ASYMMETRIC INFORMATION, TOURIST SATISFACTION AND QUALITY IN TOURISM

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ABSTRACT: Quality is adopted by the market to resolve asymmetric information problems concerning the relationships between sellers and buyers. Also in the tourist market the quality assumes a particular importance, although its measurement needs different identification criterions. Tourism firms invest in quality and use it as mechanism of signalling, because of increasing market competitiveness. Nevertheless, it is argued in this paper that tourist satisfaction cannot depend directly on high quality good/services, but on the relationship between their expectations and satisfactions. This can explain why tourism market is characterized by different quality standard services.

KEY WORDS: Asymmetric information, Quality, Utility, Tourism market competitiveness, Tourist expectations

1. INTRODUCTION

Quality constitutes an essential component of good and services produced in different sectors of the economy. Moreover, the quality represents one of the procedures adopted by the market to resolve asymmetric information problems concerning the relationships between sellers and buyers. The firms, in fact, invest in quality and use it as mechanism of signalling to reveal information about their offered good and services. The consumers entrust instead a particular value to its recognition, that although not quantifiable, is able to drive and, in some cases to condition, their purchasing decisions.

Generally, it is possible to distinguish at least three quality’s types: the certified one, which is recognized and documented through a system of marks and protocols; the expected one, directly tied up to the consumer’s expectations; and the perceived one, recognizable either from the consumption side, as a result of the consumer experience, or from the production side, as a value attributed by the producer.

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to his goods and services, in absence of special certifications set to the market’s protection.

Also in the tourist market the quality assumes a particular importance, although its definition and measurement introduce different problems, because of the compound nature of the tourist product. As a matter of fact, in the tourist market “quality” is used with different meanings, which are linked to categories of different goods and services, for which of time in time it is necessary to define identification criterions. The attention given to tourist satisfaction, such as quality of different categories of goods and services and holistic dimension of the tourist product, is the most important factor of competition and contributes to confirm the image of a tourist destination in the market. In fact, it is fundamental to maintain and improve the quality of the supply to achieve and develop higher positions in the market. To such end, the quality needs an integrated approach, which involves all the stakeholders and includes supply’s policies, tourist’s needs and expectations and their evaluations.

The paper focuses, from a theoretical point of view, on the asymmetric information problem within the tourism sector. Moreover, it faces the theme of the quality as mechanism of regulation, taking into consideration either tourists’ or entrepreneurs’ perspectives. The study shows that although quality represents an important component for the firms’ and tourist destinations’ competition in the market, the tourist could be satisfied also when there is no quality. In fact, what is important, for the tourist, is to maximize the utility in terms of relationship between utility value, recognised to the tourist goods and services, and level of satisfaction. That can be explaining the tourist market diversification in terms of segments and different quality standards supplied by tourist firms.

2. QUALITY AND ASYMMETRIC INFORMATION

One of the main problems concerning the purchasing behaviors of goods and services regards the complete and correct information from all the subjects involved into the trading process. This topic represents a typical asymmetric information problem, that is, situations where one economic agent knows something that another economic agent doesn’t. Asymmetric information problems bring to another important economic concept, which is referred to the principal – agent problem, known also like the theory of agency. According to this theory, one individual hires another to take some action for him as his agent. Therefore, in this relationship there is an asymmetric information problem, because principal and agent do not know the aim of each other.

Also in the tourism sector the relationship between sellers and consumers is characterised by asymmetric information. If we consider, also, that tourist product has made by more goods and services, asymmetric information problems increase. In fact, just when tourist choices the travel he can incur in some problems (for example, travel type and duration) concerning asymmetric information. Tourist, at the moment of his purchase, does not know what will happen during the travel; he can trust his travel agent and tour operator only. If not, he can trust a well-known brand and his fame or a friend judge and door to door.
To solve asymmetric information problem, sellers can invest in quality. So, a firm that has built its reputation by investing in quality uses to maintain and empower its position trying to avoid going down over the minimum level of the quality standard already offered. On the other hand, the consumer appraises good and services quality comparing their quality standard offered with the that observed in the past (Brosio, 2004).

