International Journal of Hospitality & Tourism Systems
Volume 11 Issue 2 December 2018
ISSN: 0947-6250 (Print)

Hospitality & Tourism Systems

Antecedents and Consequences of Price Wars Among Hotels in Egypt

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Abstract *The hotel industry is often suffering from price wars, which have a number of reasons such as financial crises. Resulting from these reasons are going to reduce prices. The continued price reductions among hotels, resulting in price wars. So, this paper searches for developing and empirically testing a framework to examine which factors causes the price wars and the consequences of them. Using SEM to examine the data collected from a sample of 113 hotels, the results indicate supply, financial crises, pricing objectives based on discounts, and price sensitivity have a significant positive impact on price wars' eruption. Price wars have a significant negative influence significantly on hotel profitability, hotel image, competitive position, brand loyalty. On the other hand, price wars may lead to exit from market. The results offer important implications for hoteliers and are likely to stimulate further research in the area of pricing.*

Keywords: *Price Wars, Price Objectives Based on Discounts, Supply, Financial Crises, Price Sensitivity, Hotel Profitability, Hotel Image, Competitive Position, Brand Loyalty, Exit from Market*

INTRODUCTION

Pricing wars are temporary phenomenon; they are considered a result of competitive pricing interaction between hotels (Bungert, 2003). Many managers see price decisions as simple, prompt, and reversible actions. So, price warsare becoming more widespread (Harvard business review on marketing, 2001). Price wars seems a lasting result of the nature of competition, demand, and technology (Morrison & Winston, 1996). Slade (1989) declared that "price wars are severe only when demand falls". However, high possibility of price wars' eruption is one of the factors that make the pricing of services more difficult (Boz, Arslan, & Koc, 2017).

The definition of a price war is always tricky, for the prejudice and abuse of the process (Zhang & Round, 2011). Grundey (2009, p. 16) defined price war as" a term used in business to indicate a state of intense competitive rivalry accompanied by a multi-lateral series of price reduction. One competitor will lower its price, and then others will lower their prices to match. If one of them reduces their price again, a new round of reductions starts". One of the main reasons of price wars' incidence is the reactions of competitors whereas when the firm cut its prices, the other firms follow it (Hanna & Dodge, 1995). According to Merriam-Webster (2016), price war is "commercial competition characterized by the repeated cutting of prices below those of competitors".

Price wars make customers expected lower prices, reacting negatively when hotels try to rise prices later, and the discounted price become the reference price (Viglia, Mauri, & Carricano, 2016). Zhang and Round (2011) indicated that it is difficult to identify the reasons of price war, when itreally starts, how and when it ends.

Not every price cut is a price war. Three conditions should be fulfilled to state the term of price war: (1) one of the companies tries to win market share by using offensive pricing, (2) companies make price undercuts to fall below the level of profitability (at least for main competitors in the market) and (3) companies drive these actions not customers (Krämer, Jung, & Burgartz, 2016).

ANTECEDENTS OF PRICE WARS

Historically, the price war is one of the worst consequences that can result from pricing lower than rivals. Price wars

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frequently happen when the companies believe that price cuts will increase their market shares. Often, misinterpretation or misunderstanding among the competitors each other' s are the reasons of price wars (Burnett, 2008).

Supply

The establishments have different motivations to start or to join a price war (Armstrong et al., 2016; Busse, 2002). Overcapacity is considered as a facilitator of price wars' upgrowth. Sooner or later, The corporates use the overcapacity to increase sales by price cutting (Heil & Helsen, 2001; Kotler, Bowen, & Makens, 2006). Markets that attract a lot of customers usually appeal lots of competitors. The result is often surplus capacity, making price wars, and loss-loss situations for all competitors (Kotabe & Helsen, 2010). The hotels are compelled to price cuts as a natural reaction to overcapacity, but the results of these reactions can be destructive if continued for a long period (Bowie & Buttle, 2004).

An intense competition occurs when there are many competitors in the market without differentiated services. It leads to price wars in the long-term and many customers may buy the cheaper one (He, Cheng, Dong, & Wang, 2016; Indounas & Roth, 2012). The firm must not only satisfy guests' needs and wants, but it must satisfy its consumers' needs and wants more than other firms. When the service quality of a firm is alike to that of other firms, the consumer cannot distinguish between them. The result could be aprice war that may satisfy the consumer's but not the firm's needs. Many of the benefits to firms that offer high perceived quality, including more loyal consumer, more repetitive businesses, and less sensitivity to price wars (Hsu & Powers, 2002; Jain, 2000).

The existence of overcapacities leads to similarity of provided service between companies and thus a stronger price comparability (Krämer et al., 2016). On the other hand, non-price competition is based on competitive product features. In this markets, the differentiation may not be based on price, but the price is still crucial, and may act as a qualifying factor (Rowley, 1997). Sometimes, incumbent companies tend to price cuts as a threat of new entry and to have a market share and deter the new entrants at the same time (Hill & Jones, 2013). On the other hand, new firms may offer low prices when starting business, the incumbents may attack by non-cooperative reactions that may bring price wars (Klemperer, 1989; Elzinga & Mills, 1999; Kim, 2010).

Financial Crisis

Eichengreen and Portes (1987, p. 10) defined financial crisis as"a disturbance to financial markets, associated typically with falling asset prices and insolvency among debtors and intermediaries, which ramifies through the financial system, disrupting the market' s capacity to allocate capital within the economy. In an international financial crisis, disturbances spill over national borders, disrupting the market's capacity to allocate capital internationally".

