Volume 8 Number 2 Fall 2012 ISSN: 1553-5495



Journal of Global Business and Technology

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In Cooperation with the Global Business and Technology Association



The Journal of Global Business and Technology

Volume 8, Number 2, Fall 2012

Publication Details Two issues per volume ISSN: 1553-5495

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The Journal of Global Business and Technology, in cooperation with the Global Business and Technology Association and sponsored by Arcadia University, U.S.A., has been listed with [1] Cabell's Directory, [2] EBSCO's Academic Search, and [3] ProQuest's ABI Form.

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Abstract: The oversaturation in the telecommunication market in Bahrain suggests reshaping of the competition to be solely based on innovation, cost and flexibility. E-Services can be used by as a competitive edge to reduce costs and increase service rate. This research investigates the factors influencing customers' intention to use e-services in the Telecommunication sector in Bahrain. It extends on the researches that combine the Technology Acceptance Model (TAM) and trust (TR) by examining the effect of a proper regulatory environment (RGE) on users' intention to adopt and use e-services (ITU). The study findings show that perceived usefulness (PU) has a significant impact on perceived ease of use (PEOU), but not on ITU. Moreover, PEOU and RGE are major determinants of ITU while TR has no significant effect on both ITU and PEOU. The research results yield useful insights for the marketing and development strategies of service providers. This research also contributes to the on-going multi-cultural research on the adoption of e-services.

Dean Elmuti Ahmed S. Abou-Zaid Heather Jia

ROLE OF STRATEGIC FIT AND RESOURCE COMPLEMENTARITY IN STRATEGIC ALLIANCE EFFECTIVENESS

Abstract: Strategic alliances allow companies to develop products and rapidly expand their markets while managing risk and costs through sharing resources. In recent years, there has been a dramatic increase in strategic alliances by multinational firms. According to recent studies, a majority of executives believe that alliances will be a prime vehicle for future growth, dramatically improving an organization's operations and competitiveness. A validated instrument on organizational characteristics was used to empirically test the impact of strategic fit and complementarity on strategic effectiveness. The results show that strategic alliance environments were positively related to perceived changes in organizational effectiveness dimensions among respondents in more than half of the surveyed organizations in five countries. Successful alliance ventures were highly evolutionary and went through a process of learning, reevaluation, and readjustment. These findings indicate that managers searching for strategic alliance partners should look at compatibility, not only in terms of objectives that both prospective partners hope to achieve through the success of the venture, but also in terms of the corporate culture, resources, prospective partners' business domains, and willingness to go through the learning process.

Gabriel Héctor CarmonaHOSPITALITY COMPETITIVENESS MEASUREMENTOlmosSYSTEM

Abstract: Many hotels around the world, such as the ones in Morelia, Michoacán, Mexico, are essentially family businesses that need to develop and improve their managerial skills in order to face competition from chain hotels and franchises. Most of these hotels have a small percentage of foreign tourists, offer standard lodging service, and lack training and information management tools for their decision-making processes. For these hotels business relationship should be a priority and not the sentimental or family issues that lead to centralized, intuitive, and reactive decisions. At the same time, hotel chains and franchises model, so it is necessary to measure their efforts and contrast its own performance with the rest of the competitors. The research answers the following questions: Which variables must be monitored by hotels in order to design a competitiveness measurement system? How can hotels develop a competitiveness measurement instrument that provides useful information for managerial activities and decisions?

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Abstract: This study bridges the gap between investment theory and practice in some of the least studied financial markets of the world, namely the stock markets in Africa and the Middle East. The objective of this pioneering study is to provide empirical documentation to global investors who are contemplating participation in African and Middle Eastern stock markets using American Depositary Receipts (ADRs) as the investment vehicle. The first part of the study examines the nature of these ADRs (based on depositary bank, sponsorship status, industry classification, and listing). The second part of the study evaluates the performance of these ADRs using statistical measures grounded in modern portfolio theory. Returns are adjusted for the degree of total risk and systematic risk inherent in each ADR, and the securities are then ranked on the basis of risk-adjusted performance. Two relatively new evaluation metrics, the Modigliani and Sortino measures, are used for ranking.

HOW CORPORATE GOVERNANCE AND GLOBALIZATION AFFECT THE ADMINISTRATIVE STRUCTURE OF THE GREEK SHIPPING INDUSTRY

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EDITORIAL

Strategic alliances allow companies to develop products and rapidly expand their markets while managing risk and costs through sharing resources. In recent years, there has been a dramatic increase in strategic alliances by multinational firms. According to recent studies, a majority of executives believes that alliances will be a prime vehicle for future growth, dramatically improving an organization's operations and competitiveness. Strategic alliances among international firms are worth studying for several key reasons. First, these alliances are growing in significance in terms of producing various patents, prototypes, and licenses through their research projects. They are also important from the standpoint of global competitiveness and growing demand for innovation in products and processes. The increasing use of cooperative arrangements amid competing firms, as well as the unfamiliar complexity of strategic alliances, suggests the need to know more about how to effectively utilize this strategy. The first paper by Dean Elmuti, Ahmed S. Abou-Zaid, and Heather Jia contributes to the knowledge of factors that may influence the success or failure of strategic alliance programs. This study empirically tests the effects of strategic fit, resource complementarity, and learning processes on strategic alliance effectiveness.

The results of Elmuti, Abou-Zaid, and Jia's study show that strategic alliance environments were positively related to perceived changes in organizational effectiveness dimensions among respondents in more than half of the surveyed organizations in five countries. Successful alliance ventures were highly evolutionary and went through a process of learning, reevaluation, and readjustment. These findings indicate that managers searching for strategic alliance partners should look at compatibility, not only in terms of objectives that both prospective partners hope to achieve through the success of the venture, but also in terms of the corporate culture, resources, prospective partners' business domains, and willingness to go through the learning process.

Elmuti, Abou-Zaid, and Jia's study also provides direction to executives and managers involved in strategic alliance projects, and it suggests that as long as the value gained from the partnership exceeds the cost to both partners, the basis of the alliance is set. The basis must be supported by continuous learning and restructuring processes to overcome the difference between the partners. By managing cultural and operational differences and by developing a comprehensive plan outlining detailed objectives and expected benefits of strategic alliance projects, these factors, as suggested in this study, can provide a template for success in entering and maintaining a successful international strategic alliance.

The oversaturation of telecommunication market in Bahrain suggests little opportunities are available for service providers in the market and might reshaped the nature of competition to be solely based on cost and flexibility. Given the tremendous rise in e-services adoption worldwide, e-services use in Bahrain is still stagnant across different sectors and requires further investigations. E-services provide more flexible and innovative means for customers and can be used by as a competitive edge that will result in huge cost reductions. Increasing the use rate will benefit both service providers and customers. The second paper by Amr A. Swid and Ahmed R. ElMelegy investigates the factors influencing customers' intention to adopt and use e-services in the telecommunication sector in Bahrain. The hypothesized research combines the literature on the extended Technology Acceptance Model (TAM), trust and legal aspects. The study by Swid and ElMelegy shows that perceived ease of use and legal aspects are major determinants of customer attitudes and intentions to adopt e-services. The results yield useful insights for the marketing and development strategies of service providers. Their research also contributes to the on-going multi-cultural empirical research on the adoption of e-services.

Over the past decade the global investment landscape has been altered by two major transformational changes. One of these changes is in the area of information technology. Due to rapid advancement in the technology of information transfer, it is possible for global investors to access real time information on stock market performance from almost anywhere and at almost any time. Similarly, information on corporate financial performance of publicly traded companies is readily available and information transmittal is almost instantaneous. The other transformational change is in the area of financial deregulation. Due to widespread deregulation in the 1990s and later, global capital markets are much more integrated today than they have been

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in the past, and it is possible for global investors to channel funds into financial securities listed in other countries and across the globe.

A global investor who is contemplating the purchase of shares of stock of a company listed on an exchange outside his/her home country has four choices. He/she can contact a broker in the foreign country to purchase shares. He/she can buy shares of a stock mutual fund in the foreign country. He/she can purchase shares of an international mutual fund in his/her home country. Finally, he/she can purchase a depositary receipt on shares of the foreign stock. This last option is the only convenient vehicle to invest in shares listed on a foreign market for an investor who does not want to hold a pre-structured financial product such as a mutual fund. In the United States there were 2,442 American Depositary Receipts (ADRs) listed on the stock market, as of January 2012. ADRs that are created at the initiative of the company that has issued the underlying stock are called "Sponsored" ADRs. ADRs that are created at the initiative of investors are called "Unsponsored" ADRs.

In the third paper by Onur Arugaslan and Ajay Samant focuses on the nature and performance of ADRs from Africa and the Middle East. The stock markets in Africa and the Middle East are some of the least studied capital markets in the world. The largest market in this region, in terms of market capitalization (USD 1,013 billion) as well as volume of trade (USD 340 billion) in 2010 was South Africa. In the Middle East, the largest markets in terms of market capitalization in 2010 were Saudi Arabia (USD 353 billion), Turkey (USD 307 billion), and Israel (USD 218 billion). On the continent of Africa, in addition to South Africa, the large stock markets are in Egypt (USD 83 billion), Morocco (USD 69 billion) and Nigeria (USD 51 billion). As mentioned in the previous paragraph, the most convenient vehicle for a global investor to access these stock markets is to use ADRs as the investment vehicle.

As of January 2012, there were 75 ADR issues on firms in the Sub-Saharan Africa (SSA) region and 58 ADR issues on firms in the Middle East / North Africa / The Gulf (MENAG) region. 74 ADRs in SSA are from South Africa and one from Zambia. 26 ADRs from MENAG are in Turkey, 22 in Israel, five in Egypt, two each in Jordan and United Arab Emirates, and one in Lebanon. 68 ADRs are sponsored and 65 are unsponsored. Regarding the financial institutions that have issued the ADRs, the Bank of New York Mellon accounts for 119 of these issues, followed by Deutsche Bank with 29 issues, Citibank with 28 issues, and J.P. Morgan Chase with eight issues. It may be noted that unsponsored ADRs may be issued by more than one financial institution. Regarding the exchanges on which Arugaslan and Samant's sample ADRs are listed, seven each are listed on the NYSE and NASDAQ, 116 are listed on OTC (other than NASDAQ), and the other three are listed on OTCQX.

Monthly return data on ADRs for the three-year period January 2008 - December 2010 are obtained from the Center for Research in Security Prices (CRSP). CRSP has full return data for 7 South African ADRs, 5 ADRs from Israel, and one Turkish ADR. Therefore, the final sample in their study for the performance analysis consists of 13 ADRs. The return on U.S. 4-week Treasury Bills is used as the proxy for the risk-free rate. The Morgan Stanley Capital International (MSCI) Europe Australia and Far East (EAFE) Index is utilized as the market benchmark for purpose of comparison. Monthly returns are averaged over the three-year period 2008, 2009, 2010 to obtain the mean return. Risk-free rate of return is subtracted from the mean return to compute the mean excess return. Based on this information, standard performance measures from Modern Portfolio Theory (Sharpe, Treynor and Jensen indexes) are calculated. In addition, two recent measures, the Sortino Ratio which utilizes semi-variance and the Modigliani and Modigliani ratio, which utilizes normalization for market risk, are used to calculate risk-adjusted return. The ADRs are then ranked on the basis of risk-adjusted return, with a view to identifying those ADRs which realized the best performance on a riskadjusted basis. The intent of Arugaslan and Samant's study is to provide documentation to global investors who are contemplating investment in stocks in Africa and the Middle East via ADRs but are not sure of which companies to invest in. Finally, it needs to be re-iterated that global investors should look at the risk and return of their entire portfolio rather than a single security. The results of their study should be of interest not only to global investors, but also to corporate financial managers who are contemplating raising capital in global financial markets, and to managers of global banking institutions who are examining the possibility of providing global investment services.

Many hotels around the world, such as the ones in Morelia, Michoacán, Mexico, are essentially family businesses that need to develop and improve their managerial skills in order to face competition from chain hotels and franchises. Most of these hotels have a small percentage of foreign tourists, offer standard lodging service, and lack training and information management tools for their decision-making processes. For these hotels business relationship should be a priority and not the sentimental or family issues that lead to centralized, intuitive, and reactive decisions. At the same time, hotel chains and franchises need to improve their systems and procedures in order to compete in many countries with a successful business model, so it is necessary to measure their efforts and contrast its own performance with the rest of the competitors. The fourth study by Gabriel Hector Carmona Olmos answers the following questions: Which variables must be monitored by hotels in order to design a competitiveness measurement system? How can hotels develop a competitiveness measurement instrument that provides useful information for managerial activities and decisions? The Olmos study offers a hospitality competitiveness measure system with administrative recommendations for a hotel or an entire hospitality industry.

The variables that must be monitored by hotels in order to design a competitiveness measurement system are: infrastructure, marketing and sales strategies, management practices, training, and information systems. These variables were determined by a focus group study including the participation of hotel owners, managers, tourism authorities, and the Tourism Sub secretary of Michoacán State in Mexico. To measure these variables a competitiveness measurement instrument has been developed, a questionnaire that provides useful information for managerial activities and decisions. The questionnaire consists of 36 questions: 35 related to the independent variables and 1 question regarding the dependent variable, with the maximum affirmation score of 5, and therefore the maximum total score of 180 (36×5), and the minimum value in the scale is 1, resulting in a minimum total score of 36 (36×1). The total competitiveness score interval for a hotel is between the extreme values of 36 and 180.

In terms of management practices it is important to define the hotel core competence, considering guests needs and identifying the alternatives that exist to satisfy them. A hotel must determine a consistent and appropriate mission that is shared by hotel members, ensuring that the objectives and activities of each department contribute to accomplishing the mission. It is important to make sure the structure is adequate to carry out the strategy and that each member of the hotel knows his or her job description. In regard to marketing and sales activities, competitive hotels are those that are customer-oriented and that build their operations around guests' satisfaction. It is important to perform market research as a regular practice, to design effective advertising and sales strategies, and to offer a fast loading website, updated with quality content. At the same time the hotel must develop a marketing plan to transmit the hotel central positioning idea and to generate a recurring program strategy for guests' retention and loyalty.

In terms of infrastructure is important to determine the core elements and additional services, to identify those that generate more value to the target market, and at the same time to ensure that the hotel has the appropriate technology. A hotel should identify and promote attitudes, appearance, and performance of employees that contribute to the success of the organization. Training should be provided by internal and external instructors, at the same time the hotel must consider performance indicators that will be measured as result of the training. The remuneration system must recognize the performance of each employees. In regard to information systems, competitive hotels are those that listen to their customers and employees. Information obtained through market research should include competitors' benchmarketing and guests' perceptions. An information portfolio may consider: after-sales service-quality scales studies, mystery shoppers, and focus groups. Additionally it is concluded that businesses require a control panel system to measure the core elements of the hotel operation while it generates useful reports for decision making processes. The information system should allow the hotel to perform longitudinal comparative studies.

The fifth paper by Vicky Zampeta examines the effects of corporate governance and globalization in the Greek shipping industry. Structured questionnaires were distributed among the top executives of the Greek shipping industry and the data was analyzed through factor analysis.

According to Zampeta's study findings, the shipping industry has accepted some elements of corporate governance, adapting them in its administrative systems. Globalization has also affected their performance and

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new initiatives have arisen in the industry regarding the policies used by the executives. The effective administrative system in shipping is now closer to modern systems used by other industries.

N. Delener, Ph.D. Editor-in-Chief

NOTE FROM THE EDITORS

As an interdisciplinary journal, *The Journal of Global Business and Technology* (JGBAT) serves academicians and practitioners in the fields of global business and technology and their related areas. The JGBAT is also an appropriate outlet for manuscripts designed to be of interest, concern, and applied value to its audience of professionals and scholars.

Readers will note that our attempt to bridge the gap between theory and practice has been successful. We cannot thank our reviewers enough for having been so professional and effective in reiterating to contributors the need to provide managerial applications of their research. As is now obvious, the majority of the articles include a section on managerial implications of research. We wish to reiterate once again our sincere thanks to JGBAT reviewers for having induced contributors to answer the "so what?" question that every Journal of Global Business and Technology article is required to address.

Thank you for your interest in the journal and we are looking forward to receiving your submissions. For submissions guidelines and requirements, please refer to the Manuscript Guidelines at the end of this publication.

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MANAGEMENT OF E-SERVICES ADOPTION IN THE TELECOMMUNICATIONS SECTOR IN BAHRAIN

Amr A. Swid and Ahmed R. ElMelegy

ABSTRACT

The oversaturation in the telecommunication market in Bahrain suggests reshaping of the competition to be solely based on innovation, cost and flexibility. E-Services can be used by as a competitive edge to reduce costs and increase service rate. This research investigates the factors influencing customers' intention to use eservices in the Telecommunication sector in Bahrain. It extends on the researches that combine the Technology Acceptance Model (TAM) and trust (TR) by examining the effect of a proper regulatory environment (RGE) on users' intention to adopt and use e-services (ITU). The study findings show that perceived usefulness (PU) has a significant impact on perceived ease of use (PEOU), but not on ITU. Moreover, PEOU and RGE are major determinants of ITU while TR has no significant effect on both ITU and PEOU. The research results yield useful insights for the marketing and development strategies of service providers. This research also contributes to the on-going multi-cultural research on the adoption of e-services.

INTRODUCTION

E-Services are defined as "Deeds, efforts or performances whose delivery is mediated by information technology. Such e-services include the service element of e-retailing, customer support, and service delivery" (Rowley, 2006); or simply services that are offered, provided and/or consumed through the Internet. Adoption is defined here as "the decision to make full use of an innovation as the best course of action available" (Rogers, 1995, p. 21). E-Services adoption is different than conducting basic e-commerce purchases in terms of complexity and long-term relationship between the consumer and service providers (Featherman and Pavlou, 2003).

Ahmed R. ElMelegy is an Assistant Professor of Quantitative Methods at New York Institute of Technology, Bahrain. He received a Ph.D. in Management Science with a specialization in Operations Management from Stuart School of Business, Illinois Institute of Technology, Chicago, USA. He has more than 10 years of academic experience at the American University in Cairo, Nile University, and New York Institute of technology. His current areas of research include E-Services and Technology, Optimization, Scheduling and Queuing Models.

Amr A. Swid is the Dean of Students at New York Institute of Technology, Bahrain. His PhD in Management at Aston Business School, Birmingham, UK focused on newcomers' adjustment and management. Following a successful management career in pharmaceutical industry, he has undertaken several administrative roles at NYIT as Assessment director and Assistant dean. He has more than 12 years of academic experience at Strathclyde, Aston, and NYIT. Generally, his academic research focuses on the challenges of managing professional service firms. In particular, his work investigates how a firm can be systematic in achieving a sustainable competitive advantage by leveraging its employees and technology.

