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CONTENTS

Marija Ackovska, Neda P. Angelovska SUSTAINABLE MODEL OF TOURIST INFORMATION CENTERS IN THE REPUBLIC OF MACEDONIA (original scientific paper)	9
Biljana Angelova, Irina Majovski DEVELOPED HUMAN RESOURCE MANAGEMENT PRACTICES IN MACEDONIAN COMPANIES (original scientific paper)	21
Snezana Kostadinovska-Milosheska GLOBAL PERSPECTIVE OF THE PUBLIC ADMINISTRATION AND THE CASE OF THE REPUBLIC OF MACEDONIA (original scientific paper)	33
Tatjana Petkovska Mirchevska, Ilijana Petrovska TRENDS IN MARKETING COMMUNICATIONS AND LEVEL OF IMPLEMENTATION IN THE BANKING INDUSTRY IN MACEDONIA (original scientific paper)	43
Vladimir Petkovski GAME THEORY- PREFERENCES AND SPECIFICATION ON DIFFERENT TYPES OF GAMES (original scientific paper)	57
Diana Boskovska THE COST OF CAPITAL –DETERMINANT IN INVESTMENT DECISIONS (professional paper)	67
Natasha Daniloska COSTS AND RISKS SPECIFIC TO AGRICULTURAL LENDING (professional paper)	79
Klimentina Poposka ANALYZING VARIABLES OF BANK PROFITABILITY: FOCUS ON EXOGENOUS VARIABLES IN COMMERCIAL BANKS IN GERMANY (professional paper)	87

Marko Trpkoski

KIOSK TERMINALS AS AN OPPORTUNITY FOR OPTIMIZATION OF THE COSTS AND INCREASING OF THE QUALITY OF BANKING SERVICES IN REPUBLIC OF MACEDONIA (professional paper)	105
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Emilija Kusakatova

DESIGNING AN INTEGRATED MARKETING COMMUNICATION PROCESS (professional paper)	119
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Biljana Petrevska

ECONOMIC PLANNING OF TOURISM DEMAND IN MACEDONIA (professional paper)	133
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Guidelines for Authors	147
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On the path of development of the economic thought, whilst building a wide network of research and technical cooperation with other countries in the world, new goals, criteria and challenges have been set in order to improve the journal quality. In this regard, during 2010 and 2011, significant changes have been made in editorial policy, design and its availability to broader academic and professional publics in the region and the world. As a result, the “Economic Development“, as of issue no.3/2010, is transformed in international journal, published in English language and distributed in the countries of the region and beyond.

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SUSTAINABLE MODEL OF TOURIST INFORMATION CENTERS IN THE REPUBLIC OF MACEDONIA

Abstract

This article is focused on functioning of TIC in the Republic of Macedonia and creation of sustainable model of TIC applicative in local circumstances.

For this purpose, the operating of thirteen TIC in the Republic of Macedonia is analyzed. Generally the method of observing of their organization and operation is used, from which arise main characteristic of their present functioning and the problems that they are facing till now are identified. For more specific issues the method of interview with TIC representatives is used, also.

The research shows that the present situation of TIC is not favorable, and they are facing with problems relating to their organization, locations, formal cooperation with real sector, promotion, but significant problem is providing financial sources for normal functioning of TIC. Therefore, different model for sustainable TIC ongoing is needed. Namely, the sustainable model of TIC will provide its successful operating in market circumstances.

Key words: sustainable model, tourist information center, financing, public-private partnerships, Republic of Macedonia

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1. TOURIST INFORMATION CENTERS IN THE REPUBLIC OF MACEDONIA-PRESENT SITUATION

In 2010, in the Republic of Macedonia there were operating around thirteen tourist information centers (TIC).. They are mainly established as a result of concrete projects of international organizations, and in some cases its establishment comes from initiatives of the civil sector or the local authorities. Most of TIC-s functions within the sectors of local economic development (LED) at municipalities, or within a particular public enterprise. They are fully financed from the municipal budget, i.e. public enterprises, or partly financially supported by local authorities through financial, technical or other forms of support.

Additionally to the above mentioned cases, which are most common, an exception can be distinguished from the tourist bureau Lihnidos Ohrid, which functions as a private enterprise, and its incomes comes completely from the outside of the municipal budget, as well as the TIC Krusevo which functions as a public-private partnership. A specific case might be noted with TIC Matka, which operates as a part of activities of Non-Governmental Organization (NGO).

Almost all TIC-s, are facing problems relating to the financial coverage of planned and ongoing activities. Also, these offices are facing with the location and staffing problems, like working through one office, instead of working through a network of several offices, and have a small number of employees engaged, which is a minimum required staff to smoothly function one office. Furthermore, it is noticed the lack of clearly defined program activities, lack of logistical support through specific services provided within the TIC, as well as the insufficient level of cooperation between the TICs themselves and the wider business community and citizens of the municipality or other potential TIC partners.

TIC also face with the lack of promotional materials, and can not satisfactorily present its tourist offer in front of potential tourists. Promotional materials are not updated and not professionally developed.

In addition to the above mentioned issues, there are more issues dealing with the differences existing between the TICs themselves. Certainly each tourist destination has its own specifics, and thus has different needs in operating a TIC. Anyhow, in addition there can be found conceptual differences that some TIC go farther in serving the tourists (i.e. mediation of accommodation to tourists, selling souvenirs and so on),

while others perform just informing activities to the tourists, without any additional service. So we still do not have a viable and successful model that should be followed by all TICs, guided also in adjusting certain actions when needed, which depends on area specifics around the TICs.

The emphasized problems represent a serious obstacle to further development of the TICs and serious threat to the economic viability of such offices. Hence, overcoming these issues, the basic direction is to establish a sustainable model of TICs, applicable in current conditions of the country.

2. THE MAIN CHALLENGES OF TIC IN REPUBLIC OF MACEDONIA

The operation of each TIC represents individual case. Each of these offices operates under specific conditions and are facing with specific problems that pose an obstacle to its current operations and its further development. However, there are problems characterizing most of the TICs operations and as such, they can be generalized and identified as major challenges in the operation of the TICs in R.M. In addition we will briefly keep on each of these determined issues.

TIC's spheres of operation are not clearly defined, which derives from the lack of **clearly specification of TIC's activities**. Namely, the expectations on a TIC operation, often are externally dimensioned; hence these offices are put into a position to undertake a number of responsibilities and activities beyond the basic functions they should principally have. However, there are also cases where these offices, deal with a limited opportunities, and not with activities to realize the potential activities envisaged by the law.

Most TICs provide the following services:

- Informing visitors about the local tourist resources and facilities available;
- Information about public transport in the region;
- Accompanying (travel guiding) organized groups;
- Development and distribution of promotional materials, as well as provision of maintenance and update of the web-portals of TICs;.

In some cases TIC deal also with: mediation providing private accommodation, and other specific products / services from the local population; sale of souvenirs, promotional materials, tickets, permits; event Organisation; developing projects, gathering information for a database of tourist facilities, capacities and services, as well as developing and creating a system of indicators for the valorization of the real quality and performance of tourism resources; establishment of cooperation with business community; developing specific tourist products.

The current unsatisfactory level of cooperation between the TICs and tourism business sector, as well as the potential individual providers of tourist services, is expressed in the absence of continued intensive communication and lack of formal contracts that clearly articulate the benefits, responsibilities and obligations (including financial) of each contracting parties. Such cooperation should be based on partnership between the TIC and other stakeholders based on mutual interest. Partnership assumes the identification of economic, technical and financial resources at all levels, public sector, private sector and nongovernmental organizations, which can contribute to the completion of the activities of the TIC, as well as in promotion and development of the overall tourist offer in the local environment, emphasizing thus that context and providing the best alternative activities and directions for creating a healthy business relations. Here should me emphasized the need for raising awareness about the acceptance of voluntary system on standardization of private accommodation (under the law on Local Self-government), in close cooperation with the municipalities that are responsible for standardization of private accommodation, which will enable the quality standards of facilities through the establishment of a relevant classification of rooms.

Staffing is also one of the critical moments in the organization of the work provided by TICs. The organization and performance of the overall work of these offices is left to a few people who with more or less success are dealing with different activities outside their scope, which in principle might be related but fundamentally are different activities. Hence, it is needed improvement of the skills of employees involved in the tourism sector of the municipality, in order to improve the quality and standardization of services and in planning, management and implementation of tourism development activities. Also, it is imperative to provide a sufficient number of employees as professional and motivated staff who possess the necessary skills and knowledge to successfully cope with the challenges of working in the TIC and would be decorated with enough enthusiasm to do socially-useful work.

Establishing an **integrated system of information, reservations and sales**. In this context, the establishment of a functional and informational updated official **website** is a very important marketing tool, especially if it provides or maintains a system of on-line bookings and payments of specific services or products.¹⁾ This integrated model is more present in the patterns of public - private partnership, where TIC is more focused on commercial activities. Otherwise, there is an open debate (from legal point of view) whether the existing TIC should be carried out only informative activities as a public service, or they can also carry out commercial activities, which additionally requires to be a separate legal person, be equipped with cash registers, and become a tax payer.

¹⁾ Yuan, Y. L., Fesenmaier, D.R.: The Role of Information Tehnology use in Visitors Bureaus. Butterworth-Heinemann, Oxford, 2006, p92.

Current funding is a major, if not the most important challenge for TICs. Adequate funding and availability of necessary resources for the smooth functioning of the TICs is critical. The limited funding disables the expansion, satisfactory / optimal scale of operations, to exploit market opportunities, as well as to engage the necessary professional staff. Hence, it raises the need to find new / additional channels of financing, or self-financing and to undertake marketing activities in order recruiting new strategic partners.

Insufficient awareness of the local community about the importance of tourism development and socio-economic life of local people and benefits from the existence of TICs, is a key link in the complex tourism offer. In this context, it is evident the absence of mass mobilization of all stakeholders to be motivated to act and make decisions aimed at the identification and implementation of joint interests.

The existence of one or maximum two TIC's offices in a wider area of the municipality, does not guarantee a successful fulfillment of the needs of potential tourists and visitors from the TIC services. Hence, it imposes the necessity of **expanding the network of TIC offices** in the local community as their services would become more accessible to potential users and thus TICs would have exercised its function in a more consistent and overall manner. In this context, should carefully be chosen the location of the TIC. Namely, they should be placed on the main tourist routes, in easily accessible places. Also, the possibilities to improve the TIC imposes the need for **networking TICs** offices at regional and national level, in order to exchange information, jointly advertise and do promotional materials, hence organize joint tourist packages in a larger context. Such networking will enable strengthening of their capacities and joint work in projects of mutual interests.

3. TIC FUNCTIONING- ABROAD EXPERIENCES

As mentioned above, most of the TICs in RM are established as a result of international projects or grants from foreign countries. Hence, most commonly the set-up as well as the operation of the TIC is based on proven international practices, customized to local conditions and context. Also, few cases where TIC employees have visited few foreign countries enabled them to gain the opportunity to learn about the experiences of similar offices in those countries and to convey the learning into their offices. Taking into account these experiences and some of our findings, we can draw generalized features of the TICs, as foreign experiences.

The experiences from abroad show different models of TICs offices. Typically these offices are the responsibility of properly established national / local tourism administration, usually a public enterprise whose dominant activity is the development and promotion of tourism in particular micro or mezzo tourist destinations. The system of public-private partnership is emphasized as one of the alternatives to an accept-

able TIC model, though this concept was abandoned in the early 80s and was declared unsuccessful and counterproductive.²⁾

According to this functioning model, activities of TIC offices in most of the cases are funded through local and central government budgets, as well as those from European community projects.³⁾ Typically, operation of such offices is supported by certain forms of self-financing (selling books, souvenirs, local products, promotional materials, service commissions from the business sector, advertising space, etc.), and depending on laws on tourist activities in most of the countries, TICs might be working as travel agencies. An illustrative example might be mentioned that even smaller TIC offices in foreign countries, are working with its own budget of about one million Euros per year. Such budgets of the TICs, are far away and too ambitious even for the most of the Macedonian municipalities, considering their weak financial condition and the fact that the total municipal budgets are smaller than the above mentioned TIC's budgets.

The organizational structure of the tourist offices allows execution of activities aligned with previously determined and well-defined programs. In these programs are included all dominant activities of TICs, and are associated with the promotional activities of all major cultural, sporting and other events during one calendar year. Namely, the tourist bureau is involved in the organization of all cultural and tourist events and takes care to accommodate their visitors, thus participating in the preparation of tourism promotional materials for the municipality and the region.⁴⁾

It should be pointed out that tourism in these countries is strongly linked and closely connected with culture, education, historical heritage, the church etc. Also, there might be noticed a widespread use of modern technology, especially Internet as an important business tool in the contemporary operating environment.

The tourist offices in other countries, differently from ours, usually have developed organizational structure. Namely, the activities within each agency are performed by at least four units-departments. The departments of tourist offices that were subject to observation for the purposes of this research can usually be as following: department for public relations; department of marketing; department for creation new materials; and department of maintenance and accuracy of the information on their ads and website. In each department, at least two employees are working and the employees are part of the municipal administration. Some of the TIC's activities are also performed by engaging volunteers.

²⁾ Costas, S.: *Urban tourism and Urban Change: Cities in a Global Economy*. Routledge, New York, 2010, p.48.

³⁾ *Budgets of National Tourism Organizations 2008-2009*, WTO, Madrid, 2010, p.84.

⁴⁾ *Policy and the practice of Global Tourism*, WTO, Madrid, 2011, p.143.

4. RECOMMENDATIONS FOR THE SUSTAINABLE OPERATION MODEL OF THE TICS IN THE REPUBLIC OF MACEDONIA

In most of the LED action plans of Macedonian municipalities, tourism is identified as one of emerging sectors for integrated development, being as one of the priority development promoter.⁵⁾ There is a broad consensus between the local government, business sector and civil community representatives for positive effects that sustainable tourism development might bring to the overall development of their municipality.⁶⁾

Taking this into account, long-term sustainability of the TIC offices will greatly depend on the attitude of leading institutions and perpetrators of the tourism policy at local level, hence whether the efforts for promotion of tourism development will be only declarative or be really supported by concrete actions. Namely, the successful survival of the TICs, mainly depends on the way that tourism will develop under specific local environments in the future and the attitude on this topic by development stakeholders.⁷⁾ In other words, the **TIC** should function as an **organizational unit within a legal entity with public mandate** (public enterprise, a foundation for tourism development, etc.), meaning its should act as a part of the local administration.

The main objective of TICs operation is to **improve the general conditions of tourists while staying at a certain destination, hereby designing and implementing specific tourist services and tourist promotions activities aimed at strengthening the image and performance of the municipality / region as an attractive tourist destination.**

For a successful realization of the basic objectives of the TICs, various activities should be performed. The main areas of TICs activities can be distinguished as following:

1. Marketing and promotion;
2. Informative and additional services;
3. Managing the tourism portal;

Marketing and promotion:

- Marketing and promotion of the municipality as an attractive destination;
- Development and production of different tourism promotional materials;
- Distribution of promotional material;

⁵⁾ Strateshki planovi za lokalni ekonomski razvoj. USAID, LGRP, Skopje 2004, p. 23.

⁶⁾ Hall, C. M. and Jenkins, J.: Tourism and Public Policy. Routledge, New York, 2004, p.68.

⁷⁾ Guide for Local Authorities on Developing Sustainable Tourism, WTO, Madrid, 1998, p.150.

- Planning and implementing interviews for medias and advertising activities;
- Develop and implement campaigns to promote specific local tourist attractions and the municipality as an attractive tourist destination;
- Cooperation with travel agencies, catering facilities and other entities at the local tourist industry in joint promotional projects;
- Selling advertising space in promotional materials of TIC, and in the tourism portal;
- Coordination and organization of TICs participation at tourist fairs and similar events;
- Cooperation with national, regional and international associations in the area of joint promotional activities and support to individual promotional efforts.
- Promotional tool called “word of mouth“ through TIC’s network of tourist guides, which would promote tourist destinations in the best way, in front of tourists visiting that area;

Informative and agency activities:

- Management of tourist information, the system of reservations and booking;
- Creating and selling complex travel packages for individuals and groups of visitors;
- Collaboration with suppliers of complimentary tourism services (restaurants, private accommodation, travel agencies, cultural institutions, etc.). on their connectivity area, as well as in marketing of its individual services;
- Planning and organizing events supplementing the tourist offer of the municipality / region.
- Sales of tourist services and products that are not part of the promotional material, or are not part of free of charge distribution (souvenirs, tourist literature, CDs, maps, tickets, permits, etc.).
- Managing and organizing the services of tourist guides;
- Organizing or cooperation when developing specific (tailor made) services and products;
- Keeping statistics on the number of visitors to the TICs and users of its services;
- Organization of work of individual TICs offices;
- Collaboration and networking with other TICs of the region in creating and selling common tourist packages/product;
- Improving quality of tourist services and preparation of proposals for new tourism products and events, aimed at improving the overall tourism offer of the municipality;

Managing the tourism portal:

- Administration of tourism portal;
- Conceptualizing and prepare the content of tourism portal;
- Update the content of the tourism portal;
- Administration of the information system of the TICs;
- Maintaining the links of TICs individual suppliers on a variety of tourist services (private accommodation, traditional cuisine and crafts) and providing support for on line booking or sale;

Each of the main areas of activity should be performed within individual sectors of the TICs, and in the organizational structure of the TIC should operate few offices / information points located in the most frequent and accessible locations.

The staff which will be engaged in TICs, should possess knowledge and skills required for successful performance of the activities as envisaged in their job description.

The number of employees should be aligned with the objectives and possibilities of the public company / municipality and the type and the scope of activities of the TIC. However, it is recommended a minimum number of employees to be engaged, at least one employee in each TIC's department and one in each extended office / information points. Hereby, it enables a smooth performance of TIC's activities.

The best is these employees are part of the municipal administration, and it is not wrong if parts of TIC's activities are covered by volunteers or other forms of outsourcing.

Cooperation with potential subcontractors should be based on a voluntary basis, but formalized through agreements that clearly define the benefits and obligations of contracting parties. In that context, the operation of tourist inspection/monitoring should be organizationally dislocated from TICs, in order to avoid the feeling of coercion and mistrust between the TICs and its associates, or partners.

The established cooperation between the tourist offices in national and regional level, contributes highly to sustainability of the TICs, as well as its networking and cooperation with other similar institutions in the country and abroad. Hereby, it would enable the promotion of common interests, joint market access and cooperation in creation and distribution of regional packages, to enable sharing of experiences and advices, and possibly direct assistance in the operation of TICs.

Recommended model for funding sources that will provide financial sustainability of the TICs, is the **self-financing**.

Given the socially-beneficial role of the TICs, in the touristic promotion of the municipality and the improvement of the general stay conditions of tourists, it is quite conceivable that the **dominant source of funding should be coming from the municipal revenues**. Namely, all municipalities in Macedonia gain incomes from

tourist taxes in a range of 80 %. Utilizing some of these funds would be substantial annual budget for operation of all bureaus, which covers a large part of its activities.

However, given the different level of tourism development in different municipalities and according to the realized number of tourist nights, the absolute amount of these revenues is different. While in areas with significant tourist visits, these figures represent significant amounts, in other less developed tourist communities, these incomes are insignificant and insufficient for establishing the financial budget of the TICs. In these cases, the hospitality fee is an insufficient source for filling the municipal budget and its spillover into the work program of the TIC. Certainly, in municipalities where tourism is determined as one of development priorities, the work of the TICs can be covered by particular programs for local development centers or through the work of separate foundations, offices, public companies, which are established and act for that purpose.

A second relatively reliable source of funding for the operation of the TIC's, are **own revenues**. In fact, majority of the TICs deal with agency services, gaining incomes based on realized sales of goods and services, provision of mediation, revenue based on advertising and the like. In order these revenues are set at a relatively sustainable level, it is required to be well defined the area of activities, then should be also organized a formal network with established providers of tourist services.

Additional sources of funding for financial support of specific activities and projects of the TIC, can be sponsorships, donations of funds from the participating projects, funds from state institutions and agencies.

Other models of TICs operation is the public-private partnership or the functioning of the TIC purely on commercial basis, which are recommended in exceptional cases.

Public-private partnerships are recommended only in cases where the financial conditions if the municipality does not allow for serious investment in supporting the tourism development of the municipality, and also recognizes the need for institutional support to promote tourism of the municipality and improvement of general conditions for tourist stay in the municipality. The advantage of this model consists in risk division, especially the financial and market one, which supports also the consolidation of facilities and personnel in achieving relatively speaking a common interest, i.e. expansion of tourism and improvement of the quality and heterogeneity of the overall tourist offer. However, in such conditions should be established a system for monitoring the performance, allowing equal representation and realization of a useful and commercial-justified services, respectively to avoid the danger of the TIC's activities to act as a private travel agency with financial and material assistance from the municipality.

The model for the commercial survival of the TIC, is a **model** that mainly operates on the principle of **self-financing** with some support from the municipality, which is the founder of the TIC. This TIC model is more acceptable in terms of

public-private partnership because there is no separation of powers and mixing of interests. The municipality being founder of the TIC has the position to insist in implementation of socio-beneficiary services. TIP is financed solely through sales of its commercial services and thus it doesn't burden the municipal budget. However, the sustainability of that TIC model depends on the sustainable level of tourist demand and it is applicable only for the municipalities which are recognized as tourist destinations.

Conclusion

It should be emphasized that there is no a generally accepted universal model for the functioning of the TICs, because each of these offices operates under specific conditions and they perform different functions. However, the analysis of foreign and domestic experiences in TICs functioning, and the opinions and suggestions of individuals directly engaged in the operation of the TICs, enables us to identify key issues that represent an important base for the successful positioning of the TICs, and also makes easier the implementation of decisions regarding these issues, which should ensure the sustainability of such offices.

It should be noted that the functioning of the TICs is not an end target, but TICs should be an integral part of a complex organizational structure that underlies its action toward the overall management of tourism development by creating high quality and highly structured tourist offer, attractive to visitors and tourists, both to domestics and foreigners, but at the same time to assure a positive impact on quality of life of local people. In this context TICs functions within that organization as a marketing entity.

The Macedonian model of sustainable TIC should cover the following activities:

- Marketing and promotion;
- Informative and additional services;
- Managing the tourism portal.

Also, sustainable TIC maintenance, presumes engagement of skill staff, local and regional cooperation and networking and permanent inflow of financial sources. In this sense dominant source of funding should be coming from the municipal revenues.

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DEVELOPED HUMAN RESOURCE MANAGEMENT PRACTICES IN MACEDONIAN COMPANIES

Abstract

The increasingly important strategic role of human resource management (HRM) in the competitive advantage of companies led to extensive research of HRM systems and their impact on organizational performance in the last two decades. This paper, therefore, aims to highlight current HRM practices in Macedonia compared to western HRM systems. Research findings suggest that rigorous selection, training and performance-related pay are incorporated HRM practices in Macedonian companies. However, they are not sufficient to construct a strategic HRM system. Thus, much remains to be done for strategic integration of human resource management function in Macedonian companies.

Key words: strategic human resource management, human resource management practices, organizational performance

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Introduction

With the increasing importance of human resources in the modern business world the HRM function gained strategic importance. Achieving competitive advantage through human resources requires strategic perspective which has generated a need for a formal, systematic and long term view of the management of human resources. This has led to the development of the field of strategic human resource management.

Strategic human resource management (SHRM) is a strategic approach to managing human resources of an organisation and it is mainly concerned with the firm's choices associated with the effective use of labor to achieve business goals. SHRM, however, is considered to be in its infancy in spite of the continuous development over the past two decades, which is primarily due to the lack of consensus over the various aspects of the concept. Despite the numerous ongoing debates, broad agreement has been reached on SHRM basic function, which involves designing and implementing a set of internally consistent policies and practices in line with the business strategy, which subsequently ensures that firm's human resources contribute to the achievement of business objectives.

The assumption underpinning the strategic HRM is that people are the organization's most critical resource and that organizational success largely depends on them. So, if an appropriate set of HR practices and processes is developed and implemented in an organization it will subsequently lead to better organizational performance. Based on this assumption, the last two decades has witnessed a number of waves of interest in how to improve workplace performance, and substantial amount of research to establish a clear positive link between HR practices and organizational performance.

Theoretical background of strategic human resource management

The underlying notion of SHRM is the resource-based view (Barney, 1991) of competitive advantage which is firm-focused as opposed to the traditional strategic paradigm. The basic assumption of the RBV is that competitive advantage can only be achieved with firm resource heterogeneity and firm resource immobility. However, firm's resources can provide sustained competitive advantage only when four criteria are met: resources must be (1) valuable, (2) rare, (3) inimitable, and (4) non-substitut-

able. If the resources a firm employs cannot be easily imitated by another firm or substituted by similar resources, the firm can take advantage of this to gain competitiveness not simultaneously pursued by competitors. Some scholars (Wright, McMahahan & McWilliams, 1994) have argued that human resources meet these four requirements. In addition, the fit of human resource practices and firm strategy cannot be easily identified and imitated by other firms due to the social complexity and causal ambiguity (Becker & Gerhart, 1996; Boxall 1996). Thus, the integration of human resources with the appropriate strategy can generate a sustained competitive advantage for the firm.

In line with human capital theory, resource-based theory emphasizes that investment in people adds to their value in the firm. Thus, the challenge to organizations is, as Ulrich (1998) stated, “to ensure that they have the capability to find, assimilate, compensate and retain the talented individuals they need”. A properly developed HR system creates value when it is incorporated in the operational systems of an organization in a way that it enhances the firm’s capabilities. Such a system is difficult to imitate due to lack of understanding of the precise mechanisms by which the interaction of human resource practices generate value.

The strategic role that human resources can have in the success of an organization has led to extensive research in this field, in an attempt to set theoretical frameworks and empirical evidence of the impact of HRM on organizational performance. However, the complexity of the mechanisms by which human resource management creates and sustains value has led to an intensive debate on strategic HRM and performance link.

The notion of ‘high-performance work systems’ (HPWS), the term being introduced by Appelbaum & Batt (1994) and widely accepted by HRM researchers, is one of the most important initiatives in recent time in the field of SHRM. High performance work systems aim to make an impact on the performance of the firm through its people in such areas as productivity, quality, level of customer service, growth, profits. The practices and systems that are identified as supportive of high performance typically refer to more rigorous selection and better training systems to increase ability levels, more comprehensive incentives (such as employee bonuses and internal ladders) to enhance motivation, and participative structures (such as self-managing teams and quality circles) to improve opportunity to apply the skills (Appelbaum et al, 2000).