Internal characteristics of the establishments operating in the market have a critical reason of price wars' eruption. Specially, since establishments in worse financial crises discount future returns more heavily relative to current returns, such establishments will find price wars more attractive (Armstrong et al., 2016; Busse, 2002). During the economic crises; the customers make buying decisions according to the special offers, not to the brands. The leading companies have launched price wars, which have a negative impact on their brands and positions (Grundey, 2009).

Pricing Objectives Based on Discounts

Changeable expectations and perceptions of customers, competition, target sales, and target profits make price decision making more complicated (Krämer et al., 2016). Many factors affected on the final price for a product or a service, which can be classified into internal factors and external factors. Internal factors were returning on investment, cash flow, market share, maximize profits, fixed costs, and variable costs. On other hand, external factors were elasticity of demand, customer expectations, direct competitor pricing, related product pricing, primary product pricing, and government regulation (Haron, 2016).

Pricing decisions play two major roles in marketing. Firstly, price influences how much of a product customers buy. Secondly, price influences whether selling the product will be profitable (Cant, Strydom, Jooste, & Plessis, 2006). The corporation may tend to price cut for many reasons such as if the corporation cannot increase the volume of sales through the activities of the sales team, nor get back its market share. Furthermore, the corporate also tend to price cuts for penetrating the market through lower costs (Kotler, 2000). It is too attractive, quick and effortless to cut prices to deal with an instant deficit in sales volume (Doole & Lowe, 2008). So, Increasing sales volumes is one of the distinctive impacts of price wars. The customers tend to choose the company which offers low prices (Ansu & Kwarteng, 2016).

Customer Brand Loyalty

Second-tier brands face a threatening quandary; typically, these brands cannot win a price war (Kopalle et al., 2009). So, High customer brand loyalty is one of the factors that may decrease the probability of a price war eruption (Dowling, 2004; Spulber, 2009). On the other hand, little customer

brand loyalty makes price wars more likely to occur (Baines & Fill, 2014).

Price Sensitivity

Londhe (2006) defined price sensitivity as "the ratio of the percentage response in the quantity sold to percentage change in price". Price sensitivity of customers will determine the extent that a corporation will have in rising its price (Kumar & Meenakshi, 2011). The risk of price wars increases when price sensitivity is high (Dowling, 2004; Marn, Roegner, & Zawada, 2004).

CONSEQUENCES OF PRICE WARS

The price wars are good for customers, who can take benefit of lower prices (Grundey, 2009), they have encouraged customers to purchase more, and spending levels have retracted in the long run (Harald J. van Heerde, Gijsbrechts, & Pauwels, 2008).

Fundamentally, the cost of price war is expensive (Smith, 2012). The results of price cuts may lead to negative image about the quality of the firm's products, less customer loyalty, weak competitive position (Kotler, 2000), and the corporate's incapability to increase price again (Burnett, 2008).

Lose Profitability

Price wars appeared every place, and they menace to impact the long-term profitability of all industries, especially the industries with oligopoly structures (Bowie & Buttle, 2004; Lindstädt & Dietl, 2010; Yannopoulos, 2011). Certainly, price wars minimize business profits and contribute to their instability (Morrison & Winston, 1996; Zeithmal & Bitner, 2003; Smith, 2012). Price competition is an efficient way to make a sensible level of price and many benefits for companies and customers, but the aggressive competition could reduce the benefits of the companies (Hu & Tang, 2014). It often prompts price war and it becomes much more tricky and takes much more time and attempt to safe price increases to return profit margins (Doole & Lowe, 2008).

Negative Image

The consumers had a negative image and distrust towardsbusinesses as animpact of price war (Hassali, Siang, Saleem, & Aljadhey, 2013; Yannopoulos, 2011). One of the risks of price wars is that the consumers will be usual to pay the discounted prices and hope to have the same prices in the next deals. Specially, when the reasons of price discounts not be explained well to the consumers (Zeithmal & Bitner, 2003). So, Hotel management should be very careful in reducing their room rates to impact on the reference price, even for short times. "The more often and longer hotel room rates are discounted, the more likely the discounted rate is to become the reference price, and the more difficult it will be for hotels to recover their value in the minds of consumers" (Viglia et al., 2016).

Weak Competitive Position

Hart & Baker (2008) stated that "price plays a key role in positioning". Price might use as a way that customers sentence the quality of product or service and also as a way that establishments try to position the quality of their services or products. Commonly, Higher price with bundling values get the company a strong competitive position. On the contrary, a lower price may weak the competitive position of the firm (Berkowitz & Hillestad, 1991; Helsen & Kotabe, 2009). Price war not only leads to lose profitability but it could lastingly sully a premium brand's competitive position (Kotler, 2000; Yannopoulos, 2011).

Weak Brand Loyalty

Price cutting may lead to persuade customers to purchase product or service, on the other hand, this strategy can weaken brand loyalty (Dodds, 2003). Furthermore, a price wars may lead to damage to a brand's equity (Bungert, 2003).

Exit from the Market

Bankrupt carriers could be the target of price wars designed to hurry their exit from the market (Morrison & Winston, 1996). Similarly, market turmoil may lead some corporates to cut prices to have short-term monetary benefits. The lower prices can intimidate the survival of firms (Grundey, 2009). Furthermore, it may lead the corporates to exit from the market (Indounas & Roth, 2012).