MANAGEMENT OF E-SERVICES ADOPTION IN TELECOM SECTOR

The telecommunications market in Bahrain is experiencing an oversaturation stage with 1.7 million obile subscribers by the end of 2011, a penetration rate of 133%, according to the Telecommunication Regulatory Authority report (Sambidge, 2012). This provides little opportunity for service providers who are struggling under financial pressures to compete based on price. Accordingly, Bahrain's service providers have to explore new competitive challenges like e-services that can improve efficiency, enhance flexibility, cut operational expenses and strengthen customer relations and satisfaction (Ruyter et al., 2001).

According to the B2C e-commerce overview by the Gulf Cooperation Council (IMRG International, 2011), e-commerce and e-services adoption and use are still in their early stages in the Gulf Cooperation Council (GCC) region. This is because of barriers like payment security, delivery options, satisfaction, and legal aspects; and offenses like unauthorized access, interference or unauthorized interception of data, and fraud. Bahrain, similar to many developing countries, is slow and far behind in terms of a proper regulatory environment and a legal framework that protect online transactions.

Adoption and use of e-services depend on many factors like perceived usefulness (PU), perceived ease of use (PEOU), concerns of inherent risk (Hoffman et al, 1995), trust (TR) (Lee, 2009), and regulatory environment (RGE) (Zhu et al. , 2006). Those factors have been proven to be major inhibitors to adoption and are of great concern for many potential adopters. E-Services, e-commerce, and e-government adoption have been studied in numerous research in various countries (Anderson & Srinivasan, 2003; Gefen et el., 2003; Pavlou, 2003; Flavia'n & Guinalý'u, 2006; Cyr, 2008; Kim et al., 2009). As for the Gulf region and Arab countries, few researchers have examined the antecedents of e-commerce and e-government adoption and found that they are still limited (Kassim & Ismail, 2009; Said & Galaleldeen, 2009; Alawadi & Morris, 2008; Alshehri & Drew, 2010; Al-Solbi & Al-Harbi, 2008).

Given the tremendous rise in e-services adoption in developed countries, e-services rate of adoption is still stagnant in many developing countries and requires further investigations. Bahrain is an example of a developing country that has the proper infrastructure and an educated population but still lag behind in terms of e-services adoption. E-services can provide better services for Bahraini customers in terms of flexibility, efficiency and innovation. As for services providers, e-services provide a competitive edge that can result in huge cost reductions for the telecommunication providers which are struggling in the oversaturated market of Bahrain. The study will provide insights for service providers to understand the impact of various factors related to e-services adoption rate. In fact similar studies have been done in developed countries (Prins & Verhoef, 2007; Kumar et al., 2007; Lee, 2009), few in developing countries, and non in Bahrain up to the authors' knowledge. The research model can be used further to analyse the effect in other developing countries. This derives the need and motivation for this research as to explore the determinant factors of e-services adoption and use in Bahrain.

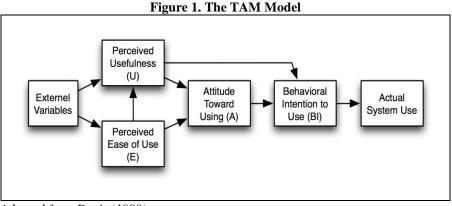
The research model is based on the work by Lee (2009) who extended the basic Technology Acceptance Model (TAM) to examine the effect of trust (TR) on users' intention to adopt and use e-services (ITU). According to Bhatnagar (2004), the successful adoption of e-services and e-government requires "existence of an enabling legal framework encompassing privacy and security of data, legal sanction of new forms of storage and archiving, and laws that accept paperless transactions". Considering this fact, we proposes to integrate the literature on TAM, trust and legal aspects by examining the effect of adding regulatory environment as a new construct. The merge of these literature streams may provide a more comprehensive model for e-services adoption. Thus, the aim of this study is to extend on the existing adoption models and to propose an integrated and eclectic conceptual framework of factors which influence e-services adoption in Bahrain. The study will add value to the literature on multi-cultural adoption of e-services by contrasting the results of Bahrain with other international cultures.

The study will also consider demographic variables like age, gender, education level, and internet usage. Other variables like difference in access to and use of information and computing technologies (ICT), social divides within countries related to income, family type, and business divides related to sector, region, and firm size will not be considered in this study to focus on the study variables while acknowledging the limits of time and manpower.

THEORITICAL BACKGROUND

Technology Acceptance Models

When it comes to technology applications, those who utilize them are required to take a specific stance as to adopt and use them accordingly (Awa et al., 2010). This poses the question as "what causes people to accept and adopt technology?". There have been many models that were developed to study technology acceptance but Davis's Technology Acceptance Model (TAM) (1989) is probably the most popular (Masrom, 2007). TAM (figure 1) is an alteration of the theory of reasoned action (TRA) by Fishbein & Ajzen (1975). It examines the impact of users' perceptions towards the usefulness (PU), the ease of use (PEOU) of a given technology, and the actual intention to use this technology (ITU). According to TAM, perceived usefulness (PU) and perceived ease of use (PEOU) directly affect attitude towards a technology (ITU) which, in turn, affects behavioral intention to use that technology (Davis, 1989). TAM has been expanded subsequently to examine the antecedents of PEOU and PU such as: computer self-efficacy, objective usability, perceived enjoyment, anxiety, and subjective norms, image, job relevance, output quality, results demonstrability, experience, and voluntariness (Venkatesh et al., 2003).



Adopted from Davis (1989)

TAM has been adopted and tailored in numerous researches that investigate the acceptance and adoption of the different applications of information and computing technology (ICT). Researchers have extended the model by integrating other variables to consider the influence of social and control factors to provide more comprehensive models of technology acceptance (Taylor & Todd, 1995). The model utilized in this research (figure 2) presumes that the intention to adopt and use e-services (ITU) is a function of perceived usefulness (PU), perceived ease of use (PEOU), trust (TR), and regulatory environment (RGE) where the proposed constructs are supported by prior studies in information systems literature.

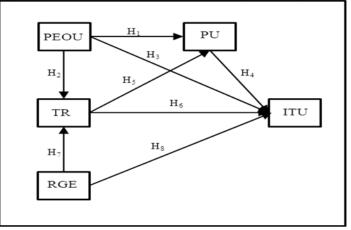


Figure 2. The Research Model and the Proposed Hypotheses

Perceived Ease of Use (PEOU)

Perceived ease of use (PEOU) is the degree to which a person believes that technology applications are easy to use (Davis, 1989). Information and computing technologies (ICT) applications that are easy to use and less complex are more likely to be perceived useful by customers. PEOU has a significant positive effect on perceived usefulness (PU) (Davis, 1989; Fagan et al., 2008; Guriting & Ndubisi, 2006). Numerous researchers found that perceived ease of use has a direct impact on intention to use technology (ITU) where customers are likely to adopt and use information and computing technologies (ICT) applications only if they perceive they are easy to use (Adams et al., 1992; Wolk, 2007; Masrom, 2007; Lee et al., 2003).

The effect of PEOU on trust (TR) in online shopping has been studied by Gefen et al. (2002) and Lee (2009) who found that PEOU positively influences trust (TR) because by help promoting customers' favorable impressions of e-vendors during the initial adoption phase. Later, it influences customers' willingness to make investments and commitment to the buyer–seller relationship. Thus, we hypothesize that:

H₁: Perceived ease of use (PEOU) has a positive effect on perceived usefulness (PU).

H₂. Perceived ease of use (PEOU) has a positive effect on trust (TR)

H₃: Perceived ease of use (PEOU) has a positive effect on intention to use technology (ITU).

Perceived Usefulness (PU)

In the context of the research, perceived usefulness refers to respondents' perception towards technology use. It has a significant positive effect on intention to use (ITU) technology (Davis, 1989; Adams et al., 1992). According to Chau (1996), PU is categorized into two distinct categories: near-term usefulness which improves job performance or enhances job satisfaction; and long-term usefulness that advances user's career prospects or social status. Chau showed that perceived near-term usefulness has more significant influence on the intention to use technology than long-term usefulness. Thus, the research tests the following hypothesis:

H₄: Perceived usefulness (PU) has a positive effect on intention to use technology (ITU).

Trust (TR)

The online environment is characterized by uncertainty, lack of control and potential opportunism (Shankar et al., 2002). Therefore, trust is an important element that shapes customers' attitudes and intentions in the online environment (Yeh & Li, 2009; Lu et al., 2010). Kaasinen (2005) and Keat & Mohan (2004) were among the first who suggested adding a component that describes the conception of trust to TAM. Trust and its connection to the TAM have been discussed in many researches (e.g. Lee, 2009). Lu et al. (2011) demonstrated that customers' conception of trust is lower in the online shopping environment due to lack of face-to-face interaction between consumer and product. Lee (2009) noted that one of the main concerns of customers is that online merchants may sell consumer personal information without their approvals. The use of personal information such as address, telephone number and financial information is worrisome for most online customers as they believe it is subject to financial fraud (March, 2006).

Trust also includes the perceptions towards the information provided by the websites and its effectiveness (Kim et al., 2005). Customers' conception of trust in electronic commerce shape their attitudes towards adoption and use of e-services as the higher the trust level, the more the desire to establish long-term relationship with vendors (Kim et al., 2010). The effect of trust (TR) on perceived usefulness in online environments was studied by Lee (2007) and Wu & Chen (2005). They, both, found that trust is a significant determinant of PU because "part of the guarantee is that consumers will sense that the expected usefulness from the web site is based on the sellers behind the web site".

As for the telecommunication service providers, the development of marketing mix has received considerable academic and industry attention. Numerous modifications to the 4Ps framework have been proposed, the most concerted criticism has come from the services marketing area (Rafiq and Ahmed, 1995). Trust of customers is a basic element of the promises in maintaining and developing relationships (Ndubisi et al., 2007). The outcome is that the relationship with clients allows firms' access to marketing intelligence, resulting in better marketing strategy and enhanced profitability (Ndubisi, 2006).

Trust has been defined as public expectations of the individual which means trustworthy (Rotter, 1967; in the Morgan & Hunt, 1994). Together with commitment, Trust is a key variable for suppliers in order to maintain a long-term relationship with customers (Morgan & Hunt, 1994). The commitment-trust tandem was defined as the key that leads to efficiency, productivity and effectiveness (Morgan and Hunt, 1994).

Trust is a major antecedent for the creation of durable relationships (Ojasalo, 2008) as it has been proven that it promotes commitment and long-term orientation (Ganesan, 1994). Indeed, the higher the level of trust between both the firm and the customer, the more likely that the relationship will continue (Morgan and Hunt, 1994). Indeed, retention is considered the key outcome of affective commitment (Verhoef, 2003), given that it symbolizes the eagerness of parties to sustain the relationship (Gounaris, 2005). These researches showed that trust and commitment is linked and thus developing trust in e-services could lead to the commitment to the service provision as well.

Based on the above, we purpose the following hypotheses:

 H_5 : Conception of trust (TR) has a positive effect on perceived usefulness (PU) H_6 : Conception of trust (TR) has a positive effect on intention to use and adopt e-services (ITU).

Regulatory Environment (RGE)

E-services require supporting policy and regulation environment that addresses all potential threats that might arise during usage. The existence and effectiveness of a legal framework increase customers' confidence and guarantee the adoption and usage of e-applications (Alshehri & Drew, 2010). Customer's trust in e-banking services increases if there is an adequate legal framework supporting online transactions

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(Rotchanakitumnuai & Speece, 2003; Larpsiri et al., 2002). Zhu et al. (2006) proved that the regulatory environment plays a more important role in e-business adoption in developing countries. Thus, we purpose the following hypotheses:

- H₇: Regulatory environment (RGE) has a positive effect on the conception of trust (TR).
- H₈: Regulatory environment (RGE) has a positive effect on intention to use and adopt e-services (ITU).

RESEARCH METHODOLOGY

Survey Development

The research approach is quantitative. A paper survey was used to analyze the proposed hypotheses based on empirical data collected. The questionnaire consisted of 21 questions arranged in two groups: demographic profile and measures of the model constructs. The model measuring scale was Likert-type items with 5-point scale from "strongly agree" to "strongly disagree". A pilot study was done on 30 respondents to assess the questionnaire questions where the results provided initial insight into of the questions and some questions were properly modified. Data collected was analyzed using Statistical Package for the Social Sciences (SPSS) to ensure internal consistency of the measurement scale.

Sampling Technique

The population of the study consists of a random sample from the customers of two of the three service providers in Bahrain: Batelco and Viva which comprise nearly 80% of the market. The questionnaire was submitted by hand to customers passing at different retail locations. A total of 600 questionnaires were distributed and 172 were received with a response rate of 28.67%. Out of the 172 questionnaires, 26 were poorly filled or incomplete and were excluded. Thus, the final sample for the analysis consisted of 146 questionnaires.

Statistical Analysis

SPSS descriptive statistics was used to analyze the demographic profile of the respondents' profile. Following the two-step approach advocated by Anderson & Gerbing (1988), confirmatory factor analysis was used to test the constructs' validity and reliability of the measurement model by examining the internal consistency, composite reliability and convergent validity. Structural Equation Modelling (SEM) technique was utilized to examine the proposed research model using AMOS 18.0 software. SEM technique, in lieu, is a useful tool when complicated variable relationships are involved (Gefen, et. al, 2000). It is at this instant where the relationships among the instrument and latent variables suggest the nature of the connections at a larger scale.

DATA ANALYSIS AND RESULTS

Demographic Profile of Respondents

The demographic profile of the respondents is presented in Table 1. The typical respondent is between the ages of 20-40 with nearly equal gender representation. Nearly 75% are Bahraini and 70% has at least an undergraduate degree. Also, 53.5% are accustomed to the internet and use it more than once daily.

Analysis of variance (ANOVA) showed no significant difference (P<0.05) between different age group, gender, education level, or nationality.

Differences in access to and use of ICT and electronic networks can lead to: divides between countries; social divides within countries; divides within countries related to income, family type, & location; and business divides related to sector, region, and firm size. However, to concentrate the study and reduce the number of variables while acknowledging limits of time and manpower, this research explored only the correlation between PEU, TR, REG, PU, and ITU. It also examined several demographic characteristics like gender, age, nationality, education, and internet usage where future research might consider other variables.

Demographic Cha	racteristic	Frequency	Percentage
Gender	Male	67	45.89%
	Female	79	54.11%
Age	20-25	13	8.90%
	26-30	41	28.08%
	31-35	44	30.14%
	36-40	28	19.18%
	41-45	14	9.59%
	>45	6	4.11%
Nationality	Bahraini	109	74.66%
	GCC	27	18.49%
	Other	10	6.85%
Education	< Undergraduate degree	44	30.14%
	Undergraduate degree	72	49.32%
	Master	26	17.81%
	PhD	4	2.74%
Internet Usage	more than once a day	78	53.42%
	more than once a week	38	26.03%
	once every few weeks	17	11.64%
	once a month	7	4.79%
	Never	6	4.11%

Reliability and Validity

Constructs' reliability and validity of the questionnaire was first tested. The internal consistency and unidimensionality of the constructs were assessed by calculating Cronbach Alfa (α) and composite reliability

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(CR) measures. Average variance extracted (AVE) was calculated to evaluate the convergent validity. The results are shown in Table 2. All Cronbach Alfa measures exceeded the cut-off value of 0.70 (Schmitt, 1996) which proved a reasonable level of reliability. As for the constructs reliability, all values are above 0.7 (Segars, 1997). Finally, all AVE values are greater than 0.5. The results of the tests provided good evidence of constructs' reliability and validity.

Table 2	Table 2. Construct Reliability and Validity Measures					
Construct Item	Item	Factor Loading	α	CR	AVE	
Perceived Usefulness	PU2	0.670	0.852	0.859	0.6729	
r creerved Osciumess	PU3	0.898				
	PU4	0.873				
Perceived Ease of Use	PEOU2	0.735	0.904	0.911	0.7761	
	PEOU3	0.962				
	PEOU4	0.929				
Trust	TR2	0.658	0.838	0.848	0.6532	
	TR3	0.869				
	TR4	0.879				
Regulatory Environment	RGE1	0.740	0.701	0.702	0.5406	
	RGE2	0.731				
Intention to use	ITU1	0.728	0.740	0.743	0.5912	
	ITU2	0.808				

The Measurement Model

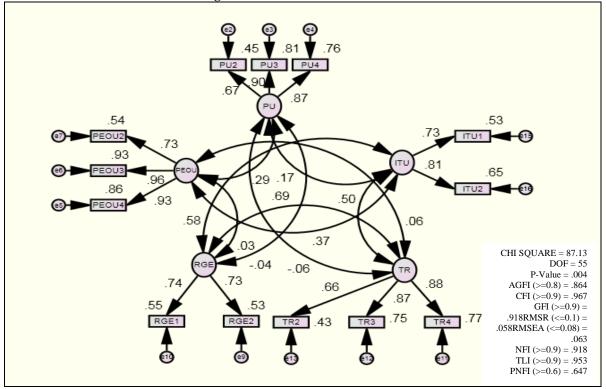
The first step was to examine the measurement model (Figure 3). Based on the factor loadings and the modification indices provided by AMOS, some indicators (PEOU1, PU1 and TR1) were excluded to improve the model fit according to Chi-square values. The measurement model was evaluated as proposed by Rainer and Miller (1996) and the computed fit indices (Table 3) proved a good fit for the measurement model. Researcher can set how large the reduction in model chi-square should be to have a parameter (path) listed in the Modification Index (MI) output. The minimum value would be 3.84, since chi-square must drop that amount simply by virtue of having one less parameter (path) in the model. This is why the default threshold is set to 4. Each time AMOS displays a modification index for a parameter, it also displays an estimate of the amount by which the parameter would change from its current constrained value if it were dropped from the model. We specified a small value for *Threshold* (=4), thus, it results in the output of a large number of modification indices.

Fit Index	Recommended Value [*]	Measuremen t Model	Structural Model
CMIN	NS	87.131	87.203
Degrees of freedom (df)	n/a	55	57
p-value		0.004	0.006
CMIN/df	<3.00*	1.584	1.530
Goodness-of-fit index (GFI)	>0.90*	0.918	0.918
Adjusted Goodness-of-fit index (AGFI)	>0.80*	0.864	0.869
Comparative fit index (CFI)	>0.90*	0.967	0.969
Root mean square residuals (RMSR)	< 0.10*	0.058	0.059
Root mean square error of approximation (RMSEA)	< 0.08*	0.063	0.060
Normed fit index (NFI)	>0.80*	0.918	0.918
Tucker-Lewis coefficient (TLI)	>0.90*	0.953	0.958
Parsimony normed fit index (PNFI)	>0.60*	0.647	0.671

Table 3. Model Fit Summary for the Measurement and Structural Models.

* Based on Rainer and Miller (1996).

