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Assessing cross-national invariance of the three-component model of organizational commitment

A cross-country study of university faculty

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Abstract

Purpose – The purpose of this paper is to examine affective commitment, normative commitment, and continuance commitment in a cross-national context to identify if the effect of country-specific cultural orientation on organizational commitment of faculty in higher education functions invariably in different countries.

Design/methodology/approach – The work expands on Meyer and Allen’s (1991) three-component model of organizational commitment. It includes relevant literature review on ten countries and the results of a survey of university faculty members, assessing their institutions’ human resources practices and their effect on organizational commitment. Basic descriptive statistics were performed on nominal and interval data, means, medians, and standard deviations were computed, and tests of mean equivalence, including ANOVA tests, were performed. In certain instances, Pearson and Spearman correlations were computed to ascertain correlation, and $\chi^2$ tests for randomized response were used, while Cronbach’s $\alpha$ test helped to establish survey instrument validity.

Findings – Though certain differences may exist between different countries and cultures with respect to the three-component model of organizational commitment, there is strong evidence of the existence of invariance and, thus, generalizability of the model across cultures.

Research limitations/implications – Cultural studies have focused on differences in organizational commitment at national levels. Further attempts to identify the universality of factors leading to organizational commitment should account for culture in the study of employee-related globalization issues in higher education institutes. Knowledge of cultural impact is also useful from a managerial perspective, and for the design of relevant strategies.

Practical implications – National context plays a major role in shaping the nature of educational institutions. This study brings out the need for a deeper understanding of invariance in organizational commitment (inter-alia, through the three-component model).

Originality/value – This study contributes to a better understanding of the relationship between organizational commitment and its various antecedents, including human resources management practices, for faculty in higher education institutes.

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Introduction
The drivers of change in higher education today include technology, changing demographics, economy (Futhey et al., 2010; Goldstein, 2006), globalization of economic, cultural, and political institutions, increasing interdependence of nations (Morey, 2004), and revolution in information and communication technology (Swist, and Kuswara, 2016). The changes have not only necessitated adoption of new teaching approaches in educational institutions, they have also resulted in a change in work culture and management styles in universities. The challenges are similar to that of business organizations – there has been not only an increase in pressure for accountability in resource usage from both internal and external bodies in higher education institutions (Hawkins, 2008) these institutions are now also required to adopt efficiency, responsiveness, and innovation in their approach (Charlier, and Croché, 2016). Thus, faculties in these institutions are faced with new expectations and a different work environment, to which they must adapt themselves. In the changing socio-economic scenario, several models have been recommended to redesign institutions. These include the entrepreneurial model (Wissem, 2008; Etzkowitz, 2008) and the “new managerialism” (Deem, 1998, 2001) model, among others. Managerialism is characterized by many highly formal organizational processes and systems, high accountability and standards, quick decision making, competitiveness, responsiveness and adaptability, and excellence (Kauffmann Foundation, 2008).

Though different universities have varying focus (Pratt, 2001; Jacob et al., 2003) and may view “excellence” differently (Tasopoulou et al., 2017; van Vught, 2008) at a national level; however, factors like traditions, hierarchies, and pressure groups (Bourdieu, 1999) play a major role in shaping the nature of higher education institutions. Thus, universities in different countries are expected to have a different work environment. Despite these local and national differences, educational institutions in general have a unique culture that provides an environment for independent thinking, autonomy, participation, and shared governance (Allen and Fifield, 1999; Rowley and Sherman, 2001). Certain academics in every educational institution are always seeking knowledge from varied sources (Bird and Allen, 1989). Stiles (2004) proposed three types of academic identities – separatist, integrationist, and hegemonist – that represent different sets of academic organization with separate institutional strategies, and further stated that when the values of academics did not correspond with the values of their “academic organization,” there arise problems.

In the networked and globalized world, universities today, like business organizations, have culturally diverse faculty members (Unum, 2013). In view of the varied challenges faced by the human resources departments in institutions of higher education, these organizations must have committed employees who can adapt to change and deliver results (Razali and Vrontis, 2010). Against this background, it is important to study organizational commitment of faculty in higher education. Since changes are taking place globally, so it becomes imperative to understand the phenomenon of organizational commitment across cultures. Meyer and Allen (1991) proposed organizational commitment as being made up of three components: affective commitment, normative commitment, and continuance commitment.

The purpose of this paper is to examine the invariance of affective commitment, normative commitment, and continuance commitment in a cross-national context and to identify if the effect of country-specific cultural orientation on organizational commitment of faculty in higher education functions invariably in different countries. The study attempts
to identify the universality of factors leading to organizational commitment. The research question to meet the goals of this study was:

RQ1. Is there a relationship between organizational commitment and its various antecedents for faculty in higher education?

Following, the hypothesis central to this study extends Meyer and Allen’s (1991) main thesis and their suggestion “that a complementary set of processes may be involved in the commitment-behavior link” (p. 62).

Theoretical framework
Porter et al. (1974) defined organizational commitment as the strength of an individual’s identification with and involvement in an organization. It is important to understand what leads to organizational commitment as it is related to two very important variables: the intention to leave an organization and actual withdrawal behavior (Allen and Meyer, 1996). Employee expectations of both intrinsic and extrinsic growth affect their commitment toward an organization. Thus, it has been shown that personal development opportunities (Liu and Wang, 2001), promotion and training (Long et al., 2002), and learning opportunities (Bashir and Long, 2015; Ng et al., 2006) affect organizational commitment. Such researchers suggest that personal and professional growths affect psychological attachment to employer (Weng et al., 2010).

Meyer and Allen’s (1991) three-component model of commitment explains that the commitment to an organization is a psychological state and has three distinct elements: affective commitment (emotional attachment to job); continuance commitment (fear of loss); and normative commitment (sense of obligation to stay).

According to Allen and Meyer (1990), experiences in the organization that “fulfill employees’ needs to feel comfortable within the organization and competent in the work role” (p. 4) develop affective commitment. Continuance commitment is mainly dependent on the investment that an employee has made in the organization (e.g. contribution to pension funds and other such major investments) and the perceived lack of alternative employment opportunities. Normative commitment is based more on early experiences of socialization and on the sense of obligation to stay (Allen and Meyer, 1996) as an organization might suffer due to the leaving of an employee.

Meyer et al. (2002) identified that all three forms of commitment are related negatively to withdrawal behavior and turnover. Affective commitment had the strongest and most positive correlations with favorable behaviors like attendance, performance, and organizational citizenship behavior. Normative commitment had somewhat lesser correlation with desirable outcomes, while continuance commitment was either unrelated or negatively related to such outcomes.

Most cultural studies have focused on the differences in organizational commitment at national levels. This theoretical framework provides the knowledge base for the design of the study, which study proposes to expand the existing theory by studying invariance in affective commitment, normative commitment, and continuance commitment in the faculty of universities in at least eight countries, and expand the three-component model of organizational commitment in a cross-national context. Theories that are considered universal and that are based upon assumption of similarity in behaviors of employees in different cultures are vulnerable to being “partially applicable” or “not applicable at all” in many countries. If culture is found to have an important impact upon the three-component model of organizational commitment, it should occupy an important place while studying employee-related globalization issues in institutes of higher education. The knowledge of cultural impact is also useful from a managerial perspective, while designing strategies.

Literature review
Commitment is one of the most widely studied phenomena in organizations. It is important to have committed employees, as employees with higher commitment perform better than
those having lesser commitment (Mowday et al., 1974). Moreover, commitment may also be seen as an indicator of organizational effectiveness (Schein, 1970; Steers, 1975). Commitment has been found to be negatively related to turnover (Cooper-Hakim and Viswesvaran, 2005; Robertson Cooper and Bank Workers Charity, 2017), absenteeism (Farrell and Stamm, 1988), and counterproductive behavior (Dalal, 2005), while it is positively related to job satisfaction (Cooper-Hakim and Viswesvaran, 2005), motivation (Mathieu and Zajac, 1990), and organizational citizenship behaviors (Riketta, 2002). It has been found that a positive relationship exists between commitment and certain values and beliefs of employees in an organization (McCaul et al., 1995; Mueller et al., 1992). In this regard, research by Robertson Cooper and Bank Workers Charity (2017) emphasizes the benefits of organizations shifting focus from work–life balance to work–life integration in recognition of the challenges of contemporary demands on work and life equally. Thus, organizational culture, management style, etc., affect commitment (Al-Sada et al., 2017; Yahaya and Ebrahim, 2016).

There are various employee-related factors that affect organizational commitment. Steers (1977) found that besides job characteristics, personal characteristics, and work experience also influence commitment. Commitment has been positively related to personal characteristics such as age (Mathieu and Zajac, 1990) and duration of service in a particular organization (Luthans et al., 1985; Kushman, 1992; Mathieu and Zajac, 1990). With respect to continuance commitment, age proved to be negatively related (Bayona-Sáez et al., 2009). An employee’s beliefs about organizational support (Eisenberger et al., 1990), fair treatment (McFarlin and Sweeney, 1992), equity in pay workload (Quirin et al., 2001), and enhancement of the feeling of personal competence and self-worth (Mathieu and Zajac, 1990; Steers, 1977) have been found to be strongly linked with organizational commitment. Employee perceptions of human resource management (HRM) practices also have an impact on organizational commitment (Steijn and Leisin, 2006).

There is evidence of organizational factors also affecting organizational commitment (Ayari-Gharbi et al., 2014). The presence of certain work characteristics like autonomy (Dunham et al., 1994) and job challenge (Meyer et al., 1998) might strengthen perceptions of personal competence, which is likely to lead to increased commitment (Mathieu and Zajac, 1990; Steers, 1977). Even promotion (Gaertner and Nollen, 1989), high compensation (McElroy, 2001), and opportunities for social interaction (Steers, 1977) lead to feelings of commitment. Other factors that research studies have found to be positively related to organizational commitment are job security (Yousef, 1998) and general working conditions (Painter and Akroyd, 1998; Richards et al., 1994).

Different studies indicate that both differences and similarities exist at cross-national level with respect to different aspects of affective commitment, normative commitment, and continuance commitment. For example, in a study of six European countries no difference was noted in affective commitment and continuance commitment in the sample, but substantial cross-national differences were found for normative commitment (Eisinga et al., 2010). Personal variables and group variables such as working atmosphere have been found to have a positive impact on affective commitment, while job-related characteristics did not appear to be significant in a study of Spanish academic staff at a university (Bayona-Sáez et al., 2009). However, a study of Dutch public sector employees revealed a relatively major importance of job and organizational characteristics and the relatively minor importance of personal characteristics for affective commitment (Steijn and Leisin, 2006). In Pakistani university, teachers distributive justice was more significantly related to organizational commitment than procedural justice (Chughtai and Zafar, 2006), while research studies in the USA have revealed that procedural justice is a stronger predictor of organizational commitment whereas distributive justice is more strongly related to personal outcomes, such as pay satisfaction (e.g. Folger and Konovsky, 1989). Commitment experienced by the faculty member was associated with the fit between the task, goal, or purpose of the job and the personal values of individuals in the USA and Canada (Henkin and Marchiori, 2003).
An equally important distinction to take into consideration is the difference between national culture and culture of the international university in that country. In this regard, Ayari-Gharbi et al. (2014) suggest that a higher education institution’s external environment (international academic market, host country culture, and expatriate teachers’ personal characteristics) has an influence on teachers’ organizational commitment. It also follows then that a well-established university will differ from a “younger” educational institution in that the former will likely have over time embraced elements of its host culture and better understand the demands of work and life in the country, and so this too plays a role in teachers’ commitment.

The bulk of the research and literature on organizational commitment has been company specific or nation specific, or focused on variance between countries. Therefore, in the era of globalization, an examination of international dynamics in terms of invariance is useful and timely for both contemporary research and practice (Vrontis and Thrassou, 2007).

**Cross-national literature review**

**Greece**

Greece is represented in most major studies of cross-cultural variation (Hofstede, 2001; House et al., 2002; Papalexandris, 2007; Papalexandris et al., 2009). Greek researchers have also focused their attention on organizational commitment at large quite early. This has resulted in a substantial volume of empirical evidence on organizational commitment from Greece, given the relatively small size and limited importance of this country, globally. So, despite the assertion of recent writings that organizational commitment has been rarely reported from a Greek perspective (Markovits et al., 2007; Dimitriades and Papalexandris, 2012), it appears that there is a considerable body of evidence on organizational commitment from this country. The – mostly Greek – researchers who have dealt with organizational commitment in Greece come from diverse disciplines and, therefore, have followed different approaches and methodologies on the study of organizational commitment, and they have also focused on different aspects of the topic.

Organizational commitment has attracted the interest of Greek management scholars early on, so there are numerous studies focusing on organizational commitment at large (Bourantas and Papalexandris, 1999), but also in relation to personality (Bourantas and Papalexandris, 1999), job satisfaction (Markovits et al., 2007), employee performance (Dimitriades and Papalexandris, 2012), organizational culture (Simosi and Xenikou, 2010), communication (Simosi, 2010; Mavro and Elenva, 2006), and leadership styles (Bourantas, 1988; Epitropaki, 2003; Epitropaki and Martin, 2005; Martin et al., 2005). The effect of specific HRM practices (Panagiotakopoulos, 2011; Katsikea et al., 2011; Nikandrou et al., 2008) and functions (Simosi, 2010; Katou and Bodhwar, 2008; Sahinidis and Bouris, 2008) on organizational commitment has also been repeatedly studied, while the effect of specific critical organizational events, such as mergers and acquisitions (Bourantas and Nicandrou, 1998) and change management (Tomprou et al., 2012; Sakola and Nikolaou, 2005), on commitment has also been studied in the Greek context.

At the same time, research on organizational commitment has focused on different sectors of the economy, as well as on different management functions. There have been studies focusing mainly on the public or private sector (Markovits et al., 2007), on banks (Dimitriades, 2011), on hotels (Glinia et al., 2004), and on smaller firms (Panagiotakopoulos, 2011). There have also been studies focusing on a specific work category/profession, most notably frontline personnel (Bozonelos and Kiamou, 2008) (such as salespeople (Stathakopoulos, 1996; Theodosiou and Katsikea, 2007; Panagotopoulos and Dimitriadis, 2009), retailers (Giannikis and Mihail, 2008), and hotel employees (Glinia et al., 2004)) who come into contact with customers. What is actually missing in the Greek literature on organizational commitment are international studies that would allow for comparisons with the experience from other countries. The gap in the Greek literature on organizational commitment is the lack of empirical evidence that would transcend Greek borders.
Italy

Studies on organizational commitment in Italy focus on Italian employment in the public and private sectors; but to our best knowledge, no studies analyze the topic among universities employees. A number of scholars have chosen Italy within a list of countries to account for cultural context as a variable affecting organizational commitment (Bresciani et al., 2012). Thus, for example, Italian nurses’ mean score for continuance commitment was the highest with respect to Hungary, the UK, and the USA, and values were found to be significantly correlated with continuance commitment; moreover, openness to change values and self-enhancement values were negatively correlated with affective commitment, whereas conservation values had a significant and positive correlation with affective commitment (Glazer et al., 2004).

Compared with Belgium, the Netherlands, and Sweden, in Italy subjective job insecurity was found to be negatively associated with organizational commitment (De Witte and Naswall, 2003). Finally, one study focused on the Italian labor market situation after the reforms (introduced in the 1990s) that introduced flexible arrangements and atypical work contracts (Gianecchini et al., 2008). It deals with normative commitment as regards the legislative framework that affects firms and individuals when choosing and managing employment contracts.

India

The liberalization and bold economic reforms initiated by the government of India in the early 1990s, coupled with advancements in information technology (IT), have affected the organizations and workforce in many ways. A shift is taking place in the pattern of HRM practices in Indian organizations from traditional administrative type to a more strategic and proactive type (Balasubramanian, 1995; Budhwar, 2009) that should manage change and be an employee champion (Srimannarayana, 2010).

Like in many other sectors, there has been an impressive growth in higher education in India in terms of increase in number of institutions/universities and enrollments (University Grants Commission, 2017). Just as in any other industry, HR practices seem to be important in educational institutions as well. Bhatnagar (2008) found a positive relationship between strategic HR roles and organizational commitment. It has been found that teachers’ job satisfaction is a multifaceted phenomenon (Sharma and Jyothi, 2006) that is critical to commitment (Mathieu and Zajac, 1990).

There are very few studies available on organizational commitment in university employees in the Indian context. Higher education institutes may be viewed as service-providing organizations. Findings in other service sector industries in India may be an indication towards those in institutes of higher education. In service sector organizations, excessive behavior controls may adversely affect the work performance. The type of activity requires the application of knowledge, intellectual skills, and strong internal motivation (Nigam, 2008). A case study of an Indian university showed that HR practices include creating a vision, linkages with agencies, training, resource generation, restructuring of curricula, decentralization of administration, and support to the disadvantaged sections. Direct and positive correlation was found between leadership behavior of heads of department and efficacy of employees in the Indian university (Tabbodi and Prahallada, 2009).

HRM practice can contribute significantly to organizational commitment, and performance appraisal has emerged as a significant predictor of organizational commitment in consultancy and research-based organizations (Shahnawaz and Juyal, 2006). Employee-friendly work environment, career development, development-oriented appraisal, and comprehensive training show a significant positive relationship with organizational commitment in India (Paul and Anantharaman, 2004). Bakhshi et al. (2009) reported a positive relationship between distributive and procedural justice with organizational commitment of medical college employees in India.
Bhatnagar (2005) identified a need to move from control-oriented to commitment-oriented work practices and to align configurational HR strategies to these high-commitment work practices. To foster organizational commitment, managers need to create an environment where employees can feel a sense of control over resources and decision making (Rama-Krishna, 2007). Psychological empowerment was found to influence affective and normative commitment positively in IT professionals in India (Jha, 2011). Bhatnagar (2008) proposed that psychological empowerment facilitates organizational learning capabilities, leading to higher commitment. Personal variables like age and tenure have been reported to have an impact on affective, continuance, and normative commitment at each career stage in India (Kaur and Sandhu, 2010). Kumar and Bakshi (2010) reported that the personality type of an employee has an impact on all the three forms of organizational commitment.

**Lebanon**

Lebanon is a middle eastern country that is unique among other Arab countries as to the freedom of education and work with no discrimination regarding religion, race, and gender. Nevertheless, Lebanese society is affected by its Arab environment and its religious and cultural factors, which drew researchers to focus on gender issues in the workplace, with limited research on job satisfaction and organizational commitment mainly applied to the Lebanese banking sector.

Crossman and Abou-Zaki (2003) found that job satisfaction is not related to an individual facet, and that satisfaction with one job facet might lead to satisfaction with another in commercial banks. On the other hand, Dirani (2009), in a study of employees of Lebanese commercial banks found a relationship between learning organization culture, employee job satisfaction, and organizational commitment. Dirani (2009) specified that dimensions like creating continuous learning and team learning are not significant predictors of organizational commitment, while dimensions like system connectedness, providing leadership, promoting inquiry and dialogue, and shared systems were significant predictor variables. Ballout (2009) found that career commitment was positively related to objective career success (salary level) and subjective career success (career satisfaction) among employees with moderate to high self-efficacy. In a study of the retail sector in Lebanon, Messarra and Karkoulian (2008) found that affective organizational commitment increased after a war crisis as compared to before the war crisis, continuance commitment decreased, and normative commitment increased, with no change in overall organizational commitment. In a similar study conducted in medium-size organizations in Lebanon, using the three-component model of Meyer and Allen (1997), Nasr (2010) reported that workplace stress is negatively correlated with affective commitment, positively slightly correlated with continuance commitment, and slightly positively correlated with normative commitment. Nasr (2010) added that career path is negatively related to normative commitment, is not correlated to affective commitment, and is not correlated to continuance commitment.

**Malaysia**

The Ministry of Higher Education in Malaysia is a government ministry that is responsible for determining the policies and direction of higher education in the country. Development of the higher education sector is being seen as a prerequisite to strong economic growth by the Government of Malaysia, articulating the effort to establish a world-class university system, to make the country a regional education hub, and to transform Malaysia into a knowledge-based economy (Ministry of Education, 2004). Rosdi and Harris (2011) and Rahman and Hanafiah (2002) found that professional commitment was best related to organizational normative commitment and least linked to
organizational continuance commitment. A more recent case study by Bashir and Long (2015) appears to corroborate these findings. Their survey of academic staff at a university in Malaysia found a significant and positive relationship between affective and normative commitment components of organizational commitment and variables related to training (availability, motivation, support by coworkers and supervisors, and benefits). The results, however, returned a non-significant relationship with continuance commitment.

Karim and Noor (2006), in a study on the academic librarian sector in Malaysia, found that employees who have strong affective commitment are more likely to remain in the organization because they want to, and will continue to work for the organization, when they agree with the organization’s goals. Meanwhile, the study of Rahman and Hanafiah (2002) showed that while a normative-orientated measure of professional commitment was strongest in the prediction of organizational normative commitment, an affectively inclined measure of professional commitment associated highly with organizational affective commitment. Besides, an employee with high continuance commitment is more likely to remain in the organization.