The quality can be evaluated applying to different methodologies, all of them bringing back to the study of relationship between consumers’ expectations and satisfactions (Parasuraman, Zeithaml, and Berry, 1985). Within tourism framework it is implied that the operators try to provide quality services and to adopt strategies that improve their standards according to tourists’ expectations and opinions (Gustafsson and Johnson, 2003).

However, it is important to remember that in tourism services are divided in categories, usually associated to different quality standards. This means that it is often possible recognise quality not only in the high standard services, but also in the lower standard ones. Then, how the empirical evidence confirms, tourists could be equally satisfied when they evaluate as adequate the relationship between the quality perceived and their expense for goods and services, independently from the standard of the goods and services that they have purchased, and vice-versa (Asero and Gozzo, 2007).

3. QUALITY AND TOURIST EXPECTATIONS

Economists assume the consumer is rational and will thus maximize his total utility that is the satisfaction gained from consuming a given amount of goods or services. Nevertheless, according to the economic behavioural approach, to be rational does not necessarily mean to maximize how much more possible the utility. In fact, the search of the best combination of that amount of products rather than a particular one involves some information costs. Therefore, the individuals take decisions “almost good” and not perfect, because their rationality is limited (Simon, 1955).

In addition, the consumer’s behaviour is determined by satisfaction expectations involved through goods purchasing. About that, the consumer recognises to each product a certain “use value”, which he will compare every time with the achieved level of satisfaction. By following this approach, it is clear that individual choices can be taken not only because of goods and services characteristics, but also as a consequence of a set of elements, tangible and intangible, which affect the satisfaction of individual needs. These elements are also linked to the quality concept and refer to informal protocols more than to formal rules. All of this implies that each consumer has an own evaluation of the quality, which is connected to his consuming experience.

In the tourism sector, quality assumes a relevant importance to direct consumers’ choices, in the sense that it guarantees the market. This purpose become much more important considering that tourism products have prevalently the nature of experience goods, defined by Nelson (1970) as ones whose quality cannot be determined by consumer before purchase. In these cases, then, quality, particularly certified by law and trademark, represents a signalling mechanism either for
consumers, which are interested to know goods and services quality to purchase or for producers, which want to be recognised in the market because of their product’s quality. This is true either when tourist purchases his holiday by distance or on the place, although information costs will be different.

Another aspect concerns tourist expectations within tourism experience. Also in this case, the quality exhibited by the sellers regarding the tourist services and goods can represent a mechanism of signalling (Stigler, 1961). Generally, in fact, goods and services of higher quality have major probabilities to be sold; because sellers will want to communicate the quality and therefore inform the consumers. In case of tourism as \textit{experience good}, tourist could consider the quality/price relationship as a sign, preferring higher price purchases. This kind of estimation method, however, presumes that consumer behave in a rational way, considering a positive relationship between quality and price of the product.

Moreover, it is important to highlight the strategic role played by quality systems in the tourism sector, like ISO, labels and trademarks. All of these represent a way to guarantee the consumers and contribute to increase quality standard supplied by the market, since these systems oblige enterprises to adequate their products to determined quality standards.

On the base of these observations, it is possible to comprehend the relationship between the consumers’ quality expectations and his perceptions regarding the product he consumes. Therefore, the post-purchasing satisfaction/dissatisfaction relationship will be clear (LaBarbara and Mazursky, 1983). Thus, consumers formulate their expectations according to their past experiences, the messages they received from producers, from friends and other general information. Larger is the gap between expectations and perceptions of quality product, higher is the level of dissatisfaction that is perceived. Consumers’ reactions, in this case, can be various going from the customer complaints to the consumer associations’ protection or more simply discouraging the future purchases of friends and family (Kotler, Bowen, and Makens, 2007).

