

Emerald Insight



Journal of Product & Brand Management

How are prices set? An exploratory investigation in the Greek services sector
George Avlonitis Kostis Indounas

Article information:

To cite this document:
George Avlonitis Kostis Indounas, (2006),"How are prices set? An exploratory investigation in the Greek services sector", Journal of Product & Brand Management, Vol. 15 Iss 3 pp. 203 - 213
Permanent link to this document:
http://dx.doi.org/10.1108/10610420610668649

Downloaded on: 03 September 2014, At: 01:37 (PT)
References: this document contains references to 25 other documents.
To copy this document: permissions@emeraldinsight.com
The fulltext of this document has been downloaded 1429 times since 2006*

Users who downloaded this article also downloaded:

George J. Avlonitis, Kostis A. Indounas, (2007),"An empirical examination of the pricing policies and their antecedents in the services sector", European Journal of Marketing, Vol. 41 Iss 7/8 pp. 740-764

Kostis Indounas, George J. Avlonitis, (2009),"Pricing objectives and their antecedents in the services sector", Journal of Service Management, Vol. 20 Iss 3 pp. 342-374

Kostis Indounas, (2009),"Successful industrial service pricing", Journal of Business & Industrial Marketing, Vol. 24 Iss 2 pp. 86-97

Access to this document was granted through an Emerald subscription provided by 384482 []

For Authors

If you would like to write for this, or any other Emerald publication, then please use our Emerald for Authors service information about how to choose which publication to write for and submission guidelines are available for all. Please visit www.emeraldinsight.com/authors for more information.

About Emerald www.emeraldinsight.com

Emerald is a global publisher linking research and practice to the benefit of society. The company manages a portfolio of more than 290 journals and over 2,350 books and book series volumes, as well as providing an extensive range of online products and additional customer resources and services.

Emerald is both COUNTER 4 and TRANSFER compliant. The organization is a partner of the Committee on Publication Ethics (COPE) and also works with Portico and the LOCKSS initiative for digital archive preservation.

*Related content and download information correct at time of download.

Downloaded by ANADOLU UNIVERSITY At 01:37 03 September 2014 (PT)

How are prices set? An exploratory investigation in the Greek services sector

George Avlonitis and Kostis Indounas
Department of Marketing and Communication, Athens University of Economics and Business, Athens, Greece

Abstract
Purpose – The purpose of the present study is to explore the pricing methods that service companies adopt in order to set their prices, along with the service, organizational and environmental characteristics that influence these methods.
Design/methodology/approach – To achieve the research objectives, data were collected through personal interviews in 170 companies operating in six different services sectors in Greece.
Findings – The study concluded that the two most popular pricing methods are the traditional "cost-plus" method and "pricing according to the market's average prices", while all the other methods (including customer-based methods) are adopted by a small number of companies in the sample. Similarly, "service cost" along with "competitors' prices" were found to be the two most important characteristics that are taken into consideration when setting prices.
Research limitations/implications – Despite the importance attached to cost and competitive issues when setting prices, pricing decisions need to be treated from a more "holistic" approach, where apart from cost and competition, emphasis will also be placed on other company and environmentally related characteristics, including customers. The significance of these findings notwithstanding, the context of the study is a caveat, since it limits the ability to generalize the results to other countries.
Originality/value – The contribution of the paper lies in the fact that it presents the first attempt to examine empirically the potential impact of these characteristics on the pricing methods used.

Keywords Pricing, Services, Organizational philosophy, Business environment, Grecee

Paper type Research paper

Downloaded by ANADOLU UNIVERSITY At 01:37 03 September 2014 (PT)

Introduction

According to Shipley and Jobber (2001, p. 301), "price management is a critical element in marketing and competitive strategy and a key determinant of performance. Price is the measure by which customers judge the value of an offering, and it strongly impacts brand selection among competing alternatives". Within the same context, Potter (2000) has pointed out that pricing is the only element of the marketing mix that generates revenues for the firm.

However, there are certain contradicting views regarding the importance of pricing. On the one hand, there are empirical studies, which show that criteria such as reliability, service quality, and time delivery are often regarded as more important when selecting a vendor (Ghymn *et al.*, 1999; Gil and Sanchez, 1997), while on the other hand, there are empirical studies that have supported empirically the significance attached to pricing when choosing among competitive brands (Huber *et al.*, 2001; Monteiro and Lucas, 2001).

The current issue and full text archive of this journal is available at
www.emeraldinsight.com/1061-0421.htm



Journal of Product & Brand Management
15/3 (2006) 203–213
© Emerald Group Publishing Limited [ISSN 1061-0421]
[DOI 10.1108/10610420610668649]

This fact notwithstanding, there seems to be a lack of interest in the field of pricing among marketing academics. Ten years ago, Nagle and Holden (1995) suggested that pricing is the most neglected element of the marketing mix. However, even a decade later, things do not seem to have changed dramatically. As Hinterhuber (2004, p. 765) has suggested:

> Not only managers, but also academics, have shown little interest in the subject of pricing. Publications on this subject are not anywhere as numerous as publications on other classical marketing instruments such as product, promotion and distribution.

In a sense, the little interest in the field of pricing is paradoxical given its importance, as underlined above. A possible reason for this may be that there is a tendency within the marketing discipline to suggest that a sustainable competitive advantage can be achieved by placing the emphasis not on price but on non-price elements, such as product differentiation, value, service quality and branding (Boone and Kurtz, 2002).