**Nigeria**

Emerging studies on organizational commitment in Nigeria have linked demographic, personal, psychological, organizational, and other variables as predictors of worker commitment. For instance, Tella et al. (2007) investigated the nexus between motivation, job satisfaction, and organizational commitment among library personnel and reported a positive correlation between work motivation and job satisfaction and a negative correlation between motivation and organizational commitment. The study reported that tenure has no relationship with organizational commitment. In another study, job satisfaction and organizational justice were identified as potent predictors of organizational commitment (Gbadamosi and Nwosu, 2011) among staff of a private university in Nigeria.

In a study on medical records personnel in university teaching hospitals in Nigeria, Igbeneghu and Popoola (2011) found that locus of control has a significant inverse relationship with organizational commitment, that job satisfaction has a significant positive relationship with organizational commitment, and that the combination of work locus of control and job satisfaction could significantly influence organizational commitment.

Salami (2008) reported that emotional intelligence, work-role salience, achievement motivation, job satisfaction, and all demographic factors except gender significantly predicted organizational commitment of the workers in Nigeria. Adeyemo (2000) reported a positive correlation between education and organizational commitment. A partial relationship exists between demographic factors and organizational commitment (Akintayo, 2003). In another study, “altruistic love” as an element of “workplace spirituality” was found to foster a high level of workers’ affective and normative commitment and low workers’ continuance commitment (Ahiauzu and Asawo, 2009). Balogun et al. (2010), in a study of organizational commitment among bank employees showed that job esteem is an established factor that can influence organizational commitment and that job status did not have significant influence on organizational commitment. Other studies (e.g. Popoola, 2006, 2007, 2009; Oladele, 2005; Opayemi, 2004; Taiwo, 2003) have equally identified many predictors of correlates of organizational commitment among Nigerian workers.

**Russia**

Organizational commitment theory as a separate field of study has not gained much interest among Russian scholars yet. Some papers reveal a new subject and study field for Russian business schools classified as “organizational commitment theories” that was developed in the USA. Buchko et al. (1997) examined whether US-based organizational commitment theories are applicable in Russian organizations and found that job involvement, job satisfaction, and organizational commitment of Russian workers is relative to US workers and data. These results indicate a positive relationship between US-based correlates of organizational commitment in a

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Russian context. A later study found out that the US-based theories on antecedents, correlates, and consequences of organizational commitment are generally applicable for Russian workers (Buchko et al., 1998). Cross-cultural research that tests US-based theories about organizational commitment was used in Ukrainian and Russian contexts later in 2011. “Soviet” and “post-Soviet” leadership were known as strict, controlling, and stubborn (Buchko et al., 1998). Lack of integrity was identified as a reason of post-Soviet managing system failures (Longenecker, 2001).

Scotland
Organizational commitment amongst university faculty is an area that has received some attention in the international research literature, but where more primary and focused research in the Scottish and broader UK context is needed. A review of the theoretical basis for research in this area (Ramiall, 2004) highlights the importance of the development of employee retention strategies from a sound theoretical base. Whilst this is certainly applicable to the university as an organization, empirical data remain sparse. Similarly, some work has considered the relationship between program knowledge and the value of work-family practices in organizational commitment, suggesting that the importance of employee perceptions of work-family practices is vital and a key part of organizational commitment (Haar and Spell, 2010). Whilst pertinent to university faculty, findings from Haar and Spell (2010) are more general in nature. In the same vein, a recent Good Day at Work report underlined personal responsibility and trust on the part of employees as key to making work-life integration work, but stressed that “this is supported by a strong psychological contract between the employer and employee based on a fair, clear agreement of what the employee is expected to deliver” (Robertson Cooper and Bank Workers Charity, 2017, p. 1). An approach that regards the two domains as complementary rather than in competition can thus diminish work-life stress.

Supplementary work from Nonis and Owens-Swift (2001) explored the link between academic dishonesty and propensity for workplace dishonesty amongst students. Whilst this study is slightly tangential – given that academic dishonesty could per se be regarded as workplace dishonesty amongst university faculty– the results are pertinent to this work. Specifically, the authors concluded that where students did not respect the climate of academic integrity in their place of study, the likelihood that they would respect professional integrity in their future workplace is decreased. This finding is important for two reasons, suggesting both a direct impact of lack of organizational commitment amongst university faculty and potentially an impact on future university faculty who are current students.

With the UK enjoying improved employment rates, organizations are hard pressed to attract and retain talent (Office for National Statistics, 2016). As such, national and international employers alike need to better understand employee needs and wants to inform their talent strategies and maintain a competitive edge (Robertson Cooper and Bank Workers Charity, 2017). Here again, research shows that high-trust organizations are mindful of the need for work-life balance and integration, which in turn improves employee performance (Unum, 2013).

South Africa
As a result of South Africa’s colonial and apartheid past, social inequality was a feature of every facet of South African existence but following South Africa’s 1994 democratic election, various transformation-oriented schemes have been suggested and implemented. These include higher education also (Badat, 2010).

Ngidi and Sibaya (2002) asserted that the South African educational system was in a “transitional stage.” They further argued that a lack of discipline in universities, unmotivated learners, retrenchments of white academics and retirement packages for academics, and large pupil-educator ratios all contribute to raising the stress levels of educators in South Africa.
Paulse (2005) added the management style of institution heads and corruption in certain academic institutions as causes of stress to educators in South Africa.

Ngidi and Sibaya (2002) and Steyn (2002) illustrated that academics in particular have to cope with "poor physical conditions" such as overcrowding, inadequate equipment, and lack of adequate facilities. Yousef (2000) argued that academics' tardiness, absenteeism, and turnover, which greatly affect an institution, are symptoms of undesirable organizational commitment and job dissatisfaction in South Africa.

The "endemic of dissatisfaction" in the academic profession identified by Khadijeh and Abrisham (2011) appears to be more pronounced in South African rural areas. Bull (2005) noted that in research done, nearly 50 percent of South African rural academics are dissatisfied with their working conditions. When compared to the private sector and positions requiring the same level of expertise, South African academics are inadequately remunerated (Badat, 2010). As result of this, many educators leave or consider leaving institutions for work in the private sector. Bull (2005) presented the following factors as being the possible causes of academic attrition: a lack of recognition, limited opportunities for promotion, excessive paperwork, lack of autonomy, lack of supplies, low pay, and stressful interpersonal interactions.

South African academics, like employees in other organizations, desire decent salaries and benefits, suitable working conditions, recognition, and promotion opportunities (Bull, 2005). There are poor academic results, poor conditions in many universities and an inferior quality of education that, in general, raise concerns regarding the attitudes of academics toward their jobs. Bagrain (2004) echoes this view when he points out that there is a "prevailing consensus" that claims that academics are not committed to their institutions. As a result of this assumption and general consensus, academics may not be as committed, derive lower satisfaction from their jobs, display higher absenteeism rates and their performance may be impeded (Bull, 2005).

Contrary to popular belief, perhaps exacerbated by the negative reports by the media as asserted by Bull (2005), Bagrain (2004) argues that on the whole, organizational commitment levels amongst academics in South Africa are high and that many surveyed academics disagreed that academics on the whole were "highly individualistic and self-interested employees" (p. 300). Bagrain (2004) affirmed that in this case, organizational commitment is not affected by factors such as downsizing (corporate disloyalty), portfolio careers, or new work values, etc., but rather the academic’s particular work conditions. Bagrain (2004) further affirmed in a study that over 70 percent of surveyed academics expressed their "intention to remain in South Africa" (p. 268).

In the North American region, earlier studies of organizational commitment typically looked for relationships between commitment levels of employees and various consequences of value to the organization, such as turnover, absenteeism, and job effort (Mathieu and Zajac, 1990; Riketta, 2002). In fact, between 1985 and 2000, over 70 articles, dissertations, and other empirical research dealing with the concept of organizational commitment had been published (Meyer et al., 2002). The more recent studies have looked at organizational commitment among boards of directors (incorporating corporate governance theories), flexible work schedules (telecommuters/telework), and volunteers rather than exclusive paid employees.

Stephens et al. (2004) found a strong association between the directors’ potential for participation in control, service, and resource dependence roles on the board, and affective and normative commitment. They found that those in elected leadership board roles possessed higher levels of affective and normative commitment. They also found that normative and
affective commitment enhances self-reported performance among volunteers. Hunton and Norman (2010) found that task performance was positively associated with organizational commitment, and organizational commitment mediated the relationship between the telework conditions and task performance. They administered the Meyer et al. (1993) revised three-component model of organizational commitment to investigate the impact of four specific telecommuting strategies on the affective, continuance, and normative commitments of medical coders in the health care industry. They found that the instrument exhibited satisfactory convergent and divergent validity in a longitudinal field setting.

A number of studies have also reported a significant correlation between affective organizational commitment and affective professional commitment of employees (Blau and Holladay, 2006; Dwivedula and Bredillet, 2010; Fu et al., 2009). Blau and Holladay (2006) found that affective commitment showed a stronger relationship to professional withdrawal intentions and to a lesser extent professional development activities. Fu et al. (2009) found that affective commitment has a positive direct effect on sales effort, whereas normative and continuance commitment do not. However, they also found that normative commitment plays a supporting role as it positively moderates the relationship between affective commitment and effort. Moreover, they found that job satisfaction has positive effects on both affective and normative commitment, but no significant effect on continuance commitment.

Methodology
In order to assess cross-national trends in HR practices for university employees, we received permission from Smeenk et al. (2006) to use the survey instrument cited in their edited text and utilized to assess organizational commitment among European university employees (the 2006 Data Archiving and Networking Services). This instrument was first used in 2004 to examine predictors and consequences of organizational commitment for a survey group of almost 9,600 respondents in six European countries.

Similarly, we utilized the survey with over 600 potential respondents in 14 universities spanning 10 countries around the world (USA, Lebanon, Greece, Malaysia, South Africa, India, Nigeria, UK/Scotland, Italy, and Russia). To deploy this survey instrument, we employed an online survey tool, SurveyMonkey (www.surveymonkey.com), in early 2012. Both e-mail invitations from the survey tool and personal, individual e-mails – with a link to the survey – were sent in order to collect responses. This was done because some universities allowed us to send e-mails to potential respondents directly while other universities preferred to have an internal resource send the link to the survey to potential respondents in order to avoid “spam” perceptions and to increase response probability.

A total of four e-mail-based invitations were sent from the survey tool from March 1, 2012 to May 1, 2012. Both partial and complete survey responses were captured, and all results were de-identified before analysis to ensure confidentiality. Only the institution from which a respondent came was known to the data analyst. Specific statistics regarding sample sizes and response rates are shown in the next section as well as overall results from statistical analyses performed.

Once the survey was closed in May 2012, summary statistical analyses were conducted to determine key trends and significant differences in response behaviors by region. Analyses were conducted using both the “response summary” features of SurveyMonkey (within the web-based survey tool environment) and STATA 11 statistical software.

Results
Sample characteristics
A total of 616 e-mail-based invitations were distributed to potential respondents across 14 universities pre-selected and pre-approved by the research team. Pre-approval was
necessary to ensure e-mail acceptance and so some university HR heads could inform potential respondents of the survey/research validity/university approval. In some cases, universities wished to distribute the survey, themselves, via e-mail – instead of having respondents receive an e-mail directly from the survey tool. This was facilitated by providing university administrators with a link to the survey that could then be e-mailed by someone within the university. Again, this helped to increase the probability of survey acceptance and completion by coming from someone “inside” the university instead of from SurveyMonkey directly. Statistics for survey responses are shown as:

(1) Total survey e-mails sent (from SurveyMonkey; does not include e-mails with link sent by others) (616):
- non-response (after three additional reminder e-mails) (506); and
- total responses received from SurveyMonkey invitations (110):
  - completed surveys (70); and
  - partial surveys (40).

(2) Additional surveys received from e-mail-based links sent to potential respondents (29):
- completed surveys (18); and
- partial surveys (11).

Thus, overall, we received 139 surveys, or a response rate of approximately 22.6 percent. This is only an approximation since we do not know how many e-mails with survey links were sent to potential respondents outside of the SurveyMonkey tool.

Of the 139 survey results received, 88 of them were completed in full (63.3 percent of those received; 14.3 percent of total surveys distributed by the SurveyMonkey tool). Of the 14 universities surveyed, 11 were represented in the responses. Note that six respondents did not answer this first question (university affiliation), and two entered “other” as their university. These eight responses were discarded and, as such, a total sample size of 131 responses was analyzed as follows.

<table>
<thead>
<tr>
<th>University</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athens University of Economics and Business (Greece)</td>
<td>41</td>
</tr>
<tr>
<td>Bryant University (USA)</td>
<td>16</td>
</tr>
<tr>
<td>Lebanese American University (Lebanon)</td>
<td>0</td>
</tr>
<tr>
<td>MARA University of Technology (Malaysia)</td>
<td>2</td>
</tr>
<tr>
<td>Motilal Nehru National Institute of Technology (India)</td>
<td>15</td>
</tr>
<tr>
<td>Nelson Mandela Metropolitan University (South Africa)</td>
<td>11</td>
</tr>
<tr>
<td>Nnamdi Azikiwe University (Nigeria)</td>
<td>8</td>
</tr>
<tr>
<td>Queen Margaret University (Scotland)</td>
<td>0</td>
</tr>
<tr>
<td>Teguh SNR Management Consulting (Malaysia)</td>
<td>0</td>
</tr>
<tr>
<td>Universiti Putra Malaysia UPM (Malaysia)</td>
<td>4</td>
</tr>
<tr>
<td>University Kebangsaan (Malaysia)</td>
<td>4</td>
</tr>
<tr>
<td>University of Bergamo (Italy)</td>
<td>19</td>
</tr>
<tr>
<td>University of Malaya (Malaysia)</td>
<td>1</td>
</tr>
<tr>
<td>Washburn University (USA)</td>
<td>12</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
</tr>
<tr>
<td>Unanswered</td>
<td>6</td>
</tr>
</tbody>
</table>
Note that even though only 88 of the 131 total survey responses assessed were completed in full, we chose to use partial survey responses in order to increase sample sizes for certain questions.

Given the relatively low per-university response counts, we determined that further cross-tabulations – and, in fact, cross-country comparisons of detailed subsets – may not be possible. Instead, we decided to treat the entire response group as a single sample and to only note, where sample sizes and significance permit, specific interesting cross-country or cross-continent differences. In general, however, low sample-size characteristics make matrix modeling of such cross-country comparisons impossible. Cross-continent comparisons are possible; however, we believe such a cross-tabulation is too general to be of any specific interest here.

Faculty composition, management, and work ethic

Across the survey group, the vast majority of respondents were assistant professors ($n = 34$), associate professors ($n = 28$), lecturers ($n = 28$), or full professors ($n = 25$). The average year of initial employment at their universities, 1984, indicates long tenures by some respondents (28 years as of 2012; $n = 126$). However, average years in current role is much shorter at seven years ($n = 126$). These long-term employees work, on average, 37.9 hours per week ($n = 126$).

The majority of respondents who identified their gender ($n = 102$) responded as male (71 percent), and the average age of the respondent pool was 43.6 years (again, of the 102 respondents who disclosed their ages). Of the 102 respondents who answered questions about publication rates over the past five years, an average of 137 articles were published in peer-reviewed journals, 239 in non-refereed professional or trade journals, 267 chapters in books, and 285 texts or other books. These 102 respondents also reported that almost 300 research reports, on average, had been disseminated by them to internal colleagues and/or external clients.

Some interesting trends emerged when we studied participants’ responses to questions involving sizes and pressures of faculty members over time. When asked whether a statement applied in a range from “not at all” to “completely,” most responses, in aggregate ($n = 119$), were middle-of-the-road (i.e. “applies to some extent”). However, some strong agreements, either “agree to a large extent” or “agree completely,” were seen with these statements:

- the faculty is under pressure to reduce expenditures ($n = 65$ for top two categories of agreement);
- numbers of enrollments to the faculty has increased since I started working here ($n = 57$); and
- faculty is under pressure to compete with similar faculties at other universities ($n = 56$).

Conversely, strong negative agreement (“does not apply at all” or “applies very little”) was seen with these statements:

- the faculty has increasingly applied private sector management techniques, such as performance management and efficiency controlling ($n = 66$ for bottom two categories of agreement); and
- in the faculty, the evaluation of teaching and research is mainly carried out with assessment criteria set by “the managers” rather than by “peers” ($n = 52$).

Thus, we note that while faculties are increasing in size, they are also being forced to spend less while competing with other faculties at competing schools. This may have led to more private sector performance management emphasis – and “scorecarding” – but with evaluation criteria still largely driven by peers, not managers. This is an interesting result in
that these “business” pressures are being applied and measured, using outside/private sector techniques, but measured largely by internal, peer-driven criteria. This may point to a disconnect between the teaching and research goals/success criteria set by academic peers and the overarching, external business goals being driven more and more into faculty performance management and measurement.

When asked a series of questions regarding attitudes toward work ethics – including how hard they work, under what conditions they work, etc. (Question 7) – respondents almost always replied in one of the top two agreement areas (“agree somewhat” and “totally agree”). Of the 114 responses to this question, almost universal agreement was seen regarding the importance of doing a good job “as best as one can” (92.1 percent totally agree). Fortunately, too, over half of respondents (51.8 percent) replied “totally agree” that they have the possibility of independent thought in their jobs.

However, interesting counterpoints were seen in terms of faculty modally replying that they “agree somewhat” have to work hard even if they do not like the work, that they do things that should be done in different ways, and/or that they work under incompatible policies and guidelines. These are important to note since even if the faculty perceive work freedom and opportunities for independent thought, they have these perceptions in the context of conflicting policies, and, at times, while having to do work they do not enjoy or that may not be completed in optimal ways. We believe these results, when coupled with those from Question 6, point to an interesting conundrum: the more that faculties are “performance managed,” while setting their own success criteria for teaching and research, the more they may perceive conflicting/confusing policies, suboptimal processes, and the need to do undesirable work in an otherwise “enjoyable” environment that promotes job freedom and independent thought.

While it is no secret that many faculty members enjoy the relative freedoms of academia, it is clear that some (private sector) management approaches stifle, somewhat, these freedoms and historically carefree attitudes relative to (business) “controls” of academic departments, budgets, reporting structures, and personnel decisions. Increasingly more common are more strict budgetary and fiscal controls, hiring guidelines and checks-and-balances, and oversight for departmental (and perhaps teaching and research) administration. More and more universities are implementing grant, teaching, and research evaluation programs – to more tightly control spending and quality in these areas – and to be more “lean” in terms of spending, staffing, and administrative costs related to core teaching and research duties of faculty. Such conflict is seen, especially in long-tenured faculty, between academic freedom and the need for improved/stricter controls.

Faculty salaries, on-the-job training, and sense of community
In terms of salaries and on-the-job training, roughly half of respondents (56 of 111) noted that their salaries were inferior to their levels of effort. Further, most noted that they received on-the-job training not directly related to their current job roles. Perhaps this indicates, again, that faculty are spending more time on administrative tasks – and the training required to complete them – than on skills and tasks more directly related to their perceived focus (of, presumably, teaching and research). To this point, when asked about freedoms in defining job roles, etc., between 28 and 39 percent (n = 111) “agreed to a large extent” that they determined their own work flows, could initiate new teaching and research efforts, and felt that employees should be more involved in day-to-day operational decisions. Thus, again, we see evidence that while faculty and administrators may have solid control over their own spheres of influence and job scopes, broader administrative and decision-making authority and involvement is likely reserved for others.

Of the 107 who replied to questions regarding involvement within (and beyond) the scopes of their departments, over 74 percent noted that they felt a part of their departments (“agree somewhat” or “agree completely”). Similar response profiles were noted regarding feeling
membership in their faculties/administration, about feeling informed about what is going on in
the faculty, and about feeling informed about changes that affect their jobs. However, lower
agreement was seen among the group when it came to doing enough to avoid faculty layoffs.
This again points to potential control conflicts between overall administration and decision
making and more focused, goal/task-oriented accomplishment and information.

When asked to pinpoint views of top management at their institutions, 107 participants
answered, and over a third (34.6 percent) felt that the middle management had little care for
employees or for the broader interests of the organization. The second most frequent response
(28.0 percent) indicated that management cared nothing of employees and only about the
broad institutional needs. Thus, almost two-thirds of respondents noted little care of
management for employee interests (and only marginal focus on institutional needs).
Encouraging, though, was the 24.3 percent of respondents who noted that management was
“ideal” in the sense that both employees and institutional needs were embraced well and equally.