These considerations can be made also for the tourism sector, where disappointed expectations determine negative effects that can be amplified because of tourism product nature and the value tourist confers to the holiday. It is therefore possible to distinguish different circumstances, all of them with negative implications. A case could be the description of the lack of quality services offered which could be taken for an example of the characteristics of a given destination. Similarly, another example is the negative experience caused by a tourism firm. However, in this case the unsatisfactory experience will affect the credibility of that firm rather than the destination itself. Each of these situations requires a constant attention towards tourist satisfaction regarding both the quality standards offered by the tourism firms and also relating to holistic tourist product of a given destination. This helps to improve market competition and destination image of a place.
4. QUALITY AND CONSUMER UTILITY

In some circumstances the asymmetric information problems between sellers and consumers develop from the difficulty to evaluate the difference between the quality perceived and the quality expected. In fact, certain situations may arise when the producer, or seller, has information on the quality of products and services offered which they do not reveal to the customer.

On the other hand, as the consumers have their own idea of what to expect, they compare this to the effective value obtained from the products/services purchased. Again in this case, the lack of adequate information on the products and services quality could compromise the market relationship. All this is evident in the tourist sector where in the case of consumer disappointment the negative effects are amply propagated, producing repercussions on the operators directly involved and indirectly on the other operators of the tourist market and consequently on all tourist destination. Moreover, asymmetric information underlining the difference between the quality perceived by the tourist and the quality offered by the producers could influence negatively the value of the entire tourist experience even when the lacking satisfaction interest only a single element of the offer.

Quality and competition are linked to each other highlighting the quality investment that could become competition investment. Therefore, firms that achieve higher quality standards can improve their market position. Quality can be defined through a set of requisites that tourist products/services must have, including the capacity to satisfy tourist expectations. Although not always a single product/service is able to satisfy all tourist expectations, its quality is always defined by a set of different requisites that apply to the implicit and explicit tourist needs.

It is possible, at this time, to relate the quality with the utility received by the tourist, who plays a very important role when selecting and then purchasing a product. The assumption is that each product/service determines a utility level for the tourist, always depending on its characteristics. Higher level of quality will create a higher utility. This relationship also involves a link between the utility and the structure of the tourists’ preferences. Thus, a larger amount of utility associated to the tourist’s product/service, concerning ones individual wellness, makes that product/service a preferential choice. This hypothesis is based on microeconomic theory of choice that we can synthesize in:

\[ i \text{ is preferable to } j \text{ Iff } U_i > U_j \]

Every consumer chooses among two options on the base of maximum utility. The utility does not derive from the product, by depends on the attributes that characterise the options of choice. In other words, if the decision maker is perfectly informed about the alternatives which he evaluates, including quality, then he will choose the option that maximises his utility (Lancaster, 1966; McFadden, 1974). Therefore, tourist satisfaction affects his system of preferences and his perceived quality of tourist product consumed. Moreover, the satisfaction deriving from past consuming quality tourism experiences increases the probabilities to be satisfy in the future.
A tourist, after having valuated the possible alternatives between two products/services, chooses after evaluating whether the utility value assigned to the first is higher than the second one. The problem arises when the tourist evaluates tourist product as an *experience goods* or *search goods*, in other words evaluates *ex post* or *ex ante*. In the first case, the tourist evaluation follows after the consumption on the base of individual’s basic tastes, which do not change over time but through experience improve and consolidate, as the experience is a cumulative process (*exogenous preferences*) (Becker and Stigler, 1977). Therefore, when the product purchase is repeated over time the tourist acquires quality information. In case of dissatisfaction he will not repeat the purchase. On the other hand, the *ex ante* valuation of the tourist product is taken basically assuming that tourist preferences can be taken as given (*endogenous preferences*), they change over the time on past purchase decisions, usually on account of social conventions or through advertising firms: “*habits creates habits*” (Galbraith, 1963). The tourist could prefer a high quality product for *ex ante* information either through “free sampling” or through direct contact with an already acquired reputation tourist company.

5. QUALITY AND TOURISM CONSUMPTION

Another aspect of tourism to consider is the purchasing decisions are influenced by a set of external events on which the tourist has no power of control. In fact, an individual may dispose of a limited amount of information that one may not foresee events or anticipate the outcome of any decisions. In other words, the tourist moves in a world of uncontrollable situations, which are known as *state of nature*. Consumer decisions are, therefore, influenced by uncertainties and state of nature (McKenna, 1986).