Figure 3. The Measurement Model



The Structural Model

The computed values of the fit indices proved a good fit (Table 3) for the structural model with the data collected based on the benchmark values provided by Rainer and Miller (1996). The structural model is shown below in figure 4.

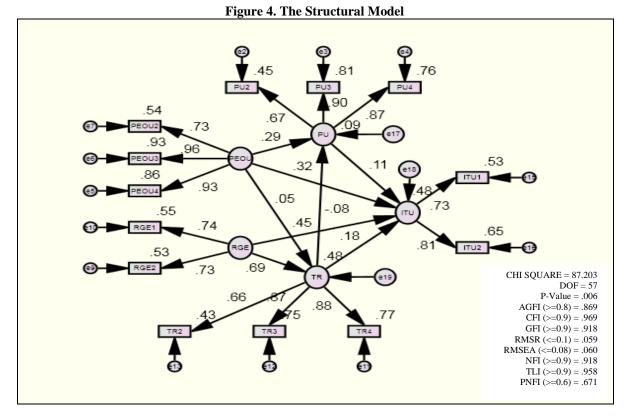
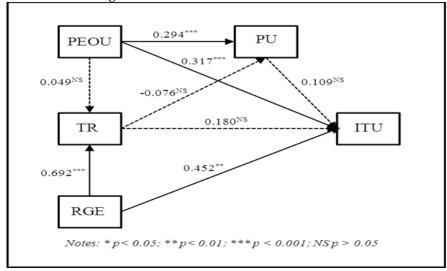


Figure 5. The Results of the Structural Model



The structural model was tested using SEM to calculate the values of the regression coefficients for the proposed hypotheses. Table 4 presents the results where the Greek letter Beta (β) represents the strength of the relation between the different constructs.

	8		<i>i</i> 1
Hypothesis	Path	β	Remarks
H ₁	$PEOU \rightarrow PU$	0.294***	Supported
H_2	$PEOU \rightarrow TR$	0.049^{NS}	Not Supported
H ₃	$PEOU \rightarrow ITU$	0.317***	Supported
H_4	$PU \rightarrow ITU$	0.109 ^{NS}	Not Supported
H ₅	$TR \rightarrow PU$	-0.076^{NS}	Not Supported
H ₆	$TR \rightarrow ITU$	0.180^{NS}	Not Supported
H ₇	$RGE \rightarrow TR$	0.692^{***}	Supported
H ₈	$RGE \rightarrow ITU$	0.452^{**}	Supported
17		0.001.10	0.05

 Table 4. Standardized Regression Weights and Hypotheses Results

Notes: * *p*< 0.05; ** *p*< 0.01; *** *p* < 0.001; *NS p* > 0.05

According to the results, perceived ease of use (PEOU) has a significant positive effect on users' perception of the usefulness of e-services (PU) ($\beta = 0.294$, p < 0.001). Perceived ease of use (PEOU) of a given e-service was found to have a significant direct impact on the final decision to adopt and use this e-service (ITU) ($\beta = 0.317$, p < 0.001). However, it has an insignificant effect on trust (TR) ($\beta = 0.049$, p > 0.05). Also, the assumption that perceived usefulness (PU) has an impact on the intention to adopt and use e-services (ITU) is not supported in our study ($\beta = 0.317$, p > 0.05). The conception of trust (TR) neither impact perceived usefulness (PU) ($\beta = -0.076$, p > 0.05) nor users' intention to adopt and use e-services ($\beta = 0.180$, P > 0.05). Finally, regulatory environment (RGE) was found to have a significant positive impact on both trust ($\beta = 0.692$, P < 0.001) and users intention to adopt and use e-services (ITU) ($\beta = 0.452$, P < 0.01). Therefore, users' perceived ease of use (PEOU) and regulatory environment (RGE) are the main determinants that drive users' intention to adopt and use e-services (ITU) ($\beta = 0.452$, P < 0.01). Therefore, users' intention to adopt and use e-services (ITU) are e-services (ITU) ($\beta = 0.452$, P < 0.01). Therefore, users' perceived ease of use (PEOU) and regulatory environment (RGE) are the main determinants that drive users' intention to adopt and use e-services (ITU) in our study. The path analysis and the beta coefficients are illustrated in figure 5 below.

DISCUSSION & IMPLICATIONS

In the current study, the typical respondent is between the ages of 20 and 40 with nearly equal gender representation. The participants were mostly educated, and frequently user of internet. The age group does not show significant difference (P<0.05) in the level of e-services adoption. Whether if the difference would have been significant if the study have included much older participants, i.e., sixty years old and above remain an open question. Moreover, the results do not reveal significant difference (P<0.05) between gender, education level, nationality and internet usage groups in the level of e-services adoption.

In order to increase the rate of e-services adoption in Bahrain, service providers have to understand the factors that affect users' intention to adopt and use technology and employ the results in their business and marketing strategies. The study reveals that the conception of a proper regulatory environment and the perception of the ease of use are the main determinants that derive customers' intention to use and adopt eservices, where the prior is the most significant contributor. Several existing studies have also revealed the same results. Concurrent with previous research (PEOU) has a significant positive effect on perceived usefulness (PU), (Davis, 1989; Fagan et al., 2008; Guriting & Ndubisi, 2006). However, Perceived usefulness has no significant effect on the intention to adopt and use e-services in our sample. This result is inconsistent with other researches but the reason might be due the fact that customers are unaware of the useful features of e-services. Trust also has no causal relationship with users' intention to adopt e-services which is against the outcome of many researches which has identified lack of trust as a major barrier for the adoption of e-services (Carter et al., 2008; Schaupp et al., 2010). It seems that Bahraini citizens' intentions to use e-services are affected mainly by other factors. Hence, perceived ease of use (PEOU), and regulatory environment (RGE) have stronger influence on the intention to use (ITU). Bahraini customers are putting higher weight on government regulations rather than a mere trust on private service providers. For example, Bélanger and Carter's (2008) study showed a very high correlation between trust in the government and trust in the Internet.

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Similarly, Teo et al. (2008) as well as Horst et al. (2007) found that trust in the government had a significant positive correlation with trust in an e-government website.

The results of the study have useful insights for service providers as well as Bahraini Government. The majority of respondents are internet experts and uses internet more than once daily but still questioning the usefulness of e-services channels. Service providers should focus of diminishing this gap by communicating the usefulness of e-services channels through awareness campaigns and provide incentives to encourage customers to try and use e-services which will result in increase in the rate of adoption. The result will be tremendous cost saving and better service rate. It is important to recognize the cultural and national limitations of these findings. It is evidence that the successful adoption of e-services and e-commerce in Bahrain requires a proper regulatory framework to support it. The Government of Bahrain should act quickly and release the cyber-crime law that has been delayed for years to minimize customers' concern and fear of the different legal issues that might arise due to the use of e-services. Issues related to Bahraini culture like favoring direct face to face interactions and the fear from online business should be addressed carefully to encourage Bahraini citizens to adopt e-services.

There are several limitations for the study. The sample studied combines users from two service providers that have different websites which are not fully aligned in terms of e-services provided. Additionally, the sample size (n=146) may limit the generalization of the research findings in the telecommunications sector in Bahrain. Also, some of the respondents haven't used e-services applications before which might have an impact on their experience regarding e-services adoption.

In future work, we can contrast e-services adoption perceptions between customers from different service providers. We can also examine the anchors that determine the perceptions of ease of use and usefulness. Cross cultural studies that include multi-cultural samples can provide more insight about users' behavior across cultures and compare perceptions towards e-services adoption in Bahrain with other developed countries. Another area worth further study is to use TAM to examine the acceptance of various forms of technology in different sectors in developing countries.

CONCLUSION

This study integrated four dimensions of perceived usefulness (PU), perceived ease of use (PEOU), trust (TR), and regulatory environment (RGE) in a model to explain Bahraini citizens' intentions to use eservices in the telecommunication sector. The results showed no significant difference between age groups, gender, education level, nationality, and internet usage groups in the level of e-services adoption. While the model confirms the influence of perceived ease of use (PEOU), and regulatory environment (RGE), the results also suggest that trust in service provider dose not play a major role on e-service adaption. That is, in the presence of an appropriate legal and regulatory framework, customers become more familiar with the possible risks and feel that they have enough regulatory protections. Concurrent with previous research, results indicated that perceived ease of use (PEOU) has a significant positive effect on users' perception of the usefulness and the ease of use of e-services providers and Bahrain Government. Service providers should focus on offering more user friendly e-services. Bahrain Government should act accordingly and speed the release of the cyber crime law to encourage customers to use e-services.

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ROLE OF STRATEGIC FIT AND RESOURCE COMPLEMENTARITY IN STRATEGIC ALLIANCE EFFECTIVENESS

Dean Elmuti, Ahmed S. Abou-Zaid and Heather Jia

ABSTRACT

Strategic alliances allow companies to develop products and rapidly expand their markets while managing risk and costs through sharing resources. In recent years, there has been a dramatic increase in strategic alliances by multinational firms. According to recent studies, a majority of executives believe that alliances will be a prime vehicle for future growth, dramatically improving an organization's operations and competitiveness. A validated instrument on organizational characteristics was used to empirically test the impact of strategic fit and complementarity on strategic effectiveness. The results show that strategic alliance environments were positively related to perceived changes in organizational effectiveness dimensions among respondents in more than half of the surveyed organizations in five countries. Successful alliance ventures were highly evolutionary and went through a process of learning, reevaluation, and readjustment. These findings indicate that managers searching for strategic alliance partners should look at compatibility, not only in terms of objectives that both prospective partners hope to achieve through the success of the venture, but also in terms of the corporate culture, resources, prospective partners' business domains, and willingness to go through the learning process.

INTRODUCTION

Strategic alliances are discrete entities created, owned, and influenced by two or more firms that may contribute various types of resources to an alliance, including physical, financial, human, technological, managerial, and organizational, and share in the outcome of the created entity (Barney, 2011; Das, 2000). Strategic alliances allow companies to develop products and rapidly expand their markets while managing risk and costs through sharing resources. Hill (2010) argues that the pace of change and the constant need to develop new capabilities often mean that strategic alliances can provide a firm with the best opportunities to expand its skills and know-how.

Dean Elmuti, Ph.D., is a professor of management in the School of Business at Eastern Illinois University. Previously, he was employed for several years by multinational corporations in the Middle East and the United States. Recently, he was selected for a Fulbright Scholar Award in the Middle East.

Ahmed Abou-Zaid, Ph.D., is an assistant professor in Economics at Eastern Illinois University. He has published several articles on trade, investment, leadership, culture, and economic challenges in the Middle East.

Heather Jia, Ph.D., is an assistant professor of management in the School of Business at Eastern Illinois University. Her research interests include deviant workplace behavior, technology usage in organizations, and business ethics.

While the need for and use of alliances is apparent, the road to successful partnership is often a minefield. In spite of the popularity, the alliance success rate is dismal. For strategic alliance strategy to become a legitimate business tool in the portfolio of general managers there must be a significant chance for success. In fact, studies have consistently shown that the failure rate of alliances can be as high as 50 percent or more (Das & Teng, 1999; Shah & Swaminathan, 2008).

Despite the frequency with which strategic alliance initiatives have been adopted in work organizations (Hill, 2010; Thompson, Peteraf, Gamble, and Strickland, 2012) there is a paucity of knowledge generated by independent evaluators using rigorous methods as to the role of market-level relatedness and assets relatedness (strategic fit and resource complementarity) in strategic alliance effectiveness. Few empirical studies suggest that the more related the partners in strategic alliances, the more opportunities there are for strategic compatibility and sharing of technical and managerial skills (Barney, 2011; Chung, Singh, & Lee, 2000; Harrigan, 1988; Koh & Venkatraman, 1991).

In a study of related diversification strategies, Liedtka (1996) concluded that the greater the relatedness among the businesses of diversified companies, the greater the opportunities for skills transfer and the bigger the window for creating competitive advantage. However, the determinants and measurements of strategic fit and value of resource complementarity among strategic alliance partners, which represent one of the relevant issues in strategic alliance performance, were seldom agreed upon among researchers. The increasing use of cooperative arrangements between competing firms, as well as the unfamiliar complexity of strategic alliances, suggests the need to know more about how to effectively utilize this strategy. The purpose of this study is to contribute to the knowledge of factors that may influence the success or failure of strategic alliance programs. This study empirically tests the effects of strategic fit, resource complementarity, and learning processes on strategic alliance effectiveness. We begin by reviewing prior research regarding issues in strategic alliances. Drawing from recent dynamic models of collaborative relationships, research hypotheses are developed and subsequently tested. We conclude with a discussion of the relevant research findings and alert managers to the important implications of pursuing particular strategies to increase competitive advantage.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Determinants of Strategic Fit among Firms

Business-related strategic fit literature suggests that cross-business strategic fits can exist anywhere along the value chain in R & D and technology activities, in supply chain activities and relationships with suppliers, in manufacturing, in sales and marketing, in distribution activities, or in administrative support activities (Liedka, 1996). Thompson, Strickland, and Gamble (2012) remark that the more related the partners in strategic alliances, the more opportunities there are for strategic compatibility and sharing of technical and managerial skills (Thompson, et al., 2012). Booz & Hamilton (1997) argue that strategic alliance partners are motivated by synergies, and there must be some common activities or relatedness for synergy. They concluded that by forming alliances with other companies, small firms are able to accomplish bigger projects more quickly and profitably than if they would have tried to do it on their own.

Traditionally, academic researchers have measured strategic fit in terms of market-level relatedness or fit, which is necessary to exploit economies of scope in one of three basic ways. The first approach is to deploy an objective index like the Standard Industrial Classification (SIC) count (Balakrishnan and Koza, 1993; Palepu, 1985). The second method is to use a more subjective measure, such as Rumelt's diversification categories, in which businesses are related, "When a common skill, resource, market, or purpose applies to each" (Rumelt, 1987, p. 148). The third approach is to use strategic asset level to measure strategic fit, which rests on the assumption that "strategic fit" enhances performance only when it allows a business to obtain

ROLE OF STRATEGIC FIT AND RESOURCE COMPLEMENTARITY

preferential access to strategic assets, those that are valuable, rare, imperfectly tradable, and costly to imitate (Barney, 2011; Das, 2000). These types of assets may be divided into five broad classes: customer assets, channel assets, input assets, process assets, and market knowledge assets (Das, 2000; Markides & Williamson, 1996). On the other hand, Thompson, et al., (2012) indicated that when the value chains of different businesses overlap such that the products are used by the same customers, distributed through common dealers and retailers, or marketed and promoted in similar ways, the businesses enjoy market-related strategic alliance fit. In addition to economies of scope, market-related alliances can generate opportunities to transfer selling skills, promotional skills, advertising skills, and product differentiation skills from one business to another (Mowery, Oxles, & Silverman, 1996).

Following the direction of these findings, part of this study investigates the influence of strategic fit or relatedness dimensions, supply chain activities and distribution-related fits; operating fits; technology fits; sales and marketing and customer services fits in strategic alliance effectiveness.

Role of Resource Complementarity in Strategic Alliances

Strategic alliances are voluntary, cooperative, inter-firm agreements aimed at achieving competitive advantage for the partners. For a given factor (product or service), a firm may choose to: (1) produce it on its own; (2) purchase it from the spot markets; or (3) make it jointly with partner firms (Das, 2000; Shah & Swamiuethan, 2008).

The resource-based view considers strategic alliances and mergers/acquisitions as strategies used to access other firms' resources for the purpose of garnering otherwise unavailable competitive advantages and values to the firm (Barney, 1991). The overall rationale for entering into a strategic alliance appears fairly simple. It is to aggregate and/or share resources that cannot be efficiently obtained through market exchanges or mergers and acquisitions (M & As). In sum, it is about creating the most value out of one's existing resources by combining these with others' resources, provided, of course, that this combination results in optimal returns (Chung, et al., 2000; Das, 2000; Harrigan, 1987).

The resource-based view suggests that firm resource heterogeneity is not a short-term phenomenon; rather, a degree of heterogeneity tends to be sustained over time. Some resource characteristics that prevent firms from moving toward resource homogeneity have been identified as imperfect mobility, imperfect imitability, and imperfect substitutability. Only if a firm cannot efficiently get needed resources from elsewhere—except by a sharing arrangement with its owners—would it be willing to form a strategic alliance. The more imperfect the mobility, imitability, and substitutability of a firm's resources, the more likely that others will be interested in forming alliances with it (Barney, 1991; Das, 2000).

Other researchers (Judge & Dooley, 2006; Parkhe, 1993) suggest that the transaction-cost economics perspective (TCE) was a useful framework for exploring alliance outcomes, but its predictions only held up in high-uncertainty environments. Furthermore, several transaction-cost studies have identified both control mechanisms and trusting relationships as key influencers of alliance outcomes. The TCE argument suggests that alliances are more efficient than markets or hierarchies when they minimize the firm's transaction costs, coordinating actions through integrated decision networks and their associated communication patterns.

Role of Learning Process in Strategic Alliances

The importance of the learning process within strategic alliances itself is acknowledged by some researchers. Roth and Magee (2000) and Doz (1996) distinguish substantive learning in alliances, adding to the skills and knowledge of the firm and process learning about managing the corporation itself. They suggest that learning along several dimensions (environment, task, process, skills, and goals) takes place in strategic alliances between firms and mediates between the initial condition and the outcomes of these alliances. Shah and Swaminathan (2008) argue that critical criteria for assessing alliance partner attractiveness and selection

vary depending on the differential levels of process manageability and outcome interpretability inherent in a strategic alliance. Hamel (1999) and Judge and Dooley (2006) believed that the perceived trustworthiness, commitment, and complementarity of the partnering executives are the most important factors associated with alliance success.

Evaluating Strategic Alliance Effectiveness

Although strategic alliance sales, partner stock price, market share, returns on investment, new product creation, name recognition, and shelf space (Dess & Robinson, 1984; Michelet & Remacle, 1992) have also been utilized, managerial assessment (i.e., efficiency, performance, partner satisfaction and adaptability) remains the most frequently used method to evaluate strategic alliance effectiveness (Anderson, 1999; Barney, 2011; Kaplan & Norton, 1996; Mowery, et al., 1996). Kaplan and Norton (1996) concluded that financial measures should be derived from an organizationally-unique strategy and from management's understanding of how the alliance will produce value. Hatfield and Pearce (1994) use an attitudinal survey which evaluates strategic alliance effectiveness and believe that the goals of the alliances should be well defined and measurable. In order to evaluate alliance effectiveness, it is important to include areas such as efficiency, performance, adaptability to environmental changes, partner satisfaction, and goal achievement (Harrigan, 1997; Inkpen, 1998; Michelet & Remacle, 1992). O'Farrell and Wood (1999) indicated that strategic alliances are very tough to measure and evaluate, but can be done with the help of understanding the form used and understanding the goals of the companies involved. It is hypothesized that more successful strategic alliances will be characterized by high levels of commitment, interdependence, trust, communication, and information sharing than less successful ones. This is true not only between strategic alliance partners, but also between strategic alliances and clients.