One of the streams running through the literature on HPWS is that these practices work much better when ‘bundled’ together (Ichniowski et al, 1995; MacDuffie, 1995). In general, horizontal fit of HRM refers to the congruence of a bundle of HR practices within the system. Specifically, horizontal fit refers to a high level of fit among independent HR practices into an effective HRM system. HR policies emphasising the compatibility among a variety of HR practices facilitate a harmonious process within the system. Only systemic interactions among these practices can increase organizational performance. Adding only one of the practices is likely to ‘have no

effect on performance' (Ichniowski et al, 1995; Purcell et al. 2003).

The configurational approach or bundling conveys the assumption that companies with bundles of HR practices have higher level of performance. An organization's HR strategies, policies and practices are a unique blend of processes, procedures, personalities, styles, capabilities and organizational culture. The idea is that practices within bundles are interrelated and therefore reinforce each other having greater impact on performance (Ichniowski et al., 1995; MacDuffie, 1995; Dyer and Reeves, 1995). The aim of bundling is to develop mutually reinforcing set of HR practices which jointly contribute to the attainment of organization's strategies.

Research has provided some evidence in favor of the configurational approach. MacDuffie (1995) in the research of manufacturing plants that have flexible production found that bundles of internally consistent HRM practices are associated with higher productivity and quality. Dyer and Reeves (1995) stress that employee performance is a function of both ability and motivation and that the logic of bundling is to enhance both. Thus, best results should be obtained when there are several ways to enhance employee abilities and skills and incentives to enhance their motivation.

While horizontal fit refers to the consistency among a variety of human resource practices, vertical fit refers to the alignment of HRM practice with the strategic management process of the firm (Schuler & Jackson 1987). The compatibility between HR practice and business strategy has been emphasised in studies related to SHRM (Miles & Snow, 1978; Delery & Doty, 1996). Several conceptual frameworks assert that the design of an HR system compatible with the firm strategy is imperative to the success of businesses (e.g., Schuler & Jackson, 1987; Lengnick-Hall & Lengnick-Hall, 1988). There are also increasing numbers of empirical studies, conducted in various contexts, on the relationship between strategic HRM and organisational performance (Arthur, 1994; Huselid 1995, Youndt et al., 1996). Although the linkage between HR practice and strategy has been in the focus of the academia, there is a significant lack of rigorous empirical evidence of this linkage. Thus, it is argued that this linkage is relatively weaker than the relationships among internal HR practices. However, from the perspective of the resource based view (RBV) of the firm (Barney, 1991), researchers advocate that HR systems aligned with the firm's strategy is helpful for creating competitive advantage.

In general, vertical fit is viewed as an essential step toward achieving the organisational goals through systematic implementation of human resource activities that are aligned with firm objectives, whereas horizontal fit is essential effective deployment of these resources. Consequently, both types of fit contribute to the competitiveness of a firm and this combination of both vertical and horizontal alignment was a significant step in explaining how HRM could contribute to the accomplishment of strategic goals of companies.

The last two decades were characterized by an intense research on high performance work systems, including HR practices as rigorous selection, formal contin-

uous training of employees, pay-for-performance policies, career promotion, employee participation, which significantly improve organizational performance by increasing productivity, quality, growth, profits, etc. In general, about 60% of Fortune 1000 companies that implement at least one HR practice for improved organizational performance in their operational processes show increased productivity, while 70% of companies show improved quality (Lawler et al., 1992).

A significant cross-sector research on the relationship between HR practices and organizational performance is conducted on a sample of 855 firms (Huselid, 1995). Namely, human resource practices, classified in two indices as 'motivation of employees' and 'staff skills and organizational structures', positively affect the increase in sales per employee. Practices show a positive correlation with productivity and financial performance of companies. Also, Ichniowski (1990) presents similar results i.e. significantly higher sales per employee in those companies that have practices such as flexible job design, formal training of employees, performance-based promotion, formal mechanisms of communication between employees and management.

Other studies on high performance work systems show increase of productivity (Arthur, 1994) and quality (Ichniowski et al., 1995) in the steel production industry, and increase of productivity and quality (MacDuffie, 1995) in the automobile industry. A number of studies on the effects of individual HR practices show close correlation between rigorous selection (Terpstra & Rozell, 1993; Collins & Han, 2004), training of employees (Bartel, 1991; Holzer et al., 1993; Dearden et al., 2006), performance-related pay (Kaufman, 1992; Gerhart & Milkovich, 1990), job security (Brown et al., 1992), different forms of employee participation (Arthur, 1994; Wagner, 1994; Wallace, 1995) and increased performance of companies.

Despite the differences in previous research (in terms of HRM practices that constitute the high performance work systems and their influence on performance) and the current debate due to lack of consensus on several aspects, theoretical and empirical research on SHRM show the positive impact of human resource practices on organizational performance, highlighting the importance of strategic human resource management.

Human resource management in Macedonia

The transition to market economy and the increasing rate of unemployment has led to a decline of the internal power of HRM function in the Macedonian companies. High unemployment, which is one of the main features of Macedonian economy, significantly reduced the impact of HRM function in companies. The large percentage of unemployment directly affected HRM policies, i.e. labour surplus influenced recruitment, training, compensation, and retention policies. Additionally, the results of the privatization process, as for example job insecurity, have reduced the power of unions.

Also, the lack of HRM tradition additionally hampered the development of HRM during and after the transition period. Namely, although compared to other socialist countries, companies in centrally-planned Yugoslavia had more freedom in determining some HRM issues (such as job design, performance evaluation, selection, training and development) yet, critical decisions related to HRM were defined at the national/political level (Zupan & Kase, 2005). The dissolution of Yugoslavia and the transition to market economy created new business climate for Macedonian companies. The loss of traditional markets and the rapid development of globalization forced Macedonian companies to seek new ways to improve their competitiveness and sustainability in the market. However, while more developed economies focused on identifying new sources for improving competitiveness, Macedonian companies were mainly focused on resolving acute financial problems, renewal of obsolete technology, and reduction of costs as a response to stronger competition. In this regard, HRM was completely neglected and even today many companies do not consider HRM to be a significant source of competitiveness.

The small percentage of medium and large companies that have developed formal proactive policies of HRM does not contribute significantly to the development of the HRM on strategic level. The literature confirms that the size of organizations influences the development of HRM systems and practices at a national level (Sparrow & Hiltrop, 1997). In this regard, the prevalence of extremely small companies, specifically family-owned, in the Republic of Macedonia has restricted the development of strategic HRM and its role in the companies. Reduced power of trade unions, high unemployment rate, the long transition period, and the insufficient knowledge and tradition in the HRM field negatively influenced the development of HRM in Macedonian companies.

On the other hand, the foreign direct investments, although at a much lower level compared to other transition countries in the region, had a positive impact on HRM development. A more significant transformation of the HR function is observed in foreign-owned companies that transfer their own HRM models and practices (Zupan & Kase, 2005; Kiriazov et al., 2000). In the foreign subsidiaries of MNCs, the reforms in selection procedures, compensation and performance management systems are the first steps taken by HR departments, and are primarily used as instruments for creating a new corporate culture (Taylor and Walley, 2002). These western HRM models are then often disseminated to the domestic sector thus influencing the HRM development.

The survey on HRM practices and the degree of their development in Serbia (a country similar to Macedonia in terms of economic and political conditions as well as national culture) conducted on a sample of 38 companies shows that human resource management is still underdeveloped compared with EU countries. The biggest drawbacks of HRM identified in companies in Serbia are: 1) HRM as a function does not have significant impact on strategy formulation in companies, 2) in most companies

the general manager is responsible for decisions related to human resources management, 3) low level of communication between management and employees, 4) low level of employee participation in decisions and low impact on company policies, and 5) inadequate competence of HRM managers (Bogicevic et al., 2008).

Indeed, the development of these practices was cited as a critical difference in HRM between Slovenia as an EU country and Serbia as a developing country. The analysis of HRM practices and systems that are implemented in companies in Slovenia and Serbia (Bogicevic & Janicijevic, 2009) point to the existence of differences in the role of HRM in companies and in the strategy creation, the organizational level at which important HRM decisions are taken, systematic planning and organizing employee training and development, performance management, pay-for-performance system, employee participation, and the union power.

Overall, the above reflects the current development of human resource management in companies in Republic of Macedonia. Recent research of the existing HRM practices and their effects on organizational performance in 27 large and medium private, domestic and foreign-owned, companies with formal HRM practices in Macedonia (Piperkova Majovski, 2010) revealed that mostly developed practices are those of rigorous selection and pay-for-performance. Indeed, the main HRM practices observed in Macedonian companies are: rigorous selection in employment, built system of performance-related pay (especially for managers and core employees), formal training of employees in several areas, and career development opportunities. On the other hand, companies are characterized by centralized decision making, low level of employee participation and low impact on company policies. Decisions regarding HRM issues are highly centralized i.e. line and middle management participates only in performance evaluation and allocation of tasks.

In particular, the results of the study show that Macedonian companies implement rigorous selection techniques in the recruitment process. The majority of the companies use external recruitment, specifically for core employees and junior management positions (middle management is internally recruited through promotion). In the selection process, one-to-one interview and letters of reference are indicated as mostly used techniques. However, the findings revealed significant differences in the ability of the companies to attract applicants. In fact, while domestic companies review on average less than 50 applications for core positions, foreign-owned companies review on average more than 550 applications for the same position. The difference is also significant with the applications for managerial positions. This indicates the ability of foreign-owned companies to attract a larger pool of applicants. The developed 'organizational brand' of foreign-owned companies enables them to easily attract employees and thus increase the quality of selection choices.

Formal training of employees is highly present in companies in Macedonia. 95% of the analyzed companies conduct formal training, however only 40% consider train-

ing to be very effective. In general, more than 30 % of the employees in the sample had formal training in last two years mainly on customer relations and technical skills.

Regarding compensation and benefits, research findings in the selected Macedonian companies reveal that performance is highly important, specifically for managers. Namely, in 70% of the sample performance has an important role in determining the compensation of managers, while in 67% of the companies performance is closely related to the total reward package of core employees.

The degree of employee participation is relatively low in the surveyed companies. However, certain variations are noted relative to addressed aspects. The analysis shows that employees have the greatest influence on decisions related to quality improvements and least influence on decisions related to technology investments and new product/service development. Specifically, employee participation in quality improvement issues is relatively high (in 50% of selected companies employees have significant impact on quality improvement). On the other hand, employees have little say in issues related to work processes, new product development and technology investment. In addition, 48% of the companies do not have any form of formal grievance procedures.

Although the HRM research evidence (Purcell et al., 2003) emphasizes the vital importance of middle and line management in implementation of HRM practices and their outcomes, the findings reveal high centralization of management in Macedonian companies. This is reflected in the findings of the study that show insignificant participation of middle and line management related to HR decisions. In particular, middle management participates only in decisions related to allocation of work (in 54% of the analyzed companies), and in performance evaluation of employees (in 59% of the companies). The decisions related to selection and recruitment of employees, pay and rewards, and promotion of employees are taken by top management in the majority of the analyzed companies.

In general, the level of development of HRM systems and practices in Macedonia is far lower in comparison to the EU and US systems of HRM. Rigorous selection, pay-for-performance systems and training, as one of the first HRM practices implemented during corporate change are not sufficient to construct a strategic HRM system. In other words, companies cannot derive all benefits from the human resources and HRM as a function. The effectiveness of HRM systems is likely to be decreased if certain practices are ignored. Indeed, the lack of employee participation and line management participation in HR related issues make companies unable to use the HRM benefits in all their ramifications. In particular, when companies emphasize some aspects of the HRM system, as for example selection and training, over others, as for example employee participation, the overall cohesion of HR practices will be reduced thus generating higher costs to the organization and poorer performance.

Conclusion

Developing an HR system of internally consistent practices that is congruent to organisational strategy is vital for the success of a firm in the increasingly competitive business arena. The complexity of contemporary business has generated the need for shaping new mindsets and proactive attitudes of the companies, as well as orientation towards greater emphasis on effective deployment of human resources. In addition, forecasted human capital shortage will increase the importance of HRM function in the pursuit and retention of human resources.

Recent research on HRM practices shows, however, that there is much to be desired in the field of HRM in Macedonian companies. Given the fact that only few HRM practices are developed in Macedonian companies, one cannot expect that businesses substantially benefit from the human resources potential. High centralization, related to organizational and HRM issues, reflects the incapability of Macedonian firms to successfully implement HR practices. In addition, the lack of strategic insight has disabled HR managers and especially line managers to develop strategic HRM.

On the other hand, although often the acceptance of western HRM systems and practices by domestic companies can result in their inappropriate use and lack of congruence with organizational strategy, it is undisputable that foreign-owned companies affect the development of HRM as a function in Macedonian companies. Therefore, it can be concluded that the development of human resources is in a positive direction however much remains to be done for strategic integration of human resource management function in Macedonian companies. Effective deployment of human resources in achieving competitive advantage requires proactive systematic design of HRM practices. In this context, companies should concentrate on developing HRM and improving the link between HR practices and company performance.

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**GLOBAL PERSPECTIVE OF THE PUBLIC
ADMINISTRATION AND THE CASE
OF THE REPUBLIC OF MACEDONIA**

Abstract

Globalization has been challenging the theory and practice of Public Administration at an unprecedented level. Major policy issues cross national boundaries cannot be solved without international collaboration—even domestic issues will be better understood and addressed with a global perspective. Public Administration theory building, we need to examine issues across national and ethnodemographic divisions in order to better understand and explain context-specific phenomena. To ensure Public Administration's relevance to practice, we must reach out to the global public administration community in academic exchanges, global innovation and diffusion of best practices, and collaborative education. In the globalization spirit, we advocate moving toward "Public Administration with a Global Perspective" (PAGP) to render our teaching, research, and engagement more relevant to the changing reality of globalization. PAGP emphasizes serving a global community by building theories that offer greater explanatory power, have higher acceptability, and are more responsive to the demands in diverse and specific contexts.

This international approach must be regarded in view in our country because it is urgent for the Republic of Macedonia.

Key words: globalization; public administration; knowledge building; global perspective; Republic of Macedonia.

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Introduction

The pursuit of relevancy has been a lasting theme at relevant conferences. As an interdisciplinary applied field, Public Administration¹ should develop theories useful for both scholars and practitioners in order to stay relevant. In the 21st century, critical public problems are increasingly interdependent across national boundaries. The traditionally US-oriented Public Administration is no longer adequate, nor is the traditional comparative Public Administration. In a new spirit, we are recommended to threat “Public Administration with a Global Perspective“ (PAGP) to advance knowledge building, address practical issues, improve Public Administration education, and, ultimately, increase the relevancy of the field. PAGP emphasizes theory building that bridges “particularism“ and “universalism,“ attending to observations in specific ethnic, cultural, and political contexts, while at the same time looking for greater explanatory power, wider practical implications, informed policy learning, and transfer. Aiming to serve a global community, PAGP may achieve higher theoretical acceptability and better satisfy practical demands in diverse and specific contexts.

Global challenges demanding global perspective

The world has increasingly been integrated and transformed through the process of globalization in recent decades. The impact of globalization on public administration and governance has evoked various responses both intellectually and practically. Critical public problems are increasingly interdependent across national boundaries. A vast array of emerging issues, such as antiterrorism wars, natural and human disasters, epidemic diseases, economic crises, energy and environmental problems, and ethnic conflicts, are all globally interconnected. Even problems within the traditional domestic policy realms, such as public transportation, information management, and defense and security, have been pushed across national boundaries by extended privatization and contracting efforts, demanding global perspectives in building knowledge and seeking solutions. Such problems in the public sphere present challenges to the theories and practices. So, we need a new theoretical perspective of Public Administration that embraces the opportunity to learn at the global level. The emergence of a new world order manifested by the rising power of the European

Union and transitional/developing economies suggests the inadequacy and obsolescence of the Public Administration framework predominantly based on US experiences.

But US-centric Public Administration was not considered by many as either informative or applicable to non-western nations. Non-western states and the European communities have explored practical solutions and generated valuable lessons that should not be ignored by the mainstream Public Administration literature. The increasingly integrated and invigorated European communities challenge the leading position of the United States in Public Administration theory building and practice innovating. The extensive experience of the former Soviet administrative systems striving for democracy and capitalism is valuable to other transitional or nondemocratic states in Asia, South America, and Africa. The abundant knowledge from E-government development in Singapore, Hong Kong, and Korea greatly complements the US and European experiences. The success stories of China's economic development zones along its coastal areas also enlighten many of the distressed western economies. Russia, China, and other transitional democracies can learn from capitalism and public administration in Westminster countries just as the present and future public administrators in America and Europe can learn from the innovations of China, India, Korea, and other countries.

Global components already in public administration (PA) literature

Traditionally and even currently, Comparative Public Administration (CPA)¹⁾ has been regarded as a "subfield" of Public Administration. Reflecting a parochial and US-centric orientation, this perception has influenced our thinking of Public Administration for the last 50 years. It demonstrates the assumption that American Public Administration is the mainstream, whereas studies of other countries, all categorized in CPA, are non-mainstream or substreams.

CPA grew as a subfield of Public Administration in the United States after World War II. The American Society for Public Administration created the Comparative Administration Group (CAG) which, with grants from the Ford Foundation and the US government, published a series of occasional papers focusing on development

¹⁾ CPA expanded our understanding of the role of PA in society and how to build administrative capacities and launch administrative reforms. It led to the construction of administrative typologies that provide frameworks for data collection and analysis. CPA also established patterns of functional administrative processes in multiple cultural settings, such as in budgetary behavior and budgeting for results. CPA also articulated and advanced development administration.

administration². Attempts by former colonial countries to learn from western nations, the establishment of international organizations such as the United Nations, and extensive funding opportunities during the Cold War were some of the driving factors that shaped the scope and perceptions toward CPA in the United States.

It is worth noting that this decline of CPA occurred mainly in America. The early 1990s witnessed a renewal of interest in CPA among Public Administration scholars in the United States, pertaining to the New Public Management (NPM) movement. NPM has revived American interests in the comparative approach and the determination to learn from other countries. This renewed CPA movement again is based on the American perspective, in conjunction with a few Anglo-Saxon countries.

It is of value to assess the global inclusiveness of American Public Administration journals and curricula as they are the main vehicles for Public Administration knowledge dissemination. Overall, the theoretical perspective and practical relevance of Public Administration scholarship, as the norm, is still seen as lagging behind the increasing pressure for global Public Administration knowledge. Overall, too, it is the dominance of American the leading journals of Public Administration. Achieving this goal requires a new set of strategic initiatives for integrating public administration research and practice with a global perspective.

The purpose of comparative work goes beyond mere comparison—it should be and has, in the research by many scholars, become an important, established approach of general knowledge building, through which we advance theoretical understanding of public issues, domestic or global, and improve our capacity to address these issues. The oft-cited phrase—“it depends on the context”—testifies to the credibility of Public Administration scholarship done via the global perspective lens.

We envision a transformed Public Administration field that views the scope of all public issues in diverse national and ethnodemographic contexts. In this vision, “comparative” is not the right word as the “global content” has been set by the environment for the field of Public Administration. The distinction between “comparative” and “country specific” will lose its original meaning and significance because individual countries, while important, are discrete organisms that will be better understood in reference to each other and will work together in a larger symbiotic relationship in the

²⁾ The 12 journals are *Administration & Society*; *Asia Pacific Journal of Public Administration*; *Global Governance: A Review of Multilateralism and International Organizations*, *Governance—An International Journal of Policy and Administration*, *International Journal of Public Administration*, *International Journal of Public Sector Management*, *International Public Management Journal*, *Journal of Asian Public Policy*, *Journal of Policy Analysis and Management*, *Journal of Public Administration Research and Theory*, *Public Management Review: An International Journal of Research and Theory*, and *Public Organization Review: A Global Journal*. It is worth noting that the list includes several non-American journals that are relatively familiar to US Public Administration scholars.

global governance environment. Therefore, PAGP must not be downgraded to a sub-field of Public Administration that attracts only a small group of scholars with international backgrounds or interests; it is a perspective that all public administration scholars should consider to embrace.

Essentials of global perspective

The global nature of public administration practice, training, and scholarship in the 21st century necessitates a new perspective that fully addresses the transnational connectedness, interdependence, and complexity of the field. PAGP will avoid ethnocentrism, the tendency to study and make judgments about other societies in terms of one's own cultural assumptions or bias. Objects of study and observation are no doubt always taken from the context of specific cultures and countries, with traces of certain political and state characteristics. But our research should not be so relativistic that it becomes impossible to apply any generic cognitive or evaluative criteria. PAGP will also emphasize historicism. Researchers should place their studies into the context of the stages of human development in socioeconomic dynamics, with a retrospective view into the past for lessons, experience, and inspiration, and with a prospective view into the future for challenges and solutions. When placed in a longer historical frame, even the most stable political, social, and economic institutions are amenable to change; hence, they should not be treated as reasons for particularism but instruments from which we can learn. PAGP further requires balancing nomotheticism, the tendency to generalize, and idiographicism, the tendency to specify.

PAGP is not proposed as a grand theory nor a movement toward grand theory. It is best viewed as an "approach," an epistemological calling in conducting research. It is not designed (it does not even attempt) to offer "a comprehensive theory" to "unify the study" or "a central demarcating concept". It does not impose restrictions with tools to be used or the deductive or inductive inclination in conducting research. PAGP aims to redefine the scope of Public Administration to be globally relevant in all our activities of teaching, research, and services. PAGP entails knowledge of, or familiarity with, diverse cultures and countries. Researchers or cross-cultural collaborative teams employing PAGP will be more advantageously situated so they can overcome with relative ease those global challenges mentioned in the first two sections.

Given the increasingly more complex ethno- and geo-political background of global public services, theories based on PAGP will be useful in handling the "increasing incidence and intensity of conflict among diverse stakeholders"³⁾, so that different civilizations do not necessarily have to conflict. Since more and more issues have

³⁾ Brinkerhoff Jennifer M, *Global public policy, partnership, and the case of the World Commission on dams. Public Administration Review* 2002;62:324-36.

become global in scale and no single country can handle them or treat them well, theories from PAGP will be particularly useful in developing practical and acceptable global public policies. PAGP will also encourage the innovation and diversity of Public Administration practices.

The global perspective of the Republic of Macedonia

The reform of the public administration is a key priority of the the Republic of Macedonia. This is noted in the EU Progres Report 2010⁴⁾. Some progress is made mainly to legislative aspects. There is no sufficiently discussion on public administration reform. The driver for it forward is only the governemnt, wich was created a specialised platform with teh EU, under the framework of the Stabilisation and Association Agreement (SAA).

The Law on public servants was enacted in order to introduce similar provisions to those in the Law on civil servants. It will enter into force in April 2011. The law entrusts new competences to the Civil Servants Agency (CSA). State administrative bodies (SABs) and municipalities have begun to align their organisational charts with the Law on civil servants. The CSA developed monitoring plans and performed inspections. It also continued to strengthen its capacities to develop and deliver general training for civil servants. The training plan for 2010 wase not be implemented due to budgetary restrictions. The capacity of the CSA to take on the new competences conferred by the Law on public servants is insufficient in terms of expertise, budget and available infrastructure.

The administrative capacity of the human resources (HR) units in some ministries and the CSA are increased slightly. The network of HR units is not yet operational.

The increased slightly progress there is in some police reform (Ministry of Interior (MoI), the recruitment procedure under the Law on public servants does not guarantee a merit-based recruitment procedure.

The quality of strategic planning within SABs and municipalities is insufficient, and is mainly confined to budgetary planning. The related budgetary support is inadequate.

Overall, significant further efforts are needed to ensure the transparency, professionalism and independence of public administration.

⁴⁾ Commission Staff Working Dokument, The Republic of Macedonia, EUROPEAN COMMISSION, Brussels, 9 November 2010.

This is in practice.

We are needed changes in our scholarship to conduct research and teaching with a global perspective to advance general Public Administration theory building, to improve the global relevance of Public Administration education, and to address practical issues that are increasingly interdependent across national borders. The agenda is especially urgent for the Macedonian Public Administration community because we are lagging behind in this effort.

Research first. The integration of a global perspective in all Public Administration research focuses on building theories that “account for the continuously changing properties and problems faced by governments as they seek to implement public policies”. Not only does such research expose us to administrative problems in other countries, it also helps scholars better understand Macedonian public administration in a global framework and discover alternative ways to advance public service in the RoM.

Now teaching. Many Public Administration schools have experienced increasing needs to globalize the Public Administration curriculum in recent years. Although the primary goal of Public Administration education in the RoM is to focus on domestic practices, Public Administration education with a global perspective will deepen their understanding of American public administration, raise their awareness of global issues, and enhance their capacity in analyzing and managing public policy problems.

These urgent education needs call for scholars to incorporate a global perspective in the design of courses within the Public Administration curriculum, including questioning the relevance of theories in international settings, using international examples, and introducing comparative literatures. We should also create more study-abroad or student-exchange programs for Public Administration students. Significant barriers include identifying funding sources, finding suitable hosting institutions, and creating educational opportunities beyond sightseeing and superficial cultural exposure. Some of these barriers may be overcome by finding institutional partners. In recent years, some schools have established global connections with such partners through international fellowship programs, foreign executive training programs, or academic exchanges. We hope this trend becomes the norm rather than the exception for most Public Administration schools.

Conclusion

Because PAGP is a new approach for Public Administration in the 21st century we propose to implement in the RoM, in practice, education, research. PAGP is an idea to be further explored and substantiated. Transcending the division between cultures and national boundaries, PAGP builds and tests theories outside of country-specific contexts to study global issues of public administration. This essay advocates

that PAGP become the mainstream for Public Administration education in the R of M. We offered some preliminary suggestions to advance Public Administration scholarship, both in research and teaching, in the hope that it will generate greater contribution in the the field of Public Administration, specially naw, in vibrant in the quickly globalizing world.

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Original scientific paper

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TRENDS IN MARKETING COMMUNICATIONS AND THE LEVEL OF IMPLEMENTATION IN THE BANKING INDUSTRY IN MACEDONIA

Abstract

The new reality in the world is transferring new marketing communications trends, visible in the last 20 years. The technology development, the Internet, the globalization, the global economic crises and the new consumer behavior are factors for developing new trends in the marketing communications in the world. In the literature review we are going to present the different marketing communications strategies as relationship marketing, permission marketing, experience marketing, social networking marketing, mobile marketing and media channel shift in the last years.