RESEARCH MODEL AND HYPOTHESES

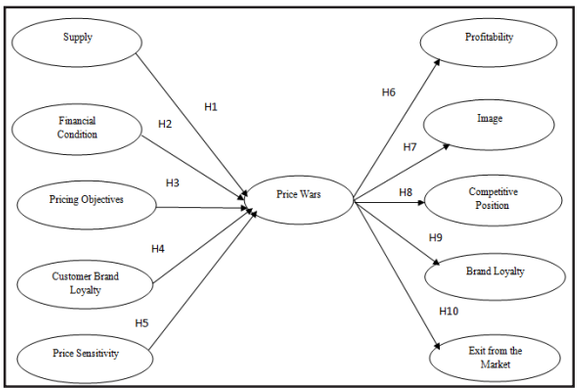

Fig. 1: Research Conceptual Framework

Based on the preceding review, the research model and its hypotheses are the following hypotheses (shown in Fig. 1).

H1: Supply has a significant direct and positive influence on the likelihood of a price wars' occurrence.

H2: Financial crises have a significant direct and positive influence on the likelihood of a price war' occurrence.

H3: Pricing objectives based on discounts have a significant direct and positive influence on the likelihood of a price wars' occurrece.

H4: Customer brand loyalty has a significant direct and negative influence on the likelihood of a price wars' occurrence.

H5: Price sensitivity has a significant direct and positive influence on the likelihood of a price wars' occurrence.

H6: Price wars have a significant direct and negative influence on hotel profitability.

H7: Price wars have a significant direct and negative influence on hotel image.

H8: Price wars have a significant direct and negative influence on competitive position.

H9: Price wars have a significant direct and negative influence onbrand loyalty.

H10: Price wars have a significant direct and positive influence on the likelihood of exit from the market.

RESEARCH METHODOLOGY

The researcher conducted an empirical study on the reasons and consequences of price wars among hotels in Egypt in order to test the proposed hypotheses using the quantitative approach. Quantitative data were collected using questionnaires.

Overbuilding in Egyptian Red Sea resorts, led to price wars and worsening of service quality (Enz, 2010). After January 25th 2011 Egypt led to political, economic and social instability, this overall instability had extreme consequences in the hospitality and tourism industry such as the declined occupancy rates that led to deteriorated profit margins, higher employee layoffs and low quality of services (Salman, Tawfik, Samy, & Artal-Tur, 2017). The target population of the current research includes five and four hotels in Sharm El Sheikh, Hurghada and Marsa Alam. The questionnaire was emailed to marketing managers with a request for participation, provided respondents with information for the purpose of the study, the estimated time to fill outthe questionnaire, and a banner with a hyperlink connecting to web questionnaire.

A pilot study was conducted to test the validity and reliability of the research instrument. A group of twenty marketing managers and ten of experts were asked to review the questionnaire. Their comments resulted in modification of the instrument in terms of its length, layout, readability, and clearness. The questionnaire was available online between December 24, 2016 and August 15th of 2017. Two hundred of Marketing managers of five and four star hotels in Sharm El Sheikh, Hurghada and Marsa Alam were invited to fill in the questionnaire, and 129 helpful respondents were obtained, But 16 who sent unfinished questionnaires were skipped from the analyses. Therefore, a total of 113 responses were considered to be valid for further analyses (response rate is 56.5%).

Of these 113 valid questionnaires, 39 were five star hotels (34.5%) and 74 were Four star hotels (65.5%). The independent hotels were 52 hotels (46%) and 61 hotels (54%) are hotel chains. The majority of the sample located in Sharm El Sheikh (58.8%), 35.3 % in Hurghada, and 5.9% in Marsa Alam.

When determining the sample size for an SEM research, 10-20 participants per independent variable is recommended (Teo, Tsai, & Yang, 2013). Since 113 cases were collected, the current study sample size considers enough for consecutive analyses with structural equation modeling.

QUESTIONNAIRE AND DESIGN

The questionnaire for the present research was divided into two main parts. The first one consisted of hotel' information such as type of management, hotel category, and location. The second part contained questions to measure each construct. It should be declared that all constructs have a reflective measurement. The option to manage and remove duplicate responses by Internet Protocol was used to avoid duplicate ones. The research model has nine constructs, each having items that are measured by Likert scale (1 = strongly disagree and 7 = strongly agree).

The researcher applied the partial least squares (PLS-SEM), used WarpPLS 6.0 programme to test the validity ofthe measures and test the hypotheses. PLS lessens the endogenous variables residual variances, and it is also an suitable approach to deal with multiple relationships at the same time. Thistechnique does not require a normal distribution (Dow, Watson, Greenberg, & Greenberg, 2012; Hair, Hult, Ringle, & Sarstedt, 2016), finally, PLSis also recommended for testing complex models. Moreover, variables with fewer items can be used (Kovacevic, Abdi, & Beaton, 2013).

RESULTS

To evaluate the conceptual framework by using PLS, the evaluation of the measurement model (outer model) and structural model (inner model) were conducted respectively.

Measurement Model

Skewness and kurtosis are used to satisfy the criterion of multivariate normality tests (Henry C. Thode, 2002). So, the researcher calculated them for all the constructs (see table 1). These results declared no departure from normality. The psychometric properties of the constructs were measured by calculating the Cronbach's alpha reliability coefficient (Keengwe, 2015) (see Table 2).

As usual, the evaluation of the measurement model is the critical first step in quantitative, positivist research. Examine of the research results validity and reliability of the measurement model need to conducted to ensure the quality of research results (Arnhold, 2010). The researcher conducted variance inflation factors (VIFs) as measures of multicollinearity. A VIF larger than 10 is a reason for concern (Wooldridge, 2009; Kamaruddin & Abeysekera, 2013).