On the other hand, the transaction-cost economics perspective has been used extensively to explore alliance outcomes, and this has led to several new insights. Following the direction of these findings, this study uses managerial assessment measures to evaluate the effects of strategic fit relatedness, resource complementarity, and the learning process in strategic alliance effectiveness.

On the basis of the above literature review, three major hypotheses to guide an investigation of the role of strategic fit relatedness and resource complementarity and learning process in strategic alliance effectiveness are suggested:

Research Hypotheses

- H₁ The greater the strategic fit among the strategic alliance partners, the higher the level of organizational effectiveness for the whole alliance venture.
- H₂ The greater the resource complementarity among the strategic alliance partners, the higher the level of organizational effectiveness for the whole alliance venture.
- H₃ The greater the evolutionary learning processes among the strategic alliance partners, the higher the level of organizational effectiveness for the whole alliance venture.

The hypotheses were stated to reflect the claims made by strategic alliance concept proponents. They were also stated in a way that seeks to determine linear relationships. Therefore, the problem was identified as one of correlation—regression or causation

METHODOLOGY

Sample

To evaluate the above research hypotheses, a survey of strategic alliance strategies was developed and distributed to 3,000 organizations throughout the United States, Canada, Japan, United Kingdom, and Mexico during a recent sabbatical assignment tour in Europe, Asia, and the Middle East. This was a principle source as the authors had access to companies in Europe, Japan, and the Middle East. The names of the firms were generated randomly from a computer database known as "Compact Disclosure" and International Directory of Corporate Affiliation in 2011. These firms were randomly selected among several types of industries and firms across a variety of settings.

A preliminary questionnaire was pretested and revised via personal interviews with subsidiaries of several multinational firms located in the Midwestern region of the United States, Asia, and Europe. Subsequently, a final questionnaire was sent by first class mail and email system to the randomly selected firms, and two follow-ups were subsequently used to increase responses.

Measures

The four-page questionnaire was divided into two parts. The first part asked about strategic alliance strategy familiarity and duration of existing strategic alliance programs among the surveyed respondents. The second part asked about measures used to assess the effectiveness of strategic alliances and the role of strategic fit, complementarity, and learning process in strategic alliance venture effectiveness. To measure organizational effectiveness, the author used Likert's Profile of Organizational Characteristics (Likert, 1967), an instrument that has demonstrated reliability and validity across a variety of settings. Unlike other measures, it allowed additions to be made to the questionnaire to assess the overall effectiveness of specific new programs or initiatives such as strategic alliances (Likert, 1973).

Several variables were identified as being significant for the purpose of this study. First, there were elements used to measure the independent and intervening variables—strategic fit, resource complementarity, and learning process—among partners in strategic alliances. Respondents rated the degree of strategic fit or relatedness between their business and their partner's business in five areas with measures derived from Doz, (1996), Harrigan (1988), Liedtka (1996), Markidas and Williamson (1996), Mowery, et al., (1996), Thompson & Strickland (2012), and Thorelli, (1986). Strategic fit relatedness dimensions included supply chain activities, distribution, operations, sales and marketing, and customer services fits (Liedtka, 1996).

A five point Likert scale was provided for each measure, with the following labels: 1—no relatedness; 2—slightly related; 3—moderately related; 4—very related; and 5—completely the same. The strategic fit for relatedness independent variables are composite measures, developed by averaging the relatedness or strategic fit ratings of the individual business domain items. The resource complementarity, the other independent variable (Chung, et al., 2000; Das, 2010) was provided for each measure with the following labels: 1—no complementarity; 2—little complementarity; 3—moderately complementarity; 4—a great deal of complementarity; and 5—complete complementarity. The learning process or the evolution of cooperation in strategic alliances, the intervening variables, included task learning, process learning, skill learning, partner goal learning and commitment (Doz, 1996; Shah & Swaminathan, 2000). The third variable focused on the elements used to measure the dependent variable—organization effectiveness—which included efficiency, performance, satisfaction, and adaptability (Kaplan & Norton, 1996; Likert, 1973; Pearce & Robinson, 2011). The Likert instrument is based on a scale of 1 - 5 (Likert 5-type rating scale) with 5 as the most effective level, 4 somewhat effective, 2 little effect, and 1 as the least effective level. Figure 1 shows the research model sketches in summary form the relationships among variables in this study.

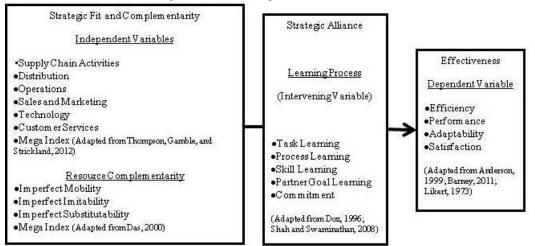


Figure 1. The Research Model—Role of Strategic Fit and Complementarity and Learning Process in Strategic Alliance Effectiveness

A reliability test was conducted for indices of organizational effectiveness to enhance their credibility. Basic demographic questions, including type of industry, country, annual sales, and job status, were included in the survey and used as control variables. The reliability of scales used in this study was 0.73, as estimated by applying Cronbach's alpha formula to the mean inter-item correlation. Although the matter of how large alpha should be for an item to be reliable is addressed differently by researchers, an alpha at 0.70 is a good criterion for adequate scale reliability (Cronbach, 1951; Nunnally, 1978). Table 1 shows the results of this analysis.

Sample Analysis

Seven hundred and ninety-five firms returned questionnaires generating a 26 percent response rate. Fifty questionnaires were not acceptable, and the response rate was lowered to 25 percent. Demographic characteristics (country, industry, and sales volume) of the responding firms (e.g., have or have not strategic alliance projects in their firms) were compared with each other to provide an indication that the demographic characteristics of both groups were similar and the sample was representative of the population. The analysis showed no significant differences between the two groups. This result offered some assurance about the representativeness of the responding firms (Kotabe & Murray, 1996).

More than one-third of the responding firms (42 percent) are from the United States, and the remaining are from Canada (26 percent), Japan (10 percent), United Kingdom (14 percent), and Mexico (8 percent) and represented industries from manufacturing to professional services. More than one-third of the responding firms had an annual sales volume of \$10 billion or more, and less than two-thirds of the responding firms had annual sales of \$2 billion or less.

The majority of responses were from general managers, operation managers, division managers, and project managers in charge of strategic alliances, and they claimed to represent their organizations. Regional differentiation, industry types, size or age of alliances were found to have statistically insignificant influence on perceptions of strategic fit, resource complementarity, and learning process in strategic alliance effectiveness. Therefore, these factors were used as control variables in this study.

Variables Mean Standard Rel				Reliability
	Deviation		Alpha	
Strat	tegic fit between partners (SFP)			
\succ	Supply Chain Activities	3.94	0.68	0.77
\succ	Distribution	3.96	0.66	0.79
\succ	Operations	3.36	0.52	0.72
\succ	Technology	3.77	0.44	0.74
\succ	Sales and Marketing	3.99	0.69	0.71
\succ	Customer Service	3.89	0.63	0.70
*	Mega index (SPM)	3.74	0.68	0.72
Strat	tegic Alliances Process Manageability			
\succ	Task learning	3.44	0.47	0.74
\succ	Process Learning	3.52	0.65	0.76
\succ	Skill Learning	3.40	0.40	0.73
\succ	Goal Learning	3.25	0.47	0.70
\succ	Commitment	3.27	0.60	0.70
*	Mega index (SFP)	3.54	0.66	0.71
Reso	Resources Complementarity (RC)			
\succ	Imperfect mobility	3.62	0.48	0.76
\succ	Imperfect imitability	3.54	0.52	0.78
\succ	Imperfect substitutability	3.20	0.56	0.72
*	Mega index (RC)	3.68	0.62	0.76
Orga	anizational Effectiveness (EFF)			
\succ	Efficiency	3.46	0.62	0.77
\succ	Performance	3.36	0.60	0.74
\succ	Adaptability	3.20	0.58	0.71
\succ	Satisfaction	3.10	0.47	0.70
*	Mega index (EFF)	3.36	0.66	0.71

 Table 1. Means, Standard Deviations and Reliability Alphas of the

 Major Variables in the Study and Their Indices

RESULTS AND DATA ANALYSIS

Level of Familiarity and Usage of Strategic Alliances

The questions were designed to measure strategic alliance strategy, familiarity, and duration of existing strategic alliance programs among the surveyed respondents. About 87 percent of the organizations surveyed reported that they were familiar with strategic alliance strategy. Less than 13 percent of the respondents reported that they were not at all familiar with such strategy. About 43 percent of the respondents (322 organizations) reported that they did not have an existing strategic alliance program because they were happy with their current strategies and/or were not willing to risk losing their sovereignty or independence. Of the remaining 423 organizations (14 percent of total response rate), 80 organizations indicated that they have had a strategic alliance program for less than one year; 160 organizations have had a strategic alliance program for less than three years; and 183 organizations have had a strategic alliance program for over five years. These organizations have adopted a strategic alliance strategy in part to include the area of manufacturing, petrochemical, banking, financial services, and professional services such as supply chain and marketing activities, information systems, and others.

STRATEGIC ALLIANCES GOALS AND ACHIEVEMENTS

Another intent of this study was to assess the primary goals for forming strategic alliances. Strategic alliance effectiveness was measured as partner goal achievement. A list of nine goals and five critically important goals was assembled by consolidating the findings and propositions of previous researchers (Barney, 2011; Chung, et al., 2000; Das, 2000; Doz, 1996; Judge and Dooley, 2006; Liedtka, 1996; Thompson, et. al., 2012; Shah and Swaminathan, 2008). The Likert Scale for goal importance was labeled as follows: 1—none, 2—minor, 3—moderate, 4—high, 5—critical. The Likert Scale for good achievement was labeled as follows: 1—far short of plan, 2—short of plan, 3—about at plan, 4—exceeds plan, 5—far exceeds plan. The reliability coefficient alpha for the composite measure was weighted by the importance rating. Thus, the higher the importance rating, the more weight the goal carried in the composite measure. More details are shown in Table 2.

ROLE OF STRATEGIC FIT, COMPLEMENTARITY AND LEARNING PROCESS EFFECTIVENESS

Another primary intent of this study was to examine the effects of strategic fit between partners, resource complementarity, and learning process in strategic alliances on overall partner effectiveness. As indicated earlier, the strategic fit, resource complementarity and learning process, the independent and intervening variables, are composite measures developed by averaging ratings of individual business items. The effectiveness and the dependent variables are also composite measures developed by averaging the effectiveness ratings of individual business domain items (Table 1, Mega Index, Likert, 1973). Hypotheses 1, 2, and 3 in this study suggested that the greater the strategic fit, resource complementarity, and learning process among strategic partners, the higher the level of organizational effectiveness for the whole alliance venture. This was supported by the regression analysis in Table 3. This analysis determines the proportion of variance in organizational effectiveness scores explained by strategic fit, complementarity, and learning process between partners' scores. Each hypothesis is tested independently of each other in regression Model 5, 1, 2, and 3. In Model 4, the independent variables (along with intervening variable, the learning process) are combined into a single multiple regression model to fully examine the effects of the independent and intervening variables concept on organizational effectiveness.

Goal	Ν	Mean Goal
		Importance
Growth strategies and entering new markets	152	4.45
Product or technology development/ acquisition	130	4.20
Reduce financial risk and share cost of R&D	110	4.05
Economies of scale or product efficiency	105	3.90
Profits and increased revenues/capital	88	3.80
Acquisition of technical knowledge/skill	77	3.77
Manager competition	55	3.10
Achieve or ensure competitive advantage	45	3.05
Identify and take advantage of opportunities rather than just minimize cost	40	3.00
Product or technology development/ acquisition	170	3.25
Profits and increased revenues/capital	155	3.05
Economies of scale or product efficiency	138	2.95
Growth strategies and entering new markets	120	2.70
Spread financial risk	110	2.60
Acquisition of technical knowledge skills	88	2.50
Achieve or ensure competitive advantage	78	2.25
Managing competition	76	2.20
Take advantage of opportunities rather than just minimize cost	70	2.10

 Table 2. Descriptive Statistics for Goal Importance and Achievement

 As Perceived by Strategic Alliance Partners

Goal	N	Percent
Efficiency	280	66
Performance	247	58
Adaptability	215	51
Satisfaction	140	30
Effectiveness248	248	58
N = 423		

Strategies and Critically Important Goals As Reported by Strategic Alliance Partners

The results show that 66 percent of the variation in efficiency, 70 percent of the variation in performance, 60 percent of the variation in adaptability, 56 percent of the variation in satisfaction, and 74 percent of the variation in overall effectiveness are explained by linear regression of the strategic fit, complementarity, and learning processes among partners' dimensions. The F-ratio indicates that these linear associations are statistically significant at P<.01.

Factors Associated With the Success or Failure of Strategic Alliances Projects to Examine the Success

Another primary intent of this study was to examine the degree of success or failure of strategic alliances among organizations that have strategic alliance programs in their establishments. Firms considered their alliance projects successful when the benefits generated by the alliance strategies were greater than the costs of implementing these strategies. On the other hand, firms considered their alliance projects unsuccessful or failures when the costs of managing the links between alliance partners were greater than the benefit generated by the alliance program. This determination is consistent with previous studies on alliances' success or failure (Barney, 2011; Das, 2000).

Dependent Variables	Model 1	Model 2	Model 3 Learning	Model 4	<i>F</i> -
Effectiveness	Strategic Fit (R2)	Complementarity (R2)	Process (R2)	(4) (R2)	Ratio
1. Efficiency	0.66	0.72	0.56	0.66	4.70
2. Performance	0.62	0.70	0.58	0.70	3.78
3. Adaptability	0.58	0.60	0.54	0.60	5.85
4. Satisfaction	0.56	0.59	0.50	0.56	4.72
5. Effectiveness (1-4)	0.66	0.74	0.62	0.74**	4.78
				•	•

 Table 3. Results of Regression Analysis for Effectiveness Using Strategic Fit, Resource Complementarity, and Learning Process Variables among Strategic Alliances

N=423 *P < .05 **P < .001 (4) Model 4 (include the independent and intervening variables)

The results of this inquiry indicate that 248 of the 423 firms (58 percent) classified their effort as successful and reported that they were achieving at least 5-15 percent improvement in each of their strategic alliance goals. Although the actual percentage of improvement is less than the projected percentage of improvement, they considered their efforts successful. One way to explain this finding suggests that the stated goals were unclear or expectations from alliance projects were too high. Furthermore, the firms reported that the alliance strategies in their organizations were making a positive contribution to overall organizational effectiveness. They indicated that the dollar savings and indirect benefits generated by the alliance programs were greater than the cost of implementing these strategies. Strategic alliance strategies were believed to help improve performance; increase access to new markets and leading-edge technologies; enhance responsiveness to customer needs; and contribute to organizational goals of increased efficiency, reduced costs, reduced cycle time, and improved quality of the goods and services in their organizations.

Factors Associated with the Success or Failure of Strategic Alliance Strategies

To examine the success factors, respondents were asked to identify their opinions concerning the degree of usefulness of 14 possible factors associated with strategic alliance strategies (on a scale of 1—very useful to 5—not useful). The responses were translated into means and ranks to make the analysis more meaningful to the readers.

Successful firms found that integrated behavior between strategic alliance partners must exist and be a focal point of companies if they wish to remain competitive. In fact, integrated behavior is (including their strategic goals and intent) the most useful and contributing factor to their alliance effort. Sharing information with all levels of the alliance is critical. The third factor and critical activity in strategic alliance projects is cooperation. Cooperation and collaboration must occur throughout the alliance, from planning to controlling activities and evaluating the performance of the alliance. Strategic alliances' activities must be accomplished systematically and with clear goals and expectations. Integration and learning of processes of alliance activities is essential to planning, sourcing, making, delivering, and consuming of specific goods or services (Doz, 1996). Building and establishing trust among alliance partners is considered one of the most critical requirements to successful alliances. Sharing channel risks and rewards should be a long-term commitment because it is important for focus and teamwork among all members along the levels of alliances.

Unsuccessful firms identified lack of cooperation and commitment within the strategic alliance activities from planning, sourcing, making, and delivering of finished goods and services to meet planned or actual demand as the most serious problem facing their strategic alliance efforts (Das, 2000). Lack of information sharing at all levels of strategic alliances is also a serious problem. Lack of integrated behavior between the alliance partners was also identified as a serious problem among unsuccessful firms. The fourth factor was lack of trust and positive relationships with the people that work throughout the alliance activities (Shahand & Swaminathan, 2008).

Other problems identified by survey respondents included lack of sharing channel risks and rewards, lack of same goals and focus on serving customers, lack of long-term commitment, and lack of flexibility to respond to changes in the marketplace (Doz, 1996; Hill, 2010; Thompson, et al., 2012).

SUMMARY AND DISCUSSION

Several significant findings emerged as a result of this study. First, the attitudinal results presented in this study provide, at best, circumspect support for the claims of strategic alliance proponents (Barney, 2011; Das, 2000; Pearce, 1997) that the technique improves participants' performance and efficiency, allows companies to develop products and rapidly expand their markets while managing risk and costs through sharing resources. At the same time, almost half (42 percent) of the surveyed respondents who implemented strategic alliance techniques indicated that their strategic alliance programs had failed to achieve their stated objectives of influencing and enhancing organizational effectiveness. This coincides with many reports claiming that the failure rate of strategic alliances can be as high as 50 percent or more (Das & Teng, 1999; Pearce & Robinson, 2011). One way to explain this finding is by suggesting that the stated objectives were unclear or too high, i.e., too much was expected from strategic alliance projects. Hence, the stated objectives were not met, or the implementation of strategic alliance projects was ineffective due to unique risks inherent in strategic alliances, such as lack of strategic fit, trust, commitment, and willingness to learn among partners.

Second, the effects of strategic fit resource, complementarity, and learning process among partners on organizational effectiveness were tested statistically for directionality and magnitude, as well as for dependency. Statistical analysis was found to indicate that strategic fit, resource complementarity, and learning process among partners in strategic alliance environments was positively related to perceived changes in

ROLE OF STRATEGIC FIT AND RESOURCE COMPLEMENTARITY

performance, efficiency, adaptability, and satisfaction among respondents in more than half of the surveyed organizations. In addition, this study identified key dimensions of strategic fit in the strategic alliance environment such as supply chain activities, distribution, operating fits, technology fits, and customer services fits. This finding complements several past studies (Harrigan, 1988; Liedtka, 1996; Markides & Williamson, 1996; Mowery, et al., 1996; Thorelli, 1986) from which they also found a positive relationship between strategic fit among partners and performance in strategic alliances' environment. The strength of these findings is amplified by the fact that each study used a different method of measuring strategic fit and employed a different effectiveness-performance measure. This is consistent with our hypothesis and complements previous studies (Barney, 2011; Chung, et al., 2008; Das, 2000). Complementarity of resources and capabilities implies the possibility of synergy when their resources are pooled together and, thus, enhance the likelihood of alliance effectiveness.