The lack of interest among marketing academics in the field of pricing is even more evident in the case of services, where most of the few studies that have been conducted tend to be descriptive in their nature, focus on a single sector of operation, and rely on very small samples (e.g. Meidan and Chin, 1995; Morris and Fuller, 1989). Hoffman *et al.* (2002, p. 1015) provide some explanations for this:

> The absence of a dominant research agenda or a well-developed research stream in service pricing contributes to this problem [...] The existing body

Journal of Product & Brand Management
Volume 15 · Number 3 · 2006 · 203–213

of service pricing literature tends to be highly specific [...] fragmented and [...] unrelated.

However, the distinctive characteristics of services necessitate a closer look at the way they are priced (Docters *et al.*, 2004).

Based on the above arguments, the present paper endeavours to contribute to this neglected field by investigating the pricing practices of service organizations. In particular, the pricing methods as well as the service, organizational and environmental characteristics that influence these methods will be examined. Thus, the objectives of the current research are as follows:

- to examine the pricing methods that service organizations follow; and
- to investigate the service, organizational and environmental characteristics that influence pricing decisions.

Literature review

Pricing methods

Pricing methods refer to the specific formulas used in order to levy a price. These formulas can range from highly sophisticated ones (e.g. break-even analysis) to rather simple ones (e.g. pricing according to the market's average prices). Moreover, the complexity of pricing decisions imposes the need to adopt more than one pricing method. For instance, a particular pricing method might be used in everyday pricing decisions, while another method may be adopted in some special circumstances (Monroe, 2003).

Following the classification put forward by Avlonitis and Indounas (2005) and based on a detailed review of the literature on service pricing (e.g. Barron and Harris, 2003; Kasper *et al.*, 2000; Lovelock and Wirtz, 2001; Zeithaml *et al.*, 2006), Table I presents 12 pricing methods which fall into three large categories (cost-based, competition-based and customer-based).

Regarding cost-based methods, empirical research has shown that the cost-plus method in particular is the most widely used method, especially among small companies. The rationale of this method is to add a percentage mark-up to the cost of producing and delivering a service. However, there are certain disadvantages related to this method, namely the fact that it disregards market conditions, along with the difficulty in allocating fixed costs in order to calculate the unit cost (Zeithaml *et al.*, 2006).

With reference to the competition-based methods, competitors' prices and actions seem to be the main characteristics that trigger pricing decisions (Monroe, 2003). Companies have three main options under these approaches: to price above, below or similar to their competitors, depending on the extent to which their product is differentiated and the intensity of competition in the market. In the majority of industries, large companies set the rules of the game, leaving smaller companies with a small price discretion and no other option than to follow the leaders' pricing initiatives (Heil and Helsen, 2001). A study by Carson *et al.* (1998) in 40 small and medium-sized UK enterprises has confirmed this argument empirically.

Customer-based methods necessitate examining the value that customers attach to the service. Zeithaml *et al.* (2006, p. 526) define value in the case of services with one of the four following ways:

1 value is low price;
2 value is everything I want in a service;
3 value is the quality I get for the price I pay; and
4 value is all that I get for all that I give.

The methods that fall under this category have the advantage that lead to prices that customers are willing to pay. This fact notwithstanding, there is an inherent difficulty in estimating the value associated with a service.

Table I Pricing methods

Cost-based	Cost-plus method
	Target return pricing
	Break-even analysis
	Contribution analysis
	Marginal pricing
Competition-based	Pricing similar to competitors or according to the market's average prices
	Pricing above competitors
	Pricing below competitors
	Pricing according to the dominant price in the market
Customer-based	Perceived-value pricing
	Value pricing
	Pricing according to the customers' needs

Source: Avlonitis and Indounas (2005)

Service, organizational and environmental characteristics that influence pricing decisions

Pricing decisions are influenced by both company-oriented and environmentally oriented characteristics (Monroe, 2003). Regarding the former, they can be further sub-divided into service (e.g. cost) and organizational characteristics (e.g. marketing objectives). Lovelock and Wirtz (2001) describe the notion of the "pricing tripod", which suggests that cost, competition and customer-based characteristics are the most important ones when setting prices.

The cost of delivering and producing a service is the starting point or the "floor" for the tripod. Costs can be divided into fixed and variable ones. However, a problem that many service providers face is how to estimate the unit cost of each service given the fact that different services share the same costs in many cases. Sophisticated accounting methods such as activity-based costing might provide a solution to this problem (Zeithaml *et al.*, 2006).

Customer-related characteristics such as the value that customers attach to the service, their individual characteristics or their price elasticity formulate the "ceiling" of the tripod representing the maximum monetary sacrifice that customers are willing to make in order to get the service. Competitors' characteristics such as their prices or their expected reactions are somewhere in the middle of the tripod. The price that will be finally set and will be accepted by both the company and its customers is a kind of a compromise between all these characteristics.

However, apart from the above characteristics, other significant characteristics that have an impact on the prices

Downloaded by ANADOLU UNIVERSITY At 01:37 03 September 2014 (PT)

set include the degree of a service's innovation, the corporate and marketing strategy and objectives, macroeconomic characteristics and the market structure in which a company operates, among others. Shipley and Jobber (2001) have underlined that it is of paramount importance to place the emphasis on a combination of service, organizational and environmental characteristics if effective pricing decisions are to be made. A review of the literature on pricing of services identified a number of service, organizational and environmental characteristics that influence pricing decisions, which are presented in Tables II-V (e.g. Kasper *et al.*, 2000; Lee and Ng, 2001; Lovelock and Wirtz, 2001).