For purpose of this research implemented was a qualitative research on a sample of banks in Macedonia, active with marketing communications in the last five years. The research was implemented with closed end questionnaire, providing valuable results for the level of implementation of the new marketing communications' trends in the banking industry in Macedonia.

The conclusion is that the Macedonian banks have to consider the world trends and local consumer expectations, and increase the usage of the new marketing communications tools for improving the relationship with their customers.

Keywords: marketing communications trends, Macedonian banking industry, financial crises, relationship marketing, permission marketing, experience marketing, media channels, and advertising.

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Introduction

The new reality is every day changes and turbulences. Information Communication Technology (ICT) rapid development influenced on the nowadays' customer. It is not a question how to control the customers' communications and word of mouth, but through providing best quality service to initiate positive communication among customers. Today's customer is more critical, can easily obtain and compare information on Internet, and is looking for more and more better quality, lower prices and interactive communications. Usage of the new digital media is a reality, not only browsing on Internet, but obvious is the rapid development of social networks. These trends are affecting the marketing managers' approach and they have to change and adopt the communications process with the new customer.

Faced with media fragmentation and escalating demand for measurable results, marketers are shifting their spending from mass media to response-oriented promotional channels. Even the advertising industry is propagating 360 degree marketing and with rising competition in every category and increasing clutter in the traditional advertising media, this is a fact which Macedonian companies have to realize. Organizations are now in the dilemma in which way to go - traditional or modern. The modern way by using channels that strive to establish targeted relationships between marketers and individual consumers; it includes direct mail, event marketing, interactive marketing, one-to-one marketing, the Internet and mobile marketing, consumer promotions and trade promotions and point of purchase displays and in-store marketing.

The aim of this paper is to present the level of implementation of different marketing communications in the banking industry in Republic of Macedonia. The scope of the paper covers world trends and new forms of marketing communications on the global level, the media shift and the empirical research on marketing communications of the banking industry in the Republic of Macedonia.

World trends' influence on marketing communications

The reality in the world is showing rapid changes in the last 20 years, mainly because of the fast technology development. This influenced on Internet appearance, which predisposed bigger and faster globalization among world customers. It is about

a new market and the customer is no longer a local customer. Nowadays we are talking about global customer, who is watching the same news, watching the same movies and listening to the same music all around the globe. This inter-market segmentation presents specific consumer behavior among the new generations as Generation X, Generation Y and the newest Millennial.

Kotler and Caslione (2009) in their book “Chaotics“ explain the four key changes in the marketing area as consumer empowerment – customers are more informed and they could find any information searching on Internet or asking their friends on their mobiles in the same moment. The second change is that clients are more believing famous brands with lower prices than famous national brands with highest advertising spending. The third change is the competition who can easily imitate any new product or service, and influencing on innovators ROI decrease. The fourth change is the Internet and the social networking web pages, creating totally new media, information source, and also new ways for commerce directly to the client. All of these changes are looking for big changes in the companies’ management and marketing strategies, with new thinking and a new marketing communications’ approach.

With the last global economic crises there were additional influences on the marketing communications, especially for the banks in the world. Most of the banks decreased their advertising budgets according to the report from TNS media intelligence data (2009). The top ten world banks decreased their advertising budgets (except for internet, outdoor and national radio) for 11 percentages in 2008, and 38.7 percentages in December 2008 comparing with the same period in the year 2007.

From the other side there were some banks that did not decrease their communication intensity, but changed the communication tactics according to the customers’ reactions as we could see in the article of Applebaum (2009). City Bank started a new advertising campaign “Never sleeps“, planning to improve the banks’ image with reassuring bank’s customers that the City Bank is working for them. Also the Bank of America continued with the same message for strengthening and stability that was started in May 2008 on TV, radio, print media and Internet, reassuring the customers that they are a safe bank for their savings.

During the crises, the bank’s managers mainly reevaluated their marketing communications and how effective it is. They were focusing on media or promotional tools which are providing measurable results, therefore increasing the usage of digital interactive media and promotional activities with higher engagement of the customer.

All of the above mentioned changes, trends and crises in the world, influenced on a new marketing communications shift. The customers are using new media, buying new types of products and companies are starting using new marketing concepts, where the customers are the most important. According to a lecture at a conference for Integrated Marketing communications in Singapore (2009) the most important nowadays for the marketing communications is the integration of new digital

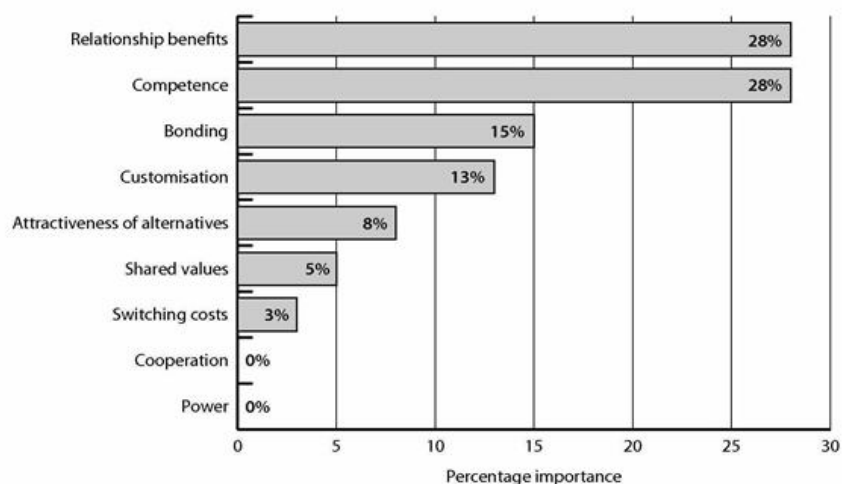
media into traditional media, inclusion and engagement of the customer and measuring the marketing communications' effects.

New forms of Relationship marketing

Trend in the modern marketing that involves all stakeholders, including employees, suppliers, distributors, customers, agencies, investors, collaborators, governmental agencies, media and society members is the relationship marketing. Relationship marketing investments generate short-term feelings of gratitude that drive long-lasting performance benefits based on gratitude-related reciprocal behaviors (Palmatier, Jarvis, Bechkoff & Kardes, 2009). The research of Palmatier et al. (2009) identified a set of managerially relevant factors and empirically demonstrates that gratitude plays an important role in understanding how relationship marketing investments increase purchase intentions, sales growth, and share of wallet.

Relationship marketing is important in establishing and managing long-term marketing relationships. The study of Theron and Terblanche (2010) found that particular dimensions are more important than others when relationships are established, and that trust, commitment, satisfaction and communication are the most important dimensions. Further dimensions identified as important in the B2B financial services industry are competence, relationship benefits, bonding, customisation, attractiveness of alternatives and shared values as presented in the Figure 1.

Figure 1 - THE IMPORTANCE OF DIMENSIONS BASED ON CONSISTENCY LEVEL



Source: *International Journal of Market Research*, 2010, Vol. 52 Issue 3, p383-402, 20p, 3 Charts, 2 Graphs, Graph; found on p395

Relationship marketing involves the application of the marketing philosophy to all parts of the organization. Every employee is said to be a “part-time marketer“. This is the way Regis McKenna (1991) view the marketing as “Marketing is not a function, it is a way of doing business . . . marketing has to be all pervasive, part of everyone’s job description, from the receptionist to the board of directors.“

Experience marketing uses events and sale premises design, to involve and engage the customers personally. This marketing means that we have to find the point of contacts (Moriarty, Mitchel and Wells, 2009) as they represent the point when the customer is experiencing our brand, not meaning that the customer is trying the product. This experience would influence on obtaining a positive or a negative brand perception within the customer. The idea is the client to be involved in order to create and build a long-term relationship. The experience marketing is a part from the relationship marketing. This is a new approach in the marketing communication, building partnership relationship marketing, through involving / engaging the customer in the banking business, making an unforgettable experience and emotions, if possible, in order the customer to talk further, to recommend the bank and to stay lifelong loyal to the bank or to the bank’s brand.

Permission marketing is a term popularized by Seth Godin (1999) and used in marketing in general and specifically influenced from the Interactive Communications Technologies development as Internet, which provided opportunities for personalized messages to each customer. The undesirable opposite of permission marketing is the interruption marketing.

Marketers obtain permission before advancing to the next step in the purchasing process. For example, they ask permission to send email newsletters to prospective customers (Scott, 2007). It is mostly used by online marketers, notably email marketers and search marketers, as well as certain direct marketers who send a catalog in response to a request.

According to the Law on Personal Data Protection (2005) Banks in Macedonia, as any other institutions, are obliged to ask for a written consent from the customers for further informing the customer and sending any promotional materials.

Interactive marketing is just another form of relationship marketing, opposite from the monologue marketing communications. It becomes available and attractive with the Interactive Communications Technologies development, same as the permission marketing. Deighton (1996) presents that Interactive Marketing refers to the evolving trend whereby marketing has moved from a transaction-based effort to a conversation. This marketing is a reality and the banks should not close their eyes and ears in front of the voice of the customer. The customer is spreading positive, but also negative information, experience, and in the best choice advocating for the brand.

In the article of Shukla (2010) the term ‘**Viral Marketing**’, developed by the Harvard Business School professor, Rayport (1996) and popularized by Tim and Steve (1997), describes e-mail practice of advertising of hotmail in their outgoing mails

from their users. When used offline, it is referred to as Word-of-Mouth (WOM) communication, and when used online, it is called 'viral marketing'.

The media shift

The importance, usage and the future of the media is presented in the research done by the Research department of the British magazine Economist (Economic Intelligence Unit – EIU) in 2008. The research presented the key factor for changes in the communications' channels; the technological improved connection with employees, suppliers, investors and the most important – customers. The results presented in the next five years, electronic mail through mobile and fixed phones will undertake the primary position as the most important business communication channel. Acceptance of new "networks" channels will increase for having improved internal and external communication with partners.

There is a forecasting from Jugenheimer in the book of Moriarty (2009) that number of newspapers will decrease, magazines will merge and become less, and television and radio are expected to be decreased, too. According to him mass media will evident trends as digitalization, interactivity, involvement, parity and media clutter. This is the reality; the audience skips the advertisements or changes the channels during the advertising block. This is why the advertiser has to find a way to come out from the clutter with finding an appropriate medium for the customer, and delivering a creative and different message to the right customer, at right time.

All of these trends create bigger usage of digital media. We are witnessing bigger usage of Internet on mobile phone as reading e-mail messages on mobile phones, browsing, communication and using social networks at the same time. According to the research of Ball State University, through the Center for Middletown Studies in 2005 presented in the book (Moriarty et al., 2010), the average person spends about nine hours per day on some medium.

Kantar media is a company that measures the media spending on annual basis and from their report (2011) we could compare the advertising spending of 2010 with 2009 in the table 1. Total advertising expenditures increased 6.5 percent in 2010. Ad spending during the fourth quarter of 2010 was up 7.0 percent versus last year. This is presenting some positive air in the advertising industry, as an after crises effect. Biggest increase is in TV, internet, outdoor and radio. From the other side there is an ongoing decline in the newspapers' advertising.

Table 1

PERCENT CHANGE IN MEASURED AD SPENDING ¹⁾	
MEDIA SECTOR	Full Year 2010 vs. 2009
• Media Type (Listed in rank order of 2010 spending)	
TELEVISION MEDIA	10.3%
• Network TV	5.3%
• Cable TV	9.8%
• Spot TV	24.2%
• Spanish Language TV	10.7%
• Syndication - National	-2.8%
MAGAZINE MEDIA5	2.9%
• Consumer Magazines	3.3%
• B-to-B Magazines	-1.2%
• Sunday Magazines	4.6%
• Local Magazines	0.9%
• Spanish Language Magazines	5.5%
NEWSPAPER MEDIA	-3.5%
• Local Newspapers	-4.6%
• National Newspapers	2.7%
• Spanish Language Newspapers	2.0%
INTERNET (display ads only)	9.9%
RADIO MEDIA	7.6%
• Local Radio	4.9%
• National Spot Radio	18.6%
• Network Radio	2.2%
OUTDOOR	9.6%
FSIS	5.4%
TOTAL	6.5%

Source: Kantar Media

In the same report, in the table 2 comparing the top ten advertising categories, we could notice that the advertising spending for Financial Services increased 6.0 percent. In the aftermath of the financial crisis, marketing activity has picked up noticeably for products related to debt (credit cards, consumer loans) while advertising budgets for savings related segments have lagged (investments, retail banking).

Except the traditional and the new digital media, there are also examples of alternative media in the world. The alternative media are not using nor traditional, nor digital media, so they could be flyers, brochures, bags, point of sales materials, point of purchase materials as ads in toilet or at pizza box or at the airplane sit, kiosk advertising, ads at certain events or places. Another idea that comes from US is the space advertising (Moriarty et al. 2010), having advertisement on the space shuttle of NASA in the space.

¹⁾ Figures tabulated from Kantar Media's Strategy™ application and cover all measured media.

Table 2

TOP TEN ADVERTISING CATEGORIES: FULL YEAR 2010 VS. FULL YEAR 2009

Rank	Category	Full Year 2010 (Millions)	Full Year 2009 (Millions)	% Change
1	Automotive	\$13,026.0	\$10,869.2	19.8%
	• (Manufacturers)	(58,224.7;	(\$7,066.3)	(+16.4%)
	• (Dealers)	(\$4,801.9)	(\$3,802.9)	(+26.3%)
2	Telecom	\$8,751.5	\$8,417.6	4.0%
3	Local Services	\$7,991.7	\$7,474.6	6.9%
4	Miscellaneous Retail	\$7,708.8	\$7,055.7	9.3%
5	Financial Services	\$7,689.7	\$7,254.8	6.0%
6	Food & Candy	\$6,672.3	\$6,228.6	7.1%
7	Personal Care Products	\$6,161.0	\$5,515.2	11.7%
8	Direct Response	\$6,143.5	\$6,521.1	-5.8%
9	Restaurants	\$5,652.8	\$5,528.3	2.3%
10	Pharmaceuticals	\$4,327.8	\$4,716.0	-8.2%
	TOTAL	\$74,125.1	\$69,581.0	6.5%

Source: Kantar Media

Research methodology

A quantitative research conducted for this research, was conducted on eight banks in Macedonia, with different size: three big, three middle and two small banks in June 2010. The sample was representative as it is presenting eighty percentages from the total Banks marketing communications budget. The questionnaire was pre-structured in order to define specific questions for banks' marketing communications activities. The survey was done online, sent by e-mail to the Bank's Heads of marketing departments. The online answers were confirmed through a telephone interview with each bank.

The questionnaire was consisted of the following questions:

1. Do you have changes in the budget allocation per media and other marketing promotional activities? What is the percentage of the change (media / PR / promotions / telemarketing / direct mailing / production / sponsorships / internal / research / agency work)?
2. Describe the budget allocation for marketing communications according the types of products and services of your bank (fulfill table) – deposit, credit, payment system and corporate image.

Results and discussion

According to the survey for this paper, half of the banks in Macedonia kept the same budget in 2009 as in 2008 and half of the banks had 20-30 percentages decreased marketing communications' budgets for 2009 comparing with 2008. In aver-

age all banks' advertising budgets were decreased 23 percentages comparing with 2008.

Another trend was the change of the media channels allocation. In the Republic of Macedonia TV and newspapers were keeping the same allocation in the total media budget, and internet and outdoor were growing slowly.

The advertising campaigns for corporate image and mortgage loans have lower allocation in the total budget. Credit cards' campaigns still have significant percentage from the total media budget and much higher budget comparing with the previous years. Consumer loans and business loans communications are completely decreased on very low or no communication at all.

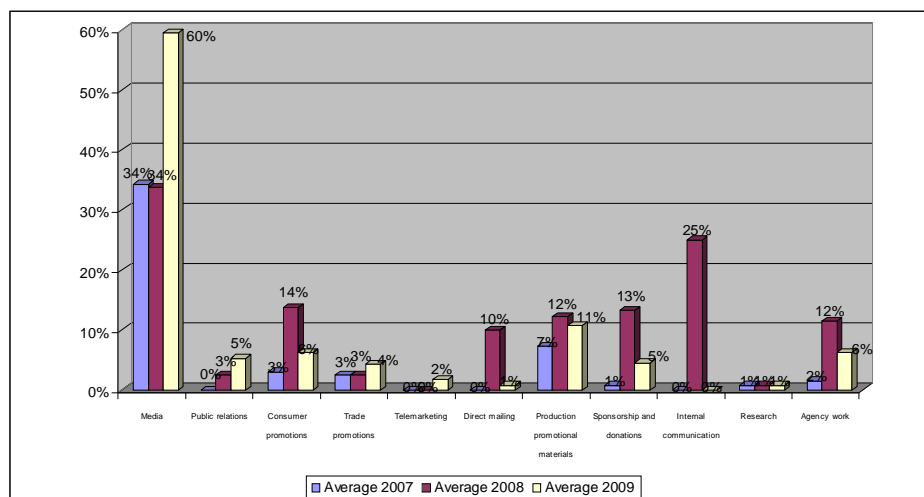
According to the survey performed for this paper and results presented in the figure 2, during the last financial crises, the marketing communications in Macedonia was mainly performed through advertising. Only few of the biggest banks have implemented other communications tools. Some of the banks have performed promotional activities as sweepstakes for credit cards. As we can see from the graph, Public relations were also much used by most of the banks, as PR is mainly influencing on the credibility, corporate image perception and is only small part from the marketing communications budget, it is very cost effective and important for the banks. Direct marketing was rarely used, only by one or two banks, with telemarketing and online direct communication, but with very low participation in the total budget. This is mainly because of the old data bases and not implemented CRM systems in the banks in Macedonia, which is a big issue and it should be changed in the near future, if the banks wants a better and cost effective communication. There is a trend of lowering the budget for sponsorships and donations, as it was on a very high level, before.

Internal communication is covered with very low budget from the total communication budget, but that doesn't mean that banks were not using. It is mainly covered by the Human resources department budgets, therefore does not exist in the marketing budget at all or exists with a small percentage.

Research activities are not used much, mainly for some quantitative or qualitative surveys, but not on a regular basis. This activity should be planned and performed on regular basis, as it is the most important for measuring the effectiveness of the marketing communications performance.

Pioneering steps are seen in using non-traditional media as guerilla marketing, i.e. one bank had brand extension in 2008 with acrobats performing the name of the "OK" loan in the most frequent trade malls (Stopanska Banka, 2008). Also some of the banks started and are using small budgets for digital media as online advertising with banners, social networking advertising on Facebook, e-mail direct mailings and mobile advertising with sms messages to current customers.

Figure 2- AVERAGE MARKETING COMMUNICATIONS EXPENDITURES FOR DIFFERENT TYPE OF MARKETING COMMUNICATION



Trying to connect with the world trends in marketing communications, we could summarize that all of the banks in Macedonia are using permission marketing, as they are obliged with the Law on Personal Data Protection (2005). However, the permission marketing, especially relationship marketing and CRM are not used enough, as not all of the banks are having direct mailing and direct marketing with their customers.

The interactive marketing is average as all of the banks are offering e-banking to their customers; they have some e-mail communication not many interactive and social networks are used on a very low level, mainly because they are afraid from negative customers' reactions.

Conclusion

The new marketing communications process is building relationship marketing with all their stakeholders, providing unforgettable experience that is going to be talked around. That is why next thing is interactivity, as today's customers are online and they expect immediate reply on Internet or on their mobile phones. But not all the customers want to be addressed and overwhelmed with millions of messages; therefore permission marketing is legally obliged to be used.

There is a change in media usage, too. Especially because of the last global financial crises, managers became more aware and more interested in measuring their results from each of the marketing communications channel. Therefore they allocated the budget towards new media and other direct promotional tools, which are easily measurable mainly because of the online or face to face interactivity. The newspapers

are facing the biggest damage from the ICT, as news is mainly read on Internet, and also on smart mobile phones. Modern customers are using many media in the same time, which is a good reason manager to find the most creative way to communicate the message, to the right person at a right time and on a right place, with other words to find out the contact points of the customers.

All of these trends in marketing communications were researched on a representative sample of Banks in Macedonia. Banks in Macedonia are keeping the track with the world banks and are already providing e-banking solutions on different quality level. From the marketing communications point of view, banks are mainly using advertising, which is generally a traditional approach and PR, which is important for the banking industry as it build the banks' reputation and it is cost effective. Consumer and trade promotions are promotional tools that could provide better experience for the customers and achieve better measurable results.

The conclusion is that not all of banks are realizing the importance of customer orientation and building relationship marketing. As CRM systems are long term beneficial, it is of great recommendation banks to start using such a system in order to build partner relations with their customers. With this system it will be much easier to make use of direct marketing as direct mailing and telemarketing, to make use of the permission marketing, and to work more effectively.

Banks should be aware of the media that today's customer is using in the same time. The banks should be present where the customer is moving, but also be present on the new media as social networks, internet, and mobile phones. It is not a question how to control what the customers are talking and sharing about the company, but how to provide the best quality service and to be transparent.

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**GAME THEORY- PREFERENCES AND SPECIFICATION ON
DIFFERENT TYPES OF GAMES**

Abstract

The concept of game theory is to study the actions of several independent agents in a given situation, which can be resolved with a conflict or cooperation. These agents may be individuals, groups, firms, or any combination of these. Game theory is a tool for analyzing different types of decision in a previously given situation in which a choice must be made by the players if they want to benefit from the game.

Game theory is a mathematically founded tool for analyzing and predicting a possible outcome based on the decisions of rationally involved players. The base of the game theory as stated before is the decision. Finding the way to track, analyze and structure the true definition of a decision made by an individual or group in a given surroundings is a primary goal of the game theory. Its efforts as presented in this article include a variety of strategic challenges and different methods of resolving each one of them always concerning the rational game play and benefit cravings from the players.

Key words: game theory, strategy, Nash equilibrium, dominance, games, decision, payoffs, players.

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1. DEFINITIONS OF GAMES

The object of study in game theory is the *game*, which is a formal model of an interactive situation. It typically involves several *players*; a game with only one player is usually called a *decision problem*¹⁾.

Games can be divided into cooperative and no cooperative. *Cooperative game* specifies the benefits that players gain from mutual cooperation. In contrast, *no cooperative game* deals with more individual approach i.e. the players choose their maximum benefit regarding the situation and in the process don't care about the outcome of the other players. Yet all types of games have one thing in common, and that is the concept of rationality. The concept of rationality states that players always choose an action which gives the outcome he most prefers, given what he expects his opponents to do. The goal of the game theory is to predict the outcome when played by rational opponents and according to the prediction define the most payable strategy in certain situation.

The *strategic form* (also called normal form) is the basic type of game in no cooperative game theory. A game in strategic form lists each player's strategies and the outcomes the result from each possible combination of choices²⁾. The benefit form each outcome is measured by the payoff and liking from the player. Often games that are more complex and strategically more dependent are shown in a game tree, and rules of engagement and choice consideration are also stated.

2. DOMINANCE

Players always make rational choices according to the doing of their opponents. When one choice (let's call it a strategy) has better outcome for another choice for a certain player it's called a dominant strategy for that player. A rational player will never choose a strategy that that it's not dominant for him if he gains more benefit from a dominant strategy.

¹⁾ Emmanuel N. Barron, "Game theory: an introduction", John Wiley & Sons, Inc., 2008, pg 3-4

²⁾ James N. Webb, "Game theory: decisions, interactions and evolution", Springer, 2007, pg.32

Prisoner dilemma

The prisoner's dilemma is a game in strategic form between two players. Each player has two strategies, called "cooperate" and "defect". The story behind the game prisoner's dilemma is that of two prisoners held suspect of a serious crime. There is no judicial evidence for this crime except if one of the prisoners testifies against the other. If one of them testifies, he will be rewarded with immunity from prosecution (payoff 3), whereas the other will serve a long prison sentence (payoff 0). However if they both cooperate with each other by not testifying at all, they will only be imprisoned briefly (payoff 2 for each). The defection for them mutually beneficial outcome is to testify, which gives a higher payoff no matter what the other prisoner does, with a resulting lower payoff to both. This constitutes their dilemma.

Picture 1: Prisoner dilemma³⁾

Prisoner	B.Cooperate	B.Defect
A.Cooperate	2	3
A.Defect	0	1

Picture 1 shows the payoffs in the game. Player A chooses a row, either Cooperate or Defect, and so does player B. According to the playable strategy that they each player has chosen certain payoffs are immanent. In this case the best possible choice for strategy will always be the choice to cooperate by both side, thus here the total beneficiary payoff for both sides is maxed. But the rational game play states that the strategy with payoffs (1; 1) will be chosen because each player will chose the part for his dominating chance i.e. part to defect. Therefore a much bigger beneficiary effect (according to the payoffs 2 and to) is alluded in order to have a chance to dominate a game. Somewhat paradoxically, the players will always have to satisfy with less (1; 1) instead (2; 2) if they tend and in most cases will play rationally.

³⁾ Origins: Author

Nash equilibrium

The central concept of Nash equilibrium recommends a strategy to each player that the player cannot improve upon by himself unless other players follow his recommendation. Since the other players are also rational, it is reasonable for each player to expect his opponents to follow the recommendation as well.

If a game has more than one Nash equilibrium, a theory of strategic interaction should guide players towards the most reasonable equilibrium upon which they should focus. However, it's easier to see this game outcome when observing the game rather than playing. Still at the end this abstract theory game model states that the players will eventually manage to play towards the best possible equilibrium i.e. Nash equilibrium.

Evolutionary games

The Nash equilibrium differs when applied to a large number of players. Equilibrium can be viewed as the outcome of a dynamic process rather than conscious rational analysis, this is called the bandwidth choice game.

Picture 2 shows a game where each player has two strategies High and Low. The main difference between this game and the game in picture 1 is the bigger payoff difference when the same strategy is called by the players. This is called a bandwidth game.

Picture 2: The bandwidth choice game⁴⁾

Prisoner	B.High	B.Low
A.High	5	1
A.Low	0	1
	5	0
	1	1

The assumption of this game is that in a large population of players one's who will be chosen to play will not always be as rational and sophisticated as theory expects. This indicates that the experience of the most beneficiary choice will apply and players will evolve in their decisions always choosing the High strategy. The concept

⁴⁾ Origins: Author

of this game is that more successful strategies will be used more frequently by the players and in the end will become more beneficiary and prevail. This is called an evolution.