In addition, it should be mentioned a particular category goods and services, defined as *contingent goods and services*, characterised by the fact that their value is conditioned by external events and which the consumer thinks of as pertaining to state of nature. Most times, the consumer is well disposed to pay high prices for these products/services, to avoid the negative impact on the state of nature. In the tourism sector, this problem can be resolved through an insurance policy against problems arising when travelling, or by the tourist himself purchasing quality services guaranteed by trademarks and specialised guides.

To better understand the various mechanisms that regulate the tourist purchase decision, we must consider the example of a tourist looking for a policy to cover all possible inconveniences while travelling and, therefore, willing to pay a higher price for a quality certified service, rather than saving on a lower quality purchase. For this reason to simplify matters we have set up a matrix of choices where one can read the results of a possible combination of actions for the tourists and the state of nature.

Firstly, one supposes that the correspondence between the expected quality (EQ) and the perceived quality (PQ) could be explained in terms of satisfaction or dissatisfaction, therefore:

\[
EQ = PQ \rightarrow \text{Satisfaction}; \text{ if } EQ \neq PQ \rightarrow \text{Satisfaction / Dissatisfaction}
\]
Considering the case of tourist in a situation of uncertainty, who has to decide whether he should or not buy a service with a quality certification. Uncertainty is a fact he cannot know about before the purchase and consumption of the service, whether he will be satisfied or dissatisfied. Still, it is to be seen whether the purchase of the service with a quality certification will give full satisfaction. If EQ and PQ are equal, then, the tourist will receive 100% satisfaction. However, before the purchase of the service may not know if this condition is satisfactory. It will be necessary, therefore, to wait and verify ex post.

The choice of buying a service with a quality certification and one without certification depends on individual requirements, payment possibility, but also on verifying state of nature, which in this case represent the equality and inequality between expected quality (EQ) and perceived quality (PQ) explained in terms of satisfaction or dissatisfaction as shown below in table 1.

<table>
<thead>
<tr>
<th>Table 1. Matrix of tourist choices</th>
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<tr>
<td><strong>State of nature</strong></td>
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<tr>
<td>Possible actions</td>
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<tr>
<td>EQ = PQ</td>
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<tr>
<td>Satisfaction</td>
</tr>
<tr>
<td>EA ≠ PQ</td>
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<tr>
<td>Purchase of quality certified service</td>
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<tr>
<td>Purchase of non certified quality service</td>
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The only thing possible tourist can do before purchasing the service is put forth some conjecture. On the base of his information and consuming habit, tourist can only guess the state of nature considering that he cannot know the results ex ante.

The tourist has 50 probabilities on 100 to obtain satisfaction and vice-versa; he can choose between a quality certification service (QC) and one without certification (QNC). We indicate with y the probability that EQ is equal to PQ and with (1-y) the probability that EQ is not equal to PQ. We define, moreover, x the tourist satisfaction’s expectation and (1-x) the dissatisfaction’s expectation. Whatever the tourist chooses a product with QC or with QNC, he thinks that there will be y probabilities to get a certain satisfaction’s level x, when the event (EQ = PQ) happens and (1-y) probabilities to obtain dissatisfaction’s level (1-x), when the opposite event happens. It is possible to see what happens when tourist chooses to consume a quality certification service (QC) or a quality not certification one (QNC) by simplifying and using numerical values.

We assume, then, the tourist considers a numerical range between 1 and 100 and chooses a number, which is representative of his satisfaction or dissatisfaction expectation. If the tourist purchases a quality certification service, he will assign a satisfaction’s expectation (x) equal to 70 and then his dissatisfaction expectation (1-x) will be equal to 30, as shown before in the table n. 1. On the contrary, when the tourist purchases a quality not certification service, the satisfaction’s expectation (x) will be equal to 30 because he will assign an higher value to the dissatisfaction’s expectation.
(1-x), that in our example will be equal to 70. It represents, for instance, the case where
tourist chooses to purchase a travel with a low cost air flight company, well known for
its delays, but for sure chipper. The traveller actually knows to risk much more and
then he has inferior satisfaction’s expectations.