Third, the findings clearly indicate that successful alliance projects were highly evolutionary and went through interactive learning process along several dimensions (tasks, processes, skills, and goals) that take place among strategic alliance partners. Failing projects, conversely, were lacking learning, information sharing at all levels of the strategic alliance activities and lack of flexibility to respond to change in the marketplace. This is also consistent with our hypotheses and complements previous studies (Doz, 1996; Patel, 2007).

CONCLUSIONS AND IMPLICATIONS

Strategic alliances have been prescribed as important tools for attaining and maintaining competitiveness. This exploratory empirical investigation into strategic alliances provided tentative avenues for increasing the probability of success of strategic alliance projects and raises many issues for further study of the strategic alliance phenomenon. Although we have attempted to present a fairly comprehensive approach of global strategic alliances development by sampling organizations throughout the United States, Canada, Japan, the United Kingdom and Mexico, our findings and interpretations have to be tempered by the limitations of the study. The study is limited by its small sample across a wide range of business sectors and organizational sizes. This was a cross sectional study utilizing managerial assessments. Thus, the possibility of recollection biases exists since the program was what the key managers in some organizations surveyed may have personally requested or supported. In addition, the sample for study is small in size and coverage may not be representative to the whole population in the surveyed organizations.

Other limitations include the size of the firms involved in alliances, human/management competence (skills, ability and knowledge), organizational structure, such as levels of power, authority, training and age of alliances, and how time impacts results. Furthermore, each country and organization has its own circumstances and internal issues so it is not wise to generalize these findings beyond these survey organizations.

Despite its limitations, the research contributes to developing an understanding of strategic alliances by identifying areas that need further research. First, the study identified key dimensions of strategic fit and resource complementarity in strategic alliance environments. However, broader measurement of the strategic fit facets and performance outcomes claimed to be influenced by the strategic alliances doctrine should be conducted. Furthermore, a broad longitudinal investigation is needed to provide insight into the effectiveness of strategic alliance phenomenon.

We have noted that alliance formation is facilitated by several resource characteristics: imperfect mobility, imitability, and substitutability. Firms with these resource characteristics will be highly in demand as alliance partners. Alliance managers should, therefore, examine the degree to which the resources of their own firm and of other firms have these characteristics. This would enable alliance managers to better understand why other firms are interested in forming alliance with them, and also who would be the most desirable and likely candidates as alliance partners (Das and Teng, 1999).

Another major implication that can be drawn from this study is that as long as the value gained from the partnership exceeds the cost of both partners, the basis of the alliance is set. The basis must be supported by continuous learning and restructuring processes to overcome the differences between the partners (Roth and Magee, 2002).

This study also provides direction to executives and managers involved in strategic alliance projects. As we reiterated in the context of this paper, the success factors can provide a template for success in entering and maintaining a successful international strategic alliance, especially since firms will need to expand globally in order to economically survive. The potential benefit of strategic alliances is enormous. If implemented correctly, some authors claim it can dramatically improve an organization's operations and competitiveness.

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HOSPITALITY COMPETITIVENESS MEASUREMENT SYSTEM

Gabriel Héctor Carmona Olmos

ABSTRACT

Many hotels around the world, such as the ones in Morelia, Michoacán, Mexico, are essentially family businesses that need to develop and improve their managerial skills in order to face competition from chain hotels and franchises. Mostly of these hotels have a small percentage of foreign tourists, offer standard lodging service, and lack training and information management tools for their decision-making processes. For these hotels business relationship should be a priority and not the sentimental or family issues that lead to centralized, intuitive, and reactive decisions. At the same time, hotel chains and franchises need to improve their systems and procedures in order to compete in many countries with a successful business model, so it is necessary to measure their efforts and contrast its own performance with the rest of the competitors. The research answers the following questions: Which variables must be monitored by hotels in order to design a competitiveness measurement system? How can hotels develop a competitiveness measurement instrument that provides useful information for managerial activities and decisions? This paper offers a hospitality competitiveness measure system with administrative recommendations for a hotel or an entire hospitality industry.

INTRODUCTION

Competitiveness must be understood as the ability of an organization, public or private, profitable or not, to obtain and maintain comparative advantages that enable it to achieve, sustain and improve a specific position in the socioeconomic environment. The term competitiveness is used in business to consider how to plan and develop any business initiative, which causes an evolution in the business model and its owner's job. (Porter, 2005)

Hotels are important for their employment contribution and for their indirect effects on the environment. The presence of a hotel in a given area can support the development of additional tourism, improve the welfare of the people in the tourist influence areas, and revitalize a number of economic activities that could disappear without the presence of the hotel. It is relevant to ask: Which are the variables that must be monitored by the hotels in order to design a competitiveness measurement system? With this system hotels will be able to improve their performance.

Gabriel Héctor Carmona Olmos is professor of strategy and business management at the Instituto Tecnológico y de Estudios Superiores de Monterrey in México. He earned a PhD degree in management science from the Michoacán State Research Center in Morelia, México. He did research, published and developed a hospitality competitiveness measurement instrument that provides useful information for managerial activities and decisions that shows the relationship between infrastructure, marketing and sales, management, training, and information system, with competitiveness. He is conducting research activities with Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM), Instituto Politécnico Nacional (IPN), and Universidad Nacional Autónoma de México (UNAM) on how to measure and improve competitiveness at different industries.

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The "Hospitality competitiveness measurement system" was applied in hotels in Morelia, Michoacán (Mexico), but the purpose of this paper is to extend it to any other hotel or hospitality industry around the world. It identifies efficient management practices performed by the owners and managers to be reflected in their level of competitiveness, impacting economic and social development. It is important to mention that in this paper we will use data from the hotels of Morelia, Michoacán. The research identifies the forces and constraints for competitiveness generated by managerial practices, such as evaluating if the objectives and goals of the hotels are measurable and well communicated, if managers plan effectively at different levels, and if the job specifications and descriptions are clear. Within the marketing aspect the following will be analyzed: the practice of market segmentation, the positioning of the hotel, the way sales activities are performed, and if there is an effective strategy for promotion and advertising. In terms of infrastructure, the research considers the facility's conditions, equipment, and how the organizational structure allows optimal processes that influence in the quality of services offered, as well as the training and administrative measures that develop technological skills and the information systems that generate indicators useful in the competitiveness improvement process.

TOURISM AND HOTELS ENVIRONMENT

In 2010, world tourism recovered more strongly than expected from the shock it suffered in late 2008 and 2009 as a result of the global financial crisis and economic recession. Worldwide, international tourist arrivals reached 940 million in 2010, up 6.6% over the previous year. Asia and the Pacific (+13%) were the first regions to recover and among the strongest growing regions in 2010. Africa maintained growth (+7%) and the Middle East returned to double digit growth (+14%). While the Americas rebounded (+6%) from the decline in 2009, Europe's (+3%) recovery was slower than in other regions. International tourism receipts are estimated to have reached US\$ 919 billion (693 billion euros) in 2010, up from US\$ 851 billion (610 billion euros) in the previous year. When ranked according to the two key tourism indicators – international tourist arrivals and international tourism receipts – it is interesting to note that eight of the top ten destinations appear in both lists, even though they show marked differences in terms of the characteristics of the tourists they attract, as well as their average length of stay and their spending per trip and per night. The two countries that are missing are Malaysia and Mexico, in 9th and 10th place on arrivals, but they face the challenge of becoming an attractive destiny for the tourism that spends a relevant amount of money on their trips. An important fact for this goal is the lodging infrastructure and the networking between tourism services providers. (World Tourism Organization, 2011)

		Million		Change (%)					
Rank	Country	2009	2010	2009/2008	2010/2009				
1	France	76.8	76.8	-3.0	0.0				
2	United States	55.0	59.7	-5.1	8.7				
3	China	50.9	55.7	-4.1	9.4				
4	Spain	52.2	52.7	-8.8	1.0				
5	Italy	43.2	43.6	1.2	0.9				
6	United Kingdom	28.2	28.1	-6.4	-0.2				
7	Turkey	25.5	27.0	2.0	5.9				
8	Germany	24.2	26.9	-2.7	10.9				
9	Malaysia	23.6	24.6	7.2	3.9				
10	Mexico	21.5	22.4	-5.2	4.4				

Table 1: International Tourist Arrivals

Source: World Tourism Organization (UNWTO), 2011.

				US(\$)	Local C	urrencies	
		Bil	Billion Change (%)		Change (%)		
Rank	Country	2009	2010	2009/2008	2010/2009	2009/2008	2010/2009
1	United States	94.2	103.5	-14.7	9.9	-14.7	9.9
2	Spain	53.2	52.5	-13.7	-1.2	-9.0	3.9
3	France	49.4	46.3	-12.7	-6.2	-7.9	-1.3
4	China	39.7	45.8	-2.9	15.5	-2.9	15.5
5	Italy	40.2	38.8	-12.0	-3.6	-7.2	1.4
6	Germany	34.6	34.7	-13.2	0.1	-8.5	5.3
7	United Kingdom	30.1	30.4	-16.3	0.8	-1.3	1.7
8	Australia	25.4	30.1	2.5	18.6	10.3	0.8
9	Hong Kong (China)	16.4	23.0	7.5	39.5	7.0	39.8
10	Turkey	21.3	20.8	-3.2	-2.1	-3.2	-2.1

Table 2: International Tourist Receipts

Source: World Tourism Organization (UNWTO), 2011.

World Tourism Organization research "Tourism 2020 Vision" projects that international arrivals are expected to reach nearly 1.6 billion by the year 2020. Of these worldwide arrivals in 2020, 1.2 billion will be intraregional and 0.4 billion will be long-haul travelers. East Asia and the Pacific, South Asia, the Middle East and Africa are forecasted to grow at over 5% per year, compared to the world average of 4.1%. More mature regions in Europe and the Americas (including Mexico) are anticipated to show lower-than-average growth rates. Europe will maintain the highest share of world arrivals, although this share will decline from 60% in 1995 to 46% in 2020. (World Tourism Organization, 2011)

"There are 5 forces that are driving firms and sectors at their global business operations: political, technological, market, costs, and competitive. Competition is stronger, and companies in newly industrialized or developing countries have the necessity and opportunity to enter in the world market". And the hotel industry is not the exception; hotel chains and franchises have begun their expansion process. The traditional family hotels businesses must develop and improve their management skills in order to face competition from chain hotels, at the time they are trying not to be displaced from a lodging business that is growing around the world. (Bell, McCulloch, Frantz, Geringer, Minor, 2004)

As an example, the hotel industry in Morelia, Michoacán, Mexico is made up mostly of family businesses, not franchises, so the implementation of quality systems is not institutionalized and procedures and manuals are hard to follow. It is a common practice to use a quality label that certifies the hotel operations, but without specific criteria. Also there is a high personnel turnover, in which an employee working in one hotel is able to find a job at another one in the best of cases.

In some countries there are a few educational institutions concerned with tourism and hospitality, so they use their empirical knowledge to function, while at the same time there is a lack of coordination to organize and avoid tourists cannibalism and clumping, and to provide useful information for decision making processes. It was not until 2006 that researches in Morelia concerning tourist profile were performed, and their results began to be exploited by the hotel managers.

DETECTED PROBLEM

Many hotels around the world, such as the ones in Morelia, Michoacán, Mexico, are essentially family businesses that need to develop and improve their managerial skills in order to face competition from chain hotels and franchises. Most of these hotels have a low share of foreign tourists, offer a lodging standard service, and have a lack of training and information management tools for their decision-making processes. For these hotels business relationship should be a priority and not the sentimental or family issues that lead to centralized, intuitive, and reactive decisions. At the same time hotel chains and franchises need to improve their systems and procedures in order to compete in many countries with a successful business model, so it is a

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necessity to measure their competitiveness effort to contrast it with its own performance and with the rest of the competitors.

Research Questions

Which are the variables that must be monitored by the hotels in order to design a competitiveness measurement system?

How can hotels develop a competitiveness measurement instrument that provides useful information for managerial activities and decisions?

COMPETITIVENESS VARIABLES

The diagram below shows the relationship between the independent variables: infrastructure, marketing and sales, management, training, and information system, with the dependent variable, competitiveness. These variables were determined by a focus group study including the participation of hotel owners, managers, tourism authorities, and the Tourism Sub secretary of Michoacán State in Mexico.

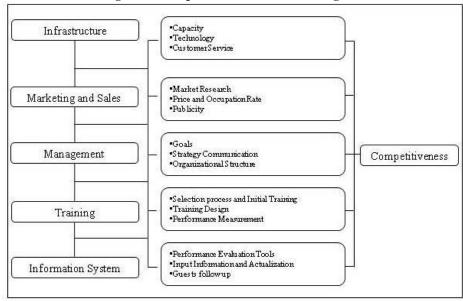


Figure 1: Competitiveness Variables Diagram

Source: Own elaboration.

COMPETITIVENESS MEASUREMENT INSTRUMENT

For each hotel to obtain information, data must be gathered using a questionnaire consisting of 36 Likert Scale affirmations under the following structure:

Six questions are related to the hotel infrastructure, capacity, level of customer service and the technology used in their processes.

- Ten questions examine the hotel marketing and sales activities, such as market research practices, guests' segmentation, prices, advertising and promotional strategy, and their after-sales follow-up activities.
- Five questions are related to management practices of the owners and managers of hotels, considering the establishment and communication of strategies and goals, the degree of involvement of managers in planning, organizational structure and the definition of staff roles.
- Eight questions consider the training provided by the hotel to its staff regarding its selection system and initial training, design, content and duration of the training programs, performance measurement indicators, staff turnover, and its remuneration system.
- Six questions refer to the information system used by the hotel and its ability to measure the performance of the organization, the use of reports for decision making processes, practices to obtain input data, data mining, and to solve complaints.

Data Analysis

In order to establish the hotel administrative practices that promote competitiveness, the responses are ranked according to the Rensis Likert scaling system. An affirmation is presented to the participant to evaluate his reaction by choosing one of the five-point scale. Each point has a numeric value. The participant obtains a score with respect to the claim and a total score is obtained by summing the scores of all claims. (Hernandez Fernandez and Baptista, 1998, p. 256)

Example Question 1: The hotel has a complete infrastructure to fully satisfy the needs of its customers

Strongly agree	5
Agree	4
Neither agree nor disagree	3
Disagree	2
Strongly disagree	1

The questionnaire consists of 36 questions: 35 related to the independent variables and 1 question regarding the dependent variable, with the maximum score for an affirmation of 5, and therefore the maximum total score is 180 (36×5), and the minimum value in the scale is 1, resulting in a minimum total score of 36 (36×1). The score interval is between the extreme values of 36 and 180.

For each variable are defined dimensions and for each dimension are established indicators considered in the Likert scale.

To analyze the hotel competitiveness performance, the following semaphore chart, which considers the score range for each variable, has been developed.

- Green zone: The hotel has a good performance in the variable.
- Yellow zone: The hotel has a regular performance in the variable.
- Red zone: The hotel has an improvement opportunity in the variable measured.

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Variable	Min	Max	Score	Green	Yellow	Red		
	Score	Score	Range	Zone	Zone	Zone		
Infrastructure	6	30	(6-30)	(24-30)	(13-23)	(1-12)		
Marketing and Sales	10	50	(10-50)	(40-50)	(21-39)	(1-20)		
Management	5	25	(5-25)	(20-25)	(11-19)	(1-10)		
Training	8	40	(8-40)	(32-40)	(17-31)	(1-16)		
Information System	6	30	(6-30)	(24-30)	(13-23)	(1-12)		
Competitiveness Personnel Impression	1	5	(1-5)	(4-5)	3	(1-2)		
Hotel Competitiveness	36	180	(36-180)	(144-280)	(73-143)	(1-72)		

Table 3: Competitiveness Semaphore Chart

Source: Own elaboration.

For the following recommendations, were reviewed the competitive hotel models developed by: Michael D. Hartline, Barbara Ross Wooldridge, y Keith C. Jones (2003), Paul A. Phillips (2004), Rodríguez y Espino (2006), Sharlene Anderson, Chris Guilding (2006); Keneth R. Lord, Michael O. Mensah and Sanjay Putrevu (2011) and Martti Lindman (2011).

According to the hotel results, the managers must take into consideration the following recommendations.

Variab G	Green	Recommendations	Yellow	Recommendations	Red	Recommendations
le Z	Zone		Zone		Zone	
	Score		Score		Score	
Infrastr (2 ucture	24-30)	 Identify new infrastructure and technology that the hotel must have in order to continue with its advantage. Promote infrastructure as one of your competitive advantages. Learn from the infrastructure and technology that other hotels around the world may offer. 	(13-23)	 Compare the hotel infrastructure and technology with its competitors. (Benchmarking) Actualize the infrastructure needed for the essential processes and services for the hotel. Actualize the technology needed for the essential processes and services for the hotel. 	(1-12)	 Verify all the lack of infrastructure and technology that the hotel presents. Acquire the infrastructure needed for the essential processes and services for the hotel. Acquire the technology needed for the essential processes and services for the hotel.
Market (4 ing and Sales	40-50)	 Verify if you could attend new market segment(s) for your hotel. If possible initiate efforts with a new business concept. Continue with your market research and verify if an expansion strategy is appropriate. You may franchise or perform a joint venture. Continue with the marketing and sales training program. Diversification of your hotel may be an option. Keep the improvement in your internet hotel access. Improve the frequent program for your guests and surprise them. 	(21-39)	 Verify the market segment(s) for your hotel, may be you have an opportunity in a new segment. Increase market research periodicity and verify your marketing mix. Verify your marketing and sales force organizational design. There could be some areas were you need to concentrate efforts. Actualize the training program for your marketing and sales personnel. Review your price strategy; you may be out of market. Verify the goals, positioning strategy, budget and media mix of your marketing plan. Verify if you offer a frequent program for your guests. Identify prospects for the low demand period. Review your internet site and improve its capacity to 	(1-20)	 Identify the market segment(s) for your hotel. Perform a market research to generate an effective marketing mix. Review your marketing and sales force organizational design. Design a training program for your marketing and sales personnel. Review your price strategy. Generate a marketing plan which includes: goals, positioning strategy, budget, media mix, and internet access. Design a frequent program for your guests. Identify prospects for the low demand period.