3. MIXED STRATEGIES

Equilibrium is defined by a strategy for each player where no player can gain more than average payoff. But a game need not to have equilibrium depending on payoff's offered by to the players. However the outcome of the strategy is still determined by the players and their decisions which all randomed with certain probability.

Suppose a gambler goes to casino, agreeing to follow the house rules. The gambler has an incentive to violate the house rules. The manager of the casino would like to verify that the gambler is abiding by the agreement to respect the house rules, but doing so requires inspections which are costly (can decrease the casino's reputation. If the manager does inspect and catches the gambler cheating, the manager can demand a large penalty payment for noncompliance.

Picture 3: Mixed strategy game ⁵⁾

Players	2.Don't cheat	2.Cheat
1.Don't Inspect	0	50
1.Inspect	0	-50
	-10	-5

Picture 3 shows possible payoffs for such a game. The standard outcome, the reference payoff zero for both the manager of the casino (player 1) and the gambler (player 2) is that the manager chooses not to inspect and the gambler chooses to play by the rules. Without the inspection, the gambler prefers to cheat since that gives him payoff 50, with resulting negative payoff for the casino manager of -50. The casino manager may also decide to inspect. If the gambler does not cheat, inspection leaves him payoff 0 unchanged, while the manager incurs a cost result in a negative payoff -10. If the gambler cheats, however, inspection will result in a heavy penalty (payoff -100 for player 2) and still create a certain amount of hassle for player 1 (payoff -5).

⁵⁾ Origins: Author

In all cases, player 1 would strongly prefer if player 2 didn't cheat, but this is outside of player's 1 control. However the manager prefers to inspect if the gambler cheats (since -5 is better than -10). If the manager always prefers not to inspect, then this would be dominating strategy and be a part of equilibrium where the gambler cheats. The circular arrow structure in Picture 3 shows that this game has no equilibrium in pure strategies. If any of the players settles on deterministic choice (like not to inspect by player 1), the best response of player 2 will be unique (here cheat), to which the original choice would not be the best response (player 1 prefers to inspect when the player 2 chooses to cheat, against which player 1 in turn prefers to comply) therefore we can conclude that this game has no equilibrium in pure strategies.

Mixed equilibrium

What should the players do in the game of picture 3? One possibility is to prepare for the worst that is the choice called max-min strategy. A max-min strategy maximizes the player's worst payoff against all possible choices of the opponent⁶⁾. The max-min strategy for player I is to inspect (where the manager guarantees himself payoff -5), and for player II is to comply (which guarantees the gambler payoff 0). However, this is not Nash equilibrium, since player I could switch his strategy and improve his payoff. A mixed strategy of player I is to inspect only with a certain probability. In the context of inspection, randomizing is also a practical approach that reduces cost. Even if an inspection is not certain, a sufficient high chance of being caught should distant the gambler from cheating, at least to some extent.

4. EXTENSIVE GAMES WITH PERFECT INFORMATION

There is no temporal component in games in strategic form. The assumption that in this game there is no temporal component means that the players choose their actions simultaneously, regarding any knowledge about the choices of the other participants. Extensive game is a more detailed model of a game tree. This section treats games of perfect information. In a game of perfect information, every player is at any point aware of the previous choices of all other players. Furthermore, only one player moves at a time, so that there are no simultaneous moves. A game where all the choices that we make are known to our competitor (other players) is known as a game of perfect information. In this game there is no simultaneous movement or, simultaneous making decisions, only one player moves at a time. Therefore all the necessary information about other players and their decisions is known when it comes the time for us to make one.

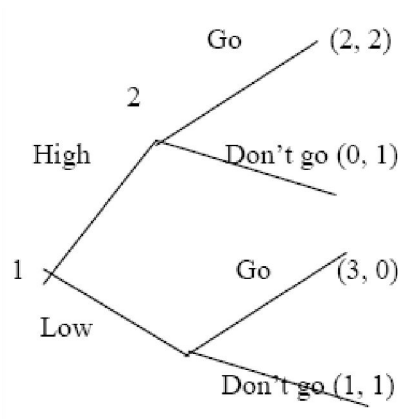
Picture 4 shows a perfect information game which is presented through a game tree. Every branching point, or node, is associated with a player who makes a move

⁶⁾ Hossein Bidgoli, "Encyclopedia of information systems" Volume 2, Academic Press, 2003, pg. 410

by choosing the next node. The connecting lines are showing the player's choices. The game starts at the initial, the root of the tree and ends at a terminal node, which establishes the outcome and determines the player's payoffs. Game trees can be drawn horizontally or vertically.

The travel manager provider, player 1, makes the first move, choosing High or Low quality for the destination and accommodation. Then the customer, player 2, is informed about that choice. Player 2 can then decide between going and not going to this vacation. The resulting payoffs are the same as in picture 1. However the game is different from the one in picture 1, since the players now move in a sequence rather than simultaneously.

Picture 4: Game tree



If we firstly considered the last possible choices of this perfect information game then the game can be analyzed by backward induction. Here, player 2 moves last and therefore can select the best action for him. If player 1 has chosen to provide High quality accommodation and destination, then the customer will surely prefer to go, since her resulting payoff of 2 is larger than 1 when not going. If the travel manager has chosen Low, then the customer prefers not to go on the vacation.

It can be clearly stated that in these case we are experiencing a phenomena called the first mover advantage also known as Stackelberg leadership by the economist who formulated it. A player in a game becomes a first mover or leader when he can commit to a strategy, that is, choose a strategy irrevocably and inform the other players about it⁷⁾. The first mover advantage states that if there is a chance in any kind of game that the player can become a leader he will always do so.

⁷⁾ Hossein Bidgoli, "Encyclopedia of information systems" Volume 2, Academic Press, 2003, pg. 418

In example seen in picture 5 presumes that the market for producing sandwiches is dominated by two producers. The firms can choose to produce certain quality of sandwiches, say either high, medium, low, or none at all, mark by H, M, L, N for firm I and h, m, n, l for firm 2. As economic theory states with increasing the total quality produced by both companies the market price of the sandwiches will fall. In these case the prices can fall as low as zero. The firms are familiar with this situation and know the consequences. Picture 5 shows the game and its payoffs.

In picture 5 no production is dominated by low or medium production, so that row N and column n can be eliminated. Then high production is dominated by medium production, so that row H and column h can be also left out. At this point, only medium and low productions of sandwiches remain. In picture 5 medium is better to produce for both firms therefore, the Nash equilibrium of the game is (M, m), where both firms make a profit of 16. In this case a first mover advantage is also a possibility depending on the commitment on player 1 and the anticipation on player 2.

Picture 5: Duopoly game ⁸⁾

Firms	h	m	l	n
H	0 0	8 12	9 18	0 36
M	12 8	16 16	15 20	0 32
L	18 9	20 15	18 18	0 27
N	36 0	32 0	27 0	0 0

⁸⁾ Hossein Bidgoli, "Encyclopedia of information systems" Volume 2, Academic Press, 2003,pg.419

5. ZERO-SUM GAMES AND COMPUTATION

The extreme case of players with fully opposed interests is embodied in the class of two player zero-sum (or constant sum) games. Familiar examples range from rock-paper-scissors to many parlor games like chess or checkers.⁹⁾

The natural device for zero-sum games which also include imperfect information is considered to be the mixed strategy. One's vulnerability against malicious responses is reduced by leaving one's actions open.

The concept of demonic no determinism is explained and modeled by zero-sum games. This concept is based on the assumption that the worst possible sequence will take place, when there is no order of events which is supposed to be specified. This randomization in which the players will play would result in a worst case scenario that later can serve as a benchmark.

Conclusions

Game theory is a very significant economic model of today's strategically thinking and developing. Although the principals are simple the applications are far reaching. Decisions for cooperation and competition are potentially included in every setting on day to day basis by the self-interested agents. Therefore Game theory is based on different layers of strategic decisions, which lead to the most rational solution in a given situation. It can be used to decline or accept proposed statements by the others or to design credible commitments.

Today game theory finds it's usage in different fields of decision making process. Through modern politics, and economic issues to warfare and every day decision, a simple or more complicated situation searches for good defined strategy in order to accomplish our goals. These types of strategic decision and the influence they bring can not be imagined without a well based strategy one provided by a well thought game-play provided by the principals of the game theory.

⁹⁾ Hossein Bidgoli, "Encyclopedia of information systems" Volume 2, Academic Press, 2003,pg.417

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Diana BOSKOVSKA^{*)}

**THE COST OF CAPITAL –DETERMINANT
IN INVESTMENT DECISIONS**

Abstract

The efficiency of the investments is affecting by various factors. One of the most important factors that determine the efficiency of investment represents the cost of capital. Regardless of the size of revenues that may be provided by an investment whether it is for real or financial investment, the price of capital can significantly affect the investment decision of acceptance a given investment project or purchase of a given financial instrument stocks, bonds and est. The cost of capital is a complex economic variable, given that its size influence by several factors, from external and internal nature, which implies the need for application of quantitative and qualitative analysis in order to provide the best possible estimate of the cost of capital. The variables taken into account in determination of the cost of capital will depend on the source of finance of a given investment.

Key words: investment cost of capital, average cost of capital, capital structure, sources of capital.

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Introduction

Starting from the goal of management of the corporation-maximization of its value, management efforts are generally carried out in two directions: increase of revenue on one hand and reduce costs of the corporation, on the other side. When it comes to cost optimization of the financial position of the corporation including the taking and the cost of capital, regardless of the manner of his engagement - for real or financial assets.

In the financial management under the cost of capital means “rate of return that the company must bring its investment to maintain unreduced market value of the company“ or “rate of return they require bidders on the capital market to make Attractive cash funds of companies that offer“¹⁾.

In the first case, the cost of capital is the subject of analysis and evaluation of capital budgeting, while in the second case of portfolio management.

Corporations are funded from multiple sources of capital: debt (bank loans, bonds, leases, etc.) and equity (retained earnings and shares), for which there is an appropriate price (cost). Given the existence of many types of sources of capital, subject to the analysis of this paper presents the structure of sources of capital, cost of different types of sources of capital and the total average cost of capital. The goal of this paper is to recognize the importance of cost of capital analysis and assessment of the justification of investing (the investments) in real and financial assets.

Before we proceed to study the structure and cost of capital, will initially make reference to theories of capital.

1. THEORIES OF CAPITAL STRUCTURE

There are generally two theories of capital structure in terms of its impact on the value of a corporation-traditional and modern theory. According to traditional theory, there is an optimal capital structure and the company can increase its value by using certain combinations of sources of funding. Moreover, the optimal capital structure

¹⁾ Spasov S., Arsov. S.: “Financial Management “, second edition, Faculty of economics, Skopje, 2002, p.322.

will be established when you execute minimizing the cost of borrowed and own capital.²⁾ In the early increase in debt does not affect or exercised little influence on price (cost) of the total capital. But in the process of increasing the debt, to increase the financial risk be seen drastic increases in price, total cost of capital. Hence, supporters of the traditional theory represent the position of part of the debt in total capital, but in proportions that will allow reducing the cost of capital, which will enable increased market value of the corporation or the share price of capital market. In this theory apply three rates: rate of return on corporate debt, the rate of return to investors (shareholders) and total rate of capitalization of the corporation as the average cost of capital³⁾.

The second conception of capital structure is the modern theory, also known as MM theory⁴⁾. This theory is based on very rigid assumptions abstracting many reality factors affecting it. MM theory in the analysis of capital structure and its impact on the value of a corporation begins with the following assumptions⁵⁾:

- Capital market is perfect;
- The information is free and is available to all investors;
- There are no transaction costs and all securities are infinitely divisible;
- The average expected future earnings of certain corporations are represented by subjective random variables. The expected value of the expected operating profits for the next period are the same as the current operating gains;
- Corporations can be classified in the same groups or enterprises of one branch have the same degree of business risk;
- There is no tax on profits of corporations⁶⁾.

Based on these assumptions (primarily the abstraction of tax) MM theory appears as the opponent of the traditional theory. Specifically, this theory argues that capital structure is irrelevant the value of the corporation. Such an attitude justified

²⁾ Trajkovski B.:“ Delovni finansii so finansiski management“ second edition, Faculty of economics, Prilep, 2002, p.335.

³⁾ Ibid, p.335-336.

⁴⁾ MM (modern) theory got its name by the initials of its authors Franco Modigliani and Merton Miller, who won the Nobel Prize for his paper “The cost of capital, corporate finance and theory of investment“, in 1958. Such work in financial theory is assessed as labor that has achieved the greatest impact in terms of any written any other work in the field of finance.

⁵⁾ Horne V. James:“ Finansisko upravljanje i politika“, Mate, Zagreb, 1993, p.277

⁶⁾ In their further works Miller and Modigliani, reject this assumption and its analysis initially expand with the introduction of corporate tax, and then only by Miller extended with the income tax.

based on the contention that the abstraction of the impact of the tax, increasing the rate of return to shareholders by increasing the financial leverage, because part of the debt in the total capital will be leveling of increased risk. Hence, there would be no net benefit from the use of debt or financial leverage on the value of the corporation.

The significance of the MM theory, despite its unrealistic assumptions is of great importance to financial theory through because the abstraction of a number of factors, pointing to factors that are important for capital structure. It represents the basis for further development of financial theory to develop other concepts of capital structure.⁷⁾

2. FACTORS AFFECTING THE CAPITAL STRUCTURE

Capital structure of the corporation is a factor that affects stock price. But individually speaking, the question of capital structure due to the influence of numerous factors from objective and subjective nature is a very complex problem. Initially, its impact on capital structure objective exercise factors external nature, including:

- The conditions for management in the actual national economy. In conditions of stable economic conditions in the economy there is opportunity for greater participation of debt in financing the corporation, because of lower financial risk. But it is not the case with unstable economic conditions, resulting in high and volatile interest rates, and thus to high financial risk for corporations.
- The type (character) in which the activity belongs to a given corporation. Corporations where the nature of the activity poses a greater share of fixed capital in total capital structure will be exposed to greater operational risk, because of the higher operating leverage. Most operational risk can be compensated by lower financial leverage, which will mean a need for lower levels of borrowing, or smaller share of debt in the structure of sources of capital.
- Taxes. The higher tax rate on profits affects greater preference of debt to equity, for tax savings.
- Capital market. Movements of capital markets in the long and short term impact on capital structure. For example, an unfavorable condition of the bond market conditions corporation will be decided on financing through stock or using credit. However, after relaxation of the conditions of the

⁷⁾ Widely seen in D Boskovskia "Portfolio management-modern approach to growth and development of corporations, " doctoral dissertation, Institute of Economics, Skopje, 2008,p.149.

market in corporate bonds will be able through the sale of bonds to reach targeted capital structure.

On the capital structure and factors affecting the internal nature such as⁸⁾:

- Developmental stage of the corporation;
- Functional features of the company;
- The nature of used assets.

Through the stages of the life cycle of the corporation in accordance with changes in production and financial capabilities of the corporation is amended and capital structure. In the initial phase, the phase of introduction, because taking a small segment of the market, the costs of operation exceed revenue from sales. Given that, at this stage remains low capacity for indebtedness of the corporation, hence the efforts of the corporation to be based more on capital from its own sources. By contrast, the stage of development (prosperity) because of the rapid improvement of production and financial results, the need for capital, but the possibility of a greater degree of indebtedness among investors and creditors because of increasing their confidence. At the stage of maturity due to stabilization of investment activities, the required capital corporation satisfies through accumulated profits. By paying off the debts of the previous installments on the one hand and using retained earnings to finance activities, again in the capital structure increases the share of equity.

Operational (functional) characteristics of a corporation are also a factor affecting capital structure. The operational capacity of the corporation is conditional stability and riskless of operations of the corporation, which directly affect capital structure. Thus, a corporation that is characterized by greater stability and lower operational risk prefer greater participation of foreign capital, unlike the corporation with a higher degree of volatility and risk and that equity prevails.

Capital structure will be conditioned by the very structure of assets of the corporation, which in turn is directly related to the type of activity which belongs to the respective corporation, which was discussed above.⁹⁾

As can be seen the capital structure is influenced by many factors of objective and subjective nature. Hence the need for the inclusion of quantitative and qualitative analysis, which would allow the analysis in addition to quantitative indicators include assessments of the impact of factors of subjective nature. In reaching a decision on the optimal capital structure or financial management of the corporation mix decisions based on the relationship between benefit and cost of appropriate capital structure between debt and equity. However, despite the practice being used three approaches to deciding on the optimal capital structure as follows:

⁸⁾ Trajkoski B., cited paper, p. 340

⁹⁾ For the other factors from the internal nature widely seen in Boskovska D., cited paper, 155, 156.

- 1) Capital structure which is determined by the phase of the lifecycle of a corporation. Therefore, the fast-growing corporations in its capital structure will have a smaller share of the debt of corporations who are in the maturity stage of its lifecycle.
- 2) Capital structure determined based on the capital structure of listed corporations in the activity.
- 3) Capital structure determined by preferences of financial management which includes the highest preference in the capital structure of retained earnings, then debt, the issuance of ordinary and preferential shares and ultimately least preferred source of equity - hybrid securities (convertible bond etc.).

Moreover, the approach that a corporation shall apply in determining the structure of capital will depend on its financial policy and state.

3. AVERAGE COST OF CAPITAL

To finance the investment and financial activities, the corporation as the most common form of organization of economic activity uses several sources of funding:

- Retained earnings;
- Equity (capital provided by issuing ordinary and preference shares);
- Commercial loans;
- Capital gain by issuing bonds.

Each source of capital has a price. But at first is necessary to determine the cost of each source of capital, you can then determine the average cost of total capital of the corporation.

No matter what source of capital in question, generally the cost of capital could be represented by the equation¹⁰⁾:

$$k = k_{rf} + p_{or} + p_{fr}$$

where:

- k - cost of capital for any kind of long-term investment;
- k_{rf} - the cost of risk-free form of financing;
- p_{or} - premium for operational risk;
- p_{fr} - premium for financial risk.

The riskfree cost of capital for individual corporations is approximately equal, which is not the case with risk premiums. Retained (retained) profits are a source of internal equity of the corporation. Price for this type of source of capital is the opportunity cost - the lost profit from alternative investment opportunities to investors or

¹⁰⁾ Spasov S., S Arsov., cited paper, p.322.

more specifically, holders of ordinary shares. Often the cost of capital of the corporation arising from accumulated profit is equal to the cost (price) of capital from ordinary shares, except that in that case it is not corrected with the cost of issuance and sale of new shares, as is the case the capital increase through issuance and sale of new shares.

The cost of capital obtained through debt or through the issuance of particular bonds or loans is in fact the required rate of return to creditors (lenders or holders of bonds), and it's interest. Interest is viewed accounting reduce item from the tax base, i.e. its rate decreases the tax base for calculating income tax. Hence the need for calculating or exemption of this particular effect of the cost of debt-interest. Consequently the cost of debt is calculated by the equation:

$$k_i = k_d(1 - T)$$

where:

- k_i - the cost of debt after tax;
- k_d - the cost of debt before tax;
- T - rate of income tax.

The cost of equity capital will depend on the type of action in question-priority or ordinary share.

Calculating the cost of capital obtained through the issuance of preferred shares is done by dividing the expected annual amount of dividend to preferential shares (DP) of net selling price that is realized from the sale of one preferred share (NP), or the amount of selling price priority actions reduced the amount of flotation costs one action. Thus,

$$K_p = \frac{D_p}{N_p}$$

In the preferred shares dividend paid after tax profit, hence does not occur and the effect of reducing the tax, and thus lack the need to make adjustment in tax returns that shareholders have rights of priority actions.

Where capital investment is financed through the issuance and sale of ordinary shares the cost of capital represents the required rate of return to holders of ordinary shares. The literature commonly used model is the model for calculating the required rate of return for ordinary shares at an infinite constant growth dividend¹¹:

$$r = \frac{D_1}{P_{va}} + g$$

¹¹⁾ In the literature this model is known under the term Gordon model by the name of the author Myron J. Gordon

where:

- D1-dividend in the first year;
- PVA - current value of shares;
- g - constant rate of dividend growth.

When it comes to the issue of new ordinary shares, the price of ordinary shares increased costs of issuance of new shares, with the cost of capital or required rate of return model for the infinite constant growth of dividends has the form:

$$Ke = \frac{D1}{Pva(1-F)} + g$$

where F is the cost shares (cost of flotation).

In determining the cost of individual sources of capital allowing it to determine the price of total capital of the corporation, which is calculated as:

$$\bar{K} = k_d w_d (1-d) + k_p w_p + k_s w_s$$

where:

- \bar{K} - average price (cost) of the total capital;
- w_d, w_p, w_s - participation of individual sources in the total capital;
- k_d - cost debt;
- k_p - cost preferential shares;
- k_s - cost equity.

The equation is determined that the cost of capital represents the total weighted average price from the prices of different sources of capital (WAAC- Weight Average Cost Capital), and occurs as a weight share of individual sources of capital expressed as a percentage of the total value of equity (investment). This way of calculating the average cost of total capital that leads to the conclusion that it is determined by two variables: price and the share of individual sources of capital. Hence, the larger or smaller price and / or participation of a separate source of capital will have greater or lesser effect on the total average cost of capital.

4. STRUCTURE OF CAPITAL IN DIFFERENT COUNTRIES AND REGIONS IN THE WORLD

Based on a comparison of financial indicators among the G-7, conducted for the period 1984-1991¹²⁾ was concluded that corporations in the U.S. to finance its

¹²⁾ Damodaran A., "Corporate finance: theory and practice", second edition, John Wiley & Sons, Inc., 2001, p. 514-515

activities are more heavily dependent on debt financing through then of sources of equity. In an additional analysis was made between Germany, Japan and the U.S. regarding the type of debt was found that the borrowing of corporations in the U.S. in greater extent by issuing bonds, unlike other countries where more was present using bank loans. This situation in the U.S. is explained by the fact that most corporations are in a stage of maturity at which stage corporations are less dependent on external sources of equity. Also, this result gives a contribution and the fact that most U.S. corporations access to the bond market as opposed to corporations in other countries.

In terms of equity, unlike other countries of the G-7 in the U.S. was well-founded negative net outflow of capital, resulting from the smaller amount of issued shares of the amount of repurchase shares by corporations.

In developing countries as exemplified in Brazil and India, financing its activities corporations greater extent based on equity, then of debt. This situation is largely explained by the legal constraints that directly prescribe limits on the rate of borrowing by corporations or indirectly, by reducing the effect of reducing the tax on profits using debt.

Regarding the manner of financing the corporate sector in the Republic of Macedonia notes a high level of capitalization, which means high equity and reserves to total sources of funding. Namely, from 2002 to 2008 the equity and reserves to total sources of financing the corporate sector is over 50%. The high level of capitalization provides a higher degree of financial security of the corporate sector. It also contributes to the relatively lower sensitivity of the corporate sector to external circumstances that might aggravate his billing and profitable position and indirectly affect the deterioration of its creditworthiness.

In the 2008 financial security has slight reduction (of 2.9 percentage points) and reached a level of 48.1%, and therefore continues to retain high levels of capitalization. Reduced financial security has led to increased indebtedness of the corporate sector to 18.4% compared to 2007.

In 2009 came the rise of the financial security of the corporate sector as measured by the share capital and reserves in the structure of the sources of funds, amounting to 49.8% (increase by 1.4 percentage points compared to 2008). This is primarily due to several factors-declining interest in borrowing due to strained credit conditions by banks, negative expectations about future movements in the economic situation in the country and the world, changes in the tax area in terms of tax exemption on reinvested profits, etc.

Conclusion

The efficiency of investment is influenced by several factors, which appear as input variables. One of those factors is the price (cost) of capital, which viewed separately is a very complex category. Such complexity of the cost of capital resulting

from the existence of different sources of financing, on the one hand and the different prices on the sources of capital, on the other side.

Capital structure is determined by objective and subjective factors. In the group of objective factors affecting capital structure, and consequently the cost of capital for more important are: the conditions for management, type of activity of the corporation, the tax policy of the state, capital markets and the like. While the side of the internal factors affecting capital structure are important for the following: the development phase of the corporation, the functional characteristics of the corporation and the nature of the assets of the corporation. The complex nature of capital structure implies the necessity of including quantitative and qualitative analysis in analyzing the cost of capital.

In determining the average cost of capital despite the structure should take into account the cost of various sources of capital.

In the Republic of Macedonia in the past regarding the structure of sources of capital notes high equity and reserves. By 2008 the equity and reserves amounted to over 50%. After that though the level of capitalization of the business sector is reduced below 50%, but the degree of financial security is high still.

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Natasha DANILOSKA^{*)}

COSTS AND RISKS SPECIFIC TO AGRICULTURAL LENDING

Abstract

The question of how to best develop an effective rural financial system in developing countries has been much debated over the past decades. During this period, developing countries are facing rather drastic changes of the agricultural sector, accompanied with decline in agricultural credit supply for borrowers. Lack of access to formal credit and to full financial intermediation services impedes agricultural development. In addition, most banks have neither the rural branches nor the agricultural lending expertise to serve small farmer clients. As a result, many rural people still rely heavily on unformal financial arrangements. These sources may be beneficial in some respects but cannot be a substitute for effective banking services.

Issues of high risks and costs are the main attributes of the rural finance markets within the developing countries. Within the framework of rural financial markets, this paper concentrates on the specific issues of lending to agricultural producers. Namely, agricultural lenders face distinct challenges that are related to the specific nature of farm production and are associated with the granting of rural and agricultural credit. The problems of high risks and costs are specific issues for agricultural finance and they are elaborated in this paper. Major attention is given to an assessment of the specific cost and risk barriers that formal lenders face in agricultural lending. In the conclusion remarks, particular attention is given to those aspects that facilitate a better cost and risk management in agricultural lending.

Keywords: agricultural lending, agricultural lenders, rural finance markets, cost reduction, risk management

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Introduction

Agricultural lenders who serve small farmers face high financial transaction costs when granting small loans. High lending risks are suggested by the frequent inability of small farmer-borrowers to provide acceptable forms of loan collateral. The unique features of agricultural lending are summarized in the table below.