All constructs had variance inflation factors (VIF) values less than 10. Hence, confirming that the measurement model results were not negatively affected by the items multicollinearity.

Table 3 shows that loadings of measurement items declared that all items loaded on to the corresponding latent variable structure and all items show loadings more than 0.7. Table 2 declares that all constructs have composite reliability more than 0.7, and all constructs have average variance extracted (AVE) more than 0.5. So, these results support convergent validity of the research model.

Discriminant validity was assessed by calculating two steps. First, the Fornell and Larcker (1981) criterion was that square root of a construct's AVE is larger than the inter-construct correlation. The results were shown in table 4 support the first step of discriminant validity because for each construct, thesquare root of all construct's AVE is larger than inter-construct correlation. The second step of discriminant validity analysis was conducted by calculating cross loadings. In cross loadings calculation, the loading of each item is expected to be higher than of all its all cross loadings (Reyes-Mercado, 2016). The results were shown in table 3 support the second step of discriminant validity. So, the researcher conclude that measurement model explored good discriminant validity.

Table 1: Descriptive Statistics and Normality Tests of the Indicators in the Model

Statistics	Mean	SD	Skewness	Kurtosis
Supply (Sup)				
Our hotel services are similar to the services of our competitors (Sup1).	4.230	1.908	-0.490	-0.972
Similarity of provided service between hotels make price wars (Sup2).	4.830	1.603	-0.907	-0.123
Supply exceeds demand in the market (Sup 3).	4.848	1.790	-0.847	-0.143
Financial Crises (FC)				
During the economic crises; the customers make buying decisions according to the special offers, not to the brands (FC1).	5.012	1.714	-0.660	-0.457
During the economic crises; The leading hotels make price cuts (FC2).	4.297	1.270	0.147	-0.378
Your hotel in worse financial crises adopts the price cuts (FC3).	4.170	1.572	-0.008	-0.993
Pricing objectives based on discounts (POs)				
Your hotel may tend to price cut because the activities of the sales team cannot get back its market share(PO1).	5.079	1.522	-0.758	-0.394
Your hotel may tend to price cut because the activities of the sales team cannot increase the volume of sales (PO2).	5.255	1.618	-0.815	-0.480
Your hotel may tend to price cut to penetrate the market through lower costs (PO3).	5.255	1.607	-0.746	-0.543
Customer Brand Loyalty (CBL)				
High customer brand loyalty may decrease the probability of a price wars' occurrence (CBL1)	5.648	1.505	-0.921	0.144
Little customer brand loyalty makes price wars more likely to occur (CBL2)	5.145	1.428	-0.660	-0.525
customer brand loyalty doesn't effect on likelihood of price wars' occurrence (CBL3s)	5.400	1.405	-0.960	0.137
Price Sensitivity (PS)				

Statistics	Mean	SD	Skewness	Kurtosis
The guests change their choice of hotels because of lower prices(PS1)	5.255	1.607	-0.746	-0.543
Lower prices greatly influence on the guests' decision to change hotel (Ps2)	5.745	1.521	-1.839	3.033
Hotel guests choose low prices over service quality in selecting the hotel (Ps3)	4.782	1.585	-0.679	-0.040
Price War (PW)				
Competition in our market is extremely intense (PW1).	4.958	1.836	-0.691	-0.610
It is quite usual to have price wars in our market (PW2).	4.939	1.824	-0.721	-0.603
When any hotel in our market makes a price cut, our hotel tends to make price cuts (PW3).	3.673	1.862	-0.034	-0.974
There is a multi-lateral series of price reduction between our hotel and its competitors(PW4).	3.576	1.815	0.129	-0.906
Hotel Profitability (Prft)				
Price wars contribute to the achievement of sales revenue and long-term profitability (Prft1).	4.339	1.869	-0.123	-1.070
Price wars contribute to the achievement of maximum gross profit (Prft2).	2.618	1.809	0.970	-0.103
Price wars contribute to achievement of target return on investment (Prft3).	3.703	1.563	-0.183	-0.941
Hotel Image (Img)				
Price wars contribute to the building of hotel's image (Img1).	4.636	1.715	-0.422	-0.678
Price wars contribute to modifying negative hotel's image (Img2).	2.758	1.791	1.210	0.210
Price wars contribute to strengthening of hotel's image (Img3).	3.412	1.707	0.530	-0.670
Competitive Position (CP)				
Price wars contribute to getting a good competitive position (CP1).	4.527	1.602	0.129	-0.924
Price wars contribute to modifying the competitive position of the hotel(CP2).	2.933	1.736	0.790	-0.332
Price wars contribute to reinforcing the competitive position of the hotel(CP3).	4.188	1.850	-0.381	-0.976
Brand Loyalty (BL)				
Price wars contribute to making guests loyal (BL1)	4.333	1.385	0.093	-0.508
Price wars contribute to returning of guests (BL2)	2.061	1.685	0.985	0.982
Price wars contribute to reinforcing the loyalty of guests (BL3)	3.418	1.750	0.161	-0.958
Exit from the market (Ext)				
Price wars push hotels to exit from the market for a short run (Ext 1).	3.055	1.726	0.437	-0.757
Price wars push hotels to exit from the market for a longrun(Ext 2).	5.745	1.724	-0.908	0.999
Price wars push hotel to exit from the market forever (Ext 3).	3.788	1.896	0.237	-0.956

Table 2: Results of Composite Reliability, Cronbach's Alpha, and Average Variance Extracted