Faculty performance and collegiality
In contrast, though, were the positive viewpoints that management shared with respect to
how they were assessed, in terms of performance, and their sense of collegiality – and of
community – with each other, in terms of personal relationships, dependence, and “fair
 treatment” of each other. In total, 49 percent of the 105 respondents asked to compare a focus
on “control and an emphasis on accountability and performance measurement” vs one on
“individual strengths and weaknesses with development of competencies” said the former
(emphasis on control and performance measurement) was either dominant or prevalent, in
terms of styles, with the remaining respondents noting that these two styles were either used
in equal measure (27 percent, rounded) or that the latter treatment (competence development)
was more prevalent (25 percent, rounded). Thus, faculty are still split, somewhat, on whether
a “command and control” system of leadership prevails over a more competence building,
learning-focused organization that prevails in today’s universities.

However, when asked to respond to questions regarding dependence on coworkers,
friendships, and helping to assist with the larger aims of the faculty, the majority of
respondents (n = 105) either agreed somewhat or totally agreed that their contributions were
important for the larger aims of the faculty (79 percent), they were able to talk to colleagues
about more than just business (77 percent), and that they had the opportunity to support their
colleagues in their research and teaching (76 percent). However, the two lowest-ranked
responses – colleagues’ trust of each other (41 percent top two boxes) and a sense that
everyone is treated fairly on the faculty (31 percent) – indicate that trust and fairness remain
issues, at an organizational level, even though friendships and support were highly rated. This
may indicate that while colleagues may enjoy working with each other and enjoy helping each
other, a sense of trust and fairness is not always evident – or evidenced – from the same
colleagues or from managers/leaders. Another lower-ranked response – about the faculty
having clear rules that everyone is expected to follow – also reinforces the relative lack of
“fairness” (or perception of it) and that, even though standard management practices may be
imported into operations, not everyone may be seen as following them consistently.

External attitudes and job security
Finally, when 104 respondents answered questions regarding their faculty/administration job
satisfaction and security, some interesting – and often personal – comments and trends
emerged. The highest-rated responses, when considering the top two boxes of “agree
somewhat” and “totally agree,” included enjoyment of discussing faculty with people outside
of the faculty (69 percent), being happy to spend the rest of their careers with the faculty
(62 percent), finding it difficult to leave the faculty right now (61 percent), and being afraid of
what might happen if they quit their jobs without having another one lined up (68 percent).
These results seem to indicate that although faculty are quite content where they are – and praise their situations to outsiders – they may be afraid, privately, about the job market in terms of finding another position either by choice or by necessity. However, the same respondents seemed relatively comfortable in their options to pursue other opportunities given relative disagreement with statements regarding moving from organization to organization too often (51 percent totally disagreed or disagreed somewhat), being able to leave the faculty at no cost right now (56 percent), or having too few options to consider leaving (40 percent). This is an interesting contradiction in the results; the same faculty who may be afraid of what to do if their jobs were to disappear also disagree that there are no other options or that it would be difficult to jump to another position. We believe that this contradiction is nothing more, however, than faculty having, perhaps, private fears about job security, but rather public displays of optionality when it comes to needing another position. This is notable, though, for managers and leaders who are seeking to build more secure organizations while also promoting skill development and competency building in the event that other opportunities come along for employees.

Discussion
The study examines the phenomenon of organizational commitment in the cross-national or cross-cultural context. The results imply that, in general, there does exist invariance in affective commitment, continuance commitment, and normative commitment across cultures. A trend emerged in the study regarding the impact of various factors – like compensation, training, management style, autonomy, fairness, trust participation in decision making – on organizational commitment, which points to some degree of similarity in attitude of employees toward organizational commitment in different cultures. In the background, there exists the phenomenon of globalization and the changing management practices with increasing emphasis on private sector practices, particularly, and focus on performance. Continuance commitment was found to be high across the countries studied for which data were collected and the need for security emerged high across the cultures. Affective commitment appeared to be high, but globalization and resultant changes (need to prove excellence, reduce expenditures, etc.) in organizations seem to be having an impact on faculty attitudes of organizational commitment. Normative commitment appeared to be high among the faculty members, though it was moderated by perceptions of trust and fair treatment in the workplace. The study brings out the need for a deeper understanding of invariance in organizational commitment (inter-alia, through the three-component model), and in particular contributes to our understanding of the relationship between organizational commitment and its various antecedents, including HRM practices, for faculty in higher education.

While this study compared statistics between the countries rather than conduct cross-country analyses, the findings have important implications for both theory and practice. Particularly, they imply that though certain differences may exist between different countries and cultures with respect to Meyer and Allen’s three-component model of organizational commitment, there is strong evidence of the existence of invariance and thus generalizability of the model across cultures. Personal cultural orientation does not seem to affect affective commitment, normative commitment, and continuance commitment too much. Also, the three-component model cannot be examined in isolation without considering the antecedents as discussed in the study, including the background context, which here is globalization.

With regard to practice, the pattern of affective commitment, continuance commitment, and normative commitment that our research highlights has implications for managers. The findings seek to help institutes of higher education in adopting a more strategic approach toward designing policies for faculty members. HR managers need to be taking care of aspects, such as salary, training, job security, and fairness at work. Results of the present study corroborate the findings of previous research (Dunham et al., 1994; Allen and Fifield, 1999; Rowley and
Sherman, 2001) that faculty members appreciate freedom at work. Policies need to be designed to strike a balance between independence at work and “performance focus” resulting from increased competition. Management must take such actions and design such policies as can make employees feel “connected” with the organization and get a feeling that management is concerned with employee interests. In this area and as with the findings of other studies, so too this research can support policymaking in the education sector through enhanced understanding of the influence of leadership style and organizational culture on the motivation, satisfaction, and commitment of employees (Al-Sada et al., 2017). Further, the public policy that supports research and career development for national as well as expatriate faculty can prove a major contribution to organizational commitment (Ayari-Gharbi et al., 2014). Efforts need to be made to increase an environment of trust and fairness. Today, when employees are coming from diverse cultural backgrounds in the organizations, the findings of the study indicate that to some extent the same policies may work for a culturally diverse workforce for increasing commitment. Since commitment is negatively related to withdrawal and turnover (Allen and Meyer, 1996) and positively related to job performance (e.g. Meyer et al., 1989), appropriate HR policies may help in retaining the talented faculty members and enhancing their performance in universities.

The results of the study also have implications for employees. The findings indicate that the impact of globalization has been felt on work practices in universities, irrespective of the country. Faculty members cannot avoid the changes in the workplace and, therefore, need to be more adaptive to a changing work environment and management practices to enhance their commitment toward their organization. Since affective commitment has been found to be related to employee stress and work-family conflict outcomes (Meyer et al., 2002), having high commitment may also improve overall quality of life of employees.

**Conclusion and recommendations for further research**

Although we did not receive enough responses to warrant a true cross-national study of hiring and employment trends and attitudes among university faculty and administrators, we were able to note some surprisingly consistent responses regarding compensation, workplace attitudes, work ethics, sense of community and collegiality, and the interesting duality of private vs public views of job security. Given that the response cohort was relatively senior – in terms of professorial ranking, publication success, years of faculty/administration employment, and sheer age – we find some of the results expected (e.g. attitudes toward outside “management” techniques), but others remarkable (e.g. job security and sense of fairness/equity in the administration).

Moving forward, there is a need for more in-depth research regarding specific, national-level behaviors and attitudes to see if any of this study’s results may differ by cultural orientation, university leadership style, etc. Further, the longitudinal research – by looking at results of the same cohort of respondents over time – would be helpful to see if attitudes change as job roles, seniority, and exposure to more management duties tempers any of these outcomes. In addition, a stratified sampling approach – comparing different job grades and faculty levels over time – could also lead to interesting comparisons and contrasts among belief systems of junior vs senior faculty, administrator vs faculty roles, and teaching vs research-oriented faculty.

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The internal and external determinants of the intermediation margin of banks across MENA countries

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Abstract

Purpose – The purpose of this paper is to conduct a comparative analysis of internal and external determinants of bank’s performance in Middle East and North Africa (MENA) countries.

Design/methodology/approach – The authors use a static unbalanced annual panel data of banks operating in eight countries pertaining to the MENA region (Tunisia, Bahrain, Egypt, Jordan, Qatar, Lebanon, Kingdom of Saudi Arabia and United Arab Emirates) over the period from 1999 to 2014.

Findings – The findings reveal that the determinants of intermediation margins in the MENA region differ across countries. Overall, banks interest margins are explained by both bank-specific variables and macroeconomic factors except for Saudi Arabia in which interest margins exclusively depend on bank-specific factors.

Originality/value – These findings contribute to the clarification and critical analysis of the current state of bank’s performance in some countries located in MENA region, which would have several crucial policy implications.

Keywords Bank performance, Net interest margin, MENA region

1. Introduction

Banking sector performance deserves the attention of both theoretical and empirical studies in developed as well as developing countries. Indeed, financial intermediaries play a crucial role in the channeling of funds from lenders to borrowers in order to achieve economic growth (Maudos and Guevara, 2004).

The financial intermediation is expected to be more important in bank-based economies given that the private sector rely heavily on bank loans. MENA region is classified as a bank-based economy. Consequently, a great number in the region witnessed broad reforms in the late 1990s. Before this date, Lebanon had the more liberalized financial sector compared to the rest of the region. In the other countries, they had a stated dominated financial sector (Ben Naceur and Omran, 2011). According to the IMF: “Some countries have well-developed banking sectors, such as the countries of the Gulf Cooperation Council (GCC, comprising Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates or UAE), Lebanon, and Jordan. Others, such as Egypt, Morocco, and Tunisia, have made important advances over the past three decades” (Creane et al., 2006).

The efficiency of financial intermediation contributes to the economic growth (Levine, 1997; Demirgüç-Kunt and Huizinga, 1999, Drakos, 2003), which is frequently measured by the net interest margin (NIM) – also called bankers’ mark-up (Allen, 1988). The NIM is defined as the spread between the interest income (interest revenue) and interest expenses (liabilities), divided by the earnings assets.
The examination of the existing empirical literature on the determinants of bank performance reveals that most previous studies on this topic have focused on Europe, USA and south of America, while only few studies have analyzed some aspects of banks’ performance in the MENA banking system. Therefore, this research attempts to widen the scope and fills the gap of the existent literature by exploring the internal and external factors explaining bank performance measured by the NIMs. This paper employs bank-level data from ten eight countries pertaining to the MENA region namely: Tunisia, Bahrain, Egypt, Jordan, Qatar, Lebanon, Kingdom of Saudi Arabia (KSA) and United Arab Emirates, for the period from 1999 to 2014.

The contributions of this paper to the banking and finance literature are threefold. First, we contribute to the existing literature by analyzing the determinants of banks’ profitability on eight countries pertaining to the MENA region. The choice of the MENA region is not arbitrary. According to Olson and Zoubi (2011), the MENA region represents a bridge between Europe and Asia and has a fast growth in terms of population and wealth and its banking sector is relatively young. Thus, investigating bank margins in this region seems interesting. Second, the interest margin represents the financial intermediation cost of banks and high levels of margins can adversely affect the development process in these countries. Third, the specificity of MENA countries (ideological considerations) may lead to specific determinants of bank margins compared to European and US banks.

The remainder of this paper is organized as follows. Section 2 presents previous theoretical and empirical studies on the determinants of bank margins. Section 3 presents data, specifies the model and reports the estimation results. Section 4 concludes the paper.

2. Literature review
The banking performance literature includes two broad approaches: the accounting-based research and the economics-based research (Olson and Zoubi, 2011).

The accounting-based studies focused primarily on the use of information provided from financial statements. The researchers have measured bank performance using either return on assets (ROA), return on equity (ROE) or NIM.

However, the limitations addressed to this method coupled with advances in methods used social sciences (parametric and non-parametric methods) have led to the development of alternate method called the economics-based approach.

The theoretical starting point of the determinants of banks’ interest rate was the Monti–Klein model (Klein, 1971; Monti, 1972) of a monopolistic bank, under the assumptions of risk neutrality, perfect information, no switching nor adjustment costs, no joint production of loans and deposits nor cross-subsidization between loans and deposits (Marotta, 2009). Banks have some pricing powers; they can maximize their profits by setting the prices of loan and deposit markets. The spread between the deposit rate and the market interest rate is the opportunity cost of deposits for depositors and profitability for banks (Gropp et al., 2014).

Ho and Saunders (1981) originally propose the reference framework of the determinants of bank interest margins. The authors use the financial literature on broker bid and ask spreads to explain bank spreads. The important contribution of the “dealership approach” is that the bank is viewed as a dynamic dealer in the credit market that provides intermediary services to their customers (Ho and Saunders, 1981; Ho and Stoll, 1981; Allen, 1988). The representative of the bank is viewed as a risk-averse agent, monopolist dealer in cash. The bank acts as an intermediary between the demand and the supply sides of funds. In more details, bank receives deposit funds at random intervals, which afterward utilize to satisfy loan requests. Technically, the risk aversion of the bank’s agent is the factor that creates the interest margins. As a result, a rational
risk-averse optimizing dealer will change his bid–ask quotations that permit to minimize excessive demand for risky loans or insufficient supply of deposits (Drakos, 2003).

Several further extensions were made to the dealership model. Allen (1988) extends this model by introducing different types of credits and deposits. According to Allen (1988), banks are treated as passive dealers similar to dealers on securities exchanges. Therefore, they change the prices offered to manipulate demand for their products (loans and deposits). Interest spreads are set due to the monopoly power and the neutrality of risk. In fact, spreads are minimized because there is no need for a risk premium to compensate the uncertainty for the arrival of deposits and request for loans (Were and Wambua, 2014).

Valverde and Fernandez (2007) extend the Ho–Saunders model to a multi-output framework. They argue that banks take into account the income earned from non-traditional activities when they set their interest spread.

Angbazo (1997) tests the dealership model for only single stage, and includes credit risk and interest rate risk to the original model. He finds that banks with more risky loans and higher interest rate risk exposure exhibit higher NIMs. Saunders and Schumacher (2000) estimate the determinants of NIMs for six industrial European countries and the USA. The authors support the dealership model and find that bank spreads are positively correlated with the interest rate volatility. They also find that macroeconomic fluctuations and regulation have a significant effect on NIMs.

Doliente (2005) applies the Ho–Saunders’ (1981) model to assess the determinants of the NIMs of commercial banks located in four Southeast Asian countries. He finds that collaterals play an important role in reducing the spread between lending and deposit rates. In contrast, banks with higher operating expenses and higher level of capitalization tend to operate with higher intermediation margins.

Hawtrey and Liang (2008) analyze the impact of industry level on bank interest margins in a sample of 14 OECD countries. They find that bank interest margins are positively influenced by many factors such as market power, operating costs, risk aversion, volatility of the interest rate, credit risk, opportunity cost and implicit interest rates on deposits.

Despite the usefulness of dealership model and its extensions in determining the factors that affect NIM, many critics were addressed to these models (Saad and El-Moussawi, 2012). The vision of the dealership is too restrictive and fails to consider some aspects of banking specifications, especially the role played by the production of the bank in its financial intermediation activities (Sealey and Lindley, 1977; Saad and El-Moussawi, 2012).

Another research stream called the intermediation approach introduced by Sealey and Lindley (1977) view financial institutions as mediators between savers and investors. As a consequence, the underlying philosophy of this approach is that banks produce intermediation services in economy and their main objective is to create outputs (loans, securities and investment), through the collection of liabilities (including deposits), labor and capital as inputs. Therefore, the economics-based analysis of cost/efficiency begins by adopting more sophisticated econometrics methods such as non-parametric (e.g. DEA) and parametric (e.g. stochastic frontier approach).

A large trend of empirical literature is available on the determinants of banks profitability globally. However, a few number of studies have been carried out on the MENA banking system. In fact, using a sample of 173 banks from ten MENA countries over a period from 1988 to 2005 period, Ben Naceur and Omran (2011) provide evidence that bank-specific characteristics have a positive impact on NIM and regarding macroeconomic indicators only inflation have a significant impact. Ben Khediri and Ben Khediri (2009) explored Islamic bank profitability in the MENA region; they studied bank profitability by examining various variables from 1999 to 2006. The empirical results show that capitalization, management efficiency, economic growth and inflation improve bank profitability. Kamarudin et al. (2016) study the effect of corporate governance on
bank efficiency in Gulf Cooperation Council (GCC) countries during the period 2007–2011. The authors find that regulatory quality influence Islamic banks, while political stability and control of corruption improves the profitability of conventional banks. Moreover, Smaoui and Ben Salah (2012) studied 44 Islamic banks in the GCC countries over the period of 1995–2009 and found that asset quality, a larger bank size and inefficiency have an impact on bank profitability. Zeitun (2012) examined the determinants of profitability among Islamic and non-Islamic banks in the GCC. They concluded that bank equity was very important for the conventional banks but not for the Islamic banks. Moreover, they found efficiency, gross domestic product (GDP) and inflation to be statistically significant.

Caporale et al. (2017) find that during the global crisis, size have no effect on banks performance while the level of liquidity has a negative effect and a positive effect on net interest revenues. For macroeconomics determinants, GDP have an impact only for domestic banks. Olson and Zoubi (2011) in a study that combine the accounting-based and economics-based approaches for ten countries that belong to MENA and for a period from 2000 to 2008, explore the efficiency and the profitability of banks. The authors find that inefficiency negatively affects banks profitability, measured by ROA and ROE ratio, while the inflation has a positive and significant effect.

3. Empirical analysis

3.1 Data
Our sample consists in an unbalanced panel of 93 commercial banks operating in eight MENA countries. Table I reports the distribution of our sample by country. To construct this sample, we began with all banks whose data are reported by the Bankscope for the period between 1999 and 2014. Then, we restricted the sample to exclude banks with a lot of missing data. Bank-level data are obtained from Bankscope database provided by Bureau Van Dijk while data on inflation, economic growth and GDP are taken from the World Development Indicators provided by the World Bank.

3.2 Variables’ definition and model specification

3.2.1 Dependent variable. This paper aims to investigate the determinants of the financial intermediation cost of banks located in eight countries pertaining to the MENA region. This financial intermediation cost is proxied by the NIM defined as the difference between interest income and interest expenses divided by earning assets.

3.2.2 Explanatory variables. Following previous studies, we assume that the NIM may be explained by bank-specific and macroeconomic factors.

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<td>90</td>
<td>93</td>
<td>98</td>
<td>97</td>
<td>1,218</td>
</tr>
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</table>

Table I. Description of data sample: number of banks in sample by country and year
Bank-specific factors. Capitalization level: capitalization (CAP) is defined as the ratio of equity capital to total assets. It reflects the risk aversion of bank. In fact, equity funds are more risky than deposits and hence they are more costly. High proportions of equity capital indicate a great risk aversion, which in turn contributes to higher NIM.

Inefficiency: the inefficiency (INEFF) is measured by the ratio of operating expenses to gross income. A high level of this ratio suggests bad management quality and that the bank is inefficient. If the bank shifts the increase of its operating fees to their customers, the NIM is expected to increase.

Liquidity: the liquidity risk is measured by the ratio of liquid assets reported to deposits and short-term funding. Banks tend to hold sufficient liquid assets in order to meet either deposit withdrawals or new loans demand. The higher funds held by the bank in cash and equivalents, the lower the liquidity risk is; and therefore the smaller the NIM is.

Other earning assets (OEA): this variable is equal to the OEA of the bank divided by total assets. A higher value of OEA implies a greater income diversification. The existence of an alternative source of income may permits to the bank to operate with lower interest margins.

Macroeconomic factors. Economic growth: the annual growth rate of the GDP is used to measure the economic growth. The impact of the improvement of economic conditions on intermediation margins is not obvious. On the one hand, the intertemporal risk smoothing hypothesis stipulates that banks tend to smooth deposit rates during downturns and compensate this during upturns by requiring high loan rates. Therefore, a positive relationship between economic growth and bank margins may exist (Claessens et al., 2001). On the other hand, economic booms are generally associated with the growth of loans supply which may increase the possibility of approving loans for bad borrowers and hence decreases the interest revenue of banks. In this line, Valverde and Fernandez (2007) find a negative relationship between economic growth and interest margins for a sample of European banks.

Inflation: the inflation rate is defined as the annual change of the consumer price index. The rate of inflation measures the macroeconomic instability and information asymmetry of a country (Huybens and Smith, 1999). Boyd et al. (2001) show that countries with high levels of inflation have vulnerable financial and banking systems. Inflationary environment is expected to positively affect interest margins since banks may adjust their rates at a faster rate than inflation (Perry, 1992).

Table II summarizes the measurement of the dependent and the explanatory variables as well as their expected relationships.