Research methodology

Sample description

In order to achieve our research objectives, a cross-sectional study among seven different sectors was conducted. More specifically, the research focused on the following industries: banks, insurance companies, transportation and shipping companies, airlines, information technology companies, medical services and education services. It is interesting to note that these sectors contribute around 25 per cent of the Greek domestic product. However, qualitative research that was conducted through 26 personal in-depth interviews in the initial phase of the research indicated that prices in the education services sector are highly regulated. Thus, it was decided to exclude that particular sector from our study.

The sampling frame (ICAP's *Directory*, a subsidiary of Gallup in Greece) included 1,495 companies in total. However, only those companies that had a total turnover of more than €1.5 million were included in our study (558 in total), since pricing in smaller companies was expected to be a top management decision. Due to changes in addresses and the closing of some of these companies, the sample was finally reduced to 464 companies.

Downloaded by ANADOLU UNIVERSITY At 01:37 03 September 2014 (PT)

Table II Sector of operation and pricing methods

Percentage of companies	Target return pricing ($n = 48$)	Pricing according to the market's average prices ($n = 94$)
Transportation-shipping companies	55.61	61.98
Insurance companies	20.72	50.43
Medical services	16.13	63.66
Information technology companies	27.32	31.82
Airlines	12.53	65.77
Banks	35.24	50.51
	χ^2 12.940	χ^2 11.780
	df 5	df 5
	Significance 0.024	Significance 0.038

Table III Mean scores and factor analysis of the service characteristics

	Mean	Standard deviation	Factor 1: service applications	Loading Factor 2: service uniqueness	Factor 3: service cost
Service standardization	2.08	1.33	0.81		
The extent to which the service can be tested	2.12	1.43	0.71		
Service automation	2.22	1.44	0.67		
Service customization	2.39	1.52	0.64		
The time required for completing the service	2.54	1.76	0.58		
Service availability	2.54	1.57	0.56		
The risk associated with the service	2.66	1.59	0.46		
The extent to which the service is human or capital based	2.12	1.40	0.45		
Service differentiation	2.61	1.57		0.82	
Service innovation	2.56	1.62		0.73	
The type of the service	3.41	1.59		0.61	
The quality of the service	3.61	1.56		0.49	
The cost of the service	4.15	1.13			0.83
Eigenvalue			5.34	1.33	1.02
Cronbach's alpha			0.85	0.75	
Percentage of variance explained			41.28	10.20	7.84
Cumulative percentage of variance explained			41.28	51.48	59.32

Notes: KMO test = 0.87; Bartlett test of sphericity = 859.31; significance = 0.000

Table IV Mean scores and factor analysis of the organizational characteristics

	Mean	Standard deviation	Loading: Factor 1: corporate and marketing objectives and strategy	Loading: Factor 2: corporate philosophy
Marketing objectives	3.06	1.64	0.88	
Marketing strategy	2.76	1.65	0.84	
The objectives of other departments within the company	2.19	1.42	0.68	
Corporate objectives	3.49	1.56	0.62	
Corporate strategy	3.59	1.59	0.57	
The company's organizational structure	2.46	1.50		0.89
The company's culture	2.62	1.59		0.87
Eigenvalue			3.42	1.21
Cronbach's alpha			0.83	0.81
Percent of variance explained			48.83	17.23
Cumulative percent of variance explained			48.83	66.06

Notes: KMO test = 0.74; Bartlett test of sphericity = 466.35; significance = 0.000

Downloaded by ANADOLU UNIVERSITY At 01:37 03 September 2014 (PT)

After a personalized pre-notification letter that was sent to the CEO of each company in order to explain the research objectives and a subsequent telephone call, 170 companies agreed to take part in the study. This represents a response rate of 36.7 per cent, which is similar to other studies in the field of pricing (Tzokas *et al.*, 2000). Of the responding companies, 10 per cent were banks (17 in total), 17.1 per cent were insurance companies (29 in total), 32.8 per cent were transportation-shipping companies (56 in total), 11.2 per cent were airlines (19 in total), 12.4 per cent were information technology companies (21 in total) and 16.5 per cent were medical services (28 in total).

Data collection

Data were collected through a ten-page questionnaire that was completed through personal interviews. A pretest among two academics and ten practitioners was conducted in order to increase its validity. Moreover, it was designed in such a way so that data for specific services (one in each company), which had been priced recently, could be collected.

Respondents within companies were selected on the basis of whether they had a deep knowledge of the company's pricing strategies. At the same time, they had to be senior enough to provide information on these strategies. Based on the 26 in-depth interviews that were conducted in the initial phase of our research, it emerged that in smaller companies the determination of prices was very much a top management decision, while in larger companies the marketing, sales (where a marketing manager did not exist) or financial manager had the main responsibility for setting prices. Consequently, in the smaller companies the managing director or an equivalent was typically the respondent, while in the larger companies the marketing, sales or financial director provided the results.

Measures

Pricing methods

In order to measure the pricing methods followed, the operationalization put forward by Avlonitis and Indounas (2005) was adopted. More specifically, a binary scale (0 = no, 1 = yes) was adopted in order to examine which of the 12 pricing methods (presented in Table I) had been used by the companies in our sample in order to set the price for the specific service that they had chosen for discussion.

Service, organizational and environmental characteristics that influence pricing decisions

Respondents were provided with a list of 41 service, organizational and environmental characteristics (presented in Tables III-V) and they were asked to indicate on a five-point scale (1 = not important at all, 5 = very important) how important they considered each one of them to be in pricing the service in question.