Construct	Composite reliability	Coronbach alpha	AVE
Sup	0.849	0.732	0.653
FC	0.760	0.725	0.515
POs	0.869	0.852	0.913
CBL	0.855	0.829	0.875
PS	0.779	0.774	0.612
PW	0.870	0.798	0.627
Prft	0.766	0.741	0.527
Img	0.789	0.713	0.592
CP	0.707	0.782	0.550
BL	0.729	0.763	0.542
Ext	0.723	0.728	0.570

Notes: Sup = Supply; FC = Financial Crises; POs = Pricing objectives based on discounts; CBL = Customer Brand Loyalty; PS = Price Sensitivity; PW = Price War; Prft = Hotel Profitability; Img = Hotel Image; CP = Competitive Position; BL = Brand Loyalty; Ext = Exit from the market.

Table 3: Loadings and Cross-Loadings of Measurement Items

Items	Sup	FC	POs	CBL	PS	PW	Pft	Img	CP	BL	Ext	*p* value
Sup1	(0.820)	0.203	0.753	0.283	0.642	0.233	0.107	0.667	0.022	-0.109	0.026	<0.001
Sup2	(0.867)	0.636	0.232	0.548	0.639	0.442	0.172	0.250	0.570	0.041	0.666	<0.001
Sup3	(0.832)	0.762	0.616	0.331	0.338	0.263	0.083	0.450	0.700	0.171	0.758	<0.001
FC1	0.246	(0.896)	0.594	0.423	0.113	0.657	0.636	0.206	0.702	0.051	0.666	<0.001
FC2	0.429	(0.850)	0.668	0.290	0.435	0.385	0.451	0.161	0.456	0.184	0.612	<0.001
FC3	0.118	(0.800)	0.264	0.644	0.785	0.538	0.141	0.384	0.375	0.113	0.097	<0.001
POs1	0.177	0.025	(0.948)	0.087	0.635	0.057	0.146	0.314	0.075	0.131	0.183	<0.001
POs2	0.025	0.015	(0.976)	0.072	0.333	0.101	0.136	0.158	0.063	0.059	0.133	<0.001
POs3	0.153	0.041	(0.942)	0.162	0.685	0.047	0.007	0.152	0.010	0.193	0.047	<0.001
CBL1	0.452	0.154	0.675	(0.923)	0.392	0.236	0.021	0.493	0.134	0.056	0.154	<0.001
CBL2	0.574	0.245	1.044	(0.939)	0.425	0.175	0.260	0.489	0.267	0.094	0.076	<0.001
CBL3	0.129	0.093	0.378	(0.945)	0.039	0.057	0.238	0.004	0.395	0.039	0.075	<0.001
PS1	0.153	0.041	0.077	0.162	(0.958)	0.047	0.007	0.152	0.010	0.193	0.047	<0.001
PS2	0.468	0.674	0.152	0.128	(0.913)	0.036	0.391	0.474	0.602	0.123	0.595	<0.001
PS3	0.209	0.145	0.059	0.148	(0.953)	0.170	0.053	0.328	0.061	0.209	0.024	<0.001
PW1	0.437	0.498	0.562	0.331	0.595	(0.837)	0.583	0.064	0.566	0.049	0.619	<0.001
PW2	0.628	0.471	0.743	0.069	0.158	(0.857)	0.003	0.257	0.512	0.048	0.462	<0.001
PW3	0.651	0.132	0.522	0.620	0.408	(0.818)	0.180	0.015	0.578	0.123	0.597	<0.001
PW4	0.464	0.049	0.609	0.003	0.606	(0.846)	0.533	0.329	0.352	0.110	0.248	<0.001
Pft1	0.729	0.699	0.259	0.171	0.517	0.544	(0.865)	0.393	0.638	0.053	0.875	<0.001
Pft2	0.318	0.151	0.944	0.467	0.863	0.058	(0.810)	0.423	0.620	0.001	1.249	<0.001
Pft3	0.586	0.692	0.897	0.404	0.316	0.507	(0.878)	0.155	0.421	0.039	0.666	<0.001
Img1	0.563	0.667	0.238	0.633	0.407	0.706	0.133	(0.849)	0.930	0.123	-0.308	<0.001
Img2	1.043	-0.360	-0.473	0.271	0.025	-0.105	-0.057	(0.848)	0.589	0.195	0.749	<0.001
Img3	0.655	0.292	0.564	0.138	0.738	0.755	0.096	(0.895)	0.429	0.400	0.554	<0.001
CP1	0.612	0.161	1.330	0.635	0.694	0.365	0.028	0.476	(0.812)	0.199	0.145	<0.001
CP2	0.110	0.432	0.127	0.788	0.736	0.537	0.068	0.191	(0.836)	0.173	0.597	<0.001
CP3	0.075	0.372	0.560	0.448	0.024	0.247	0.055	0.362	(0.847)	0.026	0.992	<0.001
BL1	0.134	0.034	0.512	0.702	0.130	0.232	0.552	0.465	0.217	(0.838)	0.167	<0.001
BL2	0.122	0.054	0.676	0.393	0.582	0.048	0.562	0.281	0.594	(0.805)	0.618	<0.001
BL3	0.789	0.085	0.864	0.632	0.959	0.139	0.136	0.166	0.574	(0.889)	0.278	<0.001
Ext1	0.157	0.565	0.233	0.600	0.295	0.448	0.077	0.600	0.425	0.087	(0.892)	<0.001
Ext2	0.107	0.076	0.138	0.402	0.441	0.202	0.072	0.210	0.130	0.252	(0.857)	<0.001
Ext3	0.062	0.441	0.107	0.464	0.053	0.250	0.118	0.378	0.281	0.102	(0.889)	<0.001

Notes: Sup = Supply; FC = Financial Crises; POs = Pricing objectives based on discounts; CBL = Customer Brand Loyalty; PS = Price Sensitivity; PW = Price Wars; Prft = Hotel Profitability; Img = Hotel Image; CP = Competitive Position; BL = Brand Loyalty; Ext = Exit from the market.