### Table II. Variables description and their expected effect on net interest margin (NIM)

<table>
<thead>
<tr>
<th>Category</th>
<th>Variable</th>
<th>Abbreviation</th>
<th>Description</th>
<th>Expected sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Macroeconomic variables</td>
<td>GDP</td>
<td>GDP</td>
<td>The annual growth rate of the gross domestic product</td>
<td>Positive/negative</td>
</tr>
<tr>
<td></td>
<td>Inflation</td>
<td>INF</td>
<td>The annual change of the consumer price index</td>
<td>Positive</td>
</tr>
<tr>
<td>Bank-specific variables</td>
<td>Capitalization</td>
<td>CAP</td>
<td>Ratio of equity to total assets</td>
<td>Positive</td>
</tr>
<tr>
<td></td>
<td>Inefficiency</td>
<td>INEFF</td>
<td>Operating expenses/gross income</td>
<td>Positive</td>
</tr>
<tr>
<td></td>
<td>Liquidity</td>
<td>LRQ</td>
<td>Ratio of liquid assets to liabilities</td>
<td>Negative</td>
</tr>
<tr>
<td></td>
<td>Other earnings assets</td>
<td>OEA</td>
<td>Other earnings assets/total assets</td>
<td>Negative</td>
</tr>
</tbody>
</table>
relation between the aforementioned explanatory variables and the NIM. Thus, our model can be presented as follows:

\[ N{\text{IM}}_{it} = \alpha_i + \beta_1{\text{CAP}}_{it} + \beta_2{\text{GDP}}_{it} + \beta_3{\text{INF}}_{it} + \beta_4{\text{INEFF}}_{it} + \beta_5{\text{LIQ}}_{it} + \beta_6{\text{OEA}}_{it} + e_{it}, \]

where NIM, the net interest margin; CAP, the ratio of equity capital to total assets; GDP, growth rate of GDP; INF, inflation rate; INEFF, inefficiency ratio; LIQ, the liquidity ratio; OEA, other earning assets; subscripts \( i, t \) representing bank and year respectively; and \( e \) is the disturbance term.

The advantage of the use of panel data model is the ability of identifying some effects that cannot be detected using time-series methods. To estimate a panel data model, we have to choose among three estimators: panel least squares, fixed effects and random effects models. The panel least squares model assumes that the constant does not change across all cross-sections. The fixed effects model assumes that the heterogeneity is constant over time. The random effects approach takes the intercept as a group-specific disturbance. The test of homogeneity is carried out to choose among these three models. The hypothesis of homogeneity assumes that the intercept is the same for all the banks of each country. The rejection of the null hypothesis will suggest the existence of individual effects. In this case, the Hausman specification test is performed in order to decide whether the fixed or the random effects model is more appropriate.

### 3.3 Empirical analysis

#### 3.3.1 Descriptive statistics

The descriptive statistics for the dependent variable and the coefficients are reported in Table III. Overall, all countries in our database have comparable NIM, and the average changes are relatively small according to standard deviation. In Table III, Egypt have the highest standard deviation of NIM (1.632), followed by Emirates, Tunisia and Lebanon, respectively, by 1.466, 1.456 and 1.276. Bahrain is the most homogeneous banking system with the lowest deviation of 0.447.

With regards to the growth rate of GDP, Qatar has the highest growth rate with 10.942 percent followed by Jordon with 5.128 percent and Saudi Arabia with 4.814 percent.

Comparing inflation rates across MENA countries, Egypt and Qatar had the highest inflation rates while KSA, UAE and Lebanon exhibit low inflation rates.

In our sample, Qatar and Tunisia exhibit the highest capitalization levels with 14.626 and 13.495 percent, respectively. Lebanese banks have the lowest capitalization ratios compared to the rest of countries.

<table>
<thead>
<tr>
<th></th>
<th>Tunisia</th>
<th>Egypt</th>
<th>UAE</th>
<th>Qatar</th>
<th>Jordan</th>
<th>Lebanon</th>
<th>KSA</th>
<th>Bahrain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.092</td>
<td>2.843</td>
<td>4.031</td>
<td>3.123</td>
<td>3.657</td>
<td>2.494</td>
<td>2.837</td>
<td>2.831</td>
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<tr>
<td>Median</td>
<td>2.979</td>
<td>2.803</td>
<td>4.025</td>
<td>4.233</td>
<td>3.596</td>
<td>2.311</td>
<td>2.826</td>
<td>2.797</td>
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<tr>
<td>Minimum</td>
<td>0.459</td>
<td>-2.076</td>
<td>1.204</td>
<td>1.604</td>
<td>1.854</td>
<td>0.391</td>
<td>0.033</td>
<td>1.974</td>
</tr>
<tr>
<td>SD</td>
<td>1.456</td>
<td>1.632</td>
<td>1.466</td>
<td>0.633</td>
<td>0.787</td>
<td>1.276</td>
<td>0.695</td>
<td>0.447</td>
</tr>
</tbody>
</table>

Table III. Descriptive statistics
3.3.2 Regression results. Table IV reports the estimation results for the determinants of NIMs. The Hausman test indicates that we should retain the fixed effects model for Tunisia, UAE, Qatar, Jordon, KSA and Bahrain and the random effects model for Egypt and Lebanon.

The coefficient of capitalization (CAP) is positive and statistically significant for Qatar. Buser et al. (1981) theoretically argue that banks need to remain well capitalized when they have a high deductible value and a greater capitalization enhance the confidence of the consumer on the banking sector which increases their demand of loans and as a consequence, a greater NIMs (Berger and Bouwman, 2013; Zribi and Boujelbène, 2011). This result suggests that well-capitalized banking system bear lower forecasted bankruptcy costs for themselves and for their clients; thereby reducing their capital costs which enhances the confidence of the consumer and increase their NIM. In contrast, CAP has a negative and significant impact on NIM for UAE and no significant effect for the other countries.

Inefficiency ratio (INEFF) has a negative impact on NIM for Jordan and KSA. These findings are in line with many previous empirical studies (Claeys and Vander Vennet, 2008) and suggest that the lower rate of inefficiency (greater efficiency) in these two countries raises the NIM. In contrast, this variables turns out to have positive coefficients in UAE, Qatar and Bahrain suggesting that banks located in these countries tend to operate with high NIM in order to overcome their bad management quality.

The increase of liquidity ratio raises the NIM for Tunisia and Jordon. In fact, for some countries the higher reserve requirements obliges banks to shift to their customers the increased cost of intermediation (Brock and Suarez, 2000) The coefficient of this variable in Egypt and Bahrain is negative. Banks with high liquidity risk are associated with lower spreads as they do not have to incur extra costs of sourcing funds when faced with an increased demand for credit (Were and Wambua, 2014).

OEA have a negative impact on NIM for Jordan. A higher value of this ratio implies greater diversification toward fee-income and/or market-based activities. Therefore, bank interest margins should decrease as a result of high income diversification. In contrast, this measure of diversification has a positive impact on NIM for KSA and Qatar. The plausible explanation of this result is that more diversified banks have a greater market power and consequently they are able to operate with higher interest spreads.

For the impact of macroeconomic variables on NIM, the results are also mixed. The coefficient of the growth of GDP (GDP) is significantly negative for Tunisia, Egypt and Jordon. This can be explained by the high volatility of the business cycle in these economies where periods of economic growth are interrupted by crisis. This environment characterized by a great degree of uncertainty and asymmetric information keep margins low (Claeys and Vander Vennet, 2008).

The link between GDP growth and NIM is positive for UAE, Qatar and Lebanon. These findings imply that periods with high growth result in higher NIM due to more intensive credit activity and better loan quality (Claeys and Vander Vennet, 2008). These findings corroborate the results of Molyneux and Thornton (1992), Demirgüç-Kunt and Huizinga (1999), Athanasoglou et al. (2008), Davydenko (2010) and Zeitun (2012).

The increase of the inflation rate (INF) raises the NIM for Tunisia, Jordon and Bahrain. The plausible explanation of this result is that inflation rates in those countries are anticipated and hence banks tend to adjust their rates at a faster rate than inflation (Perry, 1992). Similar result was found by Doyran (2013) for a sample of Argentine commercial banks. In UAE and Lebanon, the effect is opposite, which suggests that banks do not benefit from inflationary environments. Indeed, in an unanticipated inflationary environment, banks are hesitant in adjusting their interest rates, so bank expenses increase faster than revenues and subsequently, this increase in costs hampers the profitability of banks (Demirgüç-Kunt and Huizinga, 1999).
<table>
<thead>
<tr>
<th></th>
<th>Tunisia</th>
<th>Egypt</th>
<th>Emirates</th>
<th>Qatar</th>
<th>Jordan</th>
<th>Lebanon</th>
<th>KSA</th>
<th>Bahrain</th>
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</thead>
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<tr>
<td>Intercept</td>
<td>2.064* (1.908)</td>
<td>3.067*** (4.788)</td>
<td>3.902*** (8.089)</td>
<td>1.973*** (7.682)</td>
<td>5.540*** (16.608)</td>
<td>2.419*** (3.055)</td>
<td>2.372*** (9.492)</td>
<td>1.523** (2.345)</td>
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<td>CAP</td>
<td>-0.025 (−1.077)</td>
<td>0.034 (1.331)</td>
<td>-0.067*** (−4.902)</td>
<td>0.014* (1.778)</td>
<td>0.015 (1.649)</td>
<td>0.020 (0.530)</td>
<td>0.027 (1.509)</td>
<td>0.027 (1.131)</td>
</tr>
<tr>
<td>GDP</td>
<td>-0.060*** (−2.546)</td>
<td>-0.088 (−1.661)</td>
<td>0.009*** (1.840)</td>
<td>0.019** (2.164)</td>
<td>-0.18*** (−5.335)</td>
<td>0.079** (4.205)</td>
<td>0.002 (0.157)</td>
<td>-0.107 (−1.402)</td>
</tr>
<tr>
<td>INF</td>
<td>0.074*** (2.074)</td>
<td>-0.028 (−1.281)</td>
<td>-0.078*** (−3.714)</td>
<td>0.009 (0.875)</td>
<td>0.036*** (2.122)</td>
<td>-0.082*** (−2.632)</td>
<td>0.022 (0.098)</td>
<td>0.211*** (3.666)</td>
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<tr>
<td>INEFF</td>
<td>0.003 (0.217)</td>
<td>0.009 (1.616)</td>
<td>0.022*** (2.414)</td>
<td>0.007** (2.239)</td>
<td>-0.018*** (−6.913)</td>
<td>-0.018 (−0.686)</td>
<td>-0.057*** (−6.912)</td>
<td>0.073*** (9.142)</td>
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<tr>
<td>LIQ</td>
<td>0.034*** (2.245)</td>
<td>-0.011 (−1.719)</td>
<td>0.011 (1.173)</td>
<td>0.002 (0.809)</td>
<td>0.018*** (2.948)</td>
<td>-0.005 (−1.241)</td>
<td>-0.007 (−1.591)</td>
<td>-0.053*** (−7.216)</td>
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<tr>
<td>OEA</td>
<td>-0.003 (−0.193)</td>
<td>0.002 (0.216)</td>
<td>-0.003 (−0.163)</td>
<td>0.013*** (2.827)</td>
<td>-0.023*** (−2.902)</td>
<td>0.018 (1.003)</td>
<td>0.041*** (6.839)</td>
<td>-0.019 (−1.102)</td>
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<td>$R^2$</td>
<td>0.3036</td>
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<td>0.7686</td>
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<td>$F$-statistic</td>
<td>4.651</td>
<td>3.000</td>
<td>4.227</td>
<td>6.219</td>
<td>15.084</td>
<td>20.56</td>
<td>17.498</td>
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<tr>
<td>Prob. ($F$-statistic)</td>
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<td>0.007</td>
<td>0.000</td>
<td>0.000</td>
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<tr>
<td>Hausman test $\chi^2$ (6)</td>
<td>77.660</td>
<td>10.449</td>
<td>51.527</td>
<td>32.393</td>
<td>12.966</td>
<td>2661</td>
<td>84.089</td>
<td>29.336</td>
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<tr>
<td>$p$-value</td>
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<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
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<td>0.000</td>
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</tbody>
</table>

**Notes:** Numbers shown in parentheses are $t$-statistics. *, **, ***Significant at 10, 5 and 1 percent levels, respectively.
4. Conclusion

The main objective of this paper is to investigate the internal and external factors having an impact on bank’s performance measured by the NIMs. Internal determinants include bank-specific variables: capitalization, inefficiency, liquidity and OEA. External determinants cover environmental variables in which financial institutions operate that are likely to affect their profitability, which are GDP and inflation.

The empirical validation is based on eight countries located in MENA region, namely: Tunisia, Bahrain, Egypt, Jordan, Qatar, Lebanon, KSA and United Arab Emirates, covering 465 bank-year observations during the period from 2000 to 2014. We conduct a separate empirical analysis for each country.

Overall, the study results suggest that the determinants of bank’s performance in the MENA region differ across countries. The empirical results show that three bank-specific factors play a significant role in determining the NIM (CAP, LIQ, OEA) and the growth of GDP for MENA region. Moreover, banks interest margins are explained by both bank-specific variables and macroeconomic factors except for Saudi Arabia in which interest margins exclusively depend on bank-specific factors.

At the issue of this study, it is recommended to the managers to focus on internal factors, since it has been proven that internal factors have a more significant impact on the banks’ performance. On the other hand, it is up to regulators and policy-makers to reinforce external factors in order to enhance the banking system efficiency and vulnerability that directly lead to economic stability.

These findings contribute to the clarification and critical analysis of the current state of bank’s performance in some countries located in MENA region, which would have several crucial policy implications, in terms of taking more efficient and effective master of the determinants and profitability for the financial institutions.

In order to improve the academic research, further extensions of this study may examine the corporate governance mechanisms as determinants (ownership, external audit, level of corruption, etc.). In addition, the use of dynamic models could be interesting and more informative.

References


**Further reading**


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Does a high women quota in supervisory boards influence firm success?

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Hochschule Pforzheim, Pforzheim, Germany

Abstract

Purpose – The purpose of this paper is to investigate the relationship between the success of the 50 EURO STOXX companies as measured by the earnings before taxes (EBT) and the percentage of female members on their supervisory boards.

Design/methodology/approach – The paper relies on data extracted from the annual reports of the 50 EURO STOXX companies in 2015 and from financial websites.

Findings – The paper provides the existence of a weak correlation between companies’ performance as measured by EBT and the percentage of women on supervisory boards.

Research limitations/implications – This study has two main limitations: first, a single key performance indicator was used to measure firms’ success; and second, the study offers insights related only to the year 2015. The analysis could be extended over a larger time span while some other variables could be considered in a more holistic approach.

Practical implications – The paper raises awareness that there is much to be done with regard to the presence of women on boards, and readers, investors and business owners gain an insight on the business environment and women active on European corporate boards.

Originality/value – By concentrating on the companies of the EURO STOXX 50 Index, the study offers a good image of the European business environment.

Keywords Firm performance, Key performance indicators, Earnings before taxes, EURO STOXX 50, Gender quota, Women on corporate boards

Paper type Research paper

Introduction

Many large companies in Europe include mainly men in supervisory boards and the women quota is often lower than 20 percent. In Germany, an optional women quota of 30 percent in supervisory boards was proposed for capital market-oriented companies in 2016. The present paper looks at the companies of EURO STOXX 50 in the year 2015 and their success and tries to establish whether this success can be related to the percentage of female members in supervisory positions. It replicates in this way the study of Binder et al. (2016) which analyzed the relationship between female’s representation in the management board (executive board) and firm performance (measured by earnings before taxes (EBT)) of the EURO STOXX 50 companies in 2014. Nevertheless, the results are original and can be clearly distinguished from the former study, as this study relies on data from another financial year, namely 2015, and while Binder et al. (2016) concentrated on the boards for executive officers, the present one switched the focus toward the supervisory board. It is in the same time an extension of the original study as the supervisory board is brought under scrutiny and more details about the number of women in supervisory boards, the women quotas and the reasons behind are examined.

This paper contributes to the literature in the field of key performance indicators (KPIs) as success factors, e.g. the EBT. It offers an insight into the relationship between the economic success of 50 European companies and the gender balance on supervisory boards. For this purpose the paper builds upon existing literature in the field of KPIs, diversity management, supervisory boards, women quota, etc. The paper is structured as follows: the next section presents the literature review and introduces the hypothesis. The third section
contains the research methodology. In the fourth section, the findings are discussed. Finally, the fifth section develops insights for investors and owners and shows the limitations of the study and offers suggestions for future lines of research.

Literature review
A controversial issue during the past decades was women's presence in supervisory boards. The underrepresentation of women in decision-making position is a known problem in the business world and if an implementation of ethical principles might be difficult, “by passing the legal regulations it is possible to set the rules of behaviour” (Grbac and Lončarić, 2009, p. 145), in this case by imposing a gender quota for corporate boards. This paper argues that images such as the “white, heterosexual, western, middle/upper class, able man” (Zanoni et al., 2010, p. 13) ought to be challenged in international business and it considers that companies which avoid appointing women in top position are “unaware of new sources of value, and consequently, are sub-optimizing both the economic value of the firm and value to society” (Mohammed, 2013, p. 243). Nevertheless, women are still the exception in German supervisory boards, even though their representation increased gradually (Holst and Kirsch, 2014). In Northern Europe, more women are present in supervisory boards (e.g. Norway, Iceland, Latvia, Finland and Sweden to mention the top 5 countries with the highest women quotas). It depends on the examined countries if a study can find a significant link between firm performance and the women quota in supervisory boards. On the one hand, it was shown, e.g., for Denmark that a higher women quota in supervisory boards can determine a better company performance (Lückerath-Rovers, 2013) but on the other hand, this finding could not be verified for the same country by other studies (Rose, 2007).

Beaufort and Summers (2013) identified at European level a 1.5 percent change of women representation in mainly male supervisory boards between 2009 and 2013. If women were already member in a supervisory board, the women quota was likely to increase further. When one woman was a board member, the women quota stood at 3.2 percent; by already three women in the supervisory board, the women quota increased to 3.7 percent. According to the above study, the average women quota in supervisory boards in Europe in 2013 was 7.9 percent. France stood out as a positive example with a women quota of 28.1 percent in 2013.

Another study on women in European listed companies suggests positive effects of diverse boards on corporate governance and even on firm performance (Buchwald and Hottenrott, 2014). A similar result was registered by a Catalyst (2007) study which examines the relationship between women on corporate boards and their companies’ financial performance in the USA. Further Catalyst studies indicate, however, the existence of a big gap with regard to board gender diversity: in 2010 women held only 15.7 percent of board seats of the companies from Fortune 500 (Catalyst, 2011), while in the S&P 500 Index in 2016 only 21.2 percent of the board seats were held by women (Catalyst, 2017).

The study “Women matter: Time to accelerate. Ten years of insights into gender diversity” shows that companies with a higher proportion of women in top management perform better (McKinsey & Company, 2017). Other authors signal rather the lack of evidence that female representation in supervisory boards improves profitability (Ferreira, 2015). It is suggested that rather benefits for the society should be measured when women occupy supervisory board positions. In a study with 108 German large corporations which took place between 2009 and 2013, there was not enough evidence to indicate a significant relationship between gender diversity and firms' financial performance (DICK, 2015).

There are, however, institutional factors driving gender quotas in supervisory boards such as, e.g., welfare provision for state-owned enterprises, political coalitions and a legacy of initiatives (Terjesen, Aguilera and Lorenz, 2015; Terjesen, Couto and Francisco, 2015). It is
more likely to establish a high gender quota in supervisory board with left-leaning
governments. In a survey of 201 Norwegian firms, the positive effect of the women quota in
supervisory boards is seen in increased board development activities and in a decreased
level of conflict (Nielsen and Huse, 2010). Another exhaustive study, in which 2,360
companies from the Morgan Stanley Capital International All Country World Index were
observed over a period of six years by the Credit Suisse (2012), shows as a result a better
mix of leadership skills, a wider pool of talent and a better risk aversion, the higher the
women quota in supervisory boards in the companies is. Many studies (e.g. Bilimoria, 2006;
Terjesen et al., 2009) also suggest a positive relationship between female supervisory board
members and the number of women officers in management.

What needs to be acknowledged is the fact that gender balance became a priority and
diversifying corporate supervisory boards often represent a target to be achieved. Small
improvements can be seen with a law instituted quota for women in supervisory boards
(Corkery and Taylor, 2012). In Norway, Italy, France, Spain and starting with 2016 also in
Germany binding gender quota exists (Sullivan, 2015). Norway was the first country to
legislate board quotas in 2004 and many countries followed with law determined or optional
women quotas in supervisory boards; however, less than 10 percent of the board members
consist of women (Dizik, 2015). Moreover, men in supervisory boards have often better
networks and for this reason the male supervisory board managers often recruit male
followers which minimizes the women quota in supervisory boards on the long run
analyzed the impact of gender on small business performance in the UK and concluded that
there are “some considerable differences by sex in quantitative economic and financial
performance measures” (p. 476). Kalleberg and Leicht (1991) examined organizational
performance in terms of survival and success and according to the results of their study,
companies that have a high women quota in supervisory boards are not more likely to go
bankrupt than those with a high male quota, because both men and women are equally
successful with regard to earnings growth.