Data analysis and research results

Pricing methods

The most popular method among the companies in our sample seems to be the simplest and safest, "cost-plus" (58.2 per cent, or 99 companies in total used this method), while "pricing according to the market's average prices" is the second most common option (55.3 per cent, or 94 in total). These methods are the only ones used by the majority of the companies in our sample, perhaps due to the ease associated with their practical implementation. It is characteristic that all the rest of the methods score far less:

- target return pricing (28.2 per cent, or 48 in total);
- pricing according to the dominant price in the market (27.6 per cent, or 47 in total);
- pricing according to customers' needs (27.1 per cent, or 46 in total);
- break-even analysis (24.1 per cent, or 41 in total);
- perceived value pricing (23.5 per cent, or 40 in total);
- value pricing (22.9 per cent, or 39 in total);
- pricing below competitors (14.1 per cent, or 24 in total);
- pricing above competitors (9.4 per cent, or 16 in total);
- contribution analysis (7.6 per cent, or 13 in total); and
- marginal pricing (1.8 per cent, or three in total).

Thus, while cost and competitors' prices seem to be the basis for setting prices, limited emphasis is given to customers' demands and needs. Certainly, the marginal role of customer-based methods is paradoxical given the fundamental role of customer interaction in the services sector. However, it might be attributed to the difficulty associated with determining

Downloaded by ANADOLU UNIVERSITY At 01:37 03 September 2014 (PT)

Table V Mean scores and factor analysis of the environmental characteristics

			Loading					
	Mean	Standard deviation	Factor 1: macroeconomic environment	Factor 2: customers' characteristics	Factor 3: intensity of competition	Factor 4: political and social environment	Factor 5: bargaining power of suppliers and buyers	Factor 6: competitive reactions
The future expected level of interest rates	1.81	1.32	0.90					
The existing level of interest rates	1.91	1.38	0.88					
The future expected level of other macroeconomic characteristics	2.06	1.39	0.84					
Other macroeconomic characteristics (e.g. inflation, GDP)	2.22	1.44	0.79					
The process that customers adopt in order to evaluate the service	2.97	1.61		0.84				
The value that customers attach to the service	3.13	1.65		0.79				
Customers' personal characteristics	3.03	1.54		0.68				
The distribution channel that customers use	2.44	1.57		0.48				
Customers' price elasticity	2.58	1.51		0.46				
Competitors' prices	3.76	1.34			0.87			
The intensity of competition among existing companies	3.41	1.47			0.83			
Competitors' costs	2.94	1.55			0.71			
The level of government intervention	1.75	1.24				0.84		
Existing regulation regarding pricing practices	2.05	1.43				0.84		
The existing values in society	1.86	1.34				0.57		
Statistical data	1.78	1.37				0.42		
Suppliers' bargaining power	2.61	1.68					0.82	
Buyers' bargaining power	3.10	1.64					0.74	
The threat of new competitors entering into the market	2.25	1.43						0.82
The threat from substitutes	2.08	1.39						0.62
Expected competitive reactions	2.76	1.54						0.53
Eigenvalue			5.50	2.71	1.84	1.51	1.23	1.05
Cronbach's alpha			0.91	0.78	0.79	0.70	0.62	0.64
Percentage of variance explained			28.20	12.92	8.75	7.19	5.87	5.01
Cumulative percentage of variance explained			28.20	39.13	47.87	55.06	60.93	65.94

Notes: KMO test = 0.79; Bartlett test of sphericity = 1,499.06; significance = 0.000

Journal of Product & Brand Management
Volume 15 · Number 3 · 2006 · 203–213

customers' demands and needs along with the value that they attach to the service in practice and pricing according to them (Zeithaml *et al.*, 2006).

In order to examine the extent to which the pricing methods are differentiated across the six different service sectors, chi-square analyses were conducted. Two of these analyses were found to be statistically significant: "target-return pricing" and "pricing according to the market's average prices".

With reference to the first method, Table II reveals that transportation-shipping companies are the only ones that use this method when setting prices (55.6 per cent). This finding might be attributed to the nature of this method, which aims at a satisfactory rate of return on a company's investment. Thus, the large investments associated with transportation and shipping services might require the adoption of the method in question in order to cover these investments.

Regarding the "pricing according to the market's average prices" method, this method scores top in all industries, with the exception of information technology services (Table II). This finding can be explained by the nature of the information technology services, which are customized and tailor-made to each customer's individual needs, leading to difficulty in being copied by competitors. Moreover, the rather fragmented information technology market in Greece imposes a further difficulty in studying competitive prices.

Downloaded by ANADOLU UNIVERSITY At 01:37 03 September 2014 (PT)

Service characteristics

Table III presents the mean scores of each service characteristic that influences pricing decisions. What can be seen from this table is that the "cost of the service" seems to be the most important characteristic followed by the "quality of the service" and the "type of the service". These findings indicate the significance of covering the cost for ensuring the service's viability in the market along with the importance that customers attach in receiving high-quality services. Furthermore, they suggest that different categories of services have different characteristics that make their pricing process unique (Lovelock and Wirtz, 2001). On the other hand, all the other characteristics have a minimum influence on the pricing behavior of the companies in our sample.

An examination of the correlation matrix of the 13 service characteristics revealed that many of these characteristics were interrelated. This led to the conclusion that these initial characteristics could be reduced in a subset of major underlying dimensions-factors. Thus, a factor analysis (principal components analysis, Varimax rotation) was performed, which is presented in Table III. On the basis of eigenvalues >1.0 and factor loadings >0.4, three factors were identified: "service applications", "service uniqueness" and "service cost" (single factor).