- Bolded items are factor loadings

Table 4. Correlations and Square Roots of AVE

	Sup	FC	POs	CBL	PS	PW	Prft	Img	CP	BL	Ext
Sup	(0.808)										
FC	0.586	(0.718)									
POs	0.767	0.275	(0.955)								
CBL	0.784	0.475	0.851	(0.936)							
PS	0.690	0.256	0.638	0.600	(0.783)						
PW	0.708	0.657	0.479	0.501	0.442	(0.792)					
Prft	0.589	0.498	0.529	0.681	0.624	0.529	(0.826)				
Img	0.379	0.672	0.008	0.349	0.077	0.417	0.599	(0.701)			
CP	0.738	0.698	0.465	0.716	0.530	0.586	0.718	0.614	(0.771)		
BL	0.155	0.347	0.107	0.071	0.130	0.232	0.174	0.583	0.276	(0.765)	
Ext	0.724	0.592	0.387	0.588	0.345	0.623	0.650	0.581	0.765	0.332	(0.786)

Notes: Sup = Supply; FC = Financial Crises; POs = Pricing objectives based on discounts; CBL = Customer Brand Loyalty; PS = Price Sensitivity; PW = Price Wars; Prft = Hotel Profitability; Img = Hotel Image; CP = Competitive Position; BL = Brand Loyalty; Ext = Exit from the market.

Structural Model Assessment

Meanwhile the measurement model evaluation provided evidence of reliability and validity, in the next stage of the analysis, the significance and strength of the hypothesized relationships among latent variables in the research model were calculated (Wunderlich, 2013).

The model explains 96% of price wars among hotels in Egypt, 49% of hotel profitability, 20% of hotel image, 46% of competitive position, 35% of Brand Loyalty, and 48% of exit from the market. Structural equation model was used to test the research hypotheses. The global fit indicators were acceptable, Average path coefficient (APC)$==$ (0.432, $p < 0.001$), Average R-squared (ARS)$==$ (0.487, $p < 0.001$), Average adjusted R-squared $(AARS) = (AARS) =$ 0.484, $p < 0.001$), Average block VIF (AVIF)$==$ (3.421), and Goodness of fit (GoF)$==$ (0.540).

The estimated standardized structural coefficients of the hypothesized relationships between constructs and their significance are illustrated in table 5. The results declare that all hypothesized relationships are supported except H4.

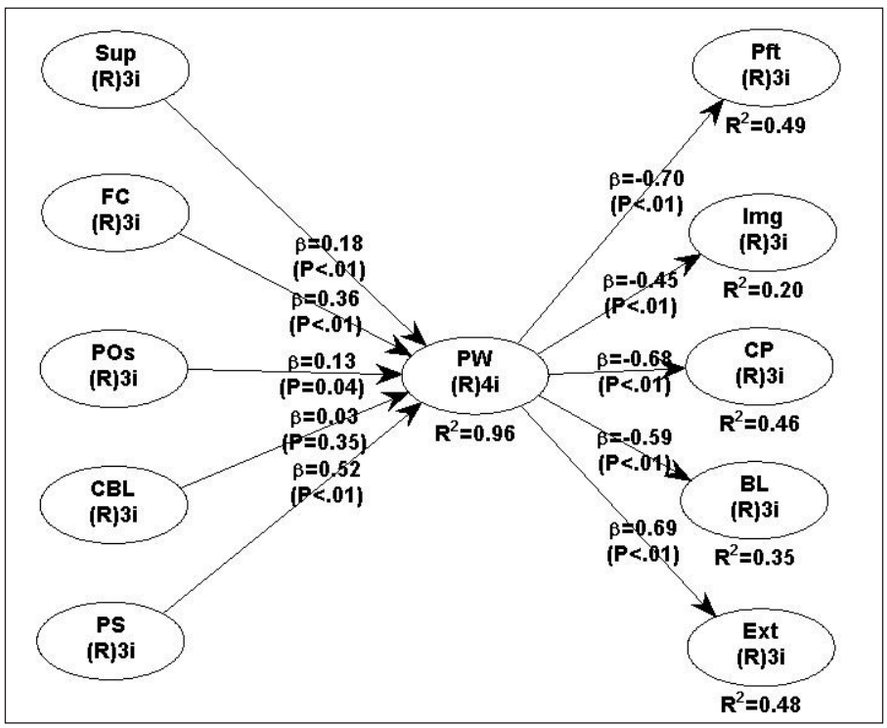

Fig. 1: PLS Results of the Research Model

Table 5: Results of Hypotheses Testing

Hypothesis	Path direction	Beta Value (β)	P Value	Result
H1	Sup → PW	0.18	<0.01	Accepted
H2	FC → PW	0.36	<0.01	Accepted
H3	POs → PW	0.13	<0.04	Accepted
H4	CBL → PW	0.03	<0.35	Rejected
H5	PS → PW	0.52	<0.01	Accepted
H6	PW → Pft	-0.70	<0.01	Accepted
H7	PW → Img	-0.45	<0.01	Accepted
H8	PW → CP	-0.68	<0.01	Accepted
H9	PW → BL	-0.59	<0.01	Accepted
H10	PW → Ext	0.69	<0.01	Accepted

The first hypothesis that predicted that supply would positively affect intentions to participate in price wars, it was supported (β = 0.18, p = <0.01). With regard to H2, H3 and H5, the findings supported that the financial crisis was positively related to price wars (β = 0.36, p = <0.01), pricing objectives based on discounts were positively related to price wars (β = 0.13, p = <0.04), and price sensitivity were positively related to price wars (β = 0.52, p = <0.01) as well. Regarding the relationships between customer brand loyalty and price wars, the findings did support the effect of customer brand loyalty on price wars' eruption (β = 0.03, p = 0.35).