Table 4: Actions to improve competitiveness

				perform sales on the web.		
Manag ement	(20-25)	 Look for new strategies to maintain your leadership in the market. Continue measuring the performance of the hotel managers and employees. Verify if you may perform an integration, diversification or expansion strategy to get into new markets. 	(11-19)	 Verify the hotel goals and objectives. Make sure all the hotel employees know them. Identify if you have a manager problem at a specific area. Design a continuous improvement plan. Verify the strategic plan is designed with the participation of the personnel. Verify there is a relation between the responsibilities of each employee and the remuneration system. Verify the hotel's organizational chart and make a restructure if necessary. Develop a recognition program for employees' improvements. 	(1-10)	 Clarify the hotel goals and objectives. Review your mission and vision. Verify the performance of the hotel managers. Generate a strategic plan and communicate it to all the personnel. Communicate the job description and responsibilities to each employee. Verify the hotel's organizational chart and make a restructure if necessary.
Trainin g	(32-40)	 Continue with your training effort. Identify new knowledge, and capacities that your personnel may need to develop. Develop training programs for both executives and employees. Promote the relation between the remuneration system and the performance indicators. 	(17-31)	 Actualize your training courses with content provided by your clients and workers. Use internal and external instructors in the training program. Review the coordination between the hotel goals and its remuneration system. Verify learning objectives, trainers and duration of your training program. You may have an opportunity to train your personnel more frequently in important hotel processes. 	(1-16)	 Design a useful training program. Verify learning objectives, trainers and duration. Hire trainers with experience. Generate a remuneration system, paying attention to the performance indicators. Provide an initial training to your knew workers.
Inform ation System	(24-30)	 Make the hotel information system a competitive advantage. Continue with your data mining activities to follow up the hotel guests. Perform a penetration strategy. 	(13-23)	 Verify if the information system and its reports are useful and opportune for your managers. Verify the data mining activities to follow up the hotel guests. You may have the information, but it has no use purpose. Redesign the information system if necessary. 	(1-12)	 Develop an information system for managers with useful and opportune reports. Perform data mining activities to follow up the hotel guests. Consider input data of the hotel main processes and activities for the information system.
Compe titivene ss Person nel Impres sion	(4-5)	1) Competitiveness as an important aspect for your hotel, managers and employees know it. Continue with this practice.	3	1) Verify competitiveness as an important aspect for your hotel. Develop a strategic plan with the participation of managers, employees and clients if possible.	(1-2)	 Determine competitiveness as an important aspect for your hotel. Everybody needs to have conscious of competitiveness and his job.
Hotel Compe titivene ss	(144-280)	Overall evaluation score. Your hotel is competitive. Its main goal is to maintain its competitive advantage. Keep in mind that what was successful in the past may not be successful in the future.	(73- 143)	Overall evaluation score. Your hotel has an opportunity to improve its competitive performance. Make a benchmarking effort in order to improve actions related to its strategy, infrastructure, marketing, management, training, and information system.	(1-72)	Overall evaluation score. Your hotel is below the standard level of competitiveness. Initiate important actions related to goals establishment, infrastructure, marketing, management, training and the hotel information system.

Source: Own elaboration.

Cluster Analysis

A cluster or conglomerates analysis is a multivariate technique that groups data that are similar. Its intention for a hotel industry analysis is to differentiate the highly competitive hotels from those that present great opportunities of improvement, in order to apply administrative actions. SPPS software is used for this purpose.

For an Industry Analysis purpose, the questionnaire should be applied to all the hotels under study, considering that it must be a census, or to a representative sample. The semaphore competitive chart will look as follows:

Table 5. Industry Competitiveness Semaphore Chart									
Variable	Min	Max	Green Zone	Yellow Zone	Red				
	Score	Score			Zone				
Infrastructure	6n	30n	(24-30)n	(13-23)n	(1-12)n				
Marketing and Sales	10n	50n	(40-50)n	(21-39)n	(1-20)n				
Management	5n	25n	(20-25)n	(11-19)n	(1-10)n				
Training	8n	40n	(32-40)n	(17-31)n	(1-16)n				
Information System	6n	30n	(24-30)n	(13-23)n	(1-12)n				
Competitiveness Personnel Impression	1n	5n	(4-5)n	3n	(1-2)n				
Hotel Competitiveness	36n	180n	(144-280)n	(73-143)n	(1-72)n				

 Table 5: Industry Competitiveness Semaphore Chart

Where: "n" is the number of hotels that participate in the study. Source: Own elaboration.

With the data gathered from applying the measuring instrument to the industry hotels, you can obtain central tendency and variability of each independent variable and affirmation.

The recommendations for the hotels that participate in the industry will be the ones that appear in Table 4: Actions to improve competitiveness. The advantage will be that each hotel may compare its performance with the average of the industry.

CONCLUSIONS

The variables that must be monitored by the hotels in order to design a competitiveness measurement system are: infrastructure, marketing and sales strategies, management practices, training, and information systems. To measure these variables a competitiveness measurement instrument has been developed, a questionnaire that provides useful information for managerial activities and decisions. The questionnaire consists of 36 questions: 35 related to the independent variables and 1 question regarding the dependent variable, with the maximum affirmation score of 5, and therefore the maximum total score of 180 (36×5), and the minimum value in the scale is 1, resulting in a minimum total score of 36 (36×1). The total competitiveness score interval for a hotel is between the extreme values of 36 and 180. The hotel will find its score in a Competitiveness level. It is important to mention that the hospitality competitiveness measurement system may be applied to an entire industry analysis.

In terms of management practices it is important to define the hotel core competence, considering guests needs and identifying the alternatives that exist to satisfy them. A hotel must determine a consistent and appropriate mission that is shared by hotel members, ensuring that the objectives and activities of each department contribute to accomplishing the mission. It is important to make sure the structure is adequate to carry out the strategy and that each member of the hotel knows his or her job description.

In regard to marketing and sales activities, competitive hotels are those that are customer-oriented and that build their operations around guests' satisfaction. A hotel must define and understand the market segment which serves and look for the ones that offer the maximum profitability. It is important to perform market research as a regular practice, to design effective advertising and sales strategies, and to offer a fast loading website, updated with quality content. At the same time the hotel must develop a marketing plan to transmit the hotel central positioning idea and to generate a recurring program strategy for guests' retention and loyalty.

In terms of infrastructure is important to determine the core elements and additional services, to identify those that generate more value to the target market, and at the same time to ensure that the hotel has the appropriate technology.

A hotel should identify and promote attitudes, appearance, and performance of employees that contribute to the success of the organization. Training should be provided by internal and external instructors, at the same time the hotel must consider performance indicators that will be measured as result of the training. The remuneration system must recognize the performance of each employee.

In regard to information systems, competitive hotels are those that listen to their customers and employees. Information obtained through market research should include competitors' benchmarketing and guests' perceptions. An information portfolio may consider: after-sales service-quality scales studies, mystery shoppers, and focus groups. Additionally it is concluded that businesses require a control panel system to measure the core elements of the hotel operation while it generates useful reports for decision making processes. The information system should allow the hotel to perform longitudinal comparative studies.

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PERFORMANCE EVALUATION OF AMERICAN DEPOSITARY RECEIPTS ON STOCKS FROM AFRICA AND THE MIDDLE EAST

Onur Arugaslan and Ajay Samant

ABSTRACT

This study bridges the gap between investment theory and practice in some of the least studied financial markets of the world, namely the stock markets in Africa and the Middle East. The objective of this pioneering study is to provide empirical documentation to global investors who are contemplating participation in African and Middle Eastern stock markets using American Depositary Receipts (ADRs) as the investment vehicle. The first part of the study examines the nature of these ADRs (based on depositary bank, sponsorship status, industry classification, and listing). The second part of the study evaluates the performance of these ADRs using statistical measures grounded in modern portfolio theory. Returns are adjusted for the degree of total risk and systematic risk inherent in each ADR, and the securities are then ranked on the basis of risk-adjusted performance. Two relatively new evaluation metrics, the Modigliani and Sortino measures, are used for ranking.

INTRODUCTION

Over the past decade, there has been a significant rise in investor comfort with global financial securities, aided by the ease and convenience with which transnational corporate information can be accessed via the internet. One of the most convenient vehicles for accessing corporate securities listed outside the investor's home country is a Global Depositary Receipt. In the United States, these securities are known as American Depositary Receipts (ADRs). As of January 2012, there were 2,442 ADRs listed on the New York Stock Exchange (NYSE), American Stock Exchange (AMEX), the NASDAQ system, and on private trading networks.

Although ADRs in general have been studied extensively, to our knowledge there has been no study of the nature and performance of ADRs on shares of firms incorporated in Africa and the Middle East. The stock market in this region is significant in size and provides many opportunities for risk diversification. Table 1 reports market capitalization and volume of trade for several markets in the Middle East and Africa in 2009

Ajay Samant, Ph.D., Indiana University, serves as Dean and Professor of Finance at the University of North Florida. His published research includes the areas of international financial markets, performance evaluation of mutual funds and interest rate swaps. He has served as keynote speaker at international business conferences and has been interviewed on national television for expert opinions in the areas of banking and financial markets.

Onur Arugaslan received his Ph.D. in Finance from the University of Texas at Dallas and is an Associate Professor of Finance at Western Michigan University. His research includes the separation of cash flow rights and voting rights, the endogeneity of liquidity, the risk-adjusted performance of American Depository Receipts, and the market reaction to the acquisitions by unified dual class firms. Arugaslan has published articles in various journals including the Journal of Finance and the Journal of Corporate Finance.

and 2010. Total market capitalization in the Middle East and North Africa in 2010 was US Dollar (USD) 1,257 billion. Of this amount, the Arab world accounted for USD 950 billion. The corresponding figures for value of stock traded are USD 506 billion and 356 billion, respectively. In 2009, the market capitalization and value of stock traded in developing countries in the Middle East and North Africa were USD 272 and 116 billion, respectively. Data for developing countries only, for 2010, was not available. In sub-Saharan Africa, market capitalization and value of stock traded in 2010 was USD 112 billion and 35 billion, respectively.

Country	Market Capi		Value of Stock	Traded
Country	(USD Bi		(USD Bill	
	2010	2009	2010	2009
Arab World	950.22	855.53	355.81	603.50
Bahrain	20.43	16.93	28.76	85.68
Botswana	4.08	3.99	0.14	0.10
Cote D'Ivoire	7.10	6.14	0.13	0.13
Egypt	82.50	89.95	37.11	52.81
Ghana	3.53	2.51	1.02	0.58
Iran	86.61	63.30	17.13	17.06
Israel	218.05	182.10	133.37	88.29
Jordan	30.86	31.87	9.45	13.65
Kenya	14.46	10.75	1.08	0.50
Kuwait	119.62	95.94	41.81	69.93
Lebanon	12.58	12.89	1.87	1.04
Malawi	1.36	1.38	0.02	0.00
Mauritius	6.51	4.74	0.36	0.33
Middle East & N. Africa (all income levels)	1,257.29	1,102.90	506.34	708.86
Middle East & N. Africa (developing countries only)	NA	272.41	NA	115.74
Morocco	69.15	62.91	10.75	29.42
Namibia	1.18	0.85	0.02	0.02
Nigeria	50.88	33.32	5.28	4.57
Oman	20.27	17.30	3.42	5.83
Qatar	123.59	87.86	18.31	25.51
Saudi Arabia	353.41	318.77	203.20	336.98
South Africa	1,012.54	704.82	340.03	342.50
Sub-Saharan Africa (developing countries only)	111.72	NA	34.85	NA
Tunisia	10.68	9.12	1.67	1.26
Turkey	306.66	225.74	42.16	24.35
United Arab Emirates	104.70	109.62	27.44	65.71
West Bank and Gaza	2.45	2.38	0.45	0.50
Zambia	2.82	NA	0.13	NA
Zimbabwe	11.48	NA	1.14	NA

 Table 1. Market Capitalization and Value of Stock Traded

The largest market in this region, in terms of market capitalization (USD 1,013 billion) as well as volume of trade (USD 340 billion) in 2010 was South Africa. In the Middle East, the largest markets in terms of market capitalization in 2010 were Saudi Arabia (USD 353 billion), Turkey (USD 307 billion), and Israel (USD 218 billion). On the continent of Africa, the largest markets are Egypt (USD 83 billion), Morocco (USD 69 billion) and Nigeria (USD 51 billion).

Many US based investors find it inconvenient, for a variety of reasons, to invest directly in stock markets in Africa and the Middle East, and, therefore, prefer to invest in ADRs based on their stocks. These ADRs may be created at the request of investors or corporations whose stock is held in trust as collateral for the ADR. These securities serve a dual purpose: they enable firms incorporated in these regions to raise funds in developed capital markets without having to meet the stringent listing requirements of U.S. stock exchanges, and, at the same time, enable global investors to earn returns on securities listed on these exchanges without

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the dual inconvenience of having to deal with time difference between countries and with currency conversion. This study examines the nature of African and Middle Eastern ADRs, sorted on basis of depositary bank, sponsorship status, industry classification, and stock exchange on which the security is listed. Data are obtained from the Bank of New York Mellon and CRSP. The intent of the study is to provide documentation to international investors who would like to hold ADRs from Africa and the Middle East in their global portfolios. The study should be of interest to international investors, managers of mutual funds who are exploring opportunities to diversify their global portfolios, managers of corporations who are planning to sponsor the issue of depositary receipts, and to bank managers who provide international financial services.

The primary securities that underlie an ADR may be corporate stocks or bonds. The earliest ADRs (1927) were issued at the request of institutional investors. These ADRs are "unsponsored." Most of the ADRs that are currently listed are "sponsored" programs, issued at the request of the firm whose securities underlie the ADR. When a sponsored ADR is issued, there may or may not be a corresponding creation of new capital. There are four grades of sponsored ADRs. Level I ADRs are traded in the OTC market. Level II ADRs trade on national stock exchanges (such as the NYSE). If new capital is raised during the process of issuing sponsored ADRs, then the ADRs are categorized as Level III and IV. Level III ADRs are listed on national stock exchanges. Level IV ADRs are privately listed, and are usually issued under rule 144A of the US Securities and Exchange Commission.

This study examines the nature and performance of ADRs on African and Middle Eastern companies. The rest of the paper is structured as follows. Section 2 reviews the literature on ADRs and summarizes pertinent studies in the area of modern portfolio theory. Section 3 examines the sponsorship status, choice of depositary bank, industrial classification, and market listing. Section 4 evaluates the performance of these ADRs on a risk-adjusted basis, using the Morgan Stanley Capital International (MSCI) Europe, Australasia, and Far East (EAFE) Index as a benchmark for comparison purposes. Section 5 concludes the paper.

LITERATURE REVIEW

Different techniques have been used in portfolio performance measurement over time. Recently, Modigliani and Modigliani (1997) did some pioneering work in the area of financial reward and risk. They proposed a new risk-adjusted performance measure (hereafter referred to as, M Squared), which is intuitively quite appealing to investors. The idea that underlies their methodology is to adjust the returns of a portfolio to the level of risk in an unmanaged stock market index and then measure the returns on the risk-matched portfolio. Separately, academicians and practitioners in finance have shown an interest in downside risk measures for evaluating portfolio performance. The most widely cited performance measure that adjusts for downside risk is the Sortino Ratio (Sortino and Price, 1994). In this paper, we use a modified Sortino Ratio that was introduced by Pedersen and Satchell (2002), who show that this ratio has a sound theoretical foundation.

Academics have studied the benefits of global diversification of investment portfolios extensively. Solnik (1996) presents an excellent summary of these benefits. Officer and Hoffmeister (1987) show that portfolio risk can be reduced significantly by including ADRs in a portfolio of purely domestic (U.S.) securities. Aggarwal, Dahiya, and Klapper (2005) analyze the investment allocation decision of mutual fund managers to invest in emerging market firms that are listed in their domestic markets and have issued ADRs in the U.S. as well. They find that ADRs are the preferred mode of holdings if the local market of the issuer has weak investor protection, low liquidity and high transaction costs, and if the firm is small and has limited analyst following.

The predictability of stock returns in emerging markets has been demonstrated widely. Aras and Yilmaz (2008), for example, report evidence on 12 emerging market countries including two of the sample countries in this paper: South Africa and Turkey. Obi, Sil, and Choi (2010) also study the South African stock market and document that traditional analytical approaches resulted in poor value-at-risk forecasts during the 2008-2009 global financial crisis. Instead they obtain more realistic value-at-risk estimates by accounting for the effects of time-varying volatility in portfolio returns. Similarly, Muzindutsi and Niyimbanira (2012)

examine the exchange rate risk exposure in the South African stock market and the pricing of this risk. They find the exchange rate exposure to be identifiable and yet different across companies.

The motivation for cross-listing shares on foreign exchanges has also been widely researched (Saudagaran, 1988). Umutlu, Salih, and Akdeniz (2007) investigate the consequences of cross listing in emerging markets and find that ADR listing has no effect on the volatility of the underlying stock. On the other hand, Jaiswal-Dale and Jithendranathan (2001) report that the ADRs capture the fluctuations of both the domestic and U.S. markets.

The relation between the price of ADRs and the underlying shares has also been studied thoroughly (Alexander, Eun, and Janakiramanan, 1987; Alexander, Eun, and Janakiramanan, 1988). Jayaraman, Shastri, and Tandon (1993) study the impact of international cross-listings using ADRs. Because ADRs can be exchanged for the underlying shares, financial arbitrage usually ensures that the price of an ADR is within transactions costs of the price of the underlying share. Interestingly, Eichler and Maltritz (2008) model the probability of a currency crisis as a function of the deviation of the ADR price from the price of the underlying stock.

To the knowledge of the authors, this is the first study of the nature and performance of ADRs on African and Middle Eastern firms, particularly, their sponsorship status, industrial classification, names of banks that are active in this business, and exchanges on which these ADRs are listed. This is also the first rigorous study of the returns that have accrued to these ADRs, from the point of view of U.S. based investors. The results of this study should be of interest to investors and mutual fund managers who are looking for opportunities to diversify their international portfolios, to managers of African and Middle Eastern firms who are contemplating sponsoring the issue of these securities in U.S. markets, and to the managers of banks, which provide international financial services.

NATURE OF AFRICAN AND MIDDLE EASTERN ADRS

As of January 2012, there are 75 ADR issues on firms in the Sub-Saharan Africa (SSA) region and 58 ADR issues on firms in the Middle East / North Africa / The Gulf (MENAG) region. 74 ADRs in SSA are from South Africa and one from Zambia. 26 ADRs from MENAG are in Turkey, 22 in Israel, five in Egypt, two each in Jordan and United Arab Emirates, and one in Lebanon. 68 ADRs are sponsored and 65 are unsponsored. Regarding the financial institutions that have issued the ADRs, the Bank of New York Mellon accounts for 119 of these issues, followed by Deutsche Bank with 29 issues, Citibank with 28 issues, and J.P. Morgan Chase with eight issues. Regarding the exchanges on which our sample ADRs are listed, seven each are listed on the NYSE and NASDAQ, 116 are listed on OTC (other than NASDAQ), and the other three are listed on OTCQX.