Finally, we have that in the first case, (perspective A) the tourist has 50/100
probabilities to get a certain satisfaction’s level (equal to 70) and 50/100 probabilities
to obtain a certain dissatisfaction’s level (equal to 30).

\[ \text{Perspective A} = \{(0.50, 70); (0.50, 30)\}. \]

In the second case (perspective B), the tourist risks more and more in term of
dissatisfaction, purchasing a product with QNC.

\[ \text{Perspective B} = \{(0.50, 30), (0.50, 70)\}. \]

At this point, how can the tourist choose among two perspectives? To answer,
it is necessary to remember the concept of expected value; it means the value obtained
when the tourist chooses of buying a service with a quality certification and one
without certification more and more times. The expected value can be calculated
summarising, for all the state of nature, the amount of satisfaction/dissatisfaction levels
and their probability:

\[ x \times y + (1-x)(1-y). \]

On the base of the numerical example we already saw, we will have:

\[
\begin{align*}
\text{Expected value of A} &= 0.50 \times 70 + 0.50 \times 30 = 50 \\
\text{Expected value of B} &= 0.50 \times 30 + 0.50 \times 70 = 50
\end{align*}
\]

The two equations present the same expected value and it means that the
tourist face a game defined equitable. If he precedes many times to purchase a quality
certification service and one without certification, at the end he will get the same result
in average. In other words, the tourist before purchasing has an expectation that only
after consuming the service could valuate in terms of satisfaction/dissatisfaction. Thus,
the expected value is indifferent if service has quality certification or not. On the other
side, the tourist can verify the satisfaction of his expectations in terms of quality only
when consumes the product purchased. After that, it is possible to enhance that tourist
is satisfied when expectations are equal to satisfaction, independently by the choice of
quality certification service. It could mean that the tourist can be satisfied also when
purchases a product without quality certification or vice-versa he can be unsatisfied
when consumes a quality certification service.

This condition is useful to explain why in the tourist market there is a strong
segmentation, first of all for what concerns single element of tourist product as
transport, accommodation and restaurants, which are characterised by different
quality’s standards.

It is clear, however, that the result can be varied if we take into consideration,
for instance, the kind of tourist service, the time to travel, the fidelity to the tour
operator, etc. The choice depends on tourist behaviour versus the risk and the state of nature. It needs, therefore, to understand if tourist is opposed, inclinable or neutral to the risk. From what has been affirmed so far, in case of asymmetric information problems there are variables, which influence individual choices. Some of them depend on the state of nature and influence the choice in relationship to the probability that certain events happen or not.

6. TOURISM FIRMS AND INVESTMENT IN QUALITY

The firms’ decisions to invest in quality to improve their market reputation are influenced by the consumers’ behaviour. Consumers, in fact, become more informed about goods/services offered by firms and compare among them different firms’ products. Particularly, if the consumer can observe the quality ex post as it happens in the tourist sector, sellers will invest in quality only if their profit’s expectations exceed the costs supported for doing it (Klein and Leffer, 1981; Shapiro, 1983). However, sellers are free to choose if invest or not in quality; if they choose to invest, they can also choose among different quality’s levels and prefer to produce with low or high quality comparing maximum profit deriving by a certain level of quality and maximum costs saving linked to a low quality.

In a competitive market, firms have incentives to invest in quality. But, because of quality is expensive the increasing competition may lead to lower quality and consequently reduce prices (Kranton, 2003; Bar-Issac, 2005). In the tourist market, sellers are usual to have this approach when they want to gain or maintain market’s share, fixing their strength on low prices. But, naturally, something different happens when sellers prefer to invest in quality to maintain the reputation of the tourist destination or because they want to have a good market’s position, independently by the price (Asero, Gozzo, and Patti, 2008).