Hypotheses H6, H7, H8, and H9, that expected a negative relationship between price wars to participate in hotel profitability (β = -0.70, p = <0.01), hotel image (β = -0.45, p = <0.01), competitive position (β = -0.68, p = <0.01), and Brand Loyalty (β = -0.59, p = <0.01), H10 predicted a positive relationship between price wars and exit from the market (β = 0.69, p = <0.01). Therefore, the results support H1, H2, H3, H5, H6, H7, H8, H9 and H10.

Testing of Mediation

To check the mediating influence, the researcher performed Preacher & Hayes (2008) approach. Table 6 declared that supply was a significant predictor of hotel profitability (p value = 0.01), competitive position (p = 0.012), brand loyalty (p = 0.025), and exit from the market (p = 0.011). The supply was no longer a significant predictor of hotel image (p = 0.07) after controlling for the mediator. The indirect effects of financial crises was significant on hotel profitability (p <0.001), hotel image (p = 0.001), competitive position (p <0.001), brand loyalty (p <0.001), and exit from the market (p <0.001).

As well, the results declared that the pricing objectives based on discounts was a significant predictor of hotel profitability (p = 0.047) and exit from the market (p = 0.049). Pricing objectives based on discounts was no longer a significant predictor of hotel image (p = 0.144), competitive position (p = 0.052), nor brand loyalty (p =0.079). The indirect coefficients of customer brand loyalty was not significant on hotel profitability (p = 0.353), hotel image (p = 0.405), competitive position (p = 0.357), brand loyalty (p = 0.375), nor exit from the market (p = 0.355). At last, price sensitivity was a significant predictor of hotel profitability (p <0.001), hotel image (p <0.001), competitive position (p <0.001), brand loyalty (p <0.001), and exit from the market (p <0.001).

Table 6: Testing of Mediation

	Path a	Path b	Indirect Effect	SE	t-value	Bootstrapped Confidence Interval		P Value
						95% LL	95% UL	
Sup > Pft	0.18	-0.70	-0.13	0.05	-2.32	-0.23	-0.02	0.01
Sup > Img	0.18	-0.45	-0.08	0.05	-1.49	-0.19	0.03	0.07
Sup > CP	0.18	-0.68	-0.12	0.05	-2.25	-0.23	-0.02	0.012
Sup > BL	0.18	-0.59	-0.11	0.05	-1.97	-0.21	0.00	0.025
Sup > Ext	0.18	0.69	0.12	0.05	2.30	0.02	0.23	0.011
FC > Pft	0.36	-0.70	-0.25	0.05	-4.85	-0.35	-0.15	<0.001
FC > Img	0.36	-0.45	-0.16	0.05	-3.05	-0.27	-0.06	0.001

	Path a	Path b	Indirect Effect	SE	t-value	Bootstrapped Confidence Interval		P Value
						95% LL	95% UL	
FC > CP	0.36	-0.68	-0.24	0.05	-4.71	-0.35	-0.14	<0.001
FC > BL	0.36	-0.59	-0.21	0.05	-4.03	-0.32	-0.11	<0.001
FC > Ext	0.36	0.69	0.25	0.05	4.80	0.15	0.35	<0.001
POs > Pft	0.13	-0.70	-0.09	0.05	-1.68	-0.20	0.02	0.047
POs > Img	0.13	-0.45	-0.06	0.05	-1.07	-0.16	0.05	0.144
POs > CP	0.13	-0.68	-0.09	0.05	-1.63	-0.19	0.02	0.052
POs > BL	0.13	-0.59	-0.08	0.05	-1.42	-0.18	0.03	0.079
POs > Ext	0.13	0.69	0.09	0.05	1.66	-0.02	0.20	0.049
CBL > Pft	0.03	-0.70	-0.02	0.06	-0.38	-0.13	0.09	0.353
CBL > Img	0.03	-0.45	-0.01	0.06	-0.24	-0.12	0.09	0.405
CBL > CP	0.03	-0.68	-0.02	0.06	-0.37	-0.13	0.09	0.357
CBL > BL	0.03	-0.59	-0.02	0.06	-0.32	-0.13	0.09	0.375
CBL > Ext	0.03	0.69	0.02	0.06	0.38	-0.09	0.13	0.355
PS > Pft	0.52	-0.70	-0.36	0.05	-7.13	-0.46	-0.26	<0.001
PS > Img	0.52	-0.45	-0.23	0.05	-4.48	-0.33	-0.13	<0.001
PS > CP	0.52	-0.68	-0.35	0.05	-6.92	-0.45	-0.25	<0.001
PS > BL	0.52	-0.59	-0.31	0.05	-5.92	-0.41	-0.21	<0.001
PS > Ext	0.52	0.69	0.36	0.05	7.06	0.26	0.46	<0.001

Notes: Sup = Supply; FC = Financial Crises; POs = Pricing objectives based on discounts; CBL= Customer Brand Loyalty; PS = Price Sensitivity; PW = Price War; Prft = Hotel Profitability; Img = Hotel Image; CP = Competitive Position; BL = Brand Loyalty; Ext = Exit from the market.