Table 1

UNIQUE FEATURE OF AGRICULTURAL LENDING

1. Lending activities in a politically sensitive environment
<ul style="list-style-type: none">• Agriculture is a politically sensitive sector• State interventions often occur in rural financial markets.
2. Risks associated with agricultural lending
<ul style="list-style-type: none">• Similar economic activities of borrowers generate covariant risks due to market and price fluctuations, yield uncertainties, changes in domestic and international policies.• State interventions.• Low loan repayment discipline in externally-funded credit schemes
3. High financial transaction costs for lenders and borrowers
<ul style="list-style-type: none">• Long distances to serve a dispersed rural clientele.• Poorly developed transportation and communication infrastructure.• Little knowledge about heterogeneous farm households.• Expensive management and supervision of rural bank branch networks.• High additional costs for borrowers: opportunity costs (e.g. lost working time), transport costs, bribes, fees.
4. Specific credit demand
<ul style="list-style-type: none">• The provision of long-term credit can lead to matching problems between assets (loans) and liabilities (funding sources).• Reduced turnover of agricultural loan portfolio over the year• Seasonality in agricultural credit demand
5. Lack of required loan collateral
<ul style="list-style-type: none">• Small farmers have few physical assets (e.g. land).• Farmers and especially poor rural women have difficulties in clearly demonstrating their legal ownership of assets.• Legal contract enforcement problems arise even when collateral is available.
6. Farm households are integrated production and consumption units
<ul style="list-style-type: none">• Demand for loans depends on the self-financing potential, access to savings deposit facilities and risk management ability of borrowers.• Due to the fungibility of money borrowed funds can be used in the farm household for consumption, education, social insurance, production and investment purposes.

1. COSTS OF AGRICULTURAL LENDING

In this part special attention is given to the challenges that agricultural lenders face in managing their financial transaction costs and risks. They are as follow:

Dispersed clients: Low population density together with dispersed location of rural clients make the provision of formal financial services costly. From the lender's perspective, the long distances between communities and the inadequate rural transportation facilities in many developing countries increase the costs of loan appraisal, loan monitoring and enforcement of loan repayments.¹⁾ The use of mobile loan officers and/or branch offices can be effective in lowering transaction costs. But mobile facilities may be subject to security risks if bank staff are required to transport money. The establishment of a rural branch network reduces the security risks, but branches are costly to maintain and to supervise. Financial transaction costs of institutional credit can also be high for rural borrowers. This results from the high opportunity costs of lost working time. A borrower may have to pay several visits to the bank branch office to conclude cumbersome loan application procedures which require a long time for processing. Clients often have to spend much time and money to obtain the required documents and to find loan guarantors. For very small loans, these costs can significantly increase the effective lending interest rate. While the decentralization of field operations has been effective in reducing the transaction costs in some countries their success depends on the local environment, infrastructure conditions and the management skills of the financial institution.

Seasonality and loan term structure: The seasonal nature of agricultural production and the relative long periods before crops can be harvested and sold have direct implications for the financial transaction costs of the lender. Agricultural loans are normally larger and are required for longer periods. Matching assets and liabilities is more difficult than for non-farm activities. Agricultural credit is also often repaid in unbalanced installments. These are one or two loan repayments rather than regular weekly or monthly installments common in microcredit. This irregular pattern implies more difficult monitoring of repayment capacity and willingness. Moreover, an uneven distribution of the agricultural lending operations over the year increases the fixed costs of personnel. The earnings from lending may not be sufficient to cover these costs. Liquidity requirements in periods of high seasonal loan demand also increase the price of loanable funds. In times of low demand, excess liquidity needs to be invested in low or non-earning assets. This will increase the opportunity costs of these funds. In summary, lenders face high agricultural lending costs.

Heterogeneity of farming: The diversity in farm and non-farm income-generating activities of rural households requires better knowledge of the farm household

¹⁾ Gurgand M: "Rural finance institutions-their outreach and sustainability"; Savings and Development, 20,2, 2006, p.129-166

financial situation. Loan officers have more information than may be needed in the case of urban lending. This can extend the bank staff time (and expenses) needed for loan appraisal. It may also require the setting of individual loan repayment terms. It is likely to increase the costs of training agricultural loan officers.

2. RISKS ASSOCIATED WITH AGRICULTURAL LENDING

Generally speaking, financial institutions face four major risks:

1. Credit or loan default risk-refers borrowers who are unable or unwilling to repay the loan principal and to service the interest rate charges
2. Liquidity risk-occurs when a bank is not able to meet its cash requirements. Mismatching the term of loan assets and liabilities (sources of loanable funds) exposes banks to high liquidity risks.
3. Interest rate risk-risk that a loan will decline in value as interest rates change.
4. Foreign exchange risk-defines exposure to changes in exchange rates which affect international borrowings denominated in foreign currency.

Regarding agricultural lending, in this paper, the focus is mainly on agricultural credit or loan default risks. Active management can reduce these risks. Risks and uncertainty are pervasive in agricultural production and are perceived to be more serious than in most non-farm activities. Production losses are also impossible to predict. They can have serious consequences for income-generation and for the loan repayment capacity of the borrowing farmer. The type and the severity of risks which farmers meet, vary with the type of farming system, the physical and economic conditions, the prevailing policies, etc.

Agricultural lending implies high liquidity risks due to the seasonality of farm household income. Surpluses supply increased savings capacity and reduced demand for loans after harvest and deficits reduce savings capacity and increase demand for loans before planting a crop. Also, agricultural lenders face particular challenges when many or all of their borrowers are affected by external factors at the same time. This condition is referred to as covariant risk which can seriously undermine the quality of the agricultural loan portfolio. As a result, the provision of viable, sustainable financial services and the development of a strong rural financial system is contingent on the ability of financial institutions to assess, quantify and appropriately manage various types of risk.²⁾ Credit risks in agricultural lending are summarized below.

Production and yield risks-yield uncertainty due to natural hazards refers to the unpredictable impact of weather, pests and diseases and calamities on farm produc-

²⁾ World Bank series: "Sustainable Banking with the Poor"; World Bank, Washington D.C., 2000.

tion. Risks severely impact younger, less well-established, but more ambitious farmers. Especially affected are those who embark on farming activities that may generate a high potential income at the price of concentrated risks, for example in the case of high input monoculture of maize. Subsequent loan defaults may adversely affect the creditworthiness of farmer borrowers and their ability to secure future loans.

Market and price risks-Price uncertainty due to market fluctuations is particularly severe where information is lacking and where markets are imperfect, features that are prevalent in the agricultural sector in many developing countries.³⁾ The relatively long time period between the decision to plant a crop or to start a livestock enterprise and the realization of farm output means that market prices are unknown at the moment when a loan is granted. This problem is even more acute for perennial plants because of the gap of several years between planting and the first harvest.

Risk of loan collateral limitations-Problems associated with inadequate loan collateral pose specific problems to rural lenders. Land is the most widely accepted asset for use as collateral, because it is fixed and not easily destroyed. It is also often prized by owners above its market value and it has a high scarcity value in densely populated areas. Smallholder farmers with land that has limited value, are less likely to have access to bank loans. Moveable assets, such as livestock and equipment, are regarded by lenders as higher risk forms of security. The owner must provide proof of purchase and have insurance coverage on these items. This is rarely the case for low-income farm households.

Moreover, there are a number of loan contract enforcement problems, even when borrowers are able to meet the loan collateral requirements. Restrictions on the transfer of land received through land reform programmes limits its value as collateral-even where sound entitlement exists.

Moral hazard risks in distorted credit cultures-Potentially serious risk problems have risen from the effects of failed directed credit programmes. The impact on the loan repayment discipline is pervasive. Borrowers who have witnessed the emergence and demise of lending institutions, have been discouraged from repaying their loans.

Under these circumstances, the incidence of moral hazard is high. The local “credit culture” is distorted among farmers and lenders. Borrowers lack the discipline to meet their loan repayment obligations, because loan repayment commitments were not enforced in the past. Lenders, on the other hand, lack the systems, experience and incentives to enforce loan repayment. There is also an urgent need to change bank staff attitudes and the poor public image of financial institutions in rural areas.

³⁾ Von Pische, John D., Dale Adams and Dordon Downald: “Rural Financial Markets in developing Countries: Their Use and Abuse”; Johns Hopkins University press, Baltimore, 2004, p. 255-261.

Risks from changes in domestic and international Policies-Policy changes and state interventions can have a damaging impact on both borrowers and lenders. For the latter they can contribute significantly to covariant risks. Many low-income economies under structural adjustment programmes have slashed their farming subsidies. This has had, for instance, a serious effect on the costs and the demand for fertilizer. Reducing government expenditures as an essential part of structural adjustment programmes may also affect employment opportunities in the public sector. Costs may even reduce agricultural production levels, if extension services are suddenly discontinued.

Concluding remarks

One of the biggest challenges that agricultural lenders face, is the problem of high costs that are associated with the granting of small loans. In fact, loan administration costs do not vary by loan amount. By definition small loans are less profitable for a lender, and in the same time, financial transaction costs are high for borrowers. However, below are listed some recommended ways to reduce the high costs of providing small loans. They are:

- Standardization of loan products and lending procedures-offering only a few highly standardized loan products and in the same time, additionally establishing collaboration with partner agencies for the provision of non-financial support services.
- ***Increasing productivity of loan officers***-loan officers are expected to serve a large number of clients. In order to achieve this, staff performance bonuses are widely used.
- ***Group lending***-there are two modalities of group lending. A microlender may lend to a collective entity such as a co-operative or a village bank, which in turn on-lends the funds to its members. Second type is joint liability or solidarity group lending, whereby the lender provides loans to individual borrowers who are organized in groups. In both cases, group members are collectively responsible for the full and timely repayment of the loans.
- ***Individual lending***-the idea is to examine the enterprise household cash flow and check the credit history of the loan applicant to get a complete picture of his/her loan repayment capacity and creditworthiness.

Regarding the risk management, an assessment of the specific risks that are associated with different agricultural production activities is essential in determining the potential risk exposure of lenders. Other recommendations are:

- Loan appraisal should include a thorough assessment of the borrower loan repayment capacity and his creditworthiness. Also, external risk factors of farm production should be taken into account.

Natasha Daniloska: Costs and risks specific to agricultural lending

- Collaboration with organizations which know farmers well, reduces client information costs and risks of lenders.
- Agricultural lending should start in production zones that present low risks. Operations can then gradually be expanded to more risky areas.
- Managing of external risks through loan rescheduling, agricultural insurance and emergency assistance can assist both the farmer-borrower and the agricultural lender.
- Staff incentives systems motivate staff and effectively increase their lending productivity.
- Close monitoring of markets and exposure to lending risks is essential for agricultural lenders.
- Clear information should be given to borrowers on the financial conditions of loans and loan repayment obligations.
- Close contacts between the lender and the borrower are conducive for an atmosphere of mutual trust that improves credit discipline.
- Agricultural lending institutions should be free of political interference in their daily management.
- Agricultural lenders as part of their risk management strategy need to monitor policy and market changes that affect their agricultural clientele.
- Collateral substitutes replace more conventional types of loan guarantees and can provide important loan repayment incentives.

Concerning the agricultural lending, despite the above listed recommendations, it is firmly believed that there are really not “best” practices that can be applied to all circumstances. Instead, the development of better rural and agricultural lending technologies is seen as a dynamic and ongoing process that guides the lending institution towards meeting the specific demands of the rural clientele.

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Klimentina POPOSKA^{*)}

**ANALYZING VARIABLES OF BANK PROFITABILITY:
FOCUS ON EXOGENOUS VARIABLES IN COMMERCIAL
BANKS IN GERMANY**

Abstract

Permanent dynamic changes in the banking industry generate pressure for identifying and searching new products in ensuring the adequate level of bank profit as profitability represents the major motive for each industry. In order to make a contribution toward existing knowledge of bank profitability and its determinates, the study sought to identify the key internal profits determinates in the commercial banks which are controllable by the bank management. To verify the expectation for the influence of certain internal variables the focus of the study has been done with data for the German banks. Regression analyses of the panel data set comprising 1500 observations of 300 banks in the period 1994-2005 verify some of the previous findings made on the panel data with EU region, albeit some findings are different. The results of the study identified that Equity to Total Assets and Net Loans to Total Assets have positive relationship with bank profitability expressed by ROAA, while as Net Loans/ Customer and Short term Financing and Cost to Income are negatively significant determinates influencing bank profitability in the commercial banks in Germany. Total Assets, Interest Income/Noninterest Income and Total Operative Income are insignificant determinates for the bank profitability expressed in Return in Average Assets.

Key words: Exogenous Variables; ROAA; Profitability; Commercial banks.

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1. INTRODUCTION

Profitability represents the key motive for each business activity including the banking industry as well. Reaching adequate level of profit, combined with tolerable risk control, preserves bank capital and provides bases for future growth. This question is of particular importance at the moment when banks compete in previously inaccessible domestic and foreign markets. Such competition adds additional pressure on banking industry to search for the new ways and better management policy for realizing better performances.

Increased pressure forces banks to seek for the new sources for profit origination. Consequently in the practice of many countries, particularly developed ones, decreasing trend of interest income activities was offset by severely growth in the non-interest income bank activities and searching for the new banking innovative banking products which would offset the decreasing role of the traditional banking activities as key element in bank profit.

In the USA, banking industry decrease the reliance on the interest income activities and increase its non-interest income, whilst the greater reliance on noninterest income, particularly the trading revenue resulted in lower risk-adjusted profits (Stiroh, Kevin J., 2002). In EU countries, particularly Germany banks indicates historically low bank profitability levels¹⁾ and massive layoffs of employee, yet it is far from clear whether the dominance of banks in the German financial system has been significantly eroded (Hackethal Andreas, 2007).

Bank profitability has been treated in the number of studies which have examined the determinants of banks' profits and margins in many countries around the world (particular country or number of countries). Most of these studies consider internal factors (i.e bank's specific characteristics) and external factors (i.e financial industry and economic environment). The results indicate that certain variables have clear connection with the bank profitability represented by Return on Assets (ROA), Return on Equity (ROE) or NIM (Net Interest Margins), expressed by positive/nega-

¹⁾ In Hackethal Andreas, 2007: The President of the German Banking association and chairman of Deutsche Bank's supervisory board, Rolf E. Breuer, declared that the state of German banking industry has been worst during the last 50 years.

tive significance with the profitability, albeit many determinates have ambiguous relationship with the profitability, hence the results are mixed.

According to our knowledge, focus on determinates of bank profitability in Germany has not been treated in a single study of the internal bank profit determinants. There are only few studies that focus on the determinants of profitability with focus on the EU as a total (e.g., Molyneux and Thorton, 1992; Staikouras and Wood, 2003; Beckmann Rainer, 2007).

The focuses of research in the study are German commercial banks and its profitability. Banks are particularly important and play dominant role in the German economy,²⁾ hence exploring internal determinates for bank profitability would contribute for better understanding the internal factors which are possible to be controlled by the management decision. Despite the general trend of declining role of the commercial banks, such as commercial banking in US which clearly demonstrate the declining trend, it is far from clear if the dominate role of the commercial banks in the German financial system has been diminished (Hackethal Andreas, 2007).

The particular focuses of this study are internal bank profitability variables as most studies conclude that internal factors explain a large portion of the bank profitability (Tanna et. al., 2005). Having in mind that the subjects of the research are commercial banks of one country it is obvious that the macroeconomic factors will influence on all banks in the same time. More over, time dimension of the panels used in the empirical studies is usually too small to capture the effect for the control variables related to the macroeconomics/ external variables (Athanasoglou, P. P., et al., 2008).

Hence, the research is focused toward the internal bank profitability in commercial banks in Germany aiming to identify the key internal elements influencing the bank profitability, or variables related to the bank management. The management controllable variables refer to bank characteristics which reflect in bank management policies and decision in regards to sources and uses of fund management, capital and liquidity management and expenses management (Nur Azura Sanusi and Abd. Ghafar b. Ismail 2005).

The paper will contribute in enriching the existing literature with the newest data with focus on the commercial banks in Germany. Obtained results confirm some of the previous findings in other countries or regions, whereas several findings are different then the literature before and supported only by few papers. The study itself seeks to enlighten dominant internal factors influencing bank profitability in commer-

²⁾ The support of the statement has been found in Koetter M., et al., (2004) indicating that the particular importance of the banks for the German economy has been recognize in two ways: a) German banks are still single most important way for channelling the funds from savers to borrowers, b) long term bank credit represent the most usually source for financing the SME activities in Germany.

cial banks, albeit the focus on the internal factors should contribute for better understanding the management policy in the enduring motive to increase bank profitability.

The paper is organized in the following manner: Section two represent literature review, section three introduce the Variable selection for the regression analysis, section four demonstrate the empirical results and section five provide the main conclusion, policy recommendations and suggestions for further research.

2. LITERATURE REVIEW

Determinants of banks' profits have been examined in many countries around the world and they focus either on a particular country or a number of countries. Most of these studies consider internal factors (i.e. bank's specific characteristics) and external factors (i.e. financial industry and economic environment).³⁾ Internal determinants are observed as micro-bank specific determinates of profitability related to the bank management, while external determinates reflect the economic and legal environment that effects the bank performances (Athanasoglou, P. P., et al., 2008).

2.1 Individual studies

Individual studies are focused at the single country examining the determinates for bank profitability as combination of internal and external determinates such as US (Berger, 1995, Seiford M. Lawrence, Zhu Joe, 1999), UK (Tanna Sailesh, et al., 2005) Greece (Athanasoglou, P. P., et al., 2008, Pasiouras Fotios, 2008, Kosmidou, K., 2008), Italy (Albertazzi Ugo and Gambacorta Leonardo, 2006), Australia (Williams B., 2003), China (García-Herrero, Alicia, et al., 2008), Malaysia (Nur Azura Sanusi and Abd. Ghafar b. Ismail, 2005), Korea (Park H. Kang, Weber L. William, 2006); Tunisia (Ben Naceur, S., Oct. 2003); Brazil (Afanasieff et al., 2002).

Several studies observe single variable and determine its effect on profitability such as effect of the capital on bank profitability in Egypt (Ben Naceur, S., Kandil, M., 2008), technology effects on profitability in UK (Holden Ken and El-Bannany Magdi, 2004), noninterest income in US, (Stiroh, Kevin J., 2002); domestic and foreign ownership (Peria Maria Soledad Martinez and Mody Ashoka, 2004; Aburime, Toni Uho-moibhi, 2008 (Nigeria)).

³⁾ In majority of earlier and recent studies, bank profitability determinants are divided into internal and external (Bourke, 1989; Molyneux and Thornton 1992; Afanasieff and Nakane, 2002; Tanna et. al., 2005; Athanasoglou, P. P., et al., 2008).

2.2. Cross countries studies

Beside the studies of the profitability determinates in one single region, bank profitability has been examined in several countries/regions such as European region (Molyneux, P. and J. Thornton, 1992, Beckmann Rainer, 2007; Stajkouras and Wood, 2003; Carbó S., Rodríguez F., 2007; Pasiouras Fotios, Kosmidou Kyriaki, 2007), Europe, North America and Australia (Bourke, 1989), Middle East (Bashir, A.M., 2000), South Eastern European Region (Panayiotis P. Athanasoglou, et al., 2006) or Worldwide commercial banks (Demirguc-Kunt, Asli and Huizinga Harry, 1999; Micco Alejandro, et al., 2004).

2.3. Internal variables

Since the focuses of the studies are internal and external variables influencing bank profitability we review some of the major determinants examined at the literature. Initially the internal factors might influence bank profitability via different channels. As internal variables, or those controllable by the bank management, the literature usually examine: Cost/Income ratio, Cost of overhead⁴⁾ to total assets, net loans to customers and short term funding, Liquid assets to customers and short term financing, Customer & Short Term Funding/total assets, Bank Loans to Total Assets, Equity to Total Assets, Bank's Total Assets, Ratio of Loan Loss Reserves to Gross Loans, Total Liability to Total Assets, Non-performing loans as a percentage of total loans, Participation of the foreign capital, Non-interest expenses relative to non-interest revenues, Ratio of earning assets to total assets, Technology, Off balance sheet activities, labor productivity measured by the real gross total revenue over the number of employees.

2.4. External variables

Despite so cold specific internal variables, or management controllable variables, many studies capture the external variables, such as macroeconomic environment which may influence bank profitability through various channels. For instance, credit risk is influenced by economic growth, inflation and the level of real interest rates as they affect the borrower's repayment ability and the value of collateral (García-Herrero, Alicia, et al., 2008). Variables that represent market characteristics are usually divided into three categories: market concentration, industry size and ownership status (Athanasoglou, P. P., et al., 2008). In our paper we focus on the internal

⁴⁾ Overhead/ta is defined as a bank's Non-interest Expenses (mostly wages) divided by Total Assets (Demirguc-Kunt and Huizinga, 2000).

determinates for bank profitability, since we consider that all banks in one country are under the influence on the same external factors.

3. VARIABLE SELECTION FOR THE REGRESSION ANALYSIS

3.1. Dependent variable

The profitability variable as dependent variable in our study is represented by Return on Average Assets (ROAA), calculated as net profit after tax divided by average total assets.⁵⁾ This ratio represents returns generated from the bank assets and it is generally considered as most appropriate indicator for efficiency and operating performance of banks. Utilization of the average assets would capture any differences that occurred in assets during the fiscal year. Such measure has been used in other studies such as Tanna et al. (2005), Athanasoglou, P. P., et al., (2008), Pasiouras Fotios, (2008).

In various studies, beside the ROAA, the authors utilize other dependent variables such as Return on Equity (ROE) and Net Interest Margin (NIM).⁶⁾ Although the number of the studies which utilize the ROE and NIM are not neglecting, mostly used determinant for bank profitability is ROAA, representing the ability of management to generate profit on the banks assets). Moreover, an analysis of ROE disregards the risks associated with high leverage and financial leverage is often determined by regulation, hence ROA emerges as the key ratio for the evaluation of bank profitability. (Athanasoglou, P. P., et al., 2008).

⁵⁾ In the study we utilize balance sheet figures from Banscope. Balance sheet figures should be always averaged for use with income statement figures as this approach reduces distortion, which might be caused by unusual transactions around the reporting dates. Koch W. Timothy and Macdolanld S. Scott, 2006:69.

⁶⁾ ROE indicates the return to shareholders on their equity. Connection between the ROE and ROA can be established by the equity multiplier (EM). Namely, ROE is result of ROA times EM. EM represents assets to equity ratio and signifies the financial leverage of the bank. It affects the bank profit since it has a multiplier impact on ROA in determining banks ROE. Such financial leverage is useful for the bank when earnings are positive, but emphasize the negative impact in case of the losses. Thus, banks with higher leverage will have a lower ROA and higher ROE. In practice most of the banks utilize financial leverage heavily to increase return on equity to a competitive level (Hassan and Bashir 2002:12). NIM is also considered as profitability measurement, calculated as net interest income (Interest income-Interest expenses) expressed as a percentage of earning assets (the sum of bank assets which earns interest, such as loans and fixed income securities). In some of the studies NIM is used together with ROA (Tanna S., et al., 2005) to capture for the profitability of the bank's interest-earning business.

3.2. Exogenous variables

For exploring the determinants for bank profitability in commercial banks in Germany we put our focused on Expenses Management, Capital Strength, Liquidity Management, Management Quality, Size, Traditional/Complex Activities. We believe that these attributes influence bank profitability, thus to proxy each of them in the research we examine following variables: Cost/Income ratio, Equity to Total Assets, Net Loans/ Customer and Short term Financing, Net Loans to Total Assets, Total Assets and Interest Income/Non-interest Income respectively.

Expenses Management in the study has been captured by the **Cost/Income ratio**. The cost to income ratio measures the costs of running the bank, including staff salaries and benefits, occupancy expenses and other expenses such as office supplies, as percentage of income. It is used as an indicator of management's ability to control costs. We expect that the cost income ratio will be negatively related to profitability, since improved management of the cost increases efficiency and therefore raise profits. Moreover, higher operating costs imply increased operating inefficiency (Carbó S., Rodríguez F., 2007). Such expectations are confirmed by the study of Athanasoglou, P. P., et. al. 2008). However, Molyneux and Thornton (1992) observed a positive relationship in the European banking suggesting that high profits earned by firms may result of the more productive human capital which are entitled to the higher payroll expenditures. Hence, they find a positive relationship between better-quality management and profitability.

Capital strength and level of capitalization has been measured by the ratio of **Equity to Total Assets**. Our expectation is that higher the Equity/Assets would mean higher profitability as it lowers the need of the commercial bank to depend on the external funding. Increasing the level of equity in the banks means that commercial bank is substituting equity for debt, reduces the risk of insolvency, and therefore lowers the cost of borrowed funds. Well capitalized banks face lower costs on going bankrupt which reduces their costs on funding. This positive impact can be due to the fact that capital refers to the amount of own funds available to support a bank's business and, therefore, bank capital acts as a safety net in the case of adverse developments (Athanasoglou, P. P., et al., 2008). Stronger capitalized banks, can reduce the expected costs of financial distress and credibly transmit the expectation of better performance. (Panayiotis P. A., et. al. 2006). In their study García-Herrero, A., (2007) indicates few reasons why the higher capitalization is considered that foster profitability: First, capital is considered a cushion to raise the share of risky assets, hence when bank grants additional loans with a beneficial return/risk profile, this imply higher profitability. Second, although capital is considered to be the most expensive bank liability in terms of expected return, holding a relatively large share of capital is an important signal of creditworthiness. This is particularly evident in the developing economies which passed the period of transition; hence banks with more capital should be able to lower their funding costs and be competitive. Finally, a well capitalized bank

needs to borrow less in order to support a given level of assets. In our study for the commercial banks in Germany we expect the positive connection between the equity to total assets and ROAA.

The **Liquidity Management** in the study has been captured by the ratio of **Net Loans/ Customer and Short term Financing**. The ratio of net loans to customers and short term funding is used to measure the relationship between liquidity management and performance (Pasiouras Fotios, Kosmidou Kyriaki, 2007). This ratio shows the relationship between illiquid assets such as loans and stable funding sources such as deposits and other short term funding. It indicate the ability of the bank management to manage assets and cash flow in a way which would be the most efficient for maintaining the banking daily operations without putting in questions the repayment of the current liabilities. According to this ratio, the bank will be more liquid if value of the Net Loans/ Customer and Short term Financing is lower. Since liquid assets are associated with lower rates of return a positive relationship is expected between this variable and performance. Empirical results in testing of this variable in general are mixed.