These three factors are in line with the suggestions made by a number of authors, such as Hoffman *et al.* (2002), regarding their significance in the services sector. More specifically, "service cost" reflects the importance of covering the cost in order to ensure the service's long-term presence in the market, while "service uniqueness" indicates the importance of rendering high-quality and differentiated services that cannot be copied easily. "Service applications" consists of characteristics (e.g. service availability and automization) that have been proposed to differentiate the pricing of services from the pricing of physical goods.

Organizational characteristics

With reference to the organizational characteristics, Table IV reveals that the most important characteristics are related to the "corporate strategy" and the "corporate objectives", which reflect the need to incorporate pricing strategy into the overall corporate objectives and strategy (Kasper *et al.*, 2000). On the other hand, the "marketing objectives" and the "marketing strategy" seem to be regarded as being less important. This is an interesting finding and might be attributed to the nature of companies that are investigated in the current study, which possess confusing views about the role and significance of marketing, leading to its underestimation when levying prices. Previous studies that have been conducted in Greece have also found a lack of a marketing orientation, especially in business-to-business sectors.

It appears that all the other characteristics seem to influence the pricing behavior of the companies in our sample to a minimum extent. As in the case of the service characteristics, a factor analysis (principal components analysis, Varimax rotation) that was conducted among the seven organizational characteristics revealed two factors with eigenvalues >1.0 and factor loadings >0.4, namely "corporate and marketing objectives and strategy" and "corporate philosophy" (Table IV). These factors indicate that pricing decisions are integral part of a larger marketing effort, while at the same time they must be coordinated with the company's overall goals and long-term strategies (Monroe, 2003).

Environmental characteristics

Regarding the environmental characteristics, Table V presents the mean scores of each characteristic, where it can be seen that "competitors' prices" is the most important characteristic that influences pricing decisions followed by "the intensity of competition among the existing companies". These findings reflect the rather competitive environment that exists in the sectors investigated in our study which tends to force companies to levy their prices by taking into consideration their competitors' prices and actions.

The third most important characteristic is "the value that customers attach to the service" followed by "the bargaining power of buyers" and "the customers' personal characteristics", suggesting a limited customer orientation, which is in line with the limited marketing orientation that was found among the companies in our sample when it comes to their pricing methods. The mean scores of all the other characteristics are below 3, indicating their low importance.

Moreover, a factor analysis (principal components analysis, Varimax rotation) that was conducted among the 21 environmental characteristics revealed six factors:

1 "macroeconomic environment";
2 "customers' characteristics";
3 "intensity of competition";
4 "political and social environment";
5 "bargaining power of suppliers and buyers"; and
6 "competitive reactions".

The significance of the aforementioned factors lies in the fact that they describe the structure of a market, which has been found to exert an influence on a company' pricing behavior (Avlonitis and Indounas, 2004). Following Porter's famous classification, a market's structure can be further sub-divided into the micro-environment (i.e. "customers' characteristics",

Downloaded by ANADOLU UNIVERSITY At 01:37 03 September 2014 (PT)

"intensity of competition", "bargaining power of suppliers and buyers" and "competitive reactions") and the macro-environment ("macroeconomic environment", "political and social environment").

Moreover, some interesting insights emerged when the extent to which the service, organizational and environmental characteristics are differentiated across the six service sectors were examined. Table VI reveals that insurance companies are mainly influenced by company-related factors – namely their cost base, and the applications and uniqueness of their services – without, however, disregarding the conditions surrounding their political and social environment.

Banks are influenced by the economy's macroeconomic indices (e.g. interest rates), as might be expected. Moreover, they endeavour to integrate their pricing strategy into their overall corporate and marketing strategy and objectives. Regarding the importance of marketing in particular, this finding is interesting and may be explained by the nature of the Greek banking industry, which is dominated by large companies that exist in the market for many years and have established well-organized marketing departments.

Transportation-shipping companies design their pricing strategy by taking into account the bargaining power of their suppliers and their customers. Suppliers exert a significant influence on these companies' costs (e.g. cost of petroleum), while some categories of customers (especially large ones) may have the power to negotiate prices and impose their will.

Information technology companies give a close eye to their customers' characteristics due to the customized character of these types of services. On the other hand, airlines and medical service providers do not seem to have a clear pricing behavior, perhaps due to the confusing and in some cases "blurred" role of private and public companies characterizing these sectors in Greece.

The impact of service, organizational and environmental characteristics on pricing methods

In order to examine the impact of the service, organizational and environmental characteristics on the pricing methods that are adopted by the companies in our sample, a logistic regression analysis with the maximum likelihood ratio method was carried out. The specific analysis "predicts the probability of a dependent variable Y occurring given known values from a predictor variable X or a set of predictor variables" (Field, 2000, p. 164), and is appropriate when the dependent variable is of a qualitative nature.

In our study, the 12 pricing methods were considered as the dependent variables, while the service, organizational and environmental characteristics were considered as the independent variables. In order to avoid the possibility of multicollinearity, the factor dimensions, which were derived from the factor analyses that were presented previously, were used as the independent variables.

After performing 12 logistic regression analyses, five were found to be statistically significant, and these are presented in Table VII. Two of them, "cost-plus" and "target return pricing" refer to cost-based methods; one of them, "perceived-value pricing", refers to demand-based methods; the other two, "pricing according to the dominant price in the market" and "pricing below competitors", refer to competition-based methods.

Cost-plus method

The analysis pertaining to the "cost-plus method" revealed that "customers' characteristics" and "competitors' characteristics" have a negative impact on the pricing method in question (negative coefficients *b*). This finding does support empirically the suggestions made by a number of authors (e.g. Shipley and Jobber, 2001) regarding the fact that a severe caveat of the method in question is that it disregards market conditions. On the other hand, the characteristic of "service uniqueness" positively influences the specific method, which might be explained by the fact that rendering a unique service necessitates high investments and expenses: a cost-plus method might ensure that these costs are covered.