DISCUSSION AND CONCLUSION

The aim of this research was to suggest and empirically test a model to find the reasons of price wars eruption and what the effects of price wars on hotels' business. The researcher proposed a model in which supply, financial crises, pricing objectives based on discounts, customer brand loyalty, and price sensitivity as antecedents to price wars' eruption. Price wars significantly affect hotel profitability, hotel image, competitive position, brand loyalty, and may lead to exit from market. Findings from a sample (N = 113) declared that supply, financial crises, pricing objectives based on discounts, and price sensitivity led to price wars' eruption significantly and price wars have a significant negative impacts on hotel profitability, hotel image, competitive position, and brand loyalty. As well, the price wars led to exit from the market significantly.

The results of this research are in line with previous studies e.g., (Kim, Lee, & Roehl, 2016; Viglia et al., 2016; Boz, Arslan, & Koc, 2017) that Pricing objectives based on discounts may impact on short-run and long-run hotel business. Discounting policies impact on reference price formation. So, the discounted price for long period will be the reference price, and the more hard it will be for hotels to recover their image. The discounted price may stop the growth of a strong brand image and consequence in even narrower earnings in the hotel sector.

The findings indicated that during the financial crisis, the hotels focus on cost-cutting measures. In the long term, cost-cutting measures harm a company's competitive position because quality that consumers appreciate disappear. Cost-cutting measures reduce the quality of offered services in hotels. However, these actions are not doing well in reducing costs. Instead, these hotels are forced to cut prices to attract customers. Therefore, their competitive position get worse, which is in line with previous studies e.g., (Alonso-Almeida & Bremser, 2013; Mar-Molinero, Menendez-Plans, & Orgaz-Guerrero, 2017). The results indicate that when hotels are confronting an extremely cruel economic environment, there is no real financial earnings to be benefiting from discounting prices. As such, once one hotel has discounted its prices, just a short time before its competitors will follow suit. The result is a price war, which is in line with Willie, Pirani, Jayawardena, Sovani, & Davoodi (2013).

The author explored that the supply may lead to a price war. These finding is consistent with Lee (2015) that, neighboring hotels of similar quality would be aggressive competitors. The results declared that, the guests had a negative image and mistrust towards establishments as an influence of price war, which is consistent with previous studies e.g., (Zeithmal & Bitner, 2003; Hassali et al., 2013; Silva, 2015).

The findings declared that low customer brand loyalty may lead to price wars, which is in line with previous studies e.g., (Baines & Fill, 2014; Dowling, 2004; Heil & Helsen, 2001;

Kopalle et al., 2009; Spulber, 2009) As well, The results noticed that high price sensitivity may lead to price wars' eruption. Increased price sensitivity caused a decline in demand and occupancy levels decrease. So, hotels cut prices to try to secure bookings which is in line with previous studies e.g., (Dowling, 2004; Heil & Helsen, 2001; Kumar & Meenakshi, 2011; Marn et al., 2004; Salman et al., 2017).

The findings indicated that price wars have a negative impact on hotel profitability. Definitely, price wars minimize companies' profits and contribute to their instability, which is in line with previous studies e.g., (Morrison & Winston, 1996; Zeithmal & Bitner, 2003; Bowie & Buttle, 2004; Lindstädt & Dietl, 2010; Smith, 2012).

The results declared that price wars may lead to less customer loyalty. The lower prices can threaten the survival of firms and may lead the hotel to exit from the market, which is consistent with the previous studies e.g., (Heil & Helsen, 2001; Harald J. van Heerde et al., 2008; Grundey, 2009).

IMPLICATIONS

This study was imposed on the basis that previous researches have largely unnoticed antecedents and consequences of price wars with each other in the same model, especially in a developing country. The present research results have exposed some important implications for hotels' management and academic researchers as well as making an important contribution to the body of knowledge. The findings of this study have pertinent, practical implications for marketing practitioners and managers who design, strategic marketing plans and make pricing decisions.

First, identifying the antecedents of price wars is useful for managers who Should develop strategies and actions aimed at decreasing the eruption of price wars. So, hotel management should be very careful in reducing their prices to impact on the reference price, even for short times. Second, to offset this possible negative result of price wars, the hotels' management should tend to promote value and create competitive advantages. The hotels are responsible for meeting the guest's perception. Third, there could be a potential collaboration among neighboring hotels that could conditionally lessen the rivalry. So, the controlling of the price war among different hotels will leave a significant impact on the industry, healthy rivalry will provide the consumers many benefits of the competition. Fourth, the political power, which represents the Ministry of Tourism should try to set minimum prices for every hotel category in specific destinations.

LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

Like any other research, this study is bound by some limitations that also provide fertile grounds for further research. First, a future line of research is applying our tested model to other populations. Second, this study did not consider cross-cultural, any comparative study from a developed and developing country would make a valuable contribution to the knowledge.

Third, despite the antecedents of price wars explained a substantial amount of its variance; there are some other important factors which have not been included in the research model, representing opportunities for further research. The researcher collected data from five and four star resort hotels in Sharm El Sheikh, Hurghada and Marsa Alam, the future research may be focused on other categories in other cities.

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