Net Loans to Total Assets, measures the **Management Quality** reflected in its decision to compose the assets in the way in which they will produce the higher profit. The loans market is risky and has a greater expected return than other bank assets, hence our expectations are that this variable will be positively related to the ROAA. Furthermore, more net loans for the banks would mean higher interest income, higher risk and hence higher profit. In the previous studies the results for the net loans to total assets are mixed. Bashir (2000) and Ben (2003) found that ratio of bank loans to total assets have strong positive and statistically significant relationships with profitability. Bashir, (2000) indicate that the higher loans with less NPL would bring higher return to shareholders and depositors or banks financings (loans) are expected to be the main source of revenue, and are expected to impacts profits positively. A positive relationship between the ratio of bank loans to total assets and profit was also found using the international banks sample. The justification in such statement is that, for a given value of credit risk, an operation of greater size would mean a greater potential loss, so the bank will require a greater profit. Likewise, the potential loss will be greater for those banks in which the volume of credits (financings) granted is greater (Azura Sanusi et al. (2005). Similar justification of our expectation can be found in the study of García-Herrero, A., et al., (2007). They incline that the share of loans to total assets would generate higher interest revenue because of the higher risk. However, they emphasise that we should be aware that loans also have higher operational costs, because they need to be originated, serviced and monitored. According to this study, profitability should increase with a larger share of loans to assets as long as interest rates on loans are liberalized and the bank applies mark-up pricing.

Furthermore, in our study, we investigate if insuring optimal bank size can increase bank profitability The size of the financial institution (measured by its assets) can have an significant impact on profitability (Rose & Hudigins, 2008:184). Hence, in

our research we test determinate **Total Assets** which represent the **Size** of the bank. The general prediction is that the profits are likely to increase as a result of economies of scale; hence the bank should reduce costs and increase the profitability. In fact, more diversification opportunities should allow to maintain (or even increase) returns while lowering risk (García-Herrero, A., et al., 2007). On the other hand, large size of the bank can also imply that the bank is much harder and costly to manage the current costs.

However, the empirical results concerning bank size are mixed, since some studies found economies of scale for large banks (Berger & Humphrey, 1997; European Commission, 1997) and others diseconomies for larger banks or economies of scale for the small banks (Vander, 1998). Hence, testing this variable should indicate which size optimizes bank profitability. Bank size is generally considered a relevant determinant of profitability, but there no consensus on the direction of influence (García-Herrero, A., et al., 2007). Some studies (Athanasoglou, P. P, et al., 2006) show that the effect of bank size on profitability is usually positive and statistically significant. Goddard et al. (2004) and García-Herrero, A., et al. (2007), show that very large banks in the industrial countries tend to be more profitable. Other studies (such as Ben, 2003; Holden Ken and El-Bannany Magdi, 2004; Nur Azura S., et al., 2005; Tanna S., et al., 2005; Pasiouras F., Kosmidou K., 2007) indicate the inverse and statistically significant relationship between size and bank profitability. Negative relationship implies that big size of total assets tends to be associated with less profitability (Nur Azura S., et al., 2005). The negative coefficient indicates that larger banks tend to earn lower margins and profits and is consistent with those studies that found either economies of scale and scope for smaller banks or diseconomies of scale for larger institutions (Tanna S., et al., 2005). It means that larger (smaller) banks tend to earn lower (higher) profits and provides support to the studies that found either economies of scale and scope for smaller banks or diseconomies for larger financial institutions (Pasiouras F., Kosmidou K., 2007). In our study, we do not have any expectations, if bigger banks or small banks would demonstrate higher/ lower profitability measured by ROAA. However some authors suggests eg. Demircuc-Kunt and Huizinga (2000) that the extent to which various financial, legal and other factors (e.g. corruption) affect bank profitability is closely linked to firm size.

Interest income/Non-interest income is not very often tested variable as determinate for bank profitability. Non-interest income is becoming increasingly important because of pricing pressure of the net interest income and its decreasing trend in the last years (MacDonald and Koch, 2006:64). Having in mind the recent trend of increasing role of the non-interest income in the operating revenue of the bank,⁷⁾ we

⁷⁾ The ratio of noninterest income as fraction of operating revenue (sum of net interest income and noninterest income) is increased dramatically in USA in the last 3 decades. Namely, this ration equalled 24% in 1980 for all insured banks and it sharply increased to 42.5% in 2004. (MacDonald and Koch, 2006:122).

would like to test if this ratio influence on the bank profitability in the commercial banks in Germany. We don't have any expectation that the banks with higher interest income/lower non-interest income (traditional oriented) are more profitable then the banks with less interest income/higher non-interest income (complex banks).⁸⁾

Demirguc-Kunt and Huizinga (1999) indicate that banks with a relatively high share of non-interest earning assets are less profitable. Opposite of this findings, the common view of banks managers and analysts is that bank will rely more on non-interest income to improve profitability; hence the highest earning banks will be those that generate the increased share of noninterest income in the operating revenue (MacDonald and Koch, 2006:120).

Thus there are mix results if noninterest activities influence positive or negative on the bank profitability and it can not be generalized if non-interest activities contribute for a higher profitability to the bank compared to others basic activities. In the literature, even in the case of the same type of the banks (such as Islamic banks) the findings differ. For some countries, in which the bulk of the earnings of Islamic banks come from non-interest activities, it is expected that non-interest income will impact banks profitability positively. However, in the case of Islamic banks in Malaysia, the non-interest activities did not play an important role to generate the bank return. Hence, it is expected to affect the profitability negatively (Nur Azura Sanusi and Abd. Ghafar b. Ismail 2005).

Summarized expected effects regarding the relationship between exogenous variables and dependent variable are presented in the Table 1.

Table 1

**EXPECTED RESULTS REGARDING THE RELATIONSHIP BETWEEN
THE EXOGENOUS DETERMINANTS AND ROAA**

Variable	Abbreviation	Measure	Expected effects
Dependent variable			
Profitability	ROAA	Net profit before taxes/Average Assets	
Internal independent variables			
Capital		Equity to Total Assets	Positive
Liquidity management		Net Loans/ Customer and Short term Financing	Positive
Expenses Management		Cost to Income	Negative
Management quality		Net Loans to Total Assets	Positive
Size		Total assets	No expectation
Traditional /Complex		Interest income/Noninterest income	No expectation

Source: Based on the empirical results from existing literature review (refer to the list of references) and own predictions.

⁸⁾ For possible classification of the traditional/complex banks consider Poposka et al. (2004: 10-11).

4. EMPIRICAL RESULTS

Regression analyses of the panel data set comprising 1500 observations of 300 banks in the period 1994-2005⁹⁾ has provided the following results:

Regression analysis indicated that the **Cost to Income** is negatively significant determinant of bank profitability, providing support to our expectations that decrease of the costs will influence in increase of profitability to a large extent of the German commercial banks and vice versa. Such findings are in relation to the previous studies, which also found that the poor expenses management is major reason for low bank profitability, showing that cost decisions of bank management are instrumental in influencing bank performance. (Athanasoglou, P. P., et. al. 2008; Panayiotis P., 2006, Tanna S., et al., 2005; Pasiouras F., Kosmidou K., 2007).

As expected the variable **Equity to Total Assets** is positively significant with the bank profitability represented by ROAA. It means that commercial banks in Germany which secure higher capital to assets ratio are indicating higher profitability. Such results are consistent with the previous studies (such as of Bourke 1989; Molyneux and Thornton; 1992; Berger, A.N., 1995; Demircuc, -Kunt & Huizinga, 1999; Goddard et al., 2004; Tanna et al., 2005; Panayiotis P. A. et al., 2006; Ben Naceur, S., Kandil, M., 2008; Athanasoglou, P. P., et al., 2008).

Opposite on our expectations the determinant **Net Loans/ Customer and Short term Financing** is statistically significant, but negatively related to the bank profitability expressed in ROAA. Such result designate that liquidity is statistically significant determinates of bank profitability in commercial banks in Germany, and that less liquid commercial banks in Germany have lower ROAA. Although such results indicate a positive relationship between liquidity and banks profits, and it is contrary to our previous expectation, it is consistent with previous studies of Bourke (1989) and Kosmidou (2008). As Bourke (1989) admits that the results in relationship with liquidity ratios are less expected as conventional wisdom is that the liquidity holdings (particularly those imposed by the government are expenses for the bank. Contrary to our findings, Pasiouras F., Kosmidou K., (2007) found that the ratio Net Loans to Customer and Short Term Funding is statistically significant and positively related to the profitability of domestic banks, indicating a negative relationship between bank profitability and the level of liquid assets held by the bank. Such stance is also consistent with some previous studies such as Molyneux and Thorton, 1992.

Net Loans to Total Assets appeared to be an important determinant of bank profitability in the commercial banks in Germany. The ratio is significant and positive-

⁹⁾ Excluding the influence of the financial crises from 2007 in the banking industry has been accomplished by choosing the period from 1994-2005, whereas the crises still have had no impact on the data.

ly related to ROAA, indicating that the commercial banks in Germany which have higher proportion of Net Loans to Total Assets are acquiring higher profits expressed by ROAA. It confirms our expectation that the loans are generating the highest income for the bank and hereby the profits. Such findings is also consistent with previous studies such as Nur Azura Sanusi et al. (2005) which demonstrate that bank loan plays an important role as a main source of revenue and will increase bank profits. Same notion is pointed by Holden Ken et al., 2004 who indicate that loans generate revenue through interest and increase bank profits. Opposite of our findings, Beckmann R., (2007) examine the sample of European banking found out that the ratio of total loans to total assets is negatively related to ROA.

The impact of the **Size** of the bank calculated by its **Total Assets** is insignificant for the bank profitability. Hereby, we can draw on the conclusion that the size of the bank is not connected with acquiring higher profitability. Hence we can not support the existence of economics of scale in big banks, nor economic of scale of the small banks, nor diseconomy of the big banks. Our findings are in relation with the recent studies of Ben Naceur, S., Kandil, (2008); Athanasoglou, P. P., et al., (2008) who also found out that the bank size is insignificant and it does not generate higher returns on assets. Such findings confirm that the estimated effect of size does not provide evidence of economies of scale in banking. (Athanasoglou, P. P., et al., 2008).

Finally, the findings in our study demonstrate that the ratio **Interest Income/ Non Interest income** is not statistically significant determinate influencing bank profitability in the commercial banks in Germany and herewith it does not influence on profit generating. Such result indicates that origin of the bank income (from traditional or complex activities) does not influence bank profitability.

Summarized results of the regression analyses are presented in the Table. 2.

Table 2

**RELATIONSHIP OF THE ROAA AND IDENTIFIED EXOGENOUS
VARIABLES BASED ON PANEL DATA OF 300 COMMERCIAL
BANKS IN GERMANY IN THE PERIOD 1994-2005**

1.	Capital strength	Equity to Total Assets	Positive significant
2.	Liquidity management	Net Loans/ Customer and Short term Financing	Negative significant
3.	Expenses Management	Cost to Income	Negative significant
4.	Management quality	Net Loans to Total Assets	Positive significant
5.	Size	Total Assets	Not significant
6.	Traditional /Complex	Interest income/Noninterest income	Not significant
7.		Total Operative Income	Not significant
8		Year	Not significant

Source: Results of empirical analysis.

5. CONCLUSIONS

Main conclusion and Policy recommendations

In this paper we seek to investigate the effect of internal bank specific determinants on the Germany's commercial banks using the panel data in the period 1991-2005. We found that Capital strength, Management quality, Liquidity management and Expenses management are significant variables for bank profitability via their proxy Equity to Total Assets and Net Loans to Total Assets as positively significant, while as Net Loans/ Customer and Short term Financing and Cost to Income are negatively significant determinates. Furthermore we have find that Total assets, Interest income/ Noninterest income and Total Operative Income are insignificant determinates for the bank profitability.

Empirical results provide an evidence that profitability of the German commercial banks is dependent by the internal banks determinants which are controllable and are result of the managerial decision. Suggesting optimal bank policy according to the results of this empirical research would mean that for reaching higher profitability German commercial bank should increase its capitalization and participation of the net loans in the total assets, albeit paying attention to improve cost to income ratio in direction of improving Expenses management and decrease the Net loans to Customer and Short term Financing as significant variables affecting bank profitability.

Recommendations for further research

Having in mind the increased competition in the interest based bank activities it can be predicted that the banks would suffer from the further decrease of the interest margins due to the increased price awareness of the customers and increased competition on the financial markets (Hackethal Andreas, 2007). One of the possible solutions could be the future reliance to the noninterest income which increased its share in the total income, albeit considering all risk inherited in the noninterest income bearing bank activities, having in mind the effect of the recent financial crises.

Questions that still remain open for future research are summarized below:

- Including Macroeconomics factors?!?
- If Bank concentration influence profitability?!?
- Testing Off-balance sheet activities since studies investigating this variable are ambiguous and found out that the relationship between the importance of off-balance-sheet business in a bank's portfolio and profitability is positive, neutral or negative elsewhere (Goddard et al., 2004). The importance of including the Off-balance sheet activities in the further studies justified by the practice showing that these bank activities have grown rapidly and

they expose bank to a considerable risk. Off-balance sheet activities have exceed total bank assets many times, hence for the largest bank their nominal values are 13 times the volume of these bank's on-balance-sheet assets (Rose S. P.r & Hudigins C. S, (2008: 142).

Further research can cover longer time period, particularly the future research which would be having into consideration the data from the Banscope from 2007, 2008 and preferably 2009 in order to observe the changes in the influence of the bank determinates due to the financial crises. It would be useful to observe if the increased fee income activities are determinate of its profitability and what is the possible direction, particularly since the period 1994-2005 indicate that this variable is insignificant for bank profitability. Moreover, testing this variable would be from high importance for the policy recommendation since the general opinion in the banking industry is switch from interest toward non-interest (fee) income as more "profitable businesses", whereas as the practical implementation indicate that the crises would bring banks to be more careful in the future with utilizing complex products.

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**KIOSK TERMINALS AS AN OPPORTUNITY FOR
OPTIMIZATION OF THE COSTS AND INCREASING
OF THE QUALITY OF BANKING SERVICES
IN REPUBLIC OF MACEDONIA**

Abstract

The development of the banking sector into the Macedonian market was especially dynamic in the past decade. Banks were continually investing into their business infrastructure with primary accent on the bank branches while their expansion strategies were mostly connected via traditional channels of interaction with clients.

In the previous period although Macedonian banks started and they should continue to focus their attention into retail strategies that allow them to improve their relationship with clients using actual infrastructure into the optimized environment e.g. cost savings. Implementation of kiosk terminals present one of the possible solutions for Macedonian banks in those efforts.

The implementation of kiosk terminals as banking channel provides a range of opportunities for Macedonian banks especially in the retail part of this industry. Models of kiosk terminals used in the financial industry, into their basic functions have included/incorporated most of the banking branch operating services. Although Macedonian banks should expect that the quality of banking services that are not necessary connected with face to face human interaction, via kiosk terminals would be managed into much preferable environment (e.g. Kiosk terminals provide 24 hours unlimited service while/Vs bank branches (that) provide 8-10 hours uptime for services during the bank working days only).

As an integral part of their business strategies, Macedonian banks should evaluate the eventual barriers connected to implementation of kiosk terminals and its influ-

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ence on their business e.g. financial, ethical and legal issues. Inadequate business strategy leads to higher costs and undesirable effects on business. Every bank should create own business strategy based on its own market position and opportunities.

With the optimization of daily operations of the staff in the bank branches, banks should be able to provide a higher quality of doing business for the services that are more efficient into face to face environment especially in the field of advertising. On middle to long term, it may lead to changes into the primary role of the branches from functions connected to basic bank activities into more sophisticated CRM and profit activities.

Keywords: business infrastructure, kiosk terminals, cost savings, quality of services, business strategy, barriers, opportunities, changes into primary role of branches.



Introduction

The past ten years represent a very dynamic period in the activity of the banking sector in Republic of Macedonia. The high degree of trust in the commercial banks, banks policies-based on qualitative concepts, and adequate access of banks management in managing the large number of challenges, enabling the realization of stable banking revenues and high quality banking products and services (nema glagol). Positive events in this field reflect on the improvement of business relations between banks and customers and encourage appropriate economic development in the country.

Most of the services of the commercial banks are realized through the traditional banking channels or the business branches. This is understandable, because the habits of the customers in the Macedonian market were and still are mostly based on traditional principles of communication with commercial banks.

The introduction of the classic ATMs in the last decade, as a self servicing devices and the promotion of electronic banking channels, had some positive effects reflects on reducing of the intensity of usage of business branches to some extent. However, business branches still remain highly congested with a number of activities that could be carried out through alternative channels. Banks branches are extremely important segment in determining the market position of commercial banks, but they are generators of high costs in banking operations. The costs of branches are certainly in some degree integrated in the pricing of banking products and services. The subject of this paper is presenting one alternative approach in servicing the needs of banks customers - via introducing kiosk terminals, which have recently been presented on most of the markets in highly developed economies. Through the elaboration of the issues, the author expects to introduce the topic to the Macedonian market and give a contribution in encouraging commercial banks in implementing this type of advanced technological solutions. The author believes that the introduction of this type of self servicing devices, will lead to a reduction in bank charges/prices and improving the quality of banking services which present a fundamental goal of this research paper. Also within the objectives of the paper, the author believes that will stimulate some positive effects in direction of changing the existing primary transaction banking functions integrated within the business branches and replacing them with advisory functions, which would lead to increased quality of banking services to end users .

1. BANKING INFRASTRUCTURE AND EXISTING APPROACHES IN THE SERVICING OF CLIENTS OF BANKS ON THE MACEDONIAN MARKET

High competition pressure into the banking sector in Republic of Macedonia led to opening of many business branches by the commercial banks in the country. The growth of the number of newly registered business units continued through the past years, with the exception of 2009, when as a result of expectations of the effects of the current economic crisis and already large number of opened business units, bank investments in this domain were reduced to a minimum.

The banking system of the Republic of Macedonia in 2009, consisted of 18 banks and ten savings banks. Compared with the previous year, the number of banks was unchanged; with minor changes in the scope of the banking network (number of establishments grew by 19). The number of potential clients on each bank was approximately 112,364 inhabitants, or nearly twice more than the average of EU-27; however this indicator is significantly better than some EU countries, like Bulgaria, Romania, Slovakia, and Czech Republic. The banking network consists of 428 business units (including central banks) and is widespread in almost every citie in the country. One business unit in average is covering about 4786 people, which is twice more, compared to the EU-27 average. The geographic concentration of 40% of the banking network is in the region of the capital city - Skopje, which has been drasticaly covered by banking services compared to other regions in the country. Namely, in the region of Skopje, number of residents per establishment (3381) is the smallest. Most people per business unit still remain in the region of Polog (8,945 residents per establishment). ¹⁾

Most of the banks in the Republic of Macedonia within the offers to households and companies have integrated myriad of products and services. The offer of banking products and services through business units of banks in the country and the principles of servicing the customers through the branch networks are well known and they need not to be elaborated separately.

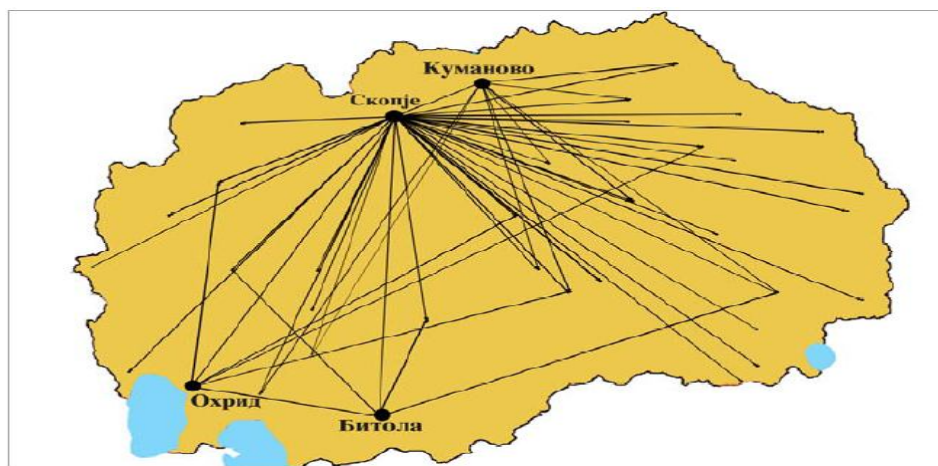
Despite the large number of business units, an extremely important segment within the existing approaches to serve the needs of customers of banks is the large number of ATMs. ATM-s as self servicing devices the Macedonian market are mainly used for withdrawing cash and checking the status of bills related to payment cards. In the previous period, were carried certain updates on the devices of this type by introducing the options for recharging credit on mobile phones. However, the usage

¹⁾ National Bank of Macedonia, Report on Banking System and Banking Supervision of the Republic of Macedonia in 2009, http://www.nbrm.gov.mk/WBStorage/Files/WebBuilder_Godisen_Izvestaj_BS_2009_MKD.pdf_04.08.2010_

of this channel as an alternative way for substitution of the customer needs that are realizing through banks business branches still remains relatively modest in scale.

Figure 1

**NETWORK OF BRANCHES OF COMMERCIAL
BANKS IN REPUBLIC OF MACEDONIA**



Source: National Bank of Macedonia, Report on Banking System and Banking Supervision of the Republic of Macedonia in 2009.

It is important to note that most banks in the current mode of operation have a high quality of service level and competitive access, which certainly results in profitable operations and adequate growth and development. However, business relations through banks branches are mostly conducted in the framework of routine activities, which is reducing the time period necessary for personal approach and strengthening of the business relations between banks and their clients.

2. NOTION OF KIOSK TERMINALS AND SPHERES OF THEIR APPLICATION

There is no universal definition that integrates all the aspects of kiosk terminals and their role in the modern world. The key reasons for this is the large number of functions that can be realized through them, and continuing developments into this growing industry.

Kiosk terminals are self servicing banking devices that provide an adequate user interface for the users of banking products and services. They are produced in different sizes and shapes, depending on the needs of final users and the different spatial conditions for their setting. Globally, the implementation of this type of devices is not limited exclusively within the financial sector.

Over the past decade, suppliers have placed increased focus on the flexibility on their manufacturing efforts. Although start-ups often emerge to develop solutions for a particular application or vertical segment, most kiosk suppliers of all sizes assert the capability to design and develop solutions for practically any application. This solution-development flexibility has defined the kiosk industry and facilitated a competitive landscape that has prevented significant market consolidation by any one supplier.²⁾

Apart from the commercial banks, devices of this type are used by many companies, medical facilities, retail and other industries where the need appears possibilities for interactively servicing clients / customers. For example, some companies use kiosk terminals for collecting data on applicants for employment. This certainly is not adequate to the labor market conditions in Republic of Macedonia, but for certain corporations, that receive annually 10 million and more applications, of course it is more rational to apply this type of equipment in its operations. Kiosk terminals within their wider application are primary used as:

- Kiosks for tickets;
- Sales kiosks:
- Human resources kiosks:
- Internet kiosks;
- Financial Kiosks;
- Kiosks for carrying out the orders and so on.

Figure 2

VIEW OF THE LARGE NUMBER OF MODELS OF KIOSK TERMINALS



Source: www.kiosk.com.

Research conducted by Summit Research Associates (Kiosks and Interactive Technology, Seventh Edition), presents an optimistic picture of continuous growth

²⁾ Rezendes Christopher, Liard J.Michael, *Kiosks for Self-Service and Interactive Applications: Technical and Vertical Market Analysis*, Automatic Identification and Data Collection Practice, Venture Development Corporation – VDC, January 2006, p.10.

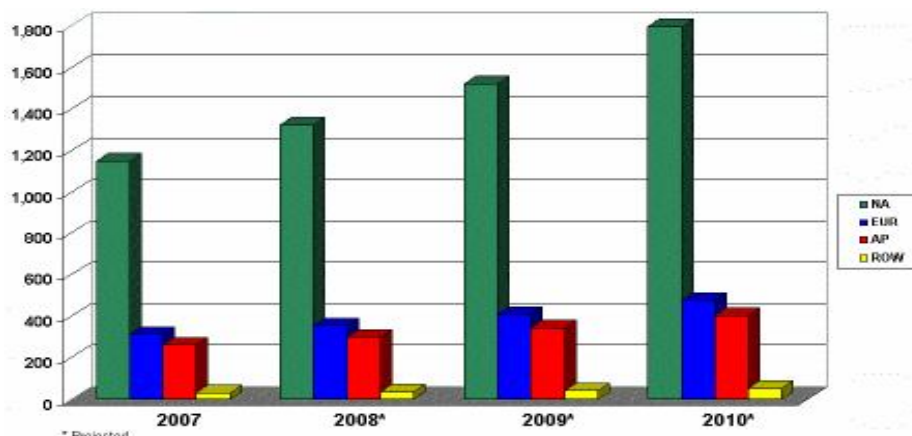
and development of kiosk terminals industry worldwide. Summit projected that the number of installed kiosk terminals will be increased by 1.76 million devices by the end of 2007, and more than 2.73 million at the end of 2010. According to the research from the same source, the expansion will continue in all major world regions, while the main activity will be present on the market in North America - primarily the United States. Summit estimates that North American region will grow to nearly 1.8 million devices by the end of 2010. These trends are represented in the figure 3 below.

The current world crisis, the worst in the last 70 years, resulted in high re-evaluation and reduction of all types of economic activities. What will be the impact of these events on the kiosk terminals industry? Summit states that certain projects may be delayed or stopped. Funding for new projects and expansion of existing initiatives can be a real difficulty. However, Summit believes that the financial crisis will have adverse effect on the kiosk terminals industry, and it can lead to a “mini boom“ of this industry. Kiosk terminals allow replacement of personnel which is expensive for hiring, training; management and exchange. The introduction of this type of devices could provide significant savings for the companies.³⁾

Figure 3

GLOBALLY INSTALLED DEVICES AND PROJECTIONS 2007 - 2010

In thousands of units



Source: Summit Research Associates, Inc., **The Solution to Challenging Times: The Integrated Approach**, A Summit Research White Paper, October, 2008, p.2.

³⁾ Summit Research Associates, Inc., *The solution to Challenging Times: The Integrated Approach*, A Summit research White Paper, October, 2008, p.2. (<http://www.pfusystems.com/kiosk/downloads/whitepapers/SummitResearch%20WhitePaperThe%20integrated%20approach.pdf> 04.08.2010).

Therefore, attention in this paper is focused on kiosk terminals that can be applied by commercial banks or so called financial kiosks and the sphere of their application in this field of operations. Into the following part are presented the advantages of introducing of this type of devices on the Macedonian market.