With respect to industrial classification, 23 of the ADRs are in the mining industry; 16 in the banking industry; 10 in general retailers; 7 each in construction and materials and financial services; 6 each in media, mobile telecommunications, oil and gas producers, and pharmaceuticals and biotechnology; 5 in food producers; 4 in industrial metals and mining; 3 each in automobiles and parts, chemicals, general industrials, and personal goods; 2 each in food and drug retailers, forestry and paper, health care equipment and services, household goods and home construction, industrial transportation, life insurance, and real estate investment and services; and 1 each in aerospace and defence, beverages, electronics and electric equipment, equity investments and instruments, fixed line telecommunications, industrial engineering, oil equipment, services, and distribution, software and computer services, support services, technical hardware and equipment, and travel and leisure. All data are obtained from the website of the Bank of New York Mellon.

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Data and Methodology

Monthly return data for the three-year period January 2008 - December 2010 are obtained from CRSP. CRSP has full return data for seven South African ADRs, five ADRs from Israel, and one Turkish ADR. Therefore, the final sample in this study for the performance analysis consists of 13 ADRs. The return on U.S. 4-week Treasury Bills is used as the proxy for the risk-free rate. The MSCI EAFE Index is utilized as the market benchmark.

Monthly returns are averaged over the three-year period to obtain the *Mean return*. Risk-free rate of return is subtracted from the mean return to compute the *Mean excess return*. *Mean excess return* of each ADR is divided by its standard deviation to compute the *Sharpe measure*:

$$S_i = \frac{R_i - R_f}{\sigma_i}$$

where Ri = mean return on ADR i, Rf = mean risk-free rate of return, $\sigma i = standard deviation of returns for ADR i$.

Mean excess return of each ADR is divided by its beta to obtain the Treynor measure:

$$S_i = \frac{R_i - R_f}{\sigma_i}$$

where β_i is estimated from the market model:

$$R_{it} = \alpha_i + \beta_i R_{mt} + e_{it}$$

where R_{mt} = market return during period t, e_{it} = error term. Expected return of each ADR is subtracted from its actual mean return to compute *Jensen's Alpha*:

$$\alpha_i = R_i - E[R_i]$$

where the expected return for each ADR is obtained using the Capital Asset Pricing Model:

$$E[R_i] = R_f + \beta_i (R_m - R_f)$$

Jensen's Alphas are then tested for statistical significance.

Mean excess return for each ADR is divided by the downside deviation of that ADR's return from the risk-free rate of return to compute the *Sortino Ratio*:

$$SO_i = \frac{R_i - R_f}{DD_i}$$

where the downside deviation is estimated as follows:

$$DD_{i} = \left[\frac{1}{n-1} \sum_{j=1}^{n} (\max\{0, R_{f} - R_{ij}\})^{2}\right]^{1/2}$$

Sharpe measure is multiplied by the market standard deviation and then the risk-free rate added to calculate the *M Squared measure*:

$$M^{2}i = \frac{Ri \cdot Rf}{\sigma i} \sigma m + Rf$$

Finally, the benchmark standard deviation is divided by the ADR standard deviation to obtain the *Leverage Factor*:

$$L_i = \frac{\sigma_m}{\sigma_i}$$

Results

The 13 ADRs with full monthly return data are identified in Table 2 along with their risk, return, and performance statistics. Returns, of course, are reported in US dollars. The ADRs are ranked in alphabetical order. The ADR with the highest mean return is Formula Systems-1985 of Israel with an average monthly return of 3.60 percent. In comparison, the monthly mean return of the benchmark MSCI EAFE Index is -0.26 percent. The ADR with the highest total risk (measured by the standard deviation of returns) is DRDGOLD of South Africa with a monthly standard deviation of 20.10 percent. In comparison, the standard deviation of the benchmark MSCI EAFE Index is 8.06 percent. Further, Table 2 reports the numerical values of the Sharpe and Sortino measures, which are used to rank the ADRs in Table 3. The highest Sharpe and Sortino measures obtained (0.29 and 0.50) are by Formula Systems-1985. In comparison, the Sharpe measure and the Sortino measure of the benchmark MSCI EAFE Index are -0.04 and -0.05, respectively.

Table 2. 3-Year Performance on a Monthly Basis (2008-2010)

			Avg	Std			,	,		Alpha	
	ADRs	Country	(%)	(%)	Sharpe	Sortino	Beta	M Squared	Alpha	t-stat	Treynor
1	Alon Holdings - Blue Square	Israel	1.23	15.64	0.08	0.13	0.67	0.66	1.39	0.51	1.79
2	AngloGold Ashanti	South Africa	1.36	12.84	0.10	0.18	0.72	0.87	1.54	0.64	1.84
3	DRDGOLD	South Africa	0.85	20.10	0.04	0.07	0.13	0.37	0.85	0.31	6.05
4	Formula Systems-1985	Israel	3.60	12.10	0.29	0.50	0.91	2.41	3.83	1.59	3.91
5	Gold Fields	South Africa	1.51	11.90	0.12	0.19	0.63	1.04	1.66	0.74	2.34
6	Harmony Gold	South Africa	1.30	12.30	0.10	0.17	0.39	0.87	1.38	0.64	3.22
7	NICE Systems	Israel	0.54	10.09	0.05	0.07	0.80	0.44	0.75	0.37	0.63
8	Partner Communications	Israel	1.08	7.53	0.14	0.20	0.59	1.15	1.21	0.73	1.77
9	Randgold Resources	South Africa	3.15	14.09	0.22	0.45	0.41	1.82	3.24	1.26	7.68
10	Sappi	South Africa	-0.27	16.74	-0.02	-0.03	1.70	-0.11	0.21	0.00	-0.18
11	Sasol	South Africa	1.08	11.32	0.09	0.14	1.21	0.78	1.40	0.58	0.86
12	Teva Pharmaceutical Industri.	Israel	0.53	4.62	0.10	0.17	0.16	0.89	0.53	0.51	3.08
13	Turkcell Iletisim Hizmetleri	Turkey	-0.24	12.05	-0.02	-0.03	0.72	-0.14	-0.06	0.01	-0.39
	MSCI EAFE		-0.26	8.06	-0.04	-0.05	1.00	-0.26	0.00	0.00	-0.30
	US 4-Week Treasury Bill		0.04	0.06	0.00	0.00	0.00	0.04	0.00	0.22	0.00

Table 2 also reports the values of ADR Betas, M Squared measures, Jensen's Alphas (and their tstatistics), and Treynor measures, all of which are computed using the benchmark MSCI EAFE Index. The ADR with the highest systematic risk (Beta=1.70) is Sappi of South Africa. In comparison, the Beta of the benchmark MSCI EAFE Index is, by definition, exactly 1.00. The ADR with the highest M Squared measure

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(2.41) is Formula Systems-1985. In comparison, the benchmark MSCI EAFE index has an M Squared measure of -0.26. The ADR with the highest Alpha measure is Formula Systems-1985 with Alpha equal to 3.83. None of the ADR Alphas are significant at the five percent level. The Alpha measure of the benchmark MSCI EAFE Index is, by definition, zero. Finally, the ADR with the highest Treynor measure (7.68) is Randgold Resources of South Africa. In comparison, the Treynor measure for the MSCI EAFE Index is -0.30.

Table 3 reports the rankings of all the ADRs. The Sharpe and Sortino ranks indicate that all 13 ADRs have returns (adjusted for total risk and downside risk) that exceed the risk-adjusted returns of the MSCI EAFE Index. The Treynor and Alpha ranks in Table 3 indicate that 12 ADRs have returns (adjusted for systematic risk) that exceed the risk-adjusted returns of the MSCI EAFE Index. The only ADR underperforming the Index is Turkcell Iletisim Hizmetleri of Turkey. The ranking based on the M Squared measure is identical to the ranking based on the Sharpe measure. However, the M Squared measure enables us to draw some inferences, which cannot be drawn from the Sharpe measure and these are detailed at the end of this section.

	Table 3. Three-Year Ranking (2008-2010)									
		Sharpe Rank	Sortino	Treynor	Alpha					
ADRs	Country	(M Squared Rank)	Rank	Rank	Rank					
Formula Systems-1985	Israel	1	1	3	1					
Randgold Resources	South Africa	2	2	1	2					
Partner Communications	Israel	3	3	9	8					
Gold Fields	South Africa	4	4	6	3					
Teva Pharmaceutical Industries	Israel	5	6	5	11					
AngloGold Ashanti	South Africa	6	5	7	4					
Harmony Gold	South Africa	7	7	4	7					
Sasol	South Africa	8	8	10	5					
Alon Holdings - Blue Square Israel	Israel	9	9	8	6					
NICE Systems	Israel	10	11	11	10					
DRDGOLD	South Africa	11	10	2	9					
Sappi	South Africa	12	12	12	12					
Turkcell Iletisim Hizmetleri	Turkey	13	13	14	14					
MSCI EAFE		14	14	13	13					

Table 4 reports the average returns that accrue to the whole sample of ADRs with and without riskadjustment. The risk-adjustment is performed by using the MSCI EAFE Index as the benchmark. The returns are annualized for the convenience of investors. This is done by compounding the monthly mean returns over twelve periods. In that table, Alon Holdings – Blue Square Israel, which ranks sixth based on unadjusted returns, falls back to rank nine on the basis of returns adjusted for risk. On the other hand, Partner Communications of Israel, which ranks eighth on an unadjusted basis, ranks third when the returns are adjusted for risk. More strikingly, Teva Pharmaceutical Industries of Israel ranks 11th on the basis of unadjusted returns, but ranks fifth based on returns adjusted for risk. The leverage factor for this ADR is 1.74, which implies that an investor, who is comfortable with bearing the same level of risk as in the benchmark MSCI EAFE index, could lever the ADR (borrow 74 percent, if possible, at the risk-free rate of interest and invest all in the ADR) and thereby attain an annual return level of 11.16 percent. The example below details how this return is obtained.

Table 4. Three-Year Annualized Performance: Unadjusted and Adjusted for Risk

			5	5		
		Unadjusted	Unadjusted	Adjusted	Adjusted	Leverage
		Annualized	Rank	Annualized	Rank	Factor
ADRs	Country	Returns (%)		Returns (%)		
Formula Systems-1985	Israel	52.86	1	33.07	1	0.67
Randgold Resources	South Africa	45.16	2	24.18	2	0.57
Partner Communications	Israel	13.73	8	14.71	3	1.07
Gold Fields	South Africa	19.73	3	13.18	4	0.68
Teva Pharmaceutical Industries	Israel	6.49	11	11.16	5	1.74

AngloGold Ashanti	South Africa	17.62	4	10.95	6	0.63
Harmony Gold	South Africa	16.80	5	10.92	7	0.65
Sasol	South Africa	13.75	7	9.77	8	0.71
Alon Holdings - Blue Square Israel	Israel	15.84	6	8.15	9	0.52
NICE Systems	Israel	6.73	10	5.44	10	0.80
DRDGOLD	South Africa	10.75	9	4.50	11	0.40
Sappi	South Africa	-3.14	14	-1.27	12	0.48
Turkcell Iletisim Hizmetleri	Turkey	-2.81	12	-1.72	13	0.67
MSCI EAFE		-3.08	13	-3.08	14	1.00

Consider an investor who would like to earn superior returns on an ADR and, at the same time, bear only an average level of risk. In this context, the average level of risk is measured by the standard deviation of the benchmark MSCI EAFE index, which is 8.06 percent on a monthly basis. Now consider the following investment strategy: Suppose that the investor has \$1,000 to invest. The investor could borrow \$740 and invest \$1,740 in Teva Pharmaceutical Industries. The end of month return from the ADR portion of the portfolio will be \$1,740 x 0.0053 = \$9.22. Suppose that the borrowed funds were loaned at the monthly risk-free rate of 0.04 percent. In that case, the borrowed funds will cost \$740 x 0.0004 = \$0.30. The portfolio return is \$9.22 - \$0.30 = \$8.92, which is a return of 0.89 percent on a monthly basis or 11.22 percent (slightly off the 11.16 percent in Table 4 due to rounding) on an annual basis. Note that the monthly risk of the portfolio is $1.74 \times 4.62 = 8.04$ percent (again slightly off the 8.06 percent in Table 2 due to rounding), which is the same as the monthly standard deviation of the benchmark MSCI EAFE Index. This investment strategy, therefore, enables the investor to earn superior returns for an average level of risk. It may be noted that the above example assumes that the returns on risk-free US treasury bills are not correlated with the returns on the ADR.

COMPREHENSIVE POLICY/MANAGERIAL IMPLICATIONS

This study has clear managerial implications for corporate treasury managers in developing economies. There may be firms located in Africa and the Middle East whose ability to raise capital is constrained by the limited size of the local stock market. One possible way out of this constraint is to issue shares in the local stock market, present a credible business plan to an international bank and then request the bank to hold the shares in trust and create a sponsored ADR which is subsequently traded in a developed stock market such as the US. By using this technique of financing, the ability of the issuing company to raise capital is not constrained by a relatively small local stock market.

Investors who would like to diversify their global portfolios would do well to examine investment opportunities in Africa and the Middle East. In particular, stock markets in South Africa, Saudi Arabia, Turkey, Israel, Qatar, Kuwait and the United Arab Emirates have a range of investment opportunities and market depth. A convenient way to access these markets would be via ADRs which are issued and traded in the US but are based on firms in this region. These ADRs vary widely in terms of their risk and return, as documented in this study. However, the risk-adjusted returns of some of these ADRs can be quite attractive and is superior to the return on a benchmark international stock index such as the MSCI EAFE. For investors who seek level of risk no higher than the benchmark index, this study presents a technique of lowering the risk of a portfolio by holding the ADR in combination with a risk-free security such as a treasury bill.

Finally, for managers of financial institutions, there is a clear opportunity to diversify operations by providing financial services to a historically underserved region of the world which has a large untapped potential for economic growth. These managers may want to evaluate business plans from firms based in Africa and the Middle-East with a view to creating sponsored ADRs based on shares of these firms. This activity will not only result in providing much needed capital to firms from developing nations but will also provide fee income for financial services provided by international banks. In many cases the reputation of the

issuing bank will facilitate the acceptance of these ADRs by the investing public in the US and other developed financial markets.

CONCLUSION

ADRs represent a convenient investment vehicle to access markets in Africa and the Middle East for international investors who are contemplating purchase of stocks listed in those markets. These securities are useful in two ways. First, they enable global investors to earn returns on African and Middle Eastern stocks without the dual inconvenience of having to deal with time difference between countries and currency conversion. Second, they allow firms incorporated in Africa and the Middle East to tap U.S. capital markets without having to meet the stringent listing requirements of U.S. stock exchanges. There are 133 ADRs from Africa and the Middle East that are listed on U.S. markets, and hence the investors have a wide range of choice of companies across diverse industry groups. This study examines the nature of these ADRs with emphasis on identifying the depository bank, sponsorship status, industry classification, and market listing.

Prior research has reported the performance of individual African and Middle Eastern stocks in local currencies. However, risk-adjusted returns reported in terms of US dollars would be more useful to international investors for, both, security selection and portfolio construction. In addition, from these investors' points of view, the instrument of choice for accessing African and Middle Eastern stock markets is the ADR, not the underlying stock itself. Hence, there is need for rigorous evaluation of the performance of ADRs using measures based on modern portfolio theory. There is extensive documentation on the performance of U.S. based stocks, especially for the S&P 500 index components. Consequently, this study serves as an important complement to the existing literature on the construction of global portfolios.

In order to facilitate comparison with international stock markets, this study uses the Morgan Stanley Capital International EAFE Index to evaluate the risk-adjusted performance of African and Middle Eastern ADRs. Some of these ADRs have unadjusted returns which are high, but once risk is factored in, the adjusted returns do not appear to be very attractive. On the other hand, some ADRs with modest returns may be quite remunerative to international investors, when their returns are adjusted for risk. Global investors may want to examine each of these securities in detail, in order to evaluate them further for possible inclusion in an investment portfolio. Of course, the contribution of a security to their portfolio return and their portfolio risk matters more to the global portfolio investors than the return and risk of the individual security.

This study provides initial evidence on the risk and return characteristics of ADRs from Africa and the Middle East. It would be beneficial to update this information on a continuing basis, in order to provide documentation to international investors who have a desire to diversify into this market, but are not sure of which ADRs they would like to select. Future research may focus on decomposing the return to these ADRs into its two components: the financial performance of the underlying firm and the fluctuations in the exchange rate.

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HOW CORPORATE GOVERNANCE AND GLOBALIZATION AFFECT THE ADMINISTRATIVE STRUCTURE OF THE GREEK SHIPPING INDUSTRY

Vicky Zampeta

ABSTRACT

According to recent studies administration systems in shipping are being developed continuously regarding two aspects. Firstly, using modern methods of design programs and measurement of performance and results and secondly with the adoption of main factors of corporate governance as defined by the Organization for Economic Co-operation and Development. As per prescriptive framework of the Organization, the fundamentals of corporate governance constitute one basic tool for the improvement of the legal, institutional, prescriptive framework of corporate governance and are focused not only in financial matters but in matters of organization and administration of listed companies in international stock exchanges including shipping companies.

Globalization, has also affected the shipping industry to a great extent, in addition to the new developments in international trade which have changed the structure of the shipping industry especially during recession due to the fact that world production is diminishing. Maritime indices are closely related to macroeconomic developments and other financial indices as well, giving a grasp for a detailed analysis in this study. These developments constitute part of this article by using a structured questionnaire in a market analysis which has been contacted for the Greek shipping industry for the period 2011-2015.

INTRODUCTION

Recent studies (Lyridis et al., 2005, McLellan 2006, Brown 2006, Spyriopoulos, Theotokas, 2007) have shown that administration systems in shipping are being developed continuously regarding two aspects following developments in the field of corporate management. Firstly, using modern methods of design programs and measurement of performance and results (Zampeta, 2010) and secondly with the adoption of main factors of corporate governance as defined by the Organization for Economic Co-operation and Development (OECD 2004, Zampeta, 2011). The fundamentals of corporate governance as developed in first stage on 1999, later on 2004 and finally on 2006 have been approved from countries of OECD as well as from some other countries. The fundamentals constitute one basic tool for the improvement of the legal, institutional, prescriptive framework of corporate governance and are focused not only in financial matters but in matters of organization and administration of listed companies in international stock exchanges including shipping companies worldwide.

Vicky Zampeta is a PhD Candidate at the University of Piraeus, Greece. She holds a Bachelor degree from the Department of International and European Studies (University of Piraeus) and an MSc Degree from the Department of Maritime Studies (University of Piraeus). During her MSc studies, she was honored with a Scholarship of Excellence by the Department of Maritime Studies and Propontis Foundation as the best ever succeeded performance. In July 2012, she was awarded with the Competitive Paper Award at the 14th Annual International Conference of the Global Business and Technology Association in New York, U.S.A.