Another study with reversed causality shows that in over 3,876 public companies the
presence of independent female directors is necessary in supervisory boards to contribute
best to the firms’ performance (Terjesen, Aguilera and Lorenz, 2015; Terjesen, Couto and
Francisco, 2015). This means that, when no women are included as supervisory board
members, the companies’ results are lower (measured by Tobin’s Q and shown by the return
on assets). Finally, another study with reversed causality about 151 of the capital market
listed German firms shows that only after a critical mass of about 30 percent (e.g. three
women in absolute positions) is attained, then a higher firm performance can be reached
(Joecks et al., 2013).

Concerning legal aspects in all seven countries whose companies are included in the
EURO STOXX 50 Index, regulations for women quotas on corporate boards exist. Except
for Finland, all other countries have integrated these regulations into national laws. However, in Finland the women quota is regulated in the country’s corporate governance
code only. Women quotas apply to listed companies in all seven countries. In Spain,
Belgium, Italy and Finland the women quotas apply additionally to state-owned companies.
In the Netherlands, France and Spain women quotas apply to companies surpassing certain
thresholds regarding their number of employees or their turnover (DIW, 2018). In Germany,
the law applies to listed companies which are fully obliged to employee co-determination
(Bundesministerium für Familie, Senioren, Frauen und Jugend, 2018).

Moreover, France and Italy decided for a two-step approach. With the introduction of the
women quota, a target quota was defined to be reached by the companies within a given
period of time. After this first period, a stronger quota comes into effect. The laws on women
quotas tend to focus on the supervisory board, in Spain and Belgium the target group is the
executive committee. Within EURO STOXX 50 countries, only in the Netherlands the women quota applies to management boards as well (DIW, 2018). Apart from the situation in Finland which is based on company self-regulation, all other women quotas are binding quotas. Nevertheless, in Spain and the Netherlands the laws do not include any sanctions for companies not achieving the defined quota (DIW, 2018).

In the following, the regulations for women quotas on corporate boards in the seven EURO STOXX 50 countries are introduced shortly. Spain implemented in 2007 the Law for the “Effective Equality of Women and Men” (Equality Law). The law defines a 40 percent women quota on corporate executive committees. Sanctions are not integrated into the law (Verge and Lombardo, 2015). However, the Amendment of the Companies Act from December 2014 requires companies to define targets for their women quota on board and to prepare a plan how to achieve the target (Palá-Laguna and Esteban-Salvador, 2016). Four years after the law in Spain came into effect, Belgium, France and Italy introduced their own women quota laws in 2011. All three laws are binding and combined with sanctions. In France, the regulation is part of the constitution as an extension of the parity clause to “social and professional responsibilities.” The law targets supervisory boards and requires a women quota of 20 percent by 2014 and 40 percent by 2017 (Lépinard and Lieber, 2015). The sanction in France is identical to the one in Belgium. Board seat appointments violating the law do not come into effect (DIW, 2018). The Italian Golfo-Mosca Act requires a women quota of 20 percent by 2012 and 33 percent by 2015. However, the law has to be considered temporary since the regulation is only valid for three consecutive elections of the supervisory boards after the implementation of the law (Ferrari et al., 2016). Companies not achieving the women quota face financial penalties and a break-up of the supervisory board (DIW, 2018). In 2013, the Netherlands integrated a women quota of 30 percent into the Dutch Civil Code. The women quota is binding but without sanctions and applies to the supervisory and the management board of a company. Germany is the last country of the EURO STOXX 50 Index to introduce a law for equal participation of women and men in leadership positions within private companies and public service. The law requires a 30 percent women quota on supervisory boards. In case companies do not fulfill the quota, the correspondent vacant seat on the supervisory board stays unoccupied. Moreover, companies need to define targets for their women quotas in their supervisory and management boards as well as for their top management-level positions. These targets need to be disclosed. However, the targets are not allowed to be lower than the current women quota. The time span to achieve the own target settings is five years (Deutscher Bundestag, 2015). As already stated above, the approach in Finland consists of a self-regulation system in which companies set their own goals for women quotas on their corporate boards. The regulation applies to listed companies since 2008. In case only one gender is represented on a corporate board, the company needs to publicly explain the reasons behind (Issumo et al., 2016). These laws in the last 10 years clearly changed the constitution of companies’ boards and determined an increase of the number of women in management and supervisory boards in all seven countries included in EURO STOXX 50 Index.

The present research focuses on the companies of the EURO STOXX 50 Index, and aims at exploring whether there is a link between the EBT of these successful European companies and the number of women in supervisory boards. Britzelmaier et al. (2013) focused on the same index while examining the remuneration of management in 2009, during the financial crisis. It has to be noted that the relationship between the EBT and the women quota in management boards was analyzed thoroughly by Binder et al. (2016); however, the focus of this paper lies on the supervisory board and especially on the link between firms’ performance measured by EBT and the proportion of women on the supervisory boards.
The following hypotheses are formulated and will be tackled in the following sections:

**H1.** Enterprises which have a higher gender quota in supervisory boards are more successful and achieve a higher EBT.

**H2.** Enterprises of technologically more innovative sectors have a higher gender quota in supervisory board.

**H3.** Country- or sector-specific gender quotas in supervisory boards become more important due to the absence of a unitary legislation.

**Methodology**

The EURO STOXX 50 Index was selected to represent the performance of the 50 largest companies among 19 supersectors in the year 2015. There are enterprises of seven Eurozone countries which are integrated in this index. This index has a fixed number of components and is part of the STOXX blue-chip index family. The current study looks at the number of women in supervisory boards and lists their names as presented in the 2015 annual reports (see Table I).

The data regarding the EBT of each of the 50 companies were collected via financial websites. It should be taken into account that women in supervisory boards listed below are sometimes member in more than just one supervisory board.

Moreover, EURO STOXX 50 Index is one of the most liquid indices for the Eurozone and serves for benchmarking purposes. The index is a financial control index which ensures stable and up-to-date figures. It represents the performance of only the largest and most liquid companies in a sector (STOXX Limited, 2016).

The present research focuses on the interrelationship between company success and women on supervisory boards on basis of the EURO STOXX 50 Index. The interrelationship between company success and women on supervisory boards is modeled in a univariate single-equation model (Welc and Rodriguez Esquerdo, 2018). Women on supervisory boards represent the independent variable, and company success represents the dependent variable. The independent variable is defined as the numerical ratio of the number of women in supervisory board compared to the number of total supervisory board members. The hypothesis is tested using the numerical dependent variable EBT, as a measure for companies’ success.

The calculated KPI to quantify the interrelationship between company success and women on supervisory boards is the correlation coefficient. A correlation coefficient is a measure for the statistical interrelationship between two variables (Bonart and Bär, 2018). In contrast to the covariance, the correlation coefficient measures the statistical interrelationship between two variables in a normalized way (Rinne, 1997). Depending on the scale, a correlation coefficient describes only the strength or the strength and the direction of the statistical interrelationship between two variables. For a cardinal scale, as used in the present study, the correlation coefficient describes the strength and the direction of the statistical interrelationship between two variables. The value of the correlation coefficient varies between $-1$ and 1. Correlation coefficients close to $-1$ or 1 signify a strong negative or positive statistical interrelationship between the two variables (Bamberg et al., 2011).

The composition of EURO STOXX index in 2015 changed slightly in comparison to the year before. Two new companies were included in the EURO STOXX index: Fresenius (Germany) and Safran (France) replaced Repsol (Spain) and REWE (Germany), a change which became effective on September 2015. The composition change of the index takes place once a year, in September, when only the biggest companies are maintained on the basis of their market capitalization and their price index. Out of the 50 EURO STOXX companies 4
<table>
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<tr>
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<th>Name of women on board</th>
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<td>PREF</td>
<td>15.0</td>
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</tbody>
</table>

have, e.g. the highest index weights: Total (France) with 4.78 percent, Sanofi-Aventis (France) with 4.39 percent, Bayer (Germany) with 4.29 percent and Anheuser-Busch InBev (Belgium) with 4.11 percent. In order to examine how successful these companies are, the EBT was chosen as being a relevant KPI, taking thus into consideration the fact that companies may face different tax rates in different states. In other words, the lack of a harmonized taxation system across the Eurozone will not affect the results of this study, the EBT making possible a comparison of the 50 EURO STOXX companies at European level (see Table II).

Findings
From a statistical point of view, the EURO STOXX 50 companies can be placed into five categories concerning the EBT as dependent variable (see Table III). Only Daimler (Germany) and Anheuser-Busch InBev (Belgium) have achieved an EBT that is higher than €9.999m. Most companies (16) are in the class between €0 and €2.999m, from sectors such as “telecommunications,” “media,” “real estate,” “oil and gas,” “banks” and “industrial goods and services.”

The independent variable women quota and the number of women in supervisory boards can also be categorized into five classes (see Tables IV and V).

Interesting is that only one company has more than ten women on the supervisory board considering that all EURO STOXX 50 companies have different numbers of employees and also different number of members on the supervisory boards. The company ENGIE (France) has 11 women out of the total 19 supervisory board members, which makes a women quota of 57.89 percent. As it can be seen Unilever NV too can be mentioned as a company with a high women quota of 54.55 percent. In absolute figures, this means 6 women in a supervisory board which has 11 supervisory board members.

Most companies in EURO STOXX 50 Index have five to six women on the supervisory board causing a women quota of 32 percent in average for this category.

In Figure 1, it can be seen that the 50 EURO STOXX companies in Europe are located only in seven countries and are active in 16 sectors.

In Figure 1, it becomes clear, for example, that Finland has only one company in the EURO STOXX index and this is the telecommunications company Nokia, which is active in the “technology” sector according to the classification of STOXX Limited. By contrast, the “automobiles and parts” sector is filled by German companies. The French companies which are present in the EURO STOXX index prevail mainly in the following sectors: “personal and household goods,” “construction and materials,” “media” and “real estate.” Belgium has only one company which is included in EURO STOXX 50 Index – Anheuser-Busch InBev in the sector “food and beverage.” Spain and Italy have each five companies and the Netherlands has four companies included in EURO STOXX 50.

In order to test the raised \( H1 \), two steps are necessary. In the first step, the EBT and the EBT/employee of the selected companies should be examined. In the second step, the gender quota per sector and in total should be analyzed for supervisory boards and the findings should be brought together.

Figure 2 shows a top 10 ranking of the EURO STOXX companies according to their achieved EBT in 2015. On the first place in 2015 was Daimler (Germany) with an EBT of €12.3m, also the highest value of all companies analyzed in this study. Daimler has overtaken Volkswagen (Germany), which was on the first place in 2014 with €10.8m, but it suffered a serious draw back in 2015 due to the emissions scandal. Daimler is followed in the 2015 EBT ranking by Anheuser-Busch InBev (Belgium) with €11.5m and BNP Paribas (France) with €9.8m.

Due to a lack of a unitary legislation concerning gender quotas on boards at European level, country-specific and even sector-specific gender quotas gain increasing relevance.
<table>
<thead>
<tr>
<th>No.</th>
<th>Company's name</th>
<th>Sector</th>
<th>Country</th>
<th>ISIN</th>
<th>No. of women</th>
<th>Percentage of women on the board (%)</th>
<th>EBT (in million euros)</th>
<th>EBT/Total no. of employees (in thousands)</th>
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Table II. Overview of the 50 EURO STOXX 50 companies in 2015

(continued)
<table>
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<th>No.</th>
<th>Company's name</th>
<th>Sector</th>
<th>Country</th>
<th>ISIN</th>
<th>No. of women</th>
<th>Percentage of women on the board (%)</th>
<th>EBT (in million euros)</th>
<th>EBT/Total no. of employees (in thousands)</th>
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<td>−19.33</td>
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<tr>
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<td>Sanofi</td>
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<td>5,731.00</td>
<td>45.34</td>
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<td>Technology</td>
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<td>11.11</td>
<td>4,355.00</td>
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<td>42.23</td>
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<td>0.00</td>
<td>10,806.00</td>
<td>−49.89</td>
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</tbody>
</table>

Therefore, in the following figures the companies with the highest EBTs and highest gender quotations are presented. It is worth mentioning that the companies achieving the highest EBTs are also from the countries with the highest gross national product. The five countries with a high gross national product have achieved the highest EBT in EURO STOXX 50 Index as well. It should be verified if these countries with the highest gross national product and the highest EBT have the highest gender quota as well. H3 can be verified. As previously discussed, the legislation on gender quotas differs from one country to another. This is the reason why it is advisable to verify the gender quota for the individual seven countries in the EURO STOXX 50 Index and separately for the different sectors.

France is the country with the highest number of companies (20) included in EURO STOXX 50 Index and it is an important country in terms of EBT. When the most important companies are analyzed, BNP Paribas is the biggest company with an EBT of €9.790m, followed by the insurance company AXA with €7.521m and LVMH Moet Hennessy with €5.983m. GRP Société Générale and Sanofi are also in top 5 of the French companies by EBT and it can be observed that especially the sectors “banks” and “insurance” have the highest EBT values (see Figure 3).

The second most important country from EURO STOXX 50 Index in the year 2015 is Germany, which has 14 companies in this index. The highest EBT of all German companies was achieved by Daimler with €12.280m followed by Allianz (€9.763m) and BMW (€8.706m). Siemens and BASF are also in this top 5 by EBT. Compared to France, it can be seen that especially the automotive sector is represented twice in this range of

### Table III.
Five categories for the EBT of the 50 EURO STOXX companies in 2015

<table>
<thead>
<tr>
<th>EBT</th>
<th>n</th>
<th>%</th>
<th>Companies</th>
</tr>
</thead>
<tbody>
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<td>&lt; €0m</td>
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<td>12</td>
<td>Safran, Eni, ENGIE, Volkswagen PRE, E.ON, Deutsche Bank</td>
</tr>
<tr>
<td>€0–€2.999m</td>
<td>16</td>
<td>32</td>
<td>Iberdrola, Unibail-Rodamco, Air Liquide, Airbus Group SE, Deutsche Post,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Danone, ASML, HLDG, Unicredit, Schneider Electric, Carrefour, Nokia, Vivendi,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Essilor International, Philips, Saint Gobain, Telefonica</td>
</tr>
<tr>
<td>€3.000–€4.999m</td>
<td>12</td>
<td>24</td>
<td>Deutsche Telekom, L’Oréal, Banco Bilbao Vizcaya Argentaria, Intesa Sampaio,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SAP, Total, Assicurazioni Generali, Frensenia, Muenchener Rueck, Industria de</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Diseno Textil SA, Orange, Vinci</td>
</tr>
<tr>
<td>€5.000–€9.999m</td>
<td>14</td>
<td>28</td>
<td>BNP Paribas, Allianz, Banco Santander, BMW, AXA, Unilever NV, LVMH Moet</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Hennessy, Siemens, GRP Societe Generale, ING Group, BASF, Bayer, Sanofi,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Enel</td>
</tr>
<tr>
<td>&gt; €9.999m</td>
<td>2</td>
<td>4</td>
<td>Daimler, Anheuser-Busch InBev</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Own representation based on the information from www.stoxx.com/index-details?symbol=SXXE (accessed March 3, 2017)

### Table IV.
Five categories for the number of women in supervisory boards of the 50 EURO STOXX companies in 2015

<table>
<thead>
<tr>
<th>Women quota</th>
<th>n</th>
<th>%</th>
<th>Number of women</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–20%</td>
<td>10</td>
<td>20</td>
<td>0–1 women</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>21–30%</td>
<td>13</td>
<td>26</td>
<td>2–4 women</td>
<td>24</td>
<td>48</td>
</tr>
<tr>
<td>31–40%</td>
<td>21</td>
<td>42</td>
<td>5–6 women</td>
<td>16</td>
<td>32</td>
</tr>
<tr>
<td>41–50%</td>
<td>4</td>
<td>8</td>
<td>7–10 women</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>51–60%</td>
<td>2</td>
<td>4</td>
<td>&gt; 10 women</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100</td>
<td>Total</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

**Source:** Own representation based on the information from www.stoxx.com/index-details?symbol=SXXE (accessed March 3, 2017)
The “insurance” sector seems to be strong in both France and Germany as in both countries, companies such as AXA and Allianz are in top 5 by EBT (see Figures 3 and 4).

Five companies from Spain are included in the EURO STOXX 50 Index and their EBT can be seen in Figure 5. As it can be seen in Spain too the most successful companies by EBT are active in the “banking” sector: Banco Santander had an EBT of €9.172m, while Banco Bilbao Vizcaya Argentaria had an EBT of €4.428m. The “retail,” “utilities” and the “telecommunication” sectors are also represent in this top 5 by the companies Industria de Diseno Textil SA (€3.212m), Iberdrola (€2.931m) and Telefonica (€3.166m).

Looking at the Italian companies present in the EURO STOXX 50 Index, it can be noticed that one of the companies, Eni, had a negative EBT in 2015: –€3.535m. On the first place by EBT is the company Enel (€5.229m) from the “utilities” sector, followed by Intesa Sanpaolo (€4.056m) representing the banking sector, Assicurazioni Generali (€3.293m) from the “insurance” sector and Unicredit (€1.775m) from the banking sector. Though again banks and insurance companies registered the highest EBT in Italy, it can be observed that the EBT of these companies are lower than the EBT of the French, German or Spanish companies active in the same sectors from the EURO STOXX 50 Index (Figure 6).

Table V.
Five categories for the women quota of the 50 EURO STOXX companies in 2015

<table>
<thead>
<tr>
<th>Women quota</th>
<th>n</th>
<th>%</th>
<th>Companies</th>
<th>0–1 women</th>
<th>2–4 women</th>
<th>5–6 women</th>
<th>7–10 women</th>
<th>&gt;10 women</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–20%</td>
<td>10</td>
<td>20</td>
<td>Bayer, Unicredit, Eni, Essilor International, Airbus Group SE, E.ON Volkswagen PREP, Anheuser-Busch InBev, Telefonica, Fresenius</td>
<td>0–1 women</td>
<td>2–4 women</td>
<td>5–6 women</td>
<td>7–10 women</td>
<td>&gt;10 women</td>
</tr>
<tr>
<td>21–30%</td>
<td>13</td>
<td>26</td>
<td>BMW, Siemens, Intesa Sanpaolo, Daimler, ING Group, BASF, Banco Bilbao Vizcaya Argentaria, Industria de Diseno Textil SA, Carrefour, Nokia, LVMH Moet Hennessy, Safran, SAP</td>
<td>2–4 women</td>
<td>5–6 women</td>
<td>7–10 women</td>
<td>&gt;10 women</td>
<td></td>
</tr>
<tr>
<td>31–40%</td>
<td>21</td>
<td>42</td>
<td>Deutsche Telekom, L’Oreal, Assicurazioni Generali, Muenchener Rueck, Orange, Vinci, Saint Gobain, Iberdrola, Danone, Schneider Electric, Banco Santander, Unibail-Rodamco, AXA, Sanofi, Deutsche Post, Enel, Total, ASML HLDG, Philips, Deutsche Bank, Allianz</td>
<td>5–6 women</td>
<td>7–10 women</td>
<td>&gt;10 women</td>
<td></td>
<td></td>
</tr>
<tr>
<td>41–50%</td>
<td>4</td>
<td>8</td>
<td>BNP Paribas, GRP Societe Generale, Vivendi, Air Liquide</td>
<td>7–10 women</td>
<td>8–10 women</td>
<td>10–12 women</td>
<td></td>
<td></td>
</tr>
<tr>
<td>51–60%</td>
<td>2</td>
<td>4</td>
<td>ENGIE, Unilever NV</td>
<td>&gt;10 women</td>
<td>12 women</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Netherlands has only four companies in EURO STOXX 50 Index and therefore only top 4 companies by EBT can be presented. The highest EBT was reached by Unilever NV (€7,133m) from the sector “personal and households goods,” followed by ING Group (€5,680m) from the banking sector, ASML HLDG (€1,856m) active in the “technology” sector and Philips (€623m) from the “industrial goods and services” sector. The banking sector is again represented; however, it is in the “personal and households goods” through Unilever NV that the highest EBT is achieved (see Figure 7).

Finally, when top 5 countries by total EBT are built, the differences between countries become evident (see Figure 9): France is on top position by total EBT, which is not

**Figure 1.** The 50 EURO STOXX companies in Europe and their sectors

**Figure 2.** Top 10 EURO STOXX companies by EBT with figures of 2015 in million euros
Top 5 EURO STOXX Companies in France by EBT in 2015

Source: Own representation – the EBTs of all the 50 companies were taken from www.finanzen.net/ (accessed March 3, 2017)

Top 5 EURO STOXX Companies in Germany by EBT in 2015

Source: Own representation – the EBTs of all the 50 companies were taken from www.finanzen.net/ (accessed March 3, 2017)

Top 5 EURO STOXX Companies in Spain by EBT in 2015

Source: Own representation – the EBTs of all the 50 companies were taken from www.finanzen.net/ (accessed March 3, 2017)
surprising, if one considers the fact that France has also the highest number of companies in EURO STOXX 50 Index. Germany follows France closely; however, the distance between the total EBT of the German companies is more than twice as high as the total EBT of the Spanish companies from EURO STOXX 50 Index. However, this is not a bad result, considering that Spain has only 5 companies in the index, while Germany has 14. What is rather surprising is that Belgium with only one company, Anheuser-Busch InBev, made it in this top 5 by total EBT, outclassing Italy which had, nevertheless, five companies in 2015 in EURO STOXX 50 Index (Figure 8).