3. BENEFITS FROM THE INTRODUCTION OF KIOSK TERMINALS IN THE BANKING SECTOR IN THE MACEDONIAN MARKET

Today banks are transformed into marketable financial institutions by offering a wide range of products such as insurance, loans, investment funds, credit cards, and other services within value channels. The need for self servicing banking terminals, is arising from: ⁴⁾

1. Increase of the number of services offered by the banking institutions;
2. The need to provide each customer to come out from the bank with the highest possible volume of sales;
3. The difficulties in finding and retaining highly qualified staff;
4. The innovative competitive strategies that reduce the waiting time and increase the time for presenting services.

The main goal of the operation of the banking sector across all market economies is providing quality banking services at lower costs and higher profits. Through the introduction of kiosk terminals by the commercial banks in Republic of Macedonia, there should be a significant impact on the operations of banks and the interaction with their customers. In the following section the focus will be given to the benefits for banks and their customers arising from usage of kiosk terminals as specialized banking equipment. Also, the attention will be focused on the impact of the costs of the banking sector via usage of kiosk terminal devices.

The introduction of kiosk terminals is an advantage for commercial banks. The high costs of opening business branches, staffing and regular maintenance through the introduction of kiosk terminals will be undoubtedly kept to a minimum level.

Financial kiosks enable banks to offer customers new, practical and 24 hours available channel to perform most of the activities that customers perform in the business branches. Within the financial kiosk terminals, as commonly present we can specify the following functionalities:

- Execution of deposit transactions (in this type of activity payment cards can be used);
- Physical disposal of assets (cash);
- Execution of transfers of funds and payments using credit cards;

⁴⁾ www.intellvisions.com/downloads/files/iservesbt.pps_04.08.2010.

- Payment of bills;
- Withdrawal of cash;
- Preview / review of the accounts;
- Electronic recharge to the credit of mobile phones;
- Inspect and payment of overhead costs;
- Repayment of borrowings and credit cards;
- Implementation of different types of orders in domestic and international payment operations;
- Other banking functionalities.

Kiosk terminals, allowing exceptional flexibility in terms of authentication of clients represents an additional advantage. Different types of transactions can be authorized by entering a PIN code, digital signature, finger footprint and other methods. Expenses in transactions processing via kiosk terminals are drastically cheaper than the costs of their processing over the counter.

According to other research, the top 10 reasons that should be considered about kiosk terminals in the banks are:⁵⁾

1. Migrating customers from teller-based transactions to on-line banking reduces costs.
2. Enhance customer satisfaction by providing needed Web-based services in the branch office.
3. Increase revenue and “share of wallet“ by offering additional products and services via cross-sell and up-sell opportunities.
4. Acquire new customers via sign-up/opening an account.
5. Educate new and existing customers about service & product offering.
6. Initiate and provide rewards in the form of loyalty.
7. Provide service 24 hours a day, 7 days a week, in centralized locations.
8. Learn more about customer preferences by collecting vital data.
9. Provide additional training and educational services to employees.
10. Bridge language barriers with non-English speaking customers.

Is objective to be expected that the introduction of this type of self servicing banking terminals would make changes in the basic business functions of banking branches. In parallel with the reduction of the expansion of the branches, there is a high probability that banks should make crucial changes in the use of established banking infrastructure. Part of the possible changes and the projected effects are given into the following section.

⁵⁾ http://www.bankersonline.com/vendor_guru/sourcetechnologies/sourcetek_kiosk.html_06.08.2010.

4. POSSIBLE OBSTACLES AND WEAKNESSES IN THE IMPLEMENTATION OF KIOSK TERMINALS IN THE BANKING SECTOR IN MACEDONIA

Before the introduction of kiosk terminals, as well as before introduction of most other products and services, banks need to make quality business analysis. One of the key roles of such analyses in the field of kiosk terminals is understanding the real needs for installation of this type of devices and create a business plan for the intensity of their market expansion. As an integral part of business strategy, despite the advantages of the introduction of kiosk terminals banks, banks need to recognize the greater number of potential barriers and their possible impact on this part of the business.

Most of the barriers that need to be overcome, have financial or ethical character, while to some extent legal / regulatory restrictions (e.g. Certain types of services through a kiosk devices, principles of authentication of the customers, etc.) are possible.

Within the list of obstacles / weaknesses of a financial nature can be mentioned:

- Investment of funds for the purchase of devices that need to be separated from the bank budgets;
- Promotion of new service channels and increase the costs of marketing;
- Local suppliers of kiosk terminals and quality of support;
- Costs for maintenance of this type of specialized banking equipment;
- Costs for processing transactions and system infrastructure;
- Provision of resources and the level of their involvement in the maintenance lines of kiosk terminals;
- Long time to effect the investments. Probably a period of over several years necessary for changing customer habits in order to effect investments and more.

However, most of the financial difficulties it is objectively to be expected that should be resolved in accordance with previous experience in the field of ATM operations. In this domain of particular benefit are recognizing previous mistakes in order to prevent their recurrence.

Kiosk terminals through its main role should perform replacement of the biggest part of the routine functions of the business branches in the banking sector. This means that some commercial banks should not retain all staff, which is a real problem of ethical character. However, banks will be able to partially overcome this problem by retraining of the qualified staff and providing new job responsibilities.

Quality evaluation of potential barriers during the introduction of kiosk terminals, presents a primary basis for the success of the commercial banks operations in this field. The introduction of kiosk terminals without proper analysis can lead to

failure and high costs of commercial banks. Banks have to balance between these parameters depending on their own market position and opportunities.

5. CHANGES IN THE BASIC FUNCTIONS OF BANKING BUSINESS BRANCHES FROM ROUTINE TRANSACTION FUNCTIONS INTO BANKING ADVISORY FUNCTIONS

Kiosk terminals can be located outside and within the banking branches of commercial banks. Setting of the kiosk terminals provides coverage of rural areas, where there is no economic logic to be opened business branches or bank branch counters., As stated in the previous part of this paper, regardless of their physical location, this type of self servicing banking terminals allows handling of most routine banking needs of the clients, especially services which realization through branch offices, initiate high employee engagement for commercial banks.

In the performance of routine business requirements through bank branches, banks generate high costs and exceptional commitment to employees. The space by the banking commercialist can be used for other types of activities related to customer needs especially for services that cannot be served via electronic devices or their servicing through the electronic channels is extremely uncomfortable.

Banks should use human resources on the most optimal possible way. Kiosk terminals have a wide range of opportunities and advantages in performing certain types of routine banking operations. Previously were discussed their 24 hour availability and the speed of execution of many of the up mentioned bank services and activities. However, regardless of the sophistication of the self servicing solutions, devices of this type cannot participate or can participate very few in the sale of bank products and services.

By reducing the volume of routine banking operations via the introduction of kiosk terminals, bank commercialists get the opportunity to focus on personal treatment of clients, realization of interaction aimed at understanding their real needs and guidance to the appropriate bank products and services. Via introducing of the kiosk terminals, bank commercialists will be able to perform some educational activities during their everyday business activities, according to the needs of the customers. Here we should mention that some of the clients require additional information about certain modern banking solutions, other require advises about existing banking products etc. Bank commercialists should be able to provide adequate information's about different type of products and their promotion for excising and potential customers (eg promotion of usage of payment cards in the retail network as a medium for a greater degree of security, in some cases opportunities to obtain certain benefits, etc.). In addition, bank employees will be able to sell the new banking products and services through their promotion to potential users. Those activities without a doubt lead to growth of the sales.

Table 1

CURRENT AND FUTURE MODEL OF BUSINESS BRANCHES

	Current model of branch offices	Future model branches
Role of branches	Reactive administrative center	Proactive center of business relations
Staff	Using 60% of the time in activities unrelated to the personal treatment of clients	Using 80% of the time in sales, consulting and providing access to experts
Strategy	Functioning within a rigid corporate guidelines / procedures	Self adapting to the needs of different segments of customers

Source: Forrester Research, Inc. (Taken and adapted from Profiting from Branch Banking, Re-engineering the Branch as a Financial Services Center, Kana, 2003)⁶⁾

In this way, the customers will be able to obtain high-quality banking services; will receive the product / service that best suits their needs, while the banking sector is objective to be expected that will increase its revenues by reducing the need for opening new business branches and growing up of sales of banking products and services.

Conclusion

The banks in Republic of Macedonia in the last decade had invested a lot in the opening of new business branches in order to maximize their market share by offering new banking products and services to existing and potential customers. Banks in R. Macedonia have offered high quality products and services to their customers.

Kiosk terminals can fully replace the most of the services and products that banks perform through their network of branches. This type of self servicing terminals operates 24x7, which is an additional advantage for commercial banks clients in terms of speed and comfort in the realization of their banking needs.

Through the introduction of kiosk terminals in the banking sector in Macedonia, the objective is to reduce the workload of the existing business branches and minimizing the need for acquisition of the market via opening new business affiliates. At the same time, promoting this type of banking services, will contribute the attracting of new customers, that would prefer settling their obligations this way rather than waiting in line for payment before the counters in the bank or post office. However, before the introduction of devices of this type, each commercial bank should create appropriate business strategy for market acquisition according to its own market position and opportunities. Banks should take into consideration the advantages of the introduction of kiosk terminals and appropriate evaluation the possible obstacles and weak-

⁶⁾ Profiting from Branch Banking, Re-engineering the Branch as a Financial Services Center, Kana, 2003, p.2 (http://www.writtenitllc.com/Samples/kana_ibm_wp.pdf 04.08.2010).

nesses. Within the strategy some of the key elements that should be evaluated are the financial costs, ethical challenges and the applicable rules and regulations. Regarding the financial challenges of particular importance is the recognition of the habits of the market and the projection of the expected period for investment recovery. It is obvious to be expected that experiences from the introduction of ATM devices, should contribute some of the possible barriers.

Banking business through subsidiaries is a crucial source of profits in the banks operations. Banks must work towards the conversion of the role of business branches through the introduction of solutions from low-income, transaction-cost units in high-value, cost-efficient financial service centers. To achieve consolidated revenue and cost targets, employees in branch offices need to become experts that will combine high knowledge of banking products and the understanding of individual customers and delivering analog needs, personalized and relevant sales and service messages. Through the introduction of kiosk terminals, banks get the an opportunity for conversion of the essential functions of the branches by reducing the volume of routine banking operations and diversion of resources to personal treatment of clients, realization of interaction aimed at understanding their real needs and pointing them to the appropriate bank products and services.

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Emilija KUSAKATOVA^{*)}

DESIGNING AN INTEGRATED MARKETING COMMUNICATION PROCESS

Abstract

In order to be successful on the market, besides having a good and available product with acceptable price, a company must establish communication with its clients in order to promote this product. The communication is achieved through the promotion, that is, through promotional or communication mix.

As a result of the increased communication needs between the company and its environment, the concept of integrated marketing communications has been developed recently. Accepting this concept in the business world results in choosing a strategy for complete marketing integration directed towards identifying how the company and its products can best help the consumers in satisfying their needs. This concept also includes establishing feed back communication from the customers to the company with the purpose of assessing the reactions, attitudes and effects from the promotional activities.

Successful and effective communication between the company and the clients can be achieved by possessing expertise and knowledge on how to properly use the elements that comprise the communication process and their phases. When designing the integrated marketing communication process one must take into consideration the significance and the role of each element and each phase in the process. These roles are different for each given case and scenario, therefore the need of choosing and emphasizing the right element and the right phase which will lead to accomplishing the communication's aim in the most optimal way.

Key words: marketing, promotion, communication.

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Introduction

Every company's main marketing aims refer to four business areas:

- Development of a good product, that fully satisfies customers needs, requests and preferences,
- Setting up acceptable price,
- Availability of the product and
- Good promotion through communication with the current and potential clients.

The above mentioned business areas represent the instruments of the marketing mix, and their joint operation/action contributes for the company's successful market positioning. Each of these instruments has its importance and specific role when deciding on the marketing strategies and accomplishing the aims of the company. These instruments do not act independently – when we talk of them, we talk of the importance of the marketing mix of the promotional activities, which represents the integrated marketing communication. In order to have successful market penetration, besides having a good quality product, with acceptable price and good accessibility, company needs to work towards its promotion through establishing good communication with the clients.

The promotion itself, that is, the marketing communication, is a complex system that integrates several instruments: advertising, sales promotion, public relations, personal sales and direct marketing. In the literature and in the practice the coordinated activities of the promotional instruments are called promotional or communication mix. In a broader sense, we talk about integrated marketing communication by accepting the opinion that the other marketing mix instruments (product, price, channels) also contribute in the company's communication with the environment. Having this in mind, all marketing communication activities have to be planned, organized and in accordance primary with the promotional mix, and secondary with the other marketing mix instruments, which contributes the most in accomplishing company's goals.

Interpretations about the role and the significance of the promotion, the promotional mix and the integrated marketing communications have evolved over time. The modern opinions view the integrated marketing communications as a continuing process that has several interactive and integrated phases that enable the company's com-

munication with the environment (current and potential customers, business partners, the society etc.).

1. PROMOTION, PROMOTIONAL MIX AND INTEGRATED MARKETING COMMUNICATIONS

The promotion, as marketing mix instrument, is “a way of continuous communication of the company with the customers”.¹⁾ The communication is implemented through the different areas (instruments) of the promotion that influence the creation of products’ and company’s positive image through constant information, persuasion and reminding, which contribute towards building the trust, the fondness and the loyalty of the customers.

With time it was obvious that the desired effect can not be obtained with separate and isolated actions of the promotional instruments. That led to acceptance of the concept of the promotional mix. The promotion should be understood as a complex system, i.e. promotional mix, which, due to its function, is also called communication mix or mix of the marketing communications. The company is achieving its promotional and marketing aims through the promotional mix. According to Kotler, the promotional mix is comprised of the following five instruments: ²⁾

- Advertising – all paid forms of group presentations and promotions of ideas, products and services by certain sponsor,
- Personal sales – personal presentation by the company’s sales personal aiming to achieve sales and build customers relations,
- Promotion of sales – short-term motivations in order to increase buying or selling products and services,
- Public relations – building good relations with different public groups through good publicity, positive image and dealing with unfavorable rumors, stories and events, and
- Direct marketing – direct contacts with carefully targeted individual consumers in order to achieve instant reaction and to maintain long-term customers’ relations by using telephone, mail, e-mail, Internet, fax and other means for direct communication.

In the recent years, the same author is adding three more instruments to the original group of five. These three new instruments also contribute to the increasing of the marketing communication effects: ³⁾

¹⁾ Milisavljević M.(1997): pg. 392.

²⁾ Kotler F., Armstrong G., Saunders X., Vong V. (2004): pg. 631.

³⁾ Kotler F., Keler K. (2009): pg. 520.

- Events and experiences – activities and programs sponsored by the company designed to create every-day or specially initiated ties between the brand and the potential customers,
- Interactive marketing – on-line activities and programs designed for direct or indirect customers' influence in order to raise their awareness and promote the image of the company's products and services, and
- Word of mouth marketing – oral, written or electronic communications between people, that refer to the values or experiences related to the purchase or use of the products and the services of the company.

As a result of the increased importance and application of the company's communications with its environment, lately the (so called) concept of integrated marketing communications has been developed. According to this concept "the company carefully integrates and coordinates many communication channels with aim to convey clear, consistent and attractive message about the organization and its products".⁴⁾ In the business world the acceptance of this concept results with selection of a strategy for complete marketing integration that shows how the company and its products can help the customers in satisfying their needs. This concept also includes establishing feed-back communication in order to understand the reactions and the attitudes and to measure the effects from the promotional activities. This concept and strategy give advantage to the company from its competitors.

2. INTEGRATED MARKETING COMMUNICATION PROCESS

The integrated marketing communication is a process that establishes continuous feedback between the company and its clients' different specific segments. The main aim is to influence the customers' behavior in several areas: to be familiar with the company and its products, to make purchase decision, to utilize the product and to build loyalty. In order for the company to know if it is on good track of achieving the above mentioned aim, good feedback channels need to be established. They will help evaluate the clients' reactions (information receivers) on the messages sent to them.

The literature refers to two models of the communication process: macro-model and micro-model. According to the integrated marketing communication concept these two models need to be concurrently utilized.⁵⁾

According to the macro-model, successful and effective communication can be established between the company and its clients by recognizing and properly utilizing the nine elements of the communication process:

⁴⁾ Kotler F., Armstrong G., Saunders X., Vong V. (2004): pg. 635.

⁵⁾ Kotler F., Keler K. (2009): pg. 523.

Sender – side that is sending the message to the other partner (also called source or communicator),

Coding – process of transferring the idea with symbols,

Message – sum of symbols send by the sender,

Media – communication channels that are transferring the message from the sender to the recipient,

Decoding – process of recipient's explanation of the meaning of the sender's symbols,

Recipient – the side that receives the message (also called audience or destination),

Response – sum of recipient's reactions after getting certain message,

Feedback / information – part of the recipient's response intended for the sender,

Interruptions – unplanned pause, stagnancy or distortion of the message in the communication process which results in delivering different message than the initially sent.

Coding of the message is crucial for the successful communication. It should be done in accordance with the decoding possibilities of the recipient. The company – sender should know its target group, to know the media this group uses, to take into consideration its decoding methods and to develop feedback channels in order to evaluate the reactions from the message.

The marketing communication micro-model refers to the modalities of the customers responses to the received messages (direction market-company) which are sent by the marketing communication macro-model (direction company-market). There are many opinions about the intensity and the level of acceptance of the company's messages by the consumers. They all have in common that the initial phase begins with attention attraction, i.e. being aware of the message, than showing interest for assessment and establishing attitude, and ending with purchasing the product of the message sending company. According one of the models, the following is the hierarchy of the effects from the integrated marketing communication activities on the customers: awareness, knowledge, empathy, preference, persuasion and procurement.⁶⁾

The process of passing from one phase to next is complex one, and the basic aim of the integrated marketing communications is reaching the last phase: to attract as many customers as possible to reach the last phase and purchase the product. That is why it is essential to have permanent researches and data to determine the number of customers and the phase of the communication acceptance process they are in.

⁶⁾ Kotler F., Keler K. (2009): pg. 524.

That helps to determine the effects of the marketing communications and to be able to create (design) a campaign that will send the right message, on the right place, in the right time, to the right customers.

3. PHASES IN THE INTEGRATED MARKETING COMMUNICATION PROCESS

The integrated marketing communication process has several phases: (1) identification of the target group, (2) determining the communication aim, (3) creating the message, (4) choosing the communication channels, (5) creation of the promotional budget, (6) decision on the promotional mix, (7) assessment/evaluation of the promotional results and (8) management and coordination of the entire marketing communication process.⁷⁾

Each of these phases has its own specifics and importance for the success of the communication and the promotion. Skipping a phase or not paying enough attention may endanger the desired effects. The following text gives short overview of each of the phases in the process of the development of the communication and promotion program.

3.1. Identification of the target group

In the first phase the company should determine who is it addressing, i.e. the target group. It can be composed of the current or the potential customers, of the purchase decision makers or those who influence the decisions etc. In any case, all further decisions and actions in the next phases of the communication will depend on the identified target group.

Determining the target group is of great importance for the entire communication process. Therefore, it has to be done based on several researches on the familiarity of the target group with the company, its products and the competition. Knowing the image the company has and the level of affection customers have for its products will determine the content of the messages that will be created.

3.2. Determining the communication aim

After the identification of the target group, next step is to determine the communication aim. Here there is no dilemma, as the aim of all marketing activities, which include the integrated marketing communication, is the purchase. In order to reach

⁷⁾ Kotler P. (1989): pg. 626.

the purchase act, the customer passes through a decision making process who is composed of several phases. This is why it is crucial for the marketing agents to know in which phase are the majority of the customers, so they can tailor the messages in a way that will encourage and inspire purchase decision.

The customers' behavior differs and depends on the habits, character and the purchase power of the customers on one side, and on the price, image, characteristics and other product attributes on the other side. That is why the purchase decision making process can have more or less phases and can last longer or shorter period of time. In general, the overall accepted model for this process is that the customer is passing through the following phases: awareness, knowledge, liking, preference, persuasion and purchase.

Having this in mind, the basic aim of the company is to shorten this process through the communication, to get customers interested in its offer and to motivate them for purchase.

3.3. Creating the message

The company through the communication message should draw the attention, keep the interest, create desire and inspire action of the target group.⁸⁾ The message gives answer to the following basic communication questions: what to tell, how to tell and who should tell. The answers of these questions are given through the content, the structure, the shape and the source of the message.

Content of the message represents carefully created basic theme, which promotes the usefulness of the product and is motivating the target group to perform certain action that would benefit the sender of the message. There are three types of themes: rational, emotional and moral. The marketing agent will select the type depending on the products' characteristics (quality, design, packaging, labeling, price etc.) or on the acceptance and reaction to the messages by the target group. For example, it is considered that the rational themes are most adequate for industrial products, because their characteristics are most visible and the customer recognizes and reacts only on concrete and realistic message. Emotional themes are more successful when it comes to products for mass use, especially the products with fashion or status character.

The structure and the form of the message are important too. Special attention needs to be paid to the sequence of the presentation – to decide if the main point should be at the beginning or at the end of the message. Besides, when it comes to the

⁸⁾ AIDA model (Attention-Interest-Desire-Action) which shows the phases from attracting customer's attention until the final action, i.e. purchase of the product.

written media, the title, the text, the pictures, the color, the size and the position are of importance as well.

Source of the message can be the company itself, the product's brand, the seller of the product or the actor-promoter in the advertisement. The source should be persuasive and well received, because in most of the cases it has determining influence in initiating reaction from the target group. For example, when it comes to pharmaceutical products, most acceptable presenter of the message would be a doctor, for sport products good presenter would be a successful athlete etc.

In order to achieve maximum impact on the target group, the source of the message should have the following three characteristics: expertise, reliability and attraction /charm.

3.4. Choosing the communication channels

The message is transferred from the company to the target group through the communication channels. There are two types: personal and general communication channels.

When using the personal channels, one or two person(s), as the message sources, communicate directly with individuals from the target group by phone, radio, TV, mail or Internet, and they establish feedback communication connection. This method is very useful when it comes to very expensive products that are rarely bought, and for products that have significant public and status importance.

The media (published, audio-visual, electronic etc.) is a general communication channel and is transferring the message without making personal contact and without establishing feedback between the source and the target group. The general communication channels are widely used and very popular in the practice because they cost less, and because they also stimulate personal communication through, so called, public opinion leaders, who transfer the messages, gathered through the general channels.

3.5. Creation of the promotional budget

Deciding on the budget that will be used for product's promotion is one of the most difficult marketing decisions for every company. Promotion budgets will differ from company to company, from industry to industry. For example, we could generalize that the biggest promotional budgets are in the cosmetics industry, industry for domestic hygiene products, in the automobile industry, in the telecommunications etc.

When deciding on the level of the promotional budgets, companies use several methods: arbitrary method, sales percentage method, competitive parity method and aims and objectives method.

The **arbitrary method** allows the promotional budget to be determined in the most voluntary (subjective) way, depending on the financial strength of the company and its ability to allocate the desired level of finances. This method neglects the promotion's effect on the sales level.

The **sales percentage method** determines the promotional budget as a certain percentage from the current or the planned sales level or as a percentage from the selling price of the product. The positive side of this method is the connection between the promotion expenses, the selling price and the profit by unit product. But the main disadvantage is the fact that the promotional costs are treated as result from the sales, so it turns that the promotion is outcome of the sales, and not vice versa – that the sales are result of the promotion.

The **competitive parity method** means that the promotional expenses are determined depending on the competitors' promotional expenses. The use of this method is not very good solution – there are big differences between the companies (different reputation, different financial means, capabilities, aims etc.) and the promotional budgets should vary.

The **aims and objectives method** is most acceptable method because it starts from the defined specific promotional aims and objectives and the tasks needed to be performed in order to reach those aims and objectives. The budget is based on the defined tasks. By using this method the company establishes connection between the expenses and the results of the promotion. At the same time, this method is hardest to be put into practice because it is not easy to determine which tasks will contribute towards completion of the set marketing aims and how much should be budgeted for that. Another problem is allocation of the estimated promotional budget according certain instruments of the promotional (communication) mix.

Whichever method is used, when determining the promotional budget, the company should take into consideration several characteristics of its products: the current phase of the life cycle, use and function of the product (for personal or industrial use), are they homogenous or differentiated, the frequency of the purchasing etc.

3.6. Decision on the promotional mix

Several factors influence the choice of the promotional instrument that will be used and its intensity: the nature of the promotional instruments, the market character of the instrument, the phase of client's readiness and the life cycle phase of the product.

When it comes to products for general use, the advertisement has biggest importance, over the sales promotion, the personal sales and the public relations. For the industrial products most important is the personal sale, than the sales promotion, the advertisement and the public relations.

Promotional instruments have different impact on different phases of the consumer's readiness to acquire the product. For example, in the first phases from this process the most important role lies with the advertisement and the public relations, whereas at a latter stage, the personal sales have greater importance.

If we look at the life cycle of the product, the advertisement and the public relations contribute the most for introducing the new product to the target group in the initial phase. Also, in this phase the personal sale is used to a limited extent in order to encourage the sales network to include the new product into their sales assortment. In the maturity phase the most important aspect is sales promotion, while in the phase of declining the use of the promotional instruments decreases.

3.7. Assessment/evaluation of the promotional results

After conducting promotional or communication activity, it is crucial to measure and assess the results. The aim of the assessment is to determine the effect the message has on the target group and to gather information that will help for more efficient and effective future planning and implementation of the promotional activities.

The research for this aim could be done with inquiry with focus on the following elements:

- Do the subjects remember the message,
- How many times have they noticed the message and on which occasions (which media),
- Which parts of the message they remember most,
- How did they accept / understand the message,
- What was their attitude towards the company and the product before and after receiving the message,
- Did they bought the product after receiving the message,
- If yes, what is their opinion of the product,
- Did they talk with someone about the product etc.

The future promotional activities of the company will be created based on the results from these inquiries. If the research shows that the biggest percentage of the subjects are familiar with the product and big percentage already bought it, but small percentage is satisfied with its quality, it would mean that the communication program was good and the company should focus on improving the quality of the product. In other case, when the subjects are familiar with the product and small percentage bought it, but the percentage of the satisfied subjects is high, it means that the product is good, but the promotional campaign was not successful.

3.8. Management and coordination of the entire marketing communication process

The promotion is a complex process that needs permanent adequate management and coordination because it is a way of continuous communication of the company with its customers. If not done properly, it causes uncoordinated use of the communication instruments, irrational budget use, inadequate messaging and poor effects with the target group.