Target return pricing

The "target return pricing" method was found to be influenced positively by:

- the "corporate philosophy";
- the "corporate and marketing objectives and strategy";
- the "macroeconomic environment"; and
- the "service cost".

With reference to the first three characteristics, these findings might be explained by the nature of this method, which relies on the achievement of a satisfactory return on the company's potential investments that may be favoured by the company's corporate and marketing objectives (e.g. expansion into new market segments) and the characteristics of their macroeconomic environment (e.g. favourable economic climate). The positive influence of the "service cost" is expected, given the fact that the pricing method in question may be classified as a cost-based one.

Perceived-value pricing

With reference to the "perceived-value pricing" method, its adoption was found to be associated positively, as we should expect, with "customers' characteristics". Moreover, the positive impact of the "corporate philosophy" is in line with the suggestions made by Zeithaml *et al.* (2006) regarding the need for a corporate culture that facilitates and even rewards pricing practices that are based on the value that customers attach to a service.

Pricing according to the dominant price in the market

Regarding this method, it was found to be influenced positively, as we should expect, by "competitors' characteristics". The specific method is also influenced positively by the "corporate philosophy", the "macroeconomic environment" and the "bargaining power of suppliers and buyers". These findings indicate that the decision to set a price similar with that imposed by the leaders in a market is fundamentally a matter of a company's managerial culture and philosophy. However, it might be also dictated by an increased bargaining power of suppliers and buyers as well as the company's macroeconomic environment, which may force the company not to deviate extensively from the prices set by the market leaders.

Pricing below competitors

This method was found to be influenced positively by the "intensity of competition" and negatively by the "customers' characteristics". These findings reflect the fact that an intensive competitive environment may force companies to

Downloaded by ANADOLU UNIVERSITY At 01:37 03 September 2014 (PT)

Table VI Sector of operation and characteristics that influence pricing decisions

	Transportation-shipping companies ($n = 56$)	Insurance companies ($n = 29$)	Medical services ($n = 28$)	Information technology companies ($n = 21$)	Airlines ($n = 19$)	Banks ($n = 17$)	F	Significance
Service applications	2.14	[3.04]	2.15	2.73	(1.80)	2.71	**4.42**	**0.001**
Service uniqueness	2.90	[3.84]	(2.73)	3.27	3.61	3.56	**3.91**	**0.002**
Service cost	4.21	[4.66]	4.28	4.05	3.95	4.06	0.28	0.923
Corporate and marketing objectives and strategy	2.66	3.63	(2.42)	3.25	3.20	[4.24]	**6.31**	**0.000**
Corporate philosophy	2.35	2.74	2.46	2.14	2.45	2.62	1.37	0.191
Macroeconomic environment	1.76	2.30	1.72	1.83	(1.50)	[3.51]	**8.51**	**0.000**
Customers' characteristics	2.85	2.76	(2.29)	[3.36]	2.80	3.09	**2.36**	**0.042**
Intensity of competition	3.46	3.43	3.31	3.02	3.56	3.29	0.53	0.751
Political and social environment	1.46	[2.96]	2.01	1.49	(1.22)	2.08	**9.69**	**0.000**
Bargaining power of suppliers and buyers	[3.29]	2.93	2.84	2.86	(2.03)	2.26	**3.14**	**0.010**
Competitive reactions	2.49	2.10	2.07	2.52	2.60	2.41	1.13	0.345

Notes: The figures represent the mean score of each characteristic in each sector. Maximum values are in brackets, while minimum values are in parentheses (based on Duncan's multiple range tests, $p < 0.05$); "Significance" indicates level of significance based on one-way analysis of variance

Table VII Pricing methods and their antecedents

Variables	Cost-plus	Target return pricing	Perceived-value pricing	Pricing according to the dominant price in the market	Pricing below competitors
Service applications	0.21	−0.21	−0.02	−0.25	0.19
Service uniqueness	**0.49**[b]	0.13	0.14	−0.05	−0.13
Service cost	−0.03	**0.36**[g]	0.26	0.09	−0.20
Corporate and marketing objectives and strategy	−0.06	**0.90**[c]	0.23	0.28	0.29
Corporate philosophy	−0.07	**0.94**[b]	**0.48**[g]	**0.71**[e]	0.09
Macroeconomic environment	−0.01	**0.40**[f]	0.09	**0.57**[e]	−0.20
Customers' characteristics	**− 0.69**[c]	0.05	**0.59**[e]	−0.13	**− 0.45**[g]
Intensity of competition	**− 0.44**[e]	−0.12	−0.30	**0.89**[a]	**0.99**[c]
Political and social environment	−0.13	−0.23	0.06	0.02	−0.01
Bargaining power of suppliers and buyers	−0.10	0.29	0.22	**0.37**[g]	0.28
Competitive reactions	0.11	0.21	−0.12	−0.08	0.14
Percentage of total correct predictions	70.6	75.9	75.3	73.5	85.3
Log likelihood (max)	−102.91	−86.80	−81.22	−83.97	−57.01
χ^2 improvement	25.23[d]	28.75[c]	23.06[e]	32.52[c]	24.40[d]
	df 11	df 11	df 11	df 11	df 11

Notes: [a]$p < 0.000$; [b]$p < 0.001$; [c]$p < 0.005$; [d]$p < 0.01$; [e]$p < 0.025$; [f]$p < 0.05$; [g]$p < 0$

Downloaded by ANADOLU UNIVERSITY At 01:37 03 September 2014 (PT)

set their prices lower than their competitors in order to cope with fierce competition ignoring at the same time "how much the customers are willing to pay" for the offered services.