This can be specified in analytical way. We consider that a firm can offer a product with two different quality levels, \( s = 0 \) (low quality) and \( s = 1 \) (high quality), their costs will be respectively equal to \( c_0 \) and \( c_1 \), with \( c_1 \) more than \( c_0 \). Every consumer takes utility by consuming the product, which is equal to \( q s - p \) (achieves 0 if he does not consume the product). Discount factor is \( d = 1/(1+r) \). Consumers know the good’s quality produced at \( t \) time, at the beginning of \( t+1 \) period. How the information concerning the quality at \( t \) time is used by consumers, which have it at the \( t+1 \) period? We suppose consumers think that firm at \( t+1 \) time supplies the same quality offered at \( t \) time (\( s_{t+1} = s_t \)). The firm fixes a price \( p \) and always offers a high quality: however, if the opposite occurs and a low quality service or product is produced and this is a constant; if the firm fixes a price equal to 0 (0 = constant), consumers will stop purchasing the product as a result. When enterprise produces high quality, profits will be equal to:

\[
(p-c_1)(1+d+d_2+...) = (p-c_1)/(1-d) ; \quad (1)
\]

when it produces lower quality, profits will be equal to:

\[
p - c_0. \quad (2)
\]
High quality is produced when:

\[
\frac{(p-c_1)}{(1-d)} = \frac{1+r}{r}(p-c_0) \quad \text{or} \quad p - c_1 \geq r(c_1 - c_0);
\]  

(3)

where \(r\) is the interest rate during the time among different purchasing.

The firm is interested to produce higher quality when achieves a prize \(p - c_1\) at least equal to \(r(c_1 - c_0)\). The prize depends on the firm’s price \(p < q\), the difference among production costs of two quality levels and on interest rate \(r\). Bigger is the time interval among different purchasing, bigger will be \(r\) value; while the incentive to produce with higher quality will be minor. At this point, considering a fixed time period \(T\), the firm will be choosing lower quality: at \(T\) time the firm does not have any interest in producing high quality, at \(T-1\) time, the firm knows that its choice won’t influence the quality in the future period and so will choose low quality and so on.

Nevertheless, it is evident that the local background in which tourist firms operate plays a fundamental role in the choices of quality investment. In fact, as empirical evidence shows, in some destinations, firms choose not to invest in quality or not to give importance to it. In these cases, firms tend to influence each other, according to an isomorphism process (Powell and DiMaggio, 1991), making homogeneous standard offers. It happens, for instance, where the accommodation offer is made up of houses to let for which quality is guaranteed by the common good sense of the owners or in unknown areas by the tourism market. The same way, the isomorphism process could lead the firms to invest in quality which increase the quality of the destination offer and consequently its competition.

Finally, the investment decision in quality by firms is given by the speed with which unsatisfied consumers identify a new firm to which turn to. In this case, the more informed consumers are able to find firms with a better reputation, the less forgiving of unsuccessful enterprise they are. If this firm is not given a “second chance” options to show the product/service quality, the consumers’ reaction could induce her to reduce incentive to invest in quality and consequently to reduce its quality offer. This investment choice is linked, also in this case, to the consumer’s reaction, which in the case of tourism, is usually very strong due to its value not only economical that the holiday has. However quality investment is a opportunity to ameliorate enterprises market position.

7. CONCLUSIONS

Quality represents an important characteristic of the tourist market either for what concerns the supply side, because increases firms’ goods/services competitivenes, or for what is the demand side, characterised by consumers more exigent and well informed. The actual evolution of care tourist legislative system underlines the necessity to produce tourist products and services of high quality. It is a point even in the tourist sector to stimulate operators to be attentive to consumers’ needs and, at the same time, to correct the negative effects deriving by asymmetric information which the tourists most of the time cannot control.
Quality either as a mean of consumer guarantee or as method adopted by firms to be recognised in the market, tends even in the tourist market to be submitted to certification’s system and to trademarks. However, it is true that, also without guarantees, it is possible to find another important quality dimension: the perceived quality. Tourists and operators have their idea of quality that is not measurable. It can be identified by the judges on quality expressed by the operators of a destination, which is a proxy of the standard offered on their territory.

On the other hand, tourists identify quality also as result of their tourism experience. Then, for higher satisfaction it is possible to associate higher perceived quality of goods and services consumed and, therefore, higher quality will characterise higher utility’s levels. It follows that tourist satisfaction cannot depend directly on the goods/services certified quality, but on the relationship between their expectations and satisfactions.

This, according to us, offers an explanation why tourist market is fragmentised in relation to the different service categories. These are characterised by different quality standard that not always are recognised by either certifications or trademarks.

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