Recently, so called coordinated marketing communication concept is developed. According this concept, for the company's successful communication with the potential and future customers, several criteria needs to be fulfilled:

- To assign person (manager) responsible for the marketing communications, who will manage and coordinate all promotional activities,
- To analyze the external situation and the internal capabilities in order to determine the strengths and weaknesses, and the role and the scope of use of each promotional instrument, which will serve as a base when determining their optimal combination,
- To have detailed accounting of all promotional expenses by product, by promotional instrument, by the product's life cycle phase and by the effects, as a base of future more rational budget utilization,
- To coordinate the promotional activities between themselves and with the other marketing instruments.

This approach enables successful management and coordination of the communication activities, which results in effective efforts of the company and acquiring relevant and useful information for the customers in the intent of satisfying their needs.

4. SPECIFICS OF THE INTEGRATED MARKETING COMMUNICATIONS ON THE FOREIGN MARKETS

When emerging on the foreign markets companies can develop the same marketing communication programs that are used on the national market or can change them for every local market which is called adjustment of the communications.⁹ The adjustment usually occurs in the segments that can cause misunderstanding with the target group in certain countries, due to some stereotypes, taboos, habits, perceptions etc.

There are always more unknown factors and risks when communicating on the foreign markets. In order to achieve successful and efficient integrated marketing

⁹⁾ Kotler F., Keler K. (2009): pg. 683.

communication on the foreign markets, special attention needs to be paid on the following:

1. To conduct research in order to determine the specifics of the communication environment. That would encompass the differences in the communication means and conditions, the target group characteristics, the promotional infrastructure, state regulations about the communications etc.
2. To avoid the danger of message not getting to the target group. This risk is realistic because of potential lack of some media or certain possible limits or prohibitions for their use. Besides, even if the message reaches the target group, there is always a danger of not being understood and received as the sender intended, due to the language and culture differences. In this case, the expected communication will not be established and the planned effect will not occur.
3. The company has to be familiarized with the existent barriers¹⁰⁾ for establishing communication on the foreign markets:
 - Legal and tax limitations,
 - Symbols and their different meaning in different countries,
 - Tradition, as important part of each culture,
 - Values and norms, as sum of attitudes and beliefs,
 - The language, as direct influencing factor on the strategy and the tactics of the international marketing communications,
 - The literacy, as limiting factor when selecting media and the communication means,
 - The subculture, especially when communicating with market segment on local and regional level,
 - The expenses, which are significantly higher in comparison with the domestic communication, and
 - The national control, which is especially evident in relation with the promotional and communication activities.

All of the above points out on the complexity of the integrated marketing communication process, especially when it comes to the foreign markets, which requires analytical and scientific approach. It implies preceding researching activities as a base of creating adequate strategy and tactics which will provide successful and effective communication with the current and potential customers.

¹⁰⁾ According Rakita B.(2005)

Conclusion

The integrated marketing communication is one of the basics marketing mix's instruments, which enables the communication between the company and its environment (current and potential customers, business partners, society etc.). It represents a complex system because it integrates five instruments: advertisement, sales promotion, public relations, personal sale and direct marketing.

Successful and effective communication between the company and the clients can be achieved by possessing expertise and knowledge on how to properly use the nine elements that comprise the communication process: sender, coding, message, media, decoding, recipient, response, feedback / information and interruptions. For the communication's success, the sender needs to pay attention to the coding of the message. The company-sender should precisely know the target group, to know which media are most appropriate to reach this group, to take into consideration the decoding style of this group and to develop feed back channels that will help assess the reaction on the message.

The integrated marketing communication is a continuous process that encompasses the following phases: identification of the target group, determining the communication aim, creating the message, choosing the communication channels, creation of the promotional budget, decision on the promotional mix, assessment/evaluation of the promotional results and management and coordination of the entire marketing communication process. The integrated marketing communication activities must be planned, organized and coordinated first on the promotional mix level, second, on the level with the other marketing mix instruments. This will enable accomplishing the company's aims. Last, but not least is providing the second communication component: the opinions, the attitudes and the behavior of the target group (the current and the potential customers).

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Biljana PETREVSKA^{*)}

**ECONOMIC PLANNING OF TOURISM
DEMAND IN MACEDONIA**

Abstract

The concept of economic planning of tourism development could not be applied if forecasting of tourism demand is neglected. The importance of application of quantitative forecasting methods is enormous when dealing with projection of future tourism trends. In that respect, the method of exponential smoothing is applied through the following variants: Double Exponential Smoothing (DES) and the Holt -Winters Smoothing (HWS). The forecast evaluation emphasizes that the DES model is more accurate and thus recommends for forecasting the number of foreign tourists in Macedonia in the period 2009 - 2014.

Furthermore, the paper identifies the lack of global concept for tourism development in Macedonia and recommends application of tourism planning as a key factor for enhancement of tourism sector.

Key words: economic planning, tourism, tourism demand, forecasting, Macedonia.

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1. INTRODUCTION

The variety of changes in the surrounding initiated creation of new ambient and challenges in front of all parties involved in the tourism policy of Macedonia. Consequently, the issue of defining innovative presumptions and general directions for tourism development in future has been raised. In this regard the necessity of implementing a brand new approach in the tourism activity has been introduced in order to provoke maximal contribution to the economic development of Macedonia.

Thus it means application of the economic planning concept and creation of competitive tourism product. In that direction, it is necessary to define the advantages, as well as the obstacles in tourism development of Macedonia. Considerable attention may be dedicated to tourism demand, with an emphasis on necessity for accurate forecast. Simultaneously, the possibility of applying quantitative methods and models for forecasting has exceptional significance for forecasting future tourism demand in Macedonia. From this reason, from the variety of quantitative methods, the paper addresses the possibility, but at the same time, the precondition of practical appliance of certain models of exponential smoothing method when dealing the issue of forecasting tourism demand in Macedonia.

2. OBSTACLES IN TOURISM DEMAND FORECASTING

Having in mind that the tourism demand includes all industries of the national economy, and is not based only on one element, clearly indicates vast obstacles present in the attempt of tourism demand estimations. Namely, all difficulties during determination of tourism demand quantity and thus to tourism industry quantity, consequently reflect on the tourism demand forecasting.

In that respect, it may be noted that measuring the tourism immensity and measuring the tourism participation in the GDP, is two different values which need to be treated separately. At the same time, tourism extension may be foreseen in best manner by measuring an effective tourism demand, while the contribution of tourism within the national economy of a country, may be perceived by the tourism participation in the GDP.

In the process estimating tourism demand, many obstacles and difficulties with various character and nature are present. The most recent ones are:

- *Lack of historical data* – most forecasting methods require a minimum of five or ten years of data for forecasting, even much more. Unavailability of statistical data for vast independent variables is top problem while predicting tourism demand.
- *Tourism demand can be volatile* – Visitor volumes fluctuate with the seasons and over annual periods, and often produce wide variations. The more volatility there is in an activity, the more difficult it is to discern patterns that can help in forecasting futures.
- *Wide choice of forecast variables* – for ex: number of tourists arrivals, number of nights spent, tourism consumption etc., which usage differs according to the forecasting model.

Undoubtedly, forecasting tourism demand is a complex process based on applying variety of forecasting methods and models. Furthermore, it should be pointed out that often in a forecasting process certain events and impacts cannot be predicted: financial crises, terrorist attacks, war conflicts and crisis, epidemics etc. Consequently, the expected results are not precise, which on the other hand, leads to inappropriate application of tourism development economic planning process, in general.

In forecasting tourism demand, it is expected that the final model chosen for forecasting will produce projections that are as precise as possible. However, it is not always the case due to following reasons: data limitations, measurement errors, unclear picture of the system of tourism demand etc. Even when an ideal forecasting model can be identified, it can only serve as an approximation for complex tourists' behavior, for it is possible that tourists' decisions change reflecting the changes in preferences, motivation or economic shocks. Hence, the planner should always be prepared to make a revision on the previously identified and defined model, to the newly created changes. Obviously the further in time the forecasts are made, the more likely it is that the prediction will be wrong. Nevertheless, evidence suggests that forecasts based on expert judgment are seldom accurate. Indeed, there is a very large body of research suggesting that experts in various areas rarely generate better predictions than non-experts who have received some training, and that the predictions of experts are completely outperformed by those made by simple statistical models.¹⁾

3. IMPORTANCE OF TOURISM DEMAND FORECASTING

Due to the extensive competition and constant changes in the tourists' demands, it is not possible to act in successful manner without defining the goals and objectives

¹⁾ Hall, Michael C.: The Future of Tourism Research, in: Tourism Research Methods: Integrating Theory with Practice, CABI Publishing, 2005, p. 222.

on clear basis i.e. without tourism demand forecasting. We should always have in mind the complexity of the procedure and that the tourism researchers and practitioners are interested in it for the following reasons:²⁾

First, tourism demand is the foundation on which all tourism-related business decisions ultimately rest. Companies, such as airlines, tour operators, hotels, cruise ship lines, and recreation facility providers are interested in the demand for their products by tourists. The success of many businesses depends largely or totally on the state of tourism demand, and ultimate management failure is quite often due to the failure to meet market demand. Because of the key role of demand as a determinant for business profitability, estimations of expected future demand constitute a very important element in all planning activities. It is clear that accurate tourism demand forecasting is essential for efficient planning by tourism-related businesses, particularly given the perishable nature of the tourism product.

Second, tourism investment, especially investment in destination infrastructures, such as airports, highways and rail links, requires long-term financial commitments and the sunk costs can be very high if the investment projects fail to fulfill their design capacities. Therefore, the prediction of long-term demand for tourism-related infrastructure often forms an important part of project appraisal.

Third, government macroeconomic policies largely depend on the relative importance of individual sectors within a destination. Hence, accurate forecasts of demand in the tourism sector of the economy will help governments in formulating and implementing appropriate medium- to long-term tourism strategies.

The above noted clearly indicates the importance of tourism demand forecasting in a line of resulting with realistic and proven grounds for establishing and applying tourism development policy. Namely, “to make a comeback to the tourism market where you have once been is by all means extremely hard work, much harder than the first market entrance to which you were anonymous.”³⁾

Hence, tourism demand forecasting can be helpful to economic planners in reducing the risk of decisions regarding the future. In that respect, they can use demand forecasts to: ⁴⁾

- predict the economic, social/cultural, environmental consequences of visitors;

²⁾ Song, Haiyan and Lindsay Turner: Tourism Demand Forecasting, in: International Handbook on the Economics of Tourism, Edward Elgar Publishing Ltd., 2006, p. 89.

³⁾ Borkovic-Vrtiprah, Vesna and Mihovil Racic: Forecasting tourism in Croatia with selected forecasting models, Hotel in tourism destination, Book I, Opatija, 1998, p. 426.

⁴⁾ Frechtling, Douglas C., Forecasting Tourism Demand: Methods and Strategies, Butterworth-Heinemann, 2001, p. 10.

- assess the potential impact of regulatory policies, such as price regulation and environmental quality controls;
- project tourism public revenues for the budgeting process;
- ensure adequate capacity and infrastructure, including airports and airways, bridges and highways, and energy and water treatment utilities.

In short, sound tourism demand forecasting can reduce the risks in the decision-making process as well as the costs of attracting and serving the travelling public. In addition, it is undoubtedly that the tourism demand is the basic indicator for the success of the tourism destination in attracting tourists. Therefore, all planning activities are focused on enlargement or control over the tourism demand. Thus, it is essential to introduce all affecting components and factors in order to identify and forecast tourism demand in the most appropriate manner.

4. SELECTING METHODS AND MODELS FOR TOURISM DEMAND FORECASTING

Selecting an appropriate method and model for forecasting tourism demand, is a very complex issue, primarily because the ability to forecast the future cannot be assessed until it really happens and until there is sufficient time to measure it. Consequently, in the preparatory phase for selecting forecasting method and model, it is necessary to gain starting information regarding their relevance. In that line, certain evaluation criteria are used in order to eliminate the inappropriate ones and to select potential starting methods, as well as to identify an adequate model for the forecasting process.

In that respect, a *forecasting method* refers to simply a systematic way of organizing information from the past to infer the occurrence of an event in the future. 'Systematic' means following a distinct set of procedures in a prescribed sequence. On the other hand, a *forecasting model* is one expression of a forecasting method. More specifically, it is a simplified representation of reality, comprising a set of relationships, historical information on these relationships, and procedures to project these relationships into the future.⁵⁾

Consequently, after selecting a forecasting method, it is the common practice to test several models incorporating the assumptions of the given method in order to find the most accurate one.

The literature review is full of different classifications when dealing the issue of methods for tourism demand forecasting. Moreover, as commonly accepted classification of tourism demand forecasting methods is: the group of quantitative methods

⁵⁾ Frechtling, Douglas C.: *Forecasting Tourism Demand: Methods and Strategies*, Butterworth - Heinemann, 2001, p. 21.

and the group of qualitative ones. Quantitative methods are based on mathematical and statistical rules, while qualitative methods are also called judgmental methods. Namely, past information about the forecast variable is organized by experts using their judgmental rather than mathematical rules. These are not necessarily cheaper or easier to apply than quantitative methods, but they have the advantage of not requiring historical data series.

Furthermore, in the frames of each of these groups of forecasting methods, there is a vast number of changeable alternatives representing forecasting models. The most satisfactory and successful methods are those which involve both, a detailed and rigorous analysis of past experience and a study of present consumer attitudes combined with the intuitive insight of expert opinion. However, such a comprehensive method is rarely employed, but models from the first group of methods are mostly applied due to the possibility to produce more adequate and more realistic outcomes.

Which method will be used in tourism demand forecasting depends on the specific aim of the study, the financial means, the data available, the time period over which the forecast is to operate etc. Some models are more suitable for providing predictions of a general nature, whereas others can be used to analyse particular aspects of demand, such as the demand for package tours to a particular resort.⁶⁾

5. QUANTITATIVE METHODS FOR TOURISM DEMAND FORECASTING

Quantitative methods organize past information about a phenomenon by mathematical rules. These rules take advantage of underlying patterns and relationships in the data of interest to the forecaster. Objective numerical measurements consistent over some historical period are required in these methods. These methods also assume that at least some elements of past patterns will continue into the future.

There are two major subcategories of quantitative methods: extrapolative and causal.

- (1) Extrapolative methods, also called 'time series methods', assume that the variable's past course is the key into predicting its future. Patterns in the data during the past are used to project or extrapolate future values. Causal relationships are ignored. These methods are particularly used for forecasting tourism demand of products/services with a relatively stable demand.

⁶⁾ Vanhove, Norbert: Tourism Planning: Economic Instruments - An Evaluation at the Project Level, Tourism Planning of the Eighties, Edition AIEST, Vol. 19, Berne, 1978, p. 30.

Although, the influence of different factors on the tourism development movement is neglected, they produce relatively accurate results, especially on short-term evaluations.

- (2) Causal methods attempt mathematically to simulate cause-and-effect relationships. Determining the causal variables (better called 'explanatory variables') that affect the forecast variable and the appropriate mathematical expression of this relationship is the central objective. These methods have the advantage over time series methods of explicitly portraying cause-and-effect relationships. This is crucial in certain forecasting situations, such as when management wants to know how much impact on demand an increased advertising budget will have. Likewise tourism policy forecasting requires causal models. However, these methods are more costly and time-consuming to construct than time series models, and are often considerably less accurate.

Tourism demand can be measured in a variety of units, including a national currency, arrivals, nights, days, distance travelled, passenger-seats occupied etc. Each of the various methods has its own strengths and weaknesses. Some are best when applying plenty of data to work with and it can present factors affecting tourism demand in the best manner. Others are superior when little is known about the past, or the future we are interested in is distant. Some forecasting methods take little time and knowledge, while others require a detailed understanding of their intricacies. There are numerous examples which indicate limited appliance of the forecasting methods and models and suggest precaution measures in interpretation of the final estimated values.

6. FORECASTING TOURISM DEMAND IN MACEDONIA

We forecast the tourism demand in Macedonia, represented by the number of foreign tourists, for the period 2009-2014 employing the method of exponential smoothing. This method can be applied in many variants, but for the purposes of this research, the following two are used: the Double Exponential Smoothing (DES) and the Holt-Winters Smoothing (HWS). Both models can be used when dealing with short

Table 1

NUMBER OF FOREIGN TOURISTS IN MACEDONIA									
Year	2000	2001	2002	2003	2004	2005	2006	2007	2008
Arrivals	224.016	98.946	122.861	157.692	165.306	197.216	202.357	230.080	254.957

Source: State Statistical Office, Statistical Yearbook of Republic of Macedonia, 2008 and State Statistical Office, Statistical Overview: Transport, Tourism and Other Services in Republic of Macedonia 2004-2008, 2009.

time series with linear trend and no seasonality. In that respect, we do the modelling with short time series with an upward trend in the period 2001-2008.

The DES model is actually an exponential smoothing of second order. This model is optimal for smoothing processes with linear trend. Similarly, it uses the same constant for smoothing the level and trend of the series, which is actually its basic characteristics, but also its weakest point. At the same time, it has to be pointed out that the model smoothes the oscillations in the series, enabling it to react on structural changes in the shortest possible time.

The equations for the DES model are:

$$\text{Level:} \quad L_t = \alpha A_t + (1 - \alpha) (L_{t-1} + b_{t-1}) \quad (1)$$

$$\text{Trend:} \quad b_t = \alpha (L_t - L_{t-1}) + (1 - \alpha) b_{t-1} \quad (2)$$

$$\text{Forecast:} \quad F_{t+h} = L_t + hb_t \quad (3)$$

It is commonly used that the constant has value of 0.2 or less. Despite the fact that the choice of the value of the constant is pretty much limited, it can be used in obtaining more accurate forecasting results. The calculations are:

Constanta value = 0.182

Trend = 22 636

The Holt-Winters model is very similar to DES model, since it can be applied in series with linear trend in the movement with no seasonality. The difference is that the HWS model is base on two smoothing constants, while the DES model uses only one because of its simplicity. But, on the other hand, due to the greater flexibility, the HWS model is considered as more accurate for forecasting.

The HWS model uses the following equations:

$$\text{Level:} \quad L_t = \alpha A_t + (1 - \alpha) (L_{t-1} + b_{t-1}) \quad (4)$$

$$\text{Trend:} \quad b_t = \beta (L_t - L_{t-1}) + (1 - \beta) b_{t-1} \quad (5)$$

$$\text{Forecast:} \quad F_{t+h} = L_t + hb_t \quad (6)$$

The calculations are:

First smoothing constant (α) = 0.48

Second smoothing constant (β) = 0.23

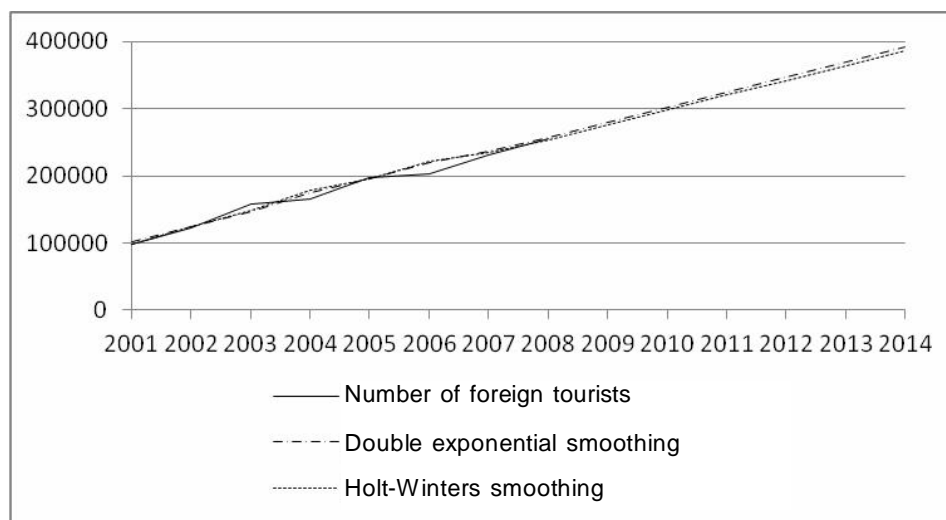
Trend = 21 887

Chart 1:

Biljana Petrevska: Economic planning of tourism demand in Macedonia

Chart 1

FORECASTING TOURISM DEMAND IN MACEDONIA



It is noticeable from Chart 1 that both forecasting models produce satisfactory results since they follow very closely the actual time series in the sample period.

Table 2

FORECASTING TOURISM DEMAND IN MACEDONIA

Model	2009	2010	2011	2012	2013	2014
DES	278.927	301.565	324.203	346.840	369.478	392.116
HWS	276.374	298.261	320.148	342.035	363.922	385.809

From Table 2 it can be concluded that both models have similar forecasting results. According to DES model, the number of foreign tourists in Macedonia for the period 2009 – 2014 is projected to be within the interval of 279 000 – 390 000 tourists. Based on this model, the number of foreign tourists in the following six years will increase for 120 000.

The HWS model forecasts that the number of foreign tourists in the 6-year period will be within the interval of 276 000 – 386 000 tourists. So, based on this projection the number of foreign tourists in Macedonia will increase for 100 000.

Both models are very often used for tourism demand forecasting, mainly because of their accuracy and simplicity in the implementation procedure. Simultaneously, their advantage lies in the ability to follow the linear trend of the original time series as well as to be used in medium-run estimations. However, the biggest disadvantage is their inappropriateness in forecasting time series with seasonality compo-

nents or without linear trend. In such cases, other models of exponential smoothing are used: simple exponential smoothing, Holt-Winters multiple smoothing (with three parameters) etc.

7. EVALUATION OF THE MODELS

Having in mind that the primary purpose of building a forecasting model is to clearly discern the future of a phenomenon, the most important criterion is how accurately a model does this, i.e. how closely the estimations provided by the model conform to the actual events being forecasted.

In that respect, in order to define which of two implemented models of the exponential smoothing method is more accurate in forecasting the tourism demand in Macedonia, the forecasts are evaluated by means of the standard indicators:

- Root Mean Squared Error (RMSE),
- Mean Absolute Error (MAE),
- Mean Absolute Percentage Error (MAPE) and
- Theil Inequality Coefficient (TIC).

The root mean squared error indicates the average forecasting error, which is calculated by taking the square of individual forecast errors in order to avoid the problem of offsetting positive and negative errors.

$$RMSE = \sqrt{\frac{1}{h} \sum_{t=T}^{T+h} (\hat{y}_t - y_t)^2}$$

Contrary to the RMSE, the mean absolute error resolves the problem of positive and negative errors by taking them in absolute value.

$$MAE = \frac{1}{h} \sum_{t=T}^{T+h} |\hat{y}_t - y_t|$$

The basic weakness of the above noted indicators is that they cannot be used in comparing errors in forecasting the time series expressed in different values. For that purpose, the mean absolute percentage error is used, which expresses the forecasting errors in percent of the values of the original series.

$$MAPE = \frac{1}{h} \sum_{t=T}^{T+h} \left| \frac{\hat{y}_t - y_t}{y_t} \right|$$

The Theil Inequality Coefficient can also be used for comparing errors in forecasting the time series expressed in different values. Specifically, this coefficient builds on the root means squared error and its value lies between 0 and 1.

The calculated values of all mentioned indicators for evaluating the forecasting model accuracy are presented in Table 3.

$$TIC = \frac{\sqrt{\frac{1}{h} \sum (\hat{y}_t - y_t)^2}}{\sqrt{\frac{1}{h} \sum \hat{y}_t^2} + \sqrt{\frac{1}{h} \sum y_t^2}}$$

Table 3

EVALUATION OF TOURISM DEMAND FORECASTING IN MACEDONIA

	Root Mean Squared Error	Mean Absolute Error	Mean Absolute Percentage Error	Theil Inequality Coefficient
DES	6.090,83	9.986,78	4,79	0,0134
HWS	9.920,87	13.150,95	5,94	0,0217

Comparing the values of calculated errors of DES and HWS model, it can easily be concluded that the DES model is more accurate model of exponential smoothing. Having in mind that the DES model is very simple for implementation, leads us to additional advantage for its choice as a leading model for forecasting tourism demand in Macedonia. According to DES model, the number of foreign tourists in Macedonia for the period 2009-2014 will be in the interval from 280 000 – 390 000 tourists. Put side by side to 2008 when 255 000 foreign tourists visited Macedonia, it means 10-50% expected increase. Furthermore, it should be pointed out that the anticipated values must be taken in consideration with a large doze of precaution, since the model does not indicate the reasons which affect the forecasted results. This is very important, as these indicators have great influence on identifying and implementing measures and activities in order to create appropriate tourism policy of the country.

8. CONCLUDING REMARKS

The key to successful tourism development is in application of the concept of its planning. The economic development must not be the one and only priority country's goal, but should be complemented by other three main goals: satisfaction of tourists' needs; resource protection, as well as tourism integration within the socio-economic community development. The overall tourism planning policy should be equally oriented towards creation of quantity, but at the same time, towards improvement of quality as well. The resistance to introduction of economic planning concept is progressively disappearing, thus being more accepted and applied as guidelines for future tourism development.

Such complex concept cannot be implemented without predicting tourism demand. At the same time, many obstacles and difficulties occur during the process, such as: lack and data limitations; inconsistency and variable errors; application of large number of variables; lack of knowledge for tourism demand system etc.

Forecasting tourism demand is important since it is the base for: creating achievable tourism policy; creating adequate regional development policy; formulating and implementing tourism strategy etc. Forecasting accuracy depends on characteristics of applied methods and models. The projected results from different models may be compared to the realistic data, thus ensuring retrospective measurement of accuracy of applied model.

The number of foreign tourists is the basic variable for forecasting tourism demand in Macedonia for the period 2009-2014. In this regard, a relatively simple qualitative model easy for practical usage, is applied. However, the model does not indicate the reasons which may affect the projected results, which on the other hand, have high influence on identifying measures and activities necessary for creating solid tourism policy.

There is a lack of global concept for tourism development in Macedonia, as well as adequate general economic policy, especially developmental policy for supplementary sectors necessary for tourism follow-up development. Herein, tourism in Macedonia should be observed in broad, macroeconomic frames as specific market segment whose dimensions and economic content comprehensively may be interpreted within the quantity and structure of tourism expenditure. That is possible only by creating analytical frame for identifying all tourism impacts, and thus, to define objectively its position within the global development strategy in Macedonia.

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