If a similar analysis is drawn with regard to the sectors (see Figure 9), one can find less surprising results as the “banks” and “insurance” companies achieved the highest cumulated EBT, followed by the “personal and household goods” (£17,633m), “automobile and parts” (£15,298m) and “food and beverage” (£13,407m), in this sector contributing heavily to this result the Belgian company Anheuser-Busch InBev.

If by now the focus was on offering a broad insight on the EURO STOXX companies and the KPI EBT, in the following section the emphasis will be on completing this insight by introducing also the information on gender quotas in supervisory boards as found in the

**Women quota in supervisory boards**
annual reports of the EURO STOXX companies. In this respect, Figure 10 shows the percentage of women in supervisory boards in each of the seven countries.

In six out of the seven countries, the women quota in supervisory boards in 2015 is higher than 25 percent in average. The highest women quota in supervisory boards has the Netherlands with 36.6 percent followed by France with 36.4 percent. Additionally, it can be seen that the expected women quota of 30–40 percent is not yet achieved by EURO STOXX companies.

While in a top 5 ranking by total EBT France could be ranked 1st, followed by Germany, Spain, the Netherlands and Belgium, in a top 5 ranking by gender quota the Netherlands is on the first place, followed by France, Italy, Spain and Germany. It can be emphasized here that German companies obtained a good EBT, but their gender quota is the lowest.

Due to the fact that the countries Germany and France have the highest number of companies in EURO STOXX 50 Index and the highest EBT per company and per employee these two countries are examined more closely.

The analysis can be deepen by looking at the women quota in different sectors. Figure 12 displays a top 5 ranking of the sectors according to women’ presence in supervisory board. The highest women quota in supervisory boards can be seen in the media sector (42.9 percent). However, this can be misleading as there is only one company – Vivendi (France) – active in this sector. Vinci (France) and Saint Gobain

### Figure 8.
Top 5 countries by total EBT with figures of 2015 in million euros

### Figure 9.
Top 5 EURO STOXX companies from the five most important sectors by EBT with figures of 2015 in million euros

### Figure 10.
Top 5 Countries by Total EBT of their EURO STOXX Companies in 2015

<table>
<thead>
<tr>
<th>Country</th>
<th>EBT in Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>FR</td>
<td>€58,011.55</td>
</tr>
<tr>
<td>DE</td>
<td>€46,778.00</td>
</tr>
<tr>
<td>ES</td>
<td>€20,059.97</td>
</tr>
<tr>
<td>NL</td>
<td>€15,292.08</td>
</tr>
<tr>
<td>BE</td>
<td>€11,482.33</td>
</tr>
</tbody>
</table>

**Source:** Own representation – the EBTs of all the 50 companies were taken from www.finanzen.net/ (accessed March 3, 2017)

### Figure 11.
Top 5 Sectors by EBT of the EURO STOXX Companies in 2015

<table>
<thead>
<tr>
<th>Sector</th>
<th>EBT in Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banks</td>
<td>€34,518.88</td>
</tr>
<tr>
<td>Insurance</td>
<td>€23,800.00</td>
</tr>
<tr>
<td>Personal and Household Goods</td>
<td>€17,633.40</td>
</tr>
<tr>
<td>Automobiles and Parts</td>
<td>€15,298.00</td>
</tr>
<tr>
<td>Food and Beverage</td>
<td>€13,407.33</td>
</tr>
</tbody>
</table>

**Source:** Own representation – the EBTs of all the 50 companies were taken from www.finanzen.net/ (accessed March 3, 2017)
(France) follow with a women quota in supervisory boards of 40.0 percent, but again these are the only two companies active in the sector “construction and materials.” The sectors “personal and household goods,” “insurance” and “utilities” follow with more companies that are located in these sectors to strengthen the results. In all of these sectors, the women quota in supervisory boards is therefore over 35 percent. If this value is considered, then this answers the expectations which are entrenched in the law of several countries or in the corporate codes of different companies as recommendation (Figure 11).

Finally, Figure 15 presents the first three sectors which have the highest women quota in supervisory boards per country (compare Figure 15).

$H2$ can be partly verified. Innovative sectors like media, telecommunications and technology have a higher women quota than 30 percent which is also requested by law in several countries. However, more in-depth information (type of organization, flexible teams, etc.) would be necessary for a better assessment of the situation. To verify, for example, if teams with mixed teams work more flexible and also in a harmonious atmosphere further research is needed (Figure 12).
If France and Germany, the countries with the highest number of companies in the EURO STOXX index, are compared, further differences can be identified. In France, the sectors with the highest women representation in the supervisory boards are “utilities,” “banks” and “media” with a women quota in supervisory boards of 58, 50 and 43 percent, respectively.

When these sectors with a high women quota in supervisory boards are compared to the companies with the highest EBT per employee, $H_1$ can be verified: in the top 10 companies by EBT per employee all enterprises of the three sectors with the highest women quota are present (see Figure 13).

**Figure 13.**
Top 10 EURO STOXX companies in France by EBT/No. of Employees in 2015

*Source:* Own representation – the information with regard to the number of women on the supervisory board was extracted from the 2015 annual reports of the respective companies
If one looks, e.g. at the sector “banks” enterprises such as BNP Paribas and GRP Société Générale are included in top 10, and in the “media” sector the company Vivendi is enclosed in the top 10 best enterprises by EBT per employee. The sector “utilities” shows a special situation as the enterprise ENGIE had a negative EBT in 2015 due to high depreciations and cost saving projects. For this reason ENGIE was not included in the hypothesis’ verification.

In Germany, the highest women quota in supervisory boards is reached in companies from different sectors compared to France: “telecommunications” (40 percent), “insurance” (35 percent) and “industrial goods and services” (33 percent). The women quota in Germany is in general much lower. Germany has the most successful companies in terms of EBT and EBT per employee but it has a women quota of only 26 percent. The sector “automobiles and parts” in which Germany makes high profits is not even mentioned under the three most important sectors when the women quota in supervisory boards of the EURO STOXX companies is measured. In spite of this, $H_1$ can be verified.

In the top 10 best companies by EBT per employee in Germany, one can find, e.g. in the sector “telecommunications” the company Deutsche Telekom. In the “insurance” sector, Münchener Rück and Allianz are included as best companies by EBT per employee. Siemens can be seen in the sector “industrial goods and services” as the best company by EBT per employee. Moreover, in top 10 companies by EBT per employee all enterprises of the three sectors with the highest women quota are included (see Figure 14).

To conclude, France has a higher concentration of women in supervisory positions (36 percent) as well as a higher number of companies in the EURO STOXX index. However, these companies are less successful than the German companies in terms of EBT per employee. The German companies have a better EBT per employee although the women quota is lower when compared with that of French companies (26 percent). However, the 26 percent women quota seems to lead to better results by EBT per employee in the top 10 companies compared to other German enterprises.

This result is illustrated also in Figure 15, where the correlation between the EBT and the percentage of women on supervisory board is drawn. In the case of the French

![Figure 14. Top 10 EURO STOXX companies in Germany by EBT/number of employees × 1,000 in 2015](source)

**Source:** Own representation – the information with regard to the number of women on the supervisory board was extracted from the 2015 annual reports of the respective companies
companies, ENGIE (which registered a negative EBT) is the only company which does not show a positive correlation.

A similar result can be seen also in the case of German companies after running a correlation for the EBT and the percentage of women on the supervisory board (see Figure 17). In case of the German companies the correlation coefficient is, however, higher ($r = 0.22$) than the correlation coefficient of the French companies ($r = 0.01$) (Figure 16).

By drawing a correlation between the EBT and the percentage of women on the supervisory boards of all EURO STOXX companies (see Figure 17), the correlation coefficient remains, however, low, which indicates a weak relationship between the two variables.

One possible explanation for the findings above could be the fact that in the correlation analysis, one absolute KPI like the EBT and one relative KPI like the women quota were
employed with all their heterogeneous differences. To solve this issue another correlation was drawn between the EBT per employee and the women quota, but again the correlation coefficient ($r = 0.12$) indicates a weak relationship (Figure 18).

**Discussion**

One important point is that the success of companies is not only driven by women in supervisory boards, but by the result of the entire supervisory board, male and female alike, as all supervisory boards of the 50 EURO STOXX companies consist of men and women. Furthermore, the presented findings should be supplemented by further research into the topic. One future research direction might be a detailed study on women in supervisory and management boards including, for instance, their exact positions or their leadership span.

Moreover, a successful result in the form of EBT or EBT per employee for an enterprise is generated mainly by the management board and not by the supervisory board only. Further research could be done in making the relationship between management board and
supervisory board more transparent and trying to explain for both boards the women quota and the reasons behind.

Furthermore, another type of information should be included in future research, such as women qualification, experience, educational background, etc. All these aspects could provide a more realistic image regarding the role of women in supervisory boards and company performance.

The quota of women in the supervisory boards is shown in this paper on basis of the year 2015. However, the development of the women quota in supervisory boards remains to a certain degree constant over a period of time. The reason is that the term of office of supervisory board members is fixed via contracts for a certain time span – e.g. four years. For this reason no massive change of the women quota in supervisory boards is be expected in short term. Additional research is needed to shed more light on this issue.

Moreover, as presented in the literature review, female participation in supervisory boards shows mixed results with regard to company performance. Therefore, a more holistic approach is needed, researching not only the number of women on board but also considering women participation in total workforce, industry sectors, management, subsidiaries, etc.

Conclusion

When taking into consideration all 50 companies of the EURO STOXX index, only a weak correlation between their EBT and the gender quota on supervisory board was shown, therefore $H1$ could not be verified.

$H2$ is partially verified, as highly innovative sectors like “media,” “telecommunications” and “technology” do have a high gender quota in supervisory boards.

Finally, $H3$ could be verified. Different laws affecting the gender quota in different countries cause a complex situation. Therefore, a country-based or even sector-based analysis of gender quota is needed.

Moreover, one should be aware that there are also companies in the EURO STOXX which stand out in the analysis: Daimler, for example, is a leading company in terms of EBT, while not reaching the legal women quota (25 percent instead of 30 percent).

Furthermore, EBT as a performance indicator provides only a rough approximation of company success, a combination of indicators could provide better results. Even the consequent measurement of the EBT per employee in all cases as relative figure and other KPIs brings additional insights.

A final remark here, depending on the country of residence of the company, the board structure differs (Anglo-Saxon one-tier board vs German two-tier board system). Thus, a comprehensive indicator should be found, one which identifies only those women, which are actually able to influence company decisions. A long-term research could bring more results and appropriate solutions to improve the situation of women the boards of companies.

References


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HRM practices and the multifaceted nature of organization performance

The mediation effect of organizational citizenship behavior

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Abstract

Purpose – The purpose of this paper is to investigate the impact of human resource management (HRM) practices on the performance of Jordanian banks as determined by using the balanced scorecard (BSC) performance measurement system and by testing the effect of organizational citizenship behavior (OCB) as a possible mediator variable.

Design/methodology/approach – A questionnaire was used to collect data from the study sample, which consisted of 230 managers working in various banks across Jordan. The study hypotheses were then tested using SPSS and AMOS software by applying structural equation models (SEMs).

Findings – The data set revealed that the use of HRM practices had a significant impact on both employee OCB and bank performance in all the four dimensions of the BSC (financial, customer satisfaction, internal processes, learning and growth). In addition, OCB was found to have a positive significant impact on organizational performance. Moreover, results indicated that OCB partially mediates the relationship between HRM practices and organizational performance.

Originality/value – The authors examine the impact HRM practices on the organization performance through the mediation role of OCB. The results obtained from this study extend the existing literature by providing evidences from non-western country such as Jordan. Based on the findings, the theoretical and practical implications of the study as well as limitations and suggestions for future studies are also discussed.

Keywords HRM practices, Performance, Organizational citizenship behavior, Balanced scorecard, Jordanian banks

Paper type Research paper

Introduction

In response to repeated criticism that human resource management (HRM) adds no value to organizations, wide scientific debate and research have been conducted to investigate HRM’s contribution to firm performance. The prevailing arguments assert that through a “bundle” of HRM practices, firms are able to attain vital human capital, a potential source of sustainable competitive advantage. This stream of research assumes that HRM practices directly affect firm performance (Alnajdawi et al., 2017). Another significant stream of research develops the notion that while HRM might bear some influence on firm performance, it does not directly lead to improved firm performance. Proponents of this latter view argue that there are a variety of mechanisms and intermediate outcomes which are central to a more complete understanding of how HRM drives firm performance.
(Becker and Gerhart, 1996). Indeed, researchers have identified several mechanisms to define the association between HRM and firm performance. They argue that appropriate HRM practices have the potential to yield committed, motivated and satisfied employees, which ultimately leads to improved individual and firm performance.

However, while current literature has advanced our knowledge of the relationship between HRM and firm performance, it suffers several limitations. First, Edgar and Geare (2009) note that significant facets of the intermediate outcomes and mechanisms by which HRM impacts performance remain unexplained. Purcell et al. (2003) refer to this gap in knowledge as a “black box,” whereby the inputs and outputs are clear, but the internal processes by which the inputs are transformed into useful outputs are not. Second, researchers are still unsure as to precisely which HRM practices are those mainly responsible for the useful outcomes in terms of firm performance. Third, while most HR researchers agree that HRM practices enable organizations to reap positive outcomes, there is no consensus regarding the multiple distal effects resulting from HRM practices. In an effort to address these concerns, Guest (1997) suggests that in order to be convincing, HRM-performance literature should develop integrative theoretical and analytical frameworks tackling all abovementioned voids.

Inspired to address these gaps in the existent literature and respond to Guest’s (1997) research agenda, we endeavor in this research paper to develop an integrative framework linking high-performance HRM practices to the various facets of organization performance through the intermediary variable of discretionary behavior, specifically OCB, among employees. Unlike previous works, we suggest that because the high-performance HRM practices (including recruitment and selection, compensation, training and development, performance management and empowerment) could be interpreted and perceived subjectively by each employee (Wright and Nishii, 2007; Rowland et al., 2017), their effect on firm performance could be mediated by the OCB exhibited by firm employees (Alnajdawi et al., 2017). If this be the case, such evidence would help us better understand how the impact of HRM can go beyond an employee’s task and job responsibilities to affect his or her discretionary behavior including self-improvement, cooperation with colleagues and creating a positive organizational image, all of which can greatly contribute to organizational performance. We have employed the balance scorecard (BSC) performance measurement system in order to comprehensively capture the several aspects of organizational performance instead of using a single measure focused on and limited to a single aspect. Utilizing BSC links HRM not only to the operational outcomes of the firm but also to the intended distal strategic performance. This research paper thus contributes to the large body of HRM literature by developing an integrative theoretical and analytical framework, which sheds light on one of the salient black boxes that translate HRM practices into both operational and strategic outcomes for the firm.

**Research background**

Despite the great efforts made by researchers to identify and define the linkage between HRM practices and firm performance, sufficient explanation of this relationship is still missing (Becker and Gerhart, 1996; Nguyen et al., 2010; Rogers and Wright, 1998; Wright and Gardner, 2000; Wright and Nishii, 2007). Guest (1997) argues that in order to advance our knowledge in this area, three theoretical frameworks are needed to propose and justify a convincing reasoning that explains the association between HRM practices and firm performance. First, there is the need for a theory of HRM practices; second, for performance theory; and finally, for a theory defining how the two are linked. In developing these theories, there are practical and theoretical challenges, which, if handled properly could in fact help in strengthening our understanding of this relationship (Bowen and Ostroff, 2004; Savaneviciene and Stankeviciute, 2010; Moideenkutty et al., 2011; Shaw et al., 2013). From the theoretical side, there is to date no consensus about the way in which HRM practices
affect performance. On the other hand, from the empirical side, little attention has been paid to the process by which this effect takes place (Wright and Gardner, 2000; Apospori et al., 2008; Chowhan, 2016). Guest and Conway (2011) highlight the need for a mechanism that illustrates this process looking specifically at the role of employee attitudes and behavior as potential mediators.

Many researchers have argued that HRM practices affect performance through their impact on staff attitudes and behavior, which can result in increased productivity and quality of goods and services, and eventually enhanced organizational financial performance (Wright et al., 2003, 2005; Singh, 2004; Beatson et al., 2008; Kooij et al., 2013; Latorre et al., 2016; Abubakar et al., 2017). They also distinguish between two types of outcome: proximal, such as changes in employee attitudes and behavior, and distal, such as financial performance. It is generally recognized that HRM practices should first affect the proximal output in order to then bring about a more distal one. Sound and effective HRM practices should elicit and enhance a positive attitude and behavior among employees; if they do not, those practices have failed to have a strategic impact (Arthur, 1994; Briscoe and Finkelstein, 2009; Inkson et al., 2012). Those employees with a positive attitude and high organizational commitment are most likely to spend their time and energy trying to help the organization in accomplishing its tasks and objectives (Anderson et al., 1994). Becker et al. (1997) stress the same point of view, arguing that HRM practices and leadership have a direct impact on employee skills, knowledge, and motivation, which, in turn, affect employees' behavior in terms of innovation, creativity, commitment and discretionary effort, which ultimately enhance the financial and market status of the organization (Elrehail et al., 2018). It is therefore essential to pay due attention to the direct effect HRM practices have on employees (Becker et al., 1997; Dyer and Reeves, 1995; Kooij et al., 2013; Latorre et al., 2016; Veth et al., 2017). Based on the above argument, we have attempted to study and explain the association between HRM practices and organizational performance, considering OCB as a mediating variable.

The concept of OCB was introduced by Organ (1988), who defined it as “individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system and that in the aggregate promotes the effective functioning of the organization.” In other words, discretionary signifies that such behavior is neither part of the job description nor included in the employment contract; rather, exhibition of this kind of behavior depends solely on the individual him or herself and on his or her personal choices. A few studies have attempted to understand the role of OCB as an important factor in determining the relationship between HRM practices and performance (e.g. Sun et al., 2007). Organ (1990) points out that employees exercise extra-role behavior when their relationship with their employer is characterized by social exchange (Blau, 1964) rather than a purely economic exchange. HRM practices control the rhythm of the relationship between employee and employer, and hence have the potential to motivate employees to exercise discretionary behavior or OCB, thereby increasing employees' contribution to the overall organizational performance. The social exchange theory underpins the relation between HRM practices and OCB, which is essentially concerned with employees' social interaction, considering the benefits they receive in exchange for their contribution. The principle of reciprocity in social interaction determines that the recipient of resources is committed to offer reciprocation to the party providing those resources (Gouldner, 1960). The employer—employee relationship encompasses mutual benefits whereby the employer provides some type of inducement in exchange for the employee's contribution. By the same principle, the organization may induce an employee with some type of benefit in order that the employee reciprocates with OCB (Tsui et al., 1997).

So far we presented two vital variables that shape relationships between HRM practices and the effect they would have on OCB. However, in order to provide an integrative framework of the impact that HRM practices have on institutional performance, we take into
consideration a firm’s distal performance and propose a more holistic view of organizational performance as a response to Guest’s (1997, 2000) call for a more comprehensive performance measurement tool. However, Wright and McMahan (1992) and Wright and Sherman (1999) both emphasize the need for more precision regarding how firm performance is defined and measured. Researchers have so far adopted various methods in their endeavors to measure performance. Huselid (1995), among others, adopted company-level measurements that predominantly rely on the financial indicators. However, in spite of the unquestionable attractiveness of financial indicators as an effective way to convince top managers of the importance of HRM, financial indicators can sometimes be misleading. Besides, it is important and indeed necessary to use a range of various outcome measures to understand how and why HRM has an impact on financial results. Studies conducted by Arthur (1994), MacDuffie (1995) and Guest and Hoque (1994) measure both productivity and quality as indicators of performance. Dyer and Reeves (1995), on the other hand, argue that HRM practices produce outcomes at four different levels: employee (e.g. satisfaction, commitment, absenteeism and turnover), organizational (e.g. productivity, quality, and customer satisfaction), financial (e.g. accounting profits) and market outcome (e.g. stock price). In the same vein, Guest et al. (2000) and Patterson et al. (1997) go a step further and divide outcomes into the following categories: financial, goods and services (e.g. units produced, customers served, number of errors and customer satisfaction) and time (e.g. lateness, absence). Similarly the three essential types of performance measures proposed by Locke and Latham (1990) consist of those measuring the goods and services output, which can be either quantitative (e.g. units produced, customers served) or qualitative (e.g. number of errors, customer complaints); those measuring time (e.g. time wasted, failure to comply with deadlines); and financial indicators (e.g. return on investment (ROI), return on assets (ROA) and cash flow).