Conclusions and implications

The objectives of the current study were to provide insights regarding the pricing methods that service organizations adopt in order to set their prices along with the service, organizational and environmental characteristics that influence their pricing decisions. The data were collected from 170 service companies operating in six different sectors. The main finding of the study relates clearly to the predominance of cost and competitors' prices as the two main characteristics that trigger the pricing decisions of the companies in our sample, which is also reflected to the fact that the two most popular pricing methods were found to be the "cost-plus method" and the method of "pricing according to the market's average prices". On the other hand, all the other methods were found to be adopted by a small minority of the companies in our sample.

Certainly, controlling the cost and taking into consideration competitive prices may ensure the long-term viability of the company in the market. For the majority of the service sectors studied here, cost is of paramount significance, given, for instance, the considerable investments in the transportation-shipping and the airline industry and the compensations that insurance companies need to undertake. Similarly, the pricing strategies cannot be formulated without deviating extensively from competing prices, unless a unique service that differs from the competing ones is offered.

This fact notwithstanding, the lack of emphasis on other characteristics apart from cost and competing prices indicates the lack of a "balanced" approach when levying prices. Such an approach has been argued to be decisive in making effective pricing decisions, in that it provides a more "holistic" picture of the pricing problem (Shipley and Jobber, 2001). Inputs from a company's internal and external environment necessitate intra-company collaboration among the different departments that participate in the pricing process. Certainly, this is not always an easy task and necessitates in many cases a change in the existing mentality and a reconsideration of the current pricing practices. Managers responsible for setting prices within their firms are strongly advised to view pricing from a more strategic perspective and to investigate continuously all the variables related both to their firm and their market that may have an impact on their pricing behavior.

In line with the above argument, the limited emphasis that was found to be given to customer-related characteristics and pricing methods needs careful analysis. Customer orientation has long been recognized as a key factor in improving any business activity (Boone and Kurtz, 2002). Despite the lack of empirical evidence regarding a positive association between customer orientation and effective pricing decision-making, a number of different authors have underlined the importance of delineating prices by always having the customer in mind (e.g. Zeithaml *et al.*, 2006). The need to formulate prices by having customers in mind might be even more significant in the services sector where customers participate in the "production" process of a service. Thus, managers might have to gain a lot by setting prices that will appeal to their customers' characteristics and individual needs. In certain cases this requires an examination of the value that customers attach to a service through formal market research, which is not always easy to achieve.

Within this context, a broader marketing orientation may also facilitate the whole pricing process. Marketing strategy and objectives were found to exert a limited influence in the present study given the confusing view of marketing that

companies in our sample may possess, leading to its limited role in pricing decision-making. However, although the pricing process is a unique activity, it must be also treated as part of the overall marketing effort. Thus, managers need to take into consideration that the success of this process is related to its co-ordination with the other elements of the marketing mix, and formulate a coherent marketing strategy. Similarly, given the importance of corporate strategy and objectives, as identified in the current study, managers are also advised to take into consideration their company's strategic goals when designing their marketing and pricing strategies.

Another interesting result that emerges from the present study is the fact that different service sectors were found to place different emphasis on the different pricing methods pursued and the service, organizational and environmental characteristics that influence their pricing decisions. These findings reflect the complexity that characterizes pricing decisions. There does not seem to be a one and only "recipe" that can be applied to all service contexts. A recent study by Avlonitis and Indounas (2004) indicated that different types of pricing information were collected under different market structures. This is further intensified in the current study if we consider that different service, organizational and environmental characteristics lead to different pricing methods. Thus, managers need to carefully assess the unique conditions surrounding both their organizations and their external environment and design their pricing strategies accordingly.

Limitations and future research

Despite the significance of the aforementioned findings, a number of limitations need to be addressed. First of all, the context of the study (Greece) is an obvious caveat, which limits the ability to generalize the results to other countries. Certainly, replicating the particular study in other countries and contexts will shed more light on the concepts underlined in the current research.

Furthermore, despite the importance of the sectors investigated in the particular study, the research results may not be easily applicable to all service sectors. Thus, further research is needed in order to examine the extent to which these findings can be applied to other service sectors. Moreover, focusing the study on individual sectors may give the opportunity to study in more detail the pricing behavior of companies operating in these sectors.

Moreover, given the complexity of pricing decisions, as identified in the current study, the examination of other contextual variables that shape the relationship between pricing methods and the aforementioned characteristics might also be fruitful. For instance, how does market structure affect this relationship? Does the type of service (e.g. consumer versus industrial) affect the relationship in question? Do high-cost service providers have a different pricing behavior than low cost ones? Does the top management's attitude have an impact on the hypothesized relationship? Does the type of a business have any effect? Further research could explore in more detail these issues and thus enrich the existing theory.

References

Avlonitis, G. and Indounas, K. (2004), "Market structure and pricing information in the services sector", paper presented at the 33rd EMAC Conference, University of Murcia, Murcia, May 18-21.

Avlonitis, G. and Indounas, K. (2005), "Pricing objectives and pricing methods in the services sector", *Journal of Services Marketing*, Vol. 19 No. 1, pp. 47-57.

Barron, S. and Harris, K. (2003), *Services Marketing: Texts and Cases*, 2nd ed., Palgrave, New York, NY.