Globalization on the other hand has affected the shipping industry to a great extent, in addition to the new developments in international trade which have changed the structure of the shipping industry especially during recession due to the fact that world production is diminishing. Maritime indices are closely related to macroeconomic developments and other financial indices as well, giving a grasp for a detailed analysis in this study.

These developments constitute part of this article. Factors of corporate governance have been included in the questions of a structured questionnaire for executive officers of shipping companies for the period 2011-2015 in order to verify the importance that the executive officers assign in these developments and the likely future adjustment of the Greek shipping companies in the herein-below characteristics. Furthermore it is worthwhile recording the views and trends emerging in the area of Greek shipping from senior executives and in terms of the impact of globalization and the recent financial crisis in the further development of Greek shipping.

LITERATURE REVIEW

The importance given to the subject of corporate governance reflected by the extensive and recent research on business issues such as organization, leadership, ownership structure, strategy development and financial management than ever with the principles of corporate governance. The most important findings are listed below:

Karpoff, Malatesta and Walkling, 1996, have found that there is lack of significant relationship between the mechanisms of corporate governance and profitability. They examined whether corporate governance mechanisms affect the profitability of firm acquisitions and they concluded that acquirers with more antitakeover provisions experience significantly lower announcement-period abnormal stock returns and also that acquirers operating in more competitive industries or separating the positions of CEO and chairman of the board experience higher abnormal announcement returns.

Shleifer and Vishny, 1997, they have presented a research on corporate governance, with special attention to the importance of legal protection of investors and of ownership concentration in corporate governance systems around the world. They have defined institutional corporate governance as a set of instruments that guarantee investors (shareholders, obligations holders and debt holders in general) a return on their investments, or else as an institutional design that make managerial interests converge with those of investors. Institutional instruments refer to the legal system, or to the set of laws and regulations that protect investor interests, to the enforcement system or judicial system that supports the laws and regulations, and to the market for corporate control, or the positive role of takeovers, that means that the financial market is effective in subtracting firm control from managers in the case of poor management.

Carleton, Nelson and Weisbach, 1998, the importance of corporate governance in strategic decision making situations was described by the above. It is analyzed the process of private negotiations between financial institutions and the companies they attempt to influence.

Supan and Koke, 2000, they have presented methodological issues in the econometric analysis of data with respect to corporate governance issues. It is a critical survey of the recent empirical literature on corporate governance – to show which methodological lessons can be learned for future empirical research in the field of corporate governance, paying particular attention to German institutions and data availability

Ireland, Hitt and Sirmon, 2003, have proved that entrepreneurship is the process of association resources to exploit market opportunities. Strategic entrepreneurship involves simultaneous opportunity-seeking and advantage-seeking behaviors and results in superior firm performance. On a relative basis, small, entrepreneurial ventures are effective in identifying opportunities but are less successful in developing competitive advantages needed to appropriate value from those opportunities. In contrast, large, established firms often are relatively more effective in establishing competitive advantages but are less able to identify

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new opportunities. An entrepreneurial mindset, an entrepreneurial culture and entrepreneurial leadership, the strategic management of resources and applying creativity to develop innovations are important dimensions of strategic entrepreneurship.

Goergen, Brewster and Wood 2007, have developed an incorrect application framework of corporate governance which reduces the growth of the company. Their article draws on evidence from a large scale survey of organizations to test the predictions of the theories on the relative strength of workers and managers across the different governance regimes. This evidence highlights the complex relationship between social institutions, legal traditions, political parties and electoral systems, on corporate governance regimes and the relative strength of unions and collective representation at workplace level, highlighting the limitations of the mainstream finance and economics rational-incentive based literature and the value of alternative socio-economic approaches.

Black, Kim, Jang and Park, 2008, have demonstrated strong correlation between corporate governance mechanisms, performance and capitalization of companies in emerging markets. It was provided evidence of an association between corporate governance and firm value, and more limited evidence that this relationship is likely to be causal. But there is very limited evidence on the channels through which governance affects value.

La Rocca, 2007, has focused mostly on the relation between capital structure and firm value and he proved that corporate governance mechanisms can create corporate value if used on a proper way. The controversial empirical results on this topic can be attributable to a lack of attention to the interaction between capital structure and other corporate governance variables. In fact, capital structure represents a corporate governance device that can preserve corporate governance efficiency and protect its ability to create value.

Giroud and Mueller, 2008, have defined that the enforcement of laws that set the framework of corporate governance inactivates mechanisms inherent in the companies and creates inefficiency of management issues and thus reduced efficiency of the company. More specifically, they found that while firms in non-competitive industries experience a substantial drop in operating performance, firms in competitive industries experience virtually no significant effect. Input costs, wages, and overhead costs all increase after the laws' passage, and only so in non-competitive industries. While firms in non-competitive industries experience a significant stock price decline, firms in competitive industries experience a small and insignificant stock price impact.

GLOBALIZATION

Globalization is the increasing interdependence, integration and friction between people and companies in various parts of the world. It is a general term that refers to a complex set of relations in the fields of economics, trade, society, technology, culture and politics. As mentioned earlier, globalization was primarily an important issue since the early 1980's. In any discussion regarding globalization, very few discussants deny the existence of the phenomenon. It is widely accepted that we all live in a globalize world.

A typical, although restrictive, definition is given by the International Monetary Fund, which emphasizes the growing economic interdependence of countries worldwide through increasing volume and variety of international trade in goods and services, free international capital flows, and rapid and widespread diffusion of technology. Although globalization is a very complex group of phenomena and relationships, however, one can distinguish various aspects like industrial globalization - the strengthening and expansion of multinational companies, financial globalization - the emergence of global financial markets and easier access to external financing for corporate and government borrowers, political globalization - the expansion of political interests in areas and countries that are not adjacent to the politically powerful states, the globalization of information - increasing the flow of information between geographically distant areas, cultural globalization - developing intercultural contacts which leads to a global culture.

The key question is whether globalization will eventually help economic development. This depends on increasing productivity, innovation and breadth of the market. Countries that grew faster were those who achieved a growth based on exports. The economies that tried to do so, protecting the economy grew at a lesser degree. The first economists could not understand that production is an interconnected relationship between developed and developing countries.

However, there are two major obstacles to rapid economic growth brought about through globalization. The first is due to geography. The profits of trade are strongly influenced by transport costs. The second is the risk that «trapped» by the producers of natural resources in an unsatisfactory trade specialization and blocks the improvements that the industry is essential to economic growth.

	ole 1: Ind				
COUNTRY	GLOBALIZATION INDEX				
	2007	2008	2009	2010	2011
Belgium	91.96	92.09	91.51	92.95	92.60
Austria	91.60	91.38	89.14	92.51	91.67
Netherlands	89.15	88.40	89.92	91.90	91.16
Sweden	89.89	90.02	88.68	89.75	89.26
Switzerland	85.53	88.60	89.87	90.55	88.97
Denmark	84.27	88.42	87.37	89.68	88.96
France	87.71	85.38	83.68	86.18	87.65
Hungary	81.15	82.52	85.15	87.00	87.62
Portugal	83.06	81.57	83.92	87.54	87.28
Ireland	83.09	79.82	91.02	86.92	86.45
Finland	84.84	84.65	84.19	87.31	86.43
Czech Republic	84.46	85.51	84.65	86.87	86.33
Canada	87.49	81.21	86.32	88.24	85.80
Luxemburg	74.18	72.88	86.28	85.84	85.62
Slovak Republic	72.58	75.82	81.24	85.07	85.30
Germany	82.48	83.01	81.75	84.16	85.10
Spain	82.52	82.73	82.94	85.71	84.71
Singapore	82.14	78.37	84.07	84.58	84.39
Norway	77.75	79.75	82.27	83.53	83.23
Cyprus	62.48	65.93	82.70	82.45	82.81
Head United Kingdom	89.29	86.67	79.31	80.18	81.68
Mustralia	80.91	77.35	80.49	83.82	81.40
United States	80.83	76.76	74.93	78.80	79.83
Italy	80.61	79.44	78.80	82.26	81.12
Greece	74.94	73.43	77.00	75.83	76.97
Malta	63.78	66.96	81.24	76.42	76.64
Croatia	69.30	70.17	80.61	76.85	75.95
 Japan 	64.22	60.91	63.54	68.16	69.13
• Turkey	63.45	69.96	66.42	64.91	64.04
🎑 Korea, Rep.	64.82	63.56	65.87	64.73	65.57

GLOBALIZATION INDEX

Source: KOF index of globalization

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The index of globalization (Table 1) is used to measure the degree of globalization of each economy in relation to four main components: personal, technological, political, and economic. Personal refers to international travel, tourism, the volume of international telephone calls, in cross-border transfers and remittances. The technology includes the number of users on the Internet, the number of internet service providers (servers), receptor Internet services (internet hosts) and generally anything related to technology services and skills. The policy is based mainly in the number of participants in international organizations, number of UN missions involving a country either by manpower or financial support, number of (selected) international conventions that the country has been ratified, balance transfers, trade balances, direct foreign investment (DFI) etc.

The measurement of the degree of globalization of a country is based on proxies. One of the most commonly used indicators measuring the degree of globalization is the A.T Kearney / Foreign Policy Magazine Globalization Index (the KFP index). Another well-known measure of the degree of globalization is the «KOF Index of Globalization (KOF Index of the Swiss Institute for Business Cycle Research of the Federal Institute of Technology).

CORPORATE GOVERNANCE

Corporate governance is a term that refers broadly to the rules, processes, or laws by which businesses are operated, regulated, and controlled. The term can refer to internal factors defined by the officers, stockholders or constitution of a corporation, as well as to external forces such as consumer groups, clients, and government regulations.

According to OECD (1999), corporate governance is defined as follows: "Corporate governance is the system by which business corporations are directed and controlled. The corporate governance structure specifies the distribution of rights and responsibilities among different participants in the corporation, such as, the board, managers, shareholders and other stakeholders, and spells out the rules and procedures for making decisions on corporate affairs. By doing this, it also provides the structure through which the company objectives are set, and the means of attaining those objectives and monitoring performance."

Well-defined and enforced corporate governance provides a structure that, at least in theory, works for the benefit of everyone concerned by ensuring that the enterprise adheres to accepted ethical standards and best practices as well as to formal laws. To that end, organizations have been formed at the regional, national, and global levels.

In recent years, corporate governance has received increased attention because of high-profile scandals involving abuse of corporate power and, in some cases, alleged criminal activity by corporate officers. An integral part of an effective corporate governance regime includes provisions for civil or criminal prosecution of individuals who conduct unethical or illegal acts in the name of the enterprise.

RESEARCH OBJECTIVE

The present study is based on the analysis of 56 questionnaires answered by senior executives of Greek shipping companies. The main objectives are to specify the way in which enterprises face the current financial crisis and the developments of international trade from 2011 up to 2015 due to globalization, as well as to develop a model of administrative structure with the inclusion of corporate governance in the form of certain elements in modern management policies, especially during financial crises and effective practices in business development for the same period. The introduction of the corporate governance elements may create positive perspectives in the development of Greek shipping companies in the captioned period. Lastly, the aim of this study is to assess the response of managers after the introduction of elements of corporate governance in their businesses and how this development will affect the progress and their economic performance.

DESCRIPTION OF SAMPLE AND METHODOLOGY

The questionnaire that was used for this research is constituted by 21 questions divided in 5 detailed subjects with 146 sub-questions on a scale of 5 levels which are 750 points of analysis (Zampeta 2011). The approved sample side consists of 56 replies by top level executives from the Greek shipping industry. Factor analysis has been used to evaluate the answers and create the appropriate factors according to factor analysis methodology.

From the questions collected within the time limits, the questionnaires have been analyzed accordingly increasing the number of the critical points of analysis to 42.000. The details aroused are constituted from 5 to 9 common characteristics with the use of factor analysis methodology and the results are considered extremely encouraging. The executive officers of this sample adopt the view of direct adoption of the concepts of corporate governance in shipping in a rate of 66, 07%.

Going one step further down the study analyses the results using multiple factor analysis. From the analysis of the sample of questionnaires with the method of factorial analysis useful conclusions have been raised regarding the executive officer's opinions who participated in the research with regard to the consequences of the globalization in the development of the Greek shipping companies. Simultaneously, useful conclusions have been raised regarding the strategies of development, the financing and the inclusion of corporate governance in the Greek shipping companies. High percentage (73, 21%) has been placed positively in the necessity of modern methods for the measurement and the performance of firms, as well as in the use of elements of corporate governance in the administration systems.

In order to understand better the methodology that was used in this research, the first question of the questionnaire is presented below analytically. The same method was used for the analysis of other questions that led to the selection of 27 factors. The factor analysis was significantly influenced by the quality of the available data. The variables should correlate well with each other (r > 0.20) but not to be too strong correlated (r < 0.80). Relations should be straight and not in extreme values. These variables should be measured at least at a scale of equal intervals. The total number of variables which will be analyzed should be 3 to 5 times more than their supported factors. The total number of variables / observations is also important (at least> 300). The SPSS provides two indicators for the quality control of data. The Index of Kaiser-Meyer-Olkin evaluate the adequacy of the sample by setting the index greater than 0.5 (KMO> 0.5) and the Bartlett's Test of Sphericity index assess whether the correlations between variables allow the application of factor analysis methodology (p < 0.05).

Regarding question 1, the indicators Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity (BTS) are presented in Table 2 as hereby calculated from the corresponding program of SPSS. The KMO index is 0.619 > 0.5 and the BTS index is 0.00 < 0.05. This result implies that the adequacy of the sample is satisfactory and the data is suitable for factor analysis with respect to question 1. The correlations between variables allow the application of factor analysis.

Table 2: KNO and	Bartiett's Test (for que	suon 1)
Kaiser-Meyer-Olkin Measure of	f Sampling Adequacy.	,619
Bartlett's Test of Sphericity	Approx. Chi-Square	126,503
	df	15
	Sig.	,000

Going one step further the methodology calculates the percentage of the total variance explained by factor analysis. For question 1, this percentage is 70.711% as shown in Table 3 which means that the choice of factors in question 1 was successful. How many players will eventually be exported is mainly based on the

Eigen-values. These factors having an Eigen-value above 1 (criterion Kaiser) and the factors that explain 70-80% of the total variance are also shown in Table 3.

Com pone nt	Initial E	eigenvalues		Extraction Loading		of Squared	Rotation Loadings	Sums	of	Squared
	Total	% of Variance	Cumulativ e %	Total	% of Variance	Cumulativ e %	Total	% Variance	of	Cumulati ve %
1	2,286	38,099	38,099	2,286	38,099	38,099	2,178	36,301		36,301
2	1,957	32,612	70,711	1,957	32,612	70,711	2,065	34,410		70,711
3	.720	12,000	82,711							
4	.585	9,758	92,469							
5	.290	4,835	97,304							
6	.162	2,696	100,000							

Table 3: Total Variance Explain	led
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Extraction Method: Principal Component Analysis.

Table 4 shows the values of each component of each factor which has been selected. Question 1 led to the selection of two factors. For the first factor, the values of components are the values shown in the second column of the table and for the second factor in the third column of Table 4.

Table 4: Component Matrix(a)				
	Component			
	1	2		
q1.1	.816	.418		
q1.2	.841	.358		
q1.3	.376	.654		
q1.4	209	.678		
q1.5	610	.646		
q1.6	596	.590		

Extraction Method: Principal Component Analysis.

The Communality indices of the extraction column represent the percentage of the variance of each question that interprets the factor analysis through the analysis of main components and according to the criterion set where the values should be greater than 0.50. For example, 84% of the variance associated with the first variable is the common variance between the sub-question 1 compared with the rest of the question 1. Similarly, 83.5% of the variance associated with the first variable is the common variance between the subquestion 2 compared with the rest of the question 2. Similarly 56.9% for the sub-question 3, 50,4% for the subquestion 4 etc., as shown in Table 5. Initially all the variation is considered as common (Initial Communalities = 1) due to the Principal Component Analysis.

Table 5: Communalities				
	Initial	Extraction		
q1.1	1.000	.840		
q1.2	1.000	.835		
q1.3	1.000	.569		
q1.4	1.000	.504		
q1.5	1.000	.790		
q1.6	1.000	.704		

Table 5. C. ----

Extraction Method: Principal Component Analysis.

The factor rotation aims to improve the detection and interpretation of the factors that describe the data leading to the achievement of a simple structure. In summary, the term of a simple structure means that there are clear loadings (structural coefficients) on the factors and each variable has high loadings on one factor

and low on other factors. The factor loadings constitute the element size of each variable in each factor (correlation index) which is key information for interpreting the factors, the higher the load the easier interpretation of the factor. An important loading is considered when the value is over 0.30. The main method of rotation is the orthogonal rotation which implies that there is no correlation between the factors and it is used for the rotation of the factors in this stady as shown in Table 6. Based on the results of Table 6 sub-questions 1, 2 and 3 of question 1 belong to component 1 and sub-questions 4, 5 and 6 to component 2.

Table 0: Rotated Component Matrix(a)				
	Component			
	1	2		
q1.1	.908	124		
q1.2	.894	188		
q1.3	.683	.321		
q1.4	.217	.676		
q1.5	130	.879		
q1.6	151	.825		

 Table 6: Rotated Component Matrix(a)

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. a Rotation converged in 3 iterations.

The criterion of Alpha-Cronbach is used for the reliability of the analysis. For question 1, the coefficient is reliable because Cronbach's Alpha is 0,717 > 0,7 as shown in Table 7 here below.

Table 7: Reliability St	tatistics (for th	e question 1)
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Cronbach's Alpha	N of Items
,717	3

CONCLUSIONS

The main objectives of this research were to identify the developments of the recent financial crisis and the process of globalization on growth, developments and prospects of the Greek shipping industry in the period 2011-2015. At the same time, the views of executives interviewed regarding specific issues of concern in this area, for example, the penetration elements of corporate governance in the administration of the Greek shipping companies and the use of modern models of administrative and operational structure were really interesting. From the questionnaire, additional evidence emerged that provide answers to questions rose with respect to the confirmation of objectives and identification of the conceptual factors emerged from factor analysis of 56 questionnaires. The initial analysis resulted in 27 factors.

The study is summarized resulting to some more findings. Corporate governance can affect the development of the Greek shipping industry. There are 2 factors related to corporate governance (referring to question 7). Some are considered as main factors of corporate governance and some as minor factors of corporate governance. Moreover, basic measures of corporate governance can be adopted by the Greek shipping companies for the increase of their productivity (referring to question 8). Regarding the administrative measures as they have been referred in this study some of them are considered as main administrative measures and some as minor administrative measures.

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