Notwithstanding the importance of the above-mentioned efforts by researchers, a more comprehensive framework is needed that encompasses the multiple varied, and mutually dependent performance indicators in one framework to capture how HRM practices simultaneously impact on all these indicators, and how, together, they contribute to boosting organizational performance. Such a framework is necessary to ensure that we are not omitting critical measures in evaluating the HRM-performance link. According to Guest (1997), the improvement of performance measurement systems necessitates the inclusion of a measure that reflects the concept of the balanced scorecard (BSC) whereby a balance is achieved between competing interests of different stakeholders. Guest et al. (2000) suggest adopting a stakeholder perspective to help reach such a balance. They argue that the range of measures used should include internal performance indicators, such as productivity and quality of goods and services, as well as external indicators, such as sales and financial performance. In other words, there is a need to consider a number of interrelated outcomes that go beyond the narrow definition of organizational performance, which is based merely on financial indicators. This perspective is upheld by the BSC concept (Kaplan and Norton, 1993), which was initially proposed as a means of balancing the interests of various stakeholders. According to Kaplan and Norton (1993), those in charge of performance measurement should pay attention not only to conventional financial measures but also to employees, processes and customers. Adopting the BSC methodology implies the need to have multiple criteria for performance that represent the four dimensions or perspectives of the BSC (customers, employees, internal processes and financial). Kaplan and Norton (1993) realized that traditional performance measurement lays the emphasis on past performance reports while the consequences of such an inclination are generally ignored. Performance measurement must focus instead on the future, thereby identifying those elements that are most important for the organization’s improvement. Thus, to maximize the usefulness and ultimate utilization of this performance measurement framework, it should be represented as a management system which has the capacity to evolve beyond performance
measurement to become a framework of organizational strategic management. The BSC therefore has the potential to serve as a framework for a new strategic management process (Kaplan and Norton, 2000), and thus to play a vital role in improving financial control systems and supporting managers in their identification of strategic performance measures, which align with the company’s mission, goals and strategy. To conclude, in this research, BSCs will be adopted as a means of performance measurement in an attempt to attain a holistic view of organizational performance.

Hypotheses development
A number of studies have attempted to understand the role of OCB in determining the relationship between HRM practices and firm performance (Park and Yoon, 2009; Alnajdawi, Emegwali and Elrehail, 2017). Organ et al. (2006) point out that employees exercise extra-role behavior when their relationship with their employer is characterized by social exchange (Blau, 1964; Colquitt et al., 2013) rather than economic exchange. Since HRM practices have the potential to guide and even define the nature of the relationship between employee and employer, they could thereby also serve as a source of motivation for employees to exercise OCB (Moorman, 1991; Kamdar and Van Dyne, 2007; Kompaso and Sridevi, 2010; Rurkkhum and Bartlett, 2012). Selectivity in the hiring process may well convey to those selected the idea that they are the chosen elite (Boswell et al., 2003; Marescaux, De Winne and Sels, 2012; Breaugh, 2013). Employees’ involvement in the decision-making process enhances their sense of importance (Kumar and Saha, 2017). Exposing employees to intensive training and paying attention to their career path planning all reinforce the message that the organization is committed to their individual development and growth. Incentives and rewards based on performance evaluation enhance workers’ sense of recognition and fair treatment, which, in turn, increases their loyalty to the institution (Kraimer et al., 2011; Wang et al., 2014). HRM practices thus have the potential to offer certain inducements to employees, who in return are more likely to exhibit OCB. Based on the above, we form the following hypothesis:

**H1.** HRM practices are positively related to OCB.

Leading companies focus on attracting and maintaining staff that provide value, have an entrepreneurial spirit, and are willing to demonstrate the type of behavior that contributes to achieving organizational objectives (Katz, 1964). A number of researchers stress the importance of such behavior in performance improvement (Paauwe and Boselie, 2005; Subramony, 2009; Katou and Budhwar, 2010; Kaufman, 2015). According to Podsakoff et al. (1997), the culture of OCB has the capacity to improve employee productivity, facilitate effective use of organizational resources, enhance teamwork effectiveness, increase the attractiveness of the work place, attract talented employees and help the organization to be a more flexible workplace. Moreover, many researchers have argued that OCB is really what distinguishes best performing service firms from average ones, noting that the former encourage their employees to participate and engage in OCB behavior, which, in turn, can help in enhancing how customers perceive the quality of services (Berry, 1984; Morrison, 1996). Drawing on the above discussion, we formulate the following hypothesis:

**H2.** There is a positive relationship between OCB and organizational performance.

Unlike the indicators applied in prior research, balanced performance indicators are used to measure how HRM practices contribute to boosting organizational performance and how HRM practices affect multiple aspects of organizational performance at once. The BSC measurement system (Kaplan and Norton, 1993) is applied whereby a balanced representation of the interests of various stakeholders is achieved by adopting multiple
criteria of performance corresponding with the four dimensions of the BSC (customers, employees, internal processes and financial).

We suggest that HRM practices contribute significantly to the four dimensions of BSC. With regard to customer satisfaction, employees’ attitudes and behavior is a key factor in shaping customer satisfaction, especially when considering the direct interaction occurring between employees and customers in service organizations. Many studies have shown a significant relationship between HRM practices and customer satisfaction (e.g. Huselid, 1995). Well-designed HRM practices aid in making employees more competent in serving and satisfying customers whose positive experience is essentially one indicator of organizational effectiveness and performance. Research conducted by Grönroos (1982) and Lewis and Booms (1983) argue that the judgment of service quality is determined by the customer, comparing his or her expectations to the actual standard of service experienced. This point has also been stressed by Parasuraman et al. (1985). Customer feedback therefore is increasingly considered a determinant of both employee performance and service quality especially in service sectors (Bowen and Waldman, 1999).

HRM practices can also contribute to facilitating the internal processes of a firm. An organization’s internal processes include its ability to develop, produce and increase its efficiency by producing goods and services using the most efficient and effective methods. By supplying skilled, knowledgeable, competent and motivated employees, HRM can help organizations to achieve internal growth. Furthermore, the relationship between HRM practices and accounting profits is well established. Well-designed HRM practices help employees to demonstrate their initiative and competences and encourage them to provide extraordinary services that satisfy customers and lead to financial profits.

Finally, HRM practices can be beneficial in terms of organizational learning. According to the literature, organizational learning can take place at three different levels: individual, group and organization. The vast majority of researchers agree that the learning process takes place through individuals, and argue that it is very important for organizations seeking learning and growth to focus on individual learning as a route to organizational learning (Argyris and Schön, 1978; Senge, 1990). HRM practices have been expanded in some institutions to facilitate individual, group and organizational learning (Watkins and Marsick, 1992). Panayotopoulou and Papaalexandris (2004) found that HRM practices have a larger impact on growth and innovation than they do on financial performance. Li et al. (2006) investigate the relationship between HRM practices and technological creativity and performance. Their study revealed that training, psychological incentives, and control of operations all have positive effects on technological creativity, while psychological incentives and control of operations showed a negative impact on technological creativity. It was also found that technological creativity has a positive impact on performance. Based on the above, we propose the following hypothesis:

H3. HRM practices are positively related to organizational performance as measured by the BSC.

Based on the ability, motivation, and opportunity model proposed by Appelbaum and Kamal (2000), HRM practices can affect organizational performance in three ways. First, they can increase employees’ knowledge, skills and abilities (KSAs), which are fundamental for the work to be done efficiently. However, for employees to make a significant contribution to the organizational performance, it is very important that they go beyond their job description and show some form of discretionary effort. Second, HRM practices can motivate employees. However, if an organization wants to take full advantage of their employees’ KSAs, attention needs to be paid to staff empowerment. This latter has been the focus of many HRM practices as a means of motivating employees to demonstrate discretionary effort. Third, HRM practices can enable employee empowerment. To fully
utilize the KSAs of skilled, knowledgeable, and motivated employees, these employees should be empowered, and any barriers in the structure or design of their job should be removed in order that the organization benefits to the maximum extent from the individual efforts and expertise. The role of HRM practices lies in removing any such barriers or obstacles to encourage and facilitate employees’ discretionary efforts.

According to Wright et al. (2003), job behavior can be classified into three categories. The first is in-role behavior, which refers to what is expected from staff as per job description and shared values and norms. In general, this kind of behavior encompasses the tasks that an employee was hired to do. The second is extra-role behavior, which we refer to here as OCB, entails behavior that goes beyond the job requirements and which has a positive impact on performance. Finally, the third category is that of dysfunctional behavior, which includes both in-role and extra-role behavior that directly or indirectly harms organizational performance. Based on the above, we set out our last hypothesis:

\[ H4. \] OCB mediates the relationship between HRM practices and organizational performance.

**Methodology**

A quantitative approach was used to test the suggested hypotheses. This approach offers the possibility of providing statistical confirmation of the conceptual model and its variables. A questionnaire was designed to collect data from the respondents and to gauge their perceptions of the actual HRM practices, OCB, and the performance level of Jordanian banks. The questionnaire was divided into four sections. The first section covered the demographic variables including gender, age, educational level, length of service and job title. The second section covered the respondent’s perception of HRM practices in five functions: recruitment and selection (six items), training and development performance appraisal (nine items), compensation and rewards (seven items) and empowerment (7 items), making a total of 37 items, all of which were adopted from various studies in this field (e.g. Delery and Doty, 1996; Huselid, 1995; Khatri, 2000; MacDuffie, 1995; Park, Mitsuhashi, Fey and Bjorkman, 2003). The third section covered the performance level of Jordanian banks measured according to the four dimensions of the BSC: financial performance (12 items), customers (11 items), internal processes (12 items) and learning and growth (11 items). The total number of questions came to 46, all of which were adopted from the study conducted by Al-Najjar and Kalaf (2012). The fourth section covered OCB, with 16 items adopted from Fox and Spector’s (2011) research, modified to suit the context of the research, the banking sector. This section covered the five dimensions of OCB: altruism, courtesy, sportsmanship, civic virtue and conscientiousness.

Data were collected from managers working in 13 Jordanian banks. The population of the current study is exclusively comprised of occupants of supervisory positions (i.e. directors, deputy directors and heads of departments) in the Jordanian banking sector, of which there are approximately 950 across the 13 different banks. As recommended by Sekaran (2003), the appropriate sample for this population consists of 300 respondents, amounting to 32 percent of the population. Our sample thus consisted of 300 employees, all of whom are either directors, deputy directors, or heads of departments. A convenience sample was selected, participants being chosen based on their availability and accessibility (Diamantopoulos and Schlegelmilch, 1997). In the attempt to cover the whole geographic area of Jordan, sample respondents came from different regions, including southern, northern and central governorates. Three hundred questionnaires were distributed; 255 were returned; and, after excluding unusable questionnaires, a total of 230 were ready for further analysis.

Table I shows the descriptive statistics of the demographical variables. The table indicates that almost 70 percent of our responses come from males, and 70 percent of
respondents are bachelor’s degree holders. The table also shows that the proportion of the age group less than 39 years old is 66.5 percent of the sample which means that the majority of the respondents would be categorized as young professionals. Moreover, almost 61 percent of respondents have less than ten years’ experience, while those who have more than 16 years of service represent only 31 percent of the sample. Finally, the table shows that most (60 percent) of the respondents are in the position of head of department.

Table II shows the descriptive statistics of the underlining variables, including the mean and standard deviation. The correlation matrix is presented in Table III. As shown in Table II, the respondents reported that their organizations perform highly in terms of HRM practices and achieve high levels in all performance dimensions.

<table>
<thead>
<tr>
<th>Grade rank</th>
<th>No.</th>
<th>Dimension</th>
<th>Mean</th>
<th>SD</th>
<th>Evaluation degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Recruitment and selection</td>
<td>4.18</td>
<td>0.480</td>
<td>High</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>Training and development</td>
<td>4.15</td>
<td>0.801</td>
<td>High</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>Performance appraisal</td>
<td>4.15</td>
<td>0.621</td>
<td>High</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>Compensation and rewards</td>
<td>3.97</td>
<td>0.644</td>
<td>High</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>Empowerment</td>
<td>3.75</td>
<td>0.660</td>
<td>High</td>
</tr>
<tr>
<td>HRM practices</td>
<td></td>
<td></td>
<td>4.05</td>
<td>0.534</td>
<td>High</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>Client</td>
<td>4.08</td>
<td>0.557</td>
<td>High</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>Training and growth</td>
<td>4.05</td>
<td>0.651</td>
<td>High</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>Internal process</td>
<td>3.99</td>
<td>0.555</td>
<td>High</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>Financial</td>
<td>3.89</td>
<td>0.873</td>
<td>High</td>
</tr>
<tr>
<td>Overall performance</td>
<td></td>
<td></td>
<td>3.98</td>
<td></td>
<td>High</td>
</tr>
</tbody>
</table>

Table II. The descriptive statistics of the underlining variables

Note: \( N = 230 \)
Data analysis

We build a structure model to examine our hypotheses wherein the model draws a direct path between HRM practices and performance and an indirect relationship between HRM practices and performance through OCB. The proposed model was devised using AMOS, which is designed to estimate and test structural equation models (SEMs). Following Anderson and Gerbing (1988) recommendation, several goodness-of-fit indices were evaluated to confirm the quality of the model, namely, $\chi^2$ statistic (X2), goodness-of-fit indices (GFI), the normed fit index (NFI), the comparative fit index (CFI), root mean square error of approximation (RMSEA), root mean square (RMR) and the X2 re-estimate test (CMIN/DF). The GFIs yielded the following results, as depicted in Table IV.

Table IV. Goodness of fit of the model

<table>
<thead>
<tr>
<th>Goodness-of-fit indices</th>
<th>Cut-off points</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2 = 370.5$, degree of freedom (df) = 180, $p &lt; 0.001$</td>
<td></td>
</tr>
<tr>
<td>GFI = 0.97</td>
<td>1 = maximum fit</td>
</tr>
<tr>
<td>NFI = 0.93</td>
<td>1 = maximum fit</td>
</tr>
<tr>
<td>CFI = 0.95</td>
<td>1 = maximum fit</td>
</tr>
<tr>
<td>RMSEA = 0.04</td>
<td>Values &lt; 0.08 indicating good fit</td>
</tr>
<tr>
<td>(Relative $\chi^2$) CMIN/DF = 2.05</td>
<td>Values &gt; 1 and &lt; 2 were accepted</td>
</tr>
</tbody>
</table>

Notes: HRM practices average variance extract (AVE) = 0.66, Composite reliability (CR) = 0.95, Organization citizenship behavior: AVE = 0.57, CR = 0.71, Organizational performance: AVE = 0.78, CR = 0.94

The results show that the model fits are reasonable and acceptable as per suggestions from Bentler and Bonett (1980), Jöreskog and Sörbom (1984), Tanaka and Huba (1985) and Wheaton et al. (1977). For scale reliability and validity, internal consistency measures (i.e. Cronbach’s $\alpha$, CR and AVE), convergent validity (i.e. standardized loadings), and discriminate validity (i.e. inter-factor correlations) were used. Cronbach’s $\alpha$s were above the cutoff point of 0.60; CR values were also above the cutoff point of 0.60; and AVE values ranged from 0.57 to 0.78, above the cutoff level of 0.50 (Hair et al., 2006). Finally, the standardized loadings were above the thresholds of 0.50, as suggested by Hair et al. (2006).

The results verify evidence of internal consistency, convergent and discriminate validity (Elrehail, 2018). Following James’ (1982) suggestion on how to justify the aggregation score statistically, an intra-class correlation (ICC) analysis was conducted to assess the level of agreement utilizing single and average measures. ICC with the aid of two-way mixed and absolute agreement definitions were used to assess the level of agreement between employees. The aim was to check whether employees in different firms can be differentiated by the variables under investigation single (ICC1) and average measures (ICC2) were reported for the variables. Overall, the $F$-value for ANOVA tests were all significant ($p < 0.001$); this meant that scores were not related to a specific bank.

Table III. The correlation matrix

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recruitmen and selection (1)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training and development (2)</td>
<td>0.652*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance appraisal (3)</td>
<td>0.612*</td>
<td>0.532*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compensational and rewards (4)</td>
<td>0.630*</td>
<td>0.787*</td>
<td>0.625*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empowerment (5)</td>
<td>0.590*</td>
<td>0.580*</td>
<td>0.682*</td>
<td>0.685*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial dimension (6)</td>
<td>0.506*</td>
<td>0.582</td>
<td>0.701*</td>
<td>0.685*</td>
<td>0.483</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clients dimension (7)</td>
<td>0.540*</td>
<td>0.450*</td>
<td>0.532*</td>
<td>0.450*</td>
<td>0.632*</td>
<td>0.589*</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal process dimension (8)</td>
<td>0.780*</td>
<td>0.540*</td>
<td>0.555*</td>
<td>0.632*</td>
<td>0.582*</td>
<td>0.540*</td>
<td>0.554*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Training and growth dimension (9)</td>
<td>0.520*</td>
<td>0.480*</td>
<td>0.460*</td>
<td>0.721*</td>
<td>0.493*</td>
<td>0.580*</td>
<td>0.560*</td>
<td>0.430*</td>
<td>1</td>
</tr>
</tbody>
</table>
Finally, the results of the hypotheses testing are presented in Tables V and VI, revealing the following results:

**H1.** HRM practices have a positive and significant impact on OCB ($\beta = 0.705$, $p = 0.000$).

**H2.** OCB has a positive and significant impact on organizational performance ($\beta = 0.490$, $p = 0.000$).

**H3.** HRM practices have a positive and significant impact on organizational performance ($\beta = 0.468$, $p = 0.000$).

**H4.** OCB mediates the relationship between HRM practices and organizational performance ($\beta = 0.346$, $p = 0.000$).

To adequately test the mediation effect as recommended by Preacher and Hayes (2004) and Preacher et al. (2007), a bootstrapping analysis was conducted to ascertain the mediating effect of OCB, using a 95 percent confidence interval. Results showed that the standardized indirect effect of HRM practices on organization performance through OCB was 0.346 ($p = 0.000$, 95 percent confidence interval: 0.24–0.43). As such, $H4$ received empirical support. Thus, we can say that HRM practices influence the overall organizational performance of banks through the mediating variable of OCB. In other words, a one-unit increase in HRM practice will increase bank performance through OCB by 34 percent (see Tables V and VI).

As shown in Figure 1 below, there is an indirect significant path between HRM practices and organizational performance through OCB, and there is also a direct significant path between HRM practices and organizational performance. This means that OCB partially mediates the relationship between HRM practices and organizational performance.

### Table V. Maximum Likelihood Estimates for the Research (Macro Model)

<table>
<thead>
<tr>
<th>Exogenous variables</th>
<th>Endogenous variables</th>
<th>Coefficient estimates</th>
<th>SE</th>
<th>t-statistics</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRM practices</td>
<td>OCB</td>
<td>0.705</td>
<td>0.037</td>
<td>18.930 ***</td>
<td></td>
</tr>
<tr>
<td>HRM practices</td>
<td>Organizational performance</td>
<td>0.468</td>
<td>0.046</td>
<td>10.085 ***</td>
<td></td>
</tr>
<tr>
<td>OCB</td>
<td>Organizational performance</td>
<td>0.490</td>
<td>0.051</td>
<td>9.530 ***</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** ***Significant at the $p < 0.01$ level (two tailed)

### Table VI. Breakdown of total effect of the research (Macro Model)

<table>
<thead>
<tr>
<th>Exogenous variables</th>
<th>Endogenous variables</th>
<th>Total effect</th>
<th>Direct effect</th>
<th>Indirect effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRM practices</td>
<td>OCB</td>
<td>0.705</td>
<td>0.705</td>
<td>0.000</td>
</tr>
<tr>
<td>HRM practices</td>
<td>Organizational performance</td>
<td>0.814</td>
<td>0.468</td>
<td>0.346</td>
</tr>
<tr>
<td>OCB</td>
<td>Organizational performance</td>
<td>0.490</td>
<td>0.490</td>
<td>0.000</td>
</tr>
</tbody>
</table>

**Figure 1.** The mediation graph
Discussion

The first hypothesis sought to find a significant positive relationship between HRM practices and OCB. The test of this hypothesis did indeed reveal a positive relationship between HRM practices and OCB. Employees who are carefully chosen, trained, empowered and motivated are expected to exercise a high level of OCB. Therefore, HRM practices adopted by Jordanian banks can be expected to lead to the development of loyal and affiliated employees characterized by their altruism, courtesy, sportsmanship, civic virtue and conscientiousness. Employees who perceive themselves to be managed with high-performance HRM practices are likely to demonstrate increased OCB toward their employers. This result is consistent with most of the literature: Many researchers pointed out that HRM practices can enhance OCB (Meetings et al., 1997; Buentello et al., 2008; Gong et al., 2010; Wei et al., 2010). HRM practices play an important role in shaping the exchange relationship with employees, through the inducements offered to them. Selectivity in recruitment may send a message to those selected that they are the chosen elite (Blau, 1986); involving employees in the decision-making process enhances their sense of importance and trust; exposing employees to intensive training and paying attention to their career path planning convey a message that the organization is committed to their development and growth; and incentives and rewards based on performance evaluation enhance workers’ sense of fairness, which, in turn, increases their loyalty to the institution. Therefore, through HRM practices an organization can provide employees with various types of inducements, with the likelihood that staff would subsequently adopt or exhibit enhanced OCB.