Boone, L.E. and Kurtz, D.L. (2002), *Contemporary Marketing*, 10th ed., Dryden Press, Hinsdale, IL.

Carson, D., Gilmore, A., Cummins, D., O'Donnell, A. and Grant, K. (1998), "Price setting in SMEs: some empirical findings", *Journal of Product and Brand Management*, Vol. 7 No. 1, pp. 74-86.

Docters, R., Reopel, M., Sun, J.M. and Tanny, S. (2004), "Capturing the unique value of services: why pricing of services is different", *Journal of Business Strategy*, Vol. 25 No. 2, pp. 23-8.

Field, A. (2000), *Discovering Statistics Using SPSS for Windows*, Sage Publications, London.

Ghymn, K., Liesch, P. and Mattsson, M. (1999), "Australian import managers' purchasing decision behavior: an empirical study", *International Marketing Review*, Vol. 16 Nos 2/3, pp. 202-16.

Gil, J.M. and Sanchez, M. (1997), "Consumer preferences for wine attributes: a conjoint approach", *British Food Journal*, Vol. 99 No. 1, pp. 3-11.

Heil, O.P. and Helsen, K. (2001), "Toward an understanding of price wars: their nature and how they erupt", *International Journal of Research in Marketing*, Vol. 18, pp. 83-98.

Hinterhuber, A. (2004), "Towards value-based pricing: an integrative framework for decision making", *Industrial Marketing Management*, Vol. 33, pp. 765-78.

Hoffman, K.D., Turley, L.W. and Kelley, S.W. (2002), "Pricing retail services", *Journal of Business Research*, Vol. 55, pp. 1015-23.

Huber, F., Herrmann, A. and Wricke, M. (2001), "Customer satisfaction as an antecedent of price acceptance: results of an empirical study", *Journal of Product and Brand Management*, Vol. 10 No. 3, pp. 160-9.

Kasper, H., Helsdingen, P.V. and Vries, W.D.J. (2000), *Services Marketing Management: An International Perspective*, Wiley, Chichester.

Lee, K.S. and Ng, C.L. (2001), "Advanced sale of service capacities: a theoretical analysis of the impact of price sensitivity on pricing and capacity allocations", *Journal of Business Research*, Vol. 54, pp. 219-25.

Lovelock, C.H. and Wirtz, J. (2001), *Services Marketing: People, Technology, Strategy*, 5th ed., Prentice-Hall, Englewood Cliffs, NJ.

Meidan, A. and Chin, A. (1995), "Mortgage-pricing determinants: a comparative investigation of national, regional and local building societies", *International Journal of Bank Marketing*, Vol. 13 No. 3, pp. 3-11.

Monroe, K.B. (2003), *Making Profitable Decisions*, 3rd ed., McGraw-Hill/Irwin, New York, NY.

Monteiro, D.M. and Lucas, M.R.V. (2001), "Conjoint measurement of preferences for traditional cheeses in Lisbon", *British Food Journal*, Vol. 103 No. 6, pp. 414-24.

Downloaded by ANADOLU UNIVERSITY At 01:37 03 September 2014 (PT)

Morris, M.H. and Fuller, D.A. (1989), "Pricing an industrial service", *Industrial Marketing Management*, Vol. 18 No. 2, pp. 139-46.

Nagle, T.T. and Holden, R.K. (1995), *The Strategy and Tactics of Pricing*, Prentice-Hall, Englewood Cliffs, NJ.

Potter, D.V. (2000), "Discovering hidden pricing power", *Business Horizons*, Vol. 43 No. 6, pp. 41-8.

Shipley, D.D. and Jobber, D. (2001), "Integrative pricing via the pricing wheel", *Industrial Marketing Management*, Vol. 30 No. 3, pp. 301-14.

Tzokas, N., Hart, S., Argouslidis, P. and Saren, M. (2000), "Industrial export pricing practices in the UK", *Industrial Marketing Management*, Vol. 29, pp. 191-204.

Zeithaml, V.A., Bitner, M.J. and Gremler, D.D. (2006), *Services Marketing: Integrating Customer Focus Across the Firm*, 4th ed., McGraw-Hill, New York, NY.

Corresponding author

Kostis Indounas is the corresponding author and can be contacted at: indounas@aueb.gr

Downloaded by ANADOLU UNIVERSITY At 01:37 03 September 2014 (PT)

To purchase reprints of this article please e-mail: **reprints@emeraldinsight.com**
Or visit our web site for further details: **www.emeraldinsight.com/reprints**

This article has been cited by:

1. Erkki K. Laitinen. 2014. Influence of cost accounting change on performance of manufacturing firms. *Advances in Accounting* **30**:1, 230-240. [CrossRef]
2. Anna Codini, Nicola Saccani, Alessandro Sicco. 2012. The relationship between customer value and pricing strategies: an empirical test. *Journal of Product & Brand Management* **21**:7, 538-546. [Abstract] [Full Text] [PDF]
3. Bakr Bin Ahmad Alserhan. 2009. Propensity to bargain in marketing exchange situations:a comparative study. *European Journal of Marketing* **43**:3/4, 350-363. [Abstract] [Full Text] [PDF]
4. Peter Hultén, Magnus Viström, Thomas Mejtoft. 2009. New printing technology and pricing. *Industrial Marketing Management* **38**:3, 253-262. [CrossRef]
5. Andreas HinterhuberValue delivery and value-based pricing in industrial markets 381-448. [Abstract] [Full Text] [PDF] [PDF]

Downloaded by ANADOLU UNIVERSITY At 01:37 03 September 2014 (PT)