Through the second hypothesis we endeavored to find a relationship between OCB and organizational performance measured by the BSCs. Our results provide support for this hypothesis. They indicate that OCB has the ability to improve the productivity of both workers and managers alike, ensuring more effective use of organizational resources, enhancing team work effectiveness and improving performance. Due to the high level of OCB prevalent in Jordanian banks, this could lead to a high level of performance in all of its major dimensions.

The third hypothesis assumed to identify a significant positive relationship between HRM practices and organizational performance as measured by the BSC. Having a system, or bundle, of HRM practices has been considered an antecedent to organizational performance. Our results support this hypothesis. This suggests that HRM practices that include empowerment, participation, job redesign, training, performance appraisal and a rewarding system have the potential to enhance organizational performance. HRM practices have the potential to affect employee skills, thereby playing a vital role in the process of human capital development. A combination of recruitment and selection procedures provide the organization with a pool of talented and skilled employees and by providing them with extensive training these employees can be further developed. In order that the organization reap maximum benefit from these employees, the organization must commit to motivating them by involving them in decision-making and encouraging them to work both harder and smarter. The results relating to this hypothesis are consistent with a number of other studies (e.g. Delery and Doty, 1996; Gong et al., 2010; Huselid, 1995; Khatri, 2000; MacDuffie, 1995; Park et al., 2003; Sun et al., 2007; Wei et al., 2010).

The fourth hypothesis was designed to examine the mediation effect of OCB between HRM practices and performance. Testing this hypothesis revealed an indirect significant path between HRM practices and organizational performance through OCB, and a direct significant path between HRM practices and organizational performance. This means that OCB partially mediates the relationship between HRM practices and organizational performance. The mediation rather than moderation effect of OCB has been focused on in
this study since the former is more appropriate given our aim to explain the mechanisms by which HRM practices affect organizational performance. A mediator effect can be utilized in situations wherein the relationship between constructs is strong and studies encompassing those constructs are mature. In such cases, the next step is to explore the mechanisms behind construct relation (Frazier, Tix and Barron, 2004). Some studies have attempted to understand the role of OCB as an important factor in determining the relationship between HRM practices and performance (e.g. Sun et al., 2007). HRM practices can ultimately control the rhythm of the relationship between employee and employer, and hence have the potential to motivate employees to exercise OCB (Tsui et al., 1997), thereby increasing their contribution to the overall organizational performance. A number of researchers have stressed the importance of such types of behavior in performance improvement (e.g. Li-Yun et al., 2007; Snape and Redman, 2010; Turek and Wojtczuk-Turek, 2015). Drawing on the above discussion, we can conclude that the result of this hypothesis is consistent with existent literature that has stressed the importance of OCB in driving organizational performance.

Theoretical implications
From a theoretical standpoint, this research has several contributions to the existing body of literature. First, while much of the prior research confirms the existence of a significant positive relationship between HRM practices and firm performance (e.g. Delery and Doty, 1996; Huselid, 1995; Khatri, 2000; MacDuffie, 1995; Park et al., 2003), no consensus has yet been reached regarding the mechanism by which this relationship occurs (Wright and Gardner, 2005). The significant lack of knowledge about this mechanism has been referred to by some researchers as the “black box” dilemma, indicating that the ideal model that could be used to interpret this mechanism is still elusive (Purcell et al., 2003). One of the main objectives of this study was therefore to try to remove some of the mystery surrounding this black box by examining the effect of OCB as a mediator of the relationship between HRM practices and performance, thus adding to the few studies that have already attempted to understand OCB in this particular role (e.g. Gong et al., 2010; Snape and Redman, 2010; Sun et al., 2007). The results of this study have indeed offered some new insight, proving that OCB acts as a mediating variable, partially mediating the relationship between HRM practices and organizational performance, as measured by the BSC.

Second, based on the review of related literature, the researcher observed an excessive emphasis on the financial aspect of an organization as an indicator of organizational performance in attempts to understand the effect of the independent variable HRM Practices on the dependent variable Performance. However, this emphasis neglects the various stakeholders affected by HRM activities including customers, employees, shareholders, etc. To address this oversight, Guest et al. (2000) suggest adopting a stakeholder perspective that offers some balance between competing interests and takes into account a range of stakeholders. Guest et al. (2000) argue that any measurement of organizational performance should include internal performance indicators such as productivity and quality of goods and services as well as external indicators, such as sales and financial performance. To put it differently, there is a need to consider a number of related outcomes that go beyond the narrow definition of organizational performance based merely on financial indicators.

In an attempt to provide a better understanding of performance, Guest (1997) argued that to improve performance measures, we would need a measure that reflected the concept of the BSC where in achieving a balance of the competing interests of different stakeholders is accounted for. Pioneered by Kaplan and Norton (1996), the BSC is considered a blueprint that helps an organization translate its mission and strategy into a measurable inclusive
performance, and thereby aids the process of strategic management. The set of measures included in the BSC offers a comprehensive approach to organizational performance, encompassing four perspectives: financial, customers, internal business processes and learning and growth. The cornerstone of the BSC is the non-financial measures that help measure performance in a balanced manner, rather than focusing solely on financial performance. However, a review of the literature indicates that surprisingly few empirical investigations have utilized a comprehensive view of organizational performance such as that of the BSC to examine the relationship between HRM practices and performance. This study has therefore aimed to address this shortcoming in performance measurement, filling the gap in the extant literature by using the BSC to comprehensively measure organizational performance. To do so, this study proposes a conceptual model that encompasses the independent (HRM practices), mediating (OCB) and dependent (dimensions of the BSC) variables. Through utilizing an appropriate statistical analysis technique, the proposed model has been validated; this constitutes empirical support to help fill the aforementioned theoretical gaps.

Managerial implications
In the service sector, companies can achieve competitive advantage through the provision of high quality services that go beyond their client’s expectations. This requires a highly knowledgeable and skilled staff to deliver such service. The results of this research reveal that HRM practices have the potential to motivate employees to practice positive behaviors, which then positively influence performance. According to Katz (1964), leading companies focus on attracting and maintaining staff who add value to the organization, have an entrepreneurial spirit, and are willing to engage in behavior that will contribute to achieving organizational objectives. Podsakoff et al. (1997) argue that OCB can improve the productivity of both workers and managers; ensure that organizational resources are more effectively used; enhance teamwork effectiveness, making the workplace more attractive by increasing employee satisfaction, thus maintaining the relationship with current staff while also attracting new talented employees; help the organization become a more flexible workplace; and finally, boost performance. For the sake of enhancing banking performance, it is therefore vital to invest in employee OCB. If we accept the widely held understanding that HRM practices are an antecedent to OCB, it should thus be mandatory to invest first in HRM practices in order to subsequently elicit employee OCB and ultimately boost organizational performance. We therefore encourage bank managers to invest in human capital development through the implementation of good HRM practices, which will contribute to the bank’s overall performance, in order to create sustainable competitive advantage for their firm.

Furthermore, the general framework of performance measurement, BSC, proposed by Kaplan and Norton (1996) has witnessed an increasing popularity among both academics and practitioners as a comprehensive approach to measuring performance. In addition, the potential of the BSC to function as a strategic guideline by which to translate the organization’s mission and vision into measurable performance indicators prompts us to encourage managers in the Jordanian banking sector to adopt this model as a viable tool of strategic planning based on the balance of various stakeholder interests and corresponding strategic goals.

Limitations
This research paper naturally has several limitations, all of which represent fruitful avenues for future research. First, the researcher relied on a single rater (employees occupying management positions) as respondents of the questionnaire, which could weaken the value of the collected data and prevent us from verifying the inter-rater
reliability of the model (Gerhart et al., 2000). Second, organizational performance has been measured subjectively using a questionnaire designed to gauge managers’ perspectives of performance. However, such a technique is nonetheless considered valid and has been used by a number of other researchers (e.g. Chuang and Liao, 2010). Wall et al. argue that using subjective measures has some advantages in that they can help to verify the measurement of convergent, discriminate, and construct validities. We therefore recommend using both subjective and objective measures in future research.

Third, in general, customers’ opinions regarding their satisfaction with services provided by a bank are obviously essential to determining how satisfactory that bank’s services are. It is therefore recommended that customers are included as a source of data gathering in further research. Finally, the context of the study, the banking sector in Jordan, limits the possibility of generalizing the results of this study to apply to other sectors or contexts. Therefore, it would be useful to study this topic in other sectors to be better able to generalize the results across different industries.

References


Further reading


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The image attributes of a destination: an analysis of the wine tourists’ perception

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Abstract

Purpose – The purpose of this paper is to identify the features that qualify the wine tourism destinations’ (WTDs) image and to deepen analyse the role of the image on the wine tourists’ perception, assuming that it changes from tourist to tourist, depending on who has formed its perception after a real experience or not.

Design/methodology/approach – This contribution fits in the range of studies regarding the measurement of the destination image; the authors suited the Echtner and Ritchie’s model (1991, 1993), as its multidimensionality approach, rarely applied in the area of wine tourism.

Findings – From a comparison between the images of the chosen destination, wine tourists consider Bordeaux the benchmark of WTDs and, in the collective imagery, France is one of the excellences between WTDs. The association territory-wine is less marked, so the biggest contribute is given by the in situ experience.

Research limitations/implications – Despite results can’t be generalised because the samples of convenience, they have provided an overall outline of attributes, benefits and attitudes of wine tourists of Web 2.0.

Practical implications – A managerial lecture of results shows that young destinations (aka new wine regions) have a bigger propensity for destination management as well as the attention to marketing aspects, which are able to influence the competitiveness of destination. Instead, destinations with an ancient tradition (aka old wine regions), although unique for their wines and territories, food traditions and the historic-architectural heritage, need to improve their services.

Originality/value – This research applies the consolidated analysis method of E&R on the theme of destination image to the wine tourism, never used for WTDs, improving the model with a comparison between visitor and no-visitor perceptions.

Keywords Destination management, Wine tourism, Destination image, TDI

Paper type Research paper

1. Introduction

It is still in discussion the relevance that the destination management should have in tourism destination image. On an international level, this theme has been studied through four different perspectives (Elliot et al., 2011): the importance that the image of a destination has in the process of the tourists’ choice (Matos et al., 2015); the measurement of the image of destination through the definition of specific samples (Echtner and Ritchie, 1991; Pike, 2007; Tasci and Kozak, 2006; Li, 2012; Stepchenkova and Li, 2014; Kislahi et al., 2016); the analysis of the process of the image creation (Baloglu and McCleary, 1999); the detection of positive effects for the destination in terms of attractiveness and competitiveness associated to the positive image it has (Tapachai and Waryszak, 2000).

This contribution fits in the range of studies regarding the measurement of the image of destination countries. More specifically we suited the model proposed by Echtner and Ritchie to the measurement of the image of the major international wine tourism destinations (WTDs), rarely applied before, in order to highlight the emersion process and its drivers. In both academic literature fields there is a paucity of research analysing the link between the destination image and the wine tourists’ perception; moreover, the research
enriched the E&R model assuming that the wine tourist perceptions change from tourist to tourist, depending on who has formed its perception after a visit to the place or not and comparing them.

2. Theoretical scope of the research
Since its very first theories (Gunn, 1972; Mayo, 1973), the theme of the image has had a significant importance in the management literature field about destinations (Blain et al., 2005; Nandan, 2005), becoming a fundamental element for success, able to promote, distribute and develop touristic products (Pikkemaat, 2004), furthermore it brings benefits in terms of distinctiveness, profitability and developing innovations.

In fact, if tourists consider the destination as any other product, evaluating tangible and intangible elements (Clifton, 2003; Florek, 2005) through an organic process in which functional, symbolic and experiential elements are focussed (Kim and Yoon, 2003), it is evident that the development of a positive and highly distinctive image is crucial not only to identify and position the specific destination (Kapferer, 1997; Pappu et al., 2006), but also for the making of a solid competitive benefit (Baloglu and Mcleary, 1999).

In this regard, the destination image represents a simplification of a huge number of information connected to a destination for its potential visitors (Kotler et al., 1993), affecting positively the consumers idea. The image guides the individual behaviour because it has a crucial role in the decisional process of choice and purchase (Tapachai and Waryszak 2000; Pike and Ryan, 2004; Tasci and Kozak, 2006; Heitmann, 2011), while giving a global satisfied or unsatisfied judgement of the experience, which has a relevant role on both the re-purchase and the word of mouth (Bignè et al., 2001). The destination image is important because it has to reflect organically values, products, facilities and different economic skills of a specific geographic area (Govers et al., 2007), communicating them unitarily on the outside (Buhalis, 2000) and incentivizing the exchange of resources and competences on the inside of the said area (Haugland et al., 2011). For the consumer, the image offers qualitative guarantees and the promise of an unforgettable journey, bonding it to the chosen destination. On one hand, this allows the tourist to reduce the feeling of any risk (Desivilya et al., 2015), consolidate the experience recall and favour the recall of pleasant aspects (Ritchie and Ritchie, 1998); on the other hand, it offers to the management the basis of a solid unique selling proposition (Blain et al., 2005).

2.1 The literature on wine tourism
The choice to analyse WTDs is taken because of the presence of a consolidated worldwide tourist niche that takes the name of wine tourism (Hall et al., 2000), with a crucial role in the local economy. The growing relevance that this phenomenon has on an international level in terms of tourist flows, specific behaviour models and expressed needs (Mitchell et al., 2000) is directly proportional to a growing attention of academic literature (Bruwer et al., 2017; Fait, Scoriano, Cavallo and Iaia, 2015; Maizza et al., 2014; Koch et al., 2013; Gómez and Molina, 2012; López-Guzmán et al., 2011), that defines wine tourism as (Hall and Macionis, 1998) “visitation to vineyards, wineries, wine festivals and wine shows for which grape wine tasting and/or experiencing the attributes of the grape wine region are the prime motivating factors for visitors”.

Depending on the chosen perspective (if the one of the tourism destination, or the operators involved in the wider tourism sector or the wine consumers), wine tourism can have various configurations (Getz, 2000; Getz and Brown, 2006; Sparks, 2007). We considered the wine consumers’ point of view, as they are curious not only to know more about the products, but also their place of origin (Iaia et al., 2016). So, they consider the tourism destination like the “primary productive resource” where the “production experience” can be seen (Rullani, 2000); in this case, wine tourism allows to unite the wine consumption with the flavours discovery and the pleasure of the visit on the territory,
associated to multiple experiences and different levels of involvement (Charters and Ali-Knight, 2002), creating value for all operators (Festa et al., 2017).

In this perspective of investigation, the WTD is the geographical area that, on the basis of defined and codified specific resources ascribable to tourist terroir (Hall and Mitchell, 2002), is able to start processes of destination management to identify market segments which can recognise and appreciate the offer validity of a well conceptualised wine-related destination. With these assumptions, tourist wine destinations are called upon themselves to think about their image, not only focussing on their functional and symbolic aspects, but especially on those features, mostly immaterial ones, that make them unique (Echtner and Ritchie, 1993; Morrison and Anderson, 2002; Kislali et al., 2016) and distinguish them from other competitors (Kotler and Gertner, 2002).

2.2 The destination and the process of purchase of the consumer

For consumers the image of a destination becomes a crucial aspect, in fact the theories on behaviour show that people act for how they feel rather than on real facts. In addition, they make decisions regarding journeys that are not rational and economically motivated (Bettman et al., 1998) and this aspect is particularly important if we consider the international competition between destinations. Decisions regarding destinations are influenced by non-economic complex factors, for example aspirations, journey desires and self-realisation, interests, motivations, emotions and the cultural environment (Stepchenkova and Eales, 2011).

The touristic image is a mental representation of a location, formed by stirrings and experiences (Tuan, 1975) which often miss a real visit (Fridgen, 1987). Travellers, in fact, know “territories” even though they have never visited or experienced them (Schroeder and Borgerson, 2005), because they have a general sensation linked to that destination (Bignè et al., 2001; Bignè Alcañiz et al., 2009). So, the destination image is able to influence the consuming behaviour of tourists as the journey choice (Kotler and Gertner, 2002), because it allows them to organise the information, to share and express point of views and expectations; in this way, the destination image suggests tourists actions.

The importance that the image has in the decisional process and influencing personal perceptions is a discussed theme, even though the connection between the image of a destination and the process of propensity, selection, intention and purchase decision has not emerged yet (Echtner and Ritchie, 1991). The main stream of contributions focus on the tourist image, to analyse the image as an independent variable from which the behaviour of travellers stem from, with its different expressions such as the location choice, the satisfaction level and the consumer’s loyalty (Bignè et al., 2001; Nadeau et al., 2008).

Moreover, the image of a destination has been identified as an element of tourists’ loyalty. According to Gartner (1989) the final decision of a tourist is based on a set of expected benefits from the “product” destination. These expectations come from different moments of the consumer’s life, before, during and after the visit. The perception and the image of the destination can sometimes change during the process of information request or purchase. It is important for the destination to maintain a set of characteristics in all the stages of interaction with potential or effective tourists. The real experience of a traveller in the tourism destination is able to produce a different perception of its image.

2.3 Image destination and its measurement

As a brand distinguishing name and/or symbol intended to identify the goods or services of either one seller or a group of sellers, and to differentiate those goods from those of competitors (Aaker, 1991), its role is also fundamental for tourism destinations. So the destination branding strategy can design a name, symbol, logo and more elements that defines and distinguishes a destination (Blain et al., 2005) and also communicates the unique selling proposition of the destination which bring value to visitors and investors (Qu et al., 2011). In this sense, the
destination image impacts in several ways the travellers’ decisions, since the moment prior and after the visitation and the related satisfaction level which influence the tourist to repeat the visit (Onder and Marchiori, 2017).

If the contribute that the image can provide for the development and competitiveness of a destination is largely shared, the adoption of an interdisciplinary study approach (Baloglu and McCleary, 1999; Hosany et al., 2007) has made its theoretical qualification quite complex, impeding to achieve an univocal definition (Gallarza et al., 2002; Tasci and Kozak, 2006; Stylidis et al., 2017; Lai and Li, 2016).

Some studies consider the image as an unaware and overarching construct if compared to the single features that contribute to define the destination offer (Ahmed, 1991). Others instead, define it as a multi-featured construct, analysing the three fundamental components, hierarchically interrelated, that take part in its formation: the cognitive component, the conative and affective one (Baloglu and McCleary, 1999). In these models, cognitive evaluations refer to beliefs and knowledge relative to the features of a specific destination, the conative ones refer to the will of visiting it, while the affective ones refer to the complex of feelings and emotions associated to the destination and work as variable between the cognitive evaluation and the construction of the global image that shapes itself while evaluating a defined destination (Michaelidou et al., 2013; Yang, 2016; Qu et al., 2011; Kastenholz et al., 2018; Lee et al., 2017).

Moreover, the image is dynamic, because it is subject to change over time (Kislali et al., 2016; Xu and Ye, 2018) and relativistic, because it is a set of perceptions that vary, according to the space and geographic distance in which they are formed (Crompton, 1979).

The variety of definitions that are present in literature and the multidimensionality (Ryan, 2003) of the concept of “image of destination”, make the choice of the model to use to measure it also difficult (Stylidis et al., 2017; Xu and Ye, 2018), because of tangible and intangible elements, measurable and not-measurable, that make up the image.

The models developed up till now, have focussed the attention on quantitative techniques for the measurement of items, based on tangible elements as the price, facilities and touristic services, omitting intangible aspects – as ideas and sensations that belong to the collective imagery – that cover a relevant position in terms of attractiveness and perception of the image.

However, among the various models proposed in the academic literature inherent the destination image review and taxonomies (Gallarza et al., 2002; Dupain and Novitskaya, 2015; Kislali et al., 2016) agree that Echtner and Ritchie’s (1991, 1993) model is the reference framework for the measurement of the image of a destination. If most of the studies are focussed on specific components of the destination image without taking in consideration a more holistic and general vision (Pike, 2016), the multidimensionality of the approach of the two authors considers intangible and psychological elements, holistic perceptions and unique attributes as functional and common characteristics of a destination.

3. Aims of the research and methodology

3.1 Applied model and research questions

On the basis of the recalled theoretical prerequisites, the purpose of this research is to identify the features that qualify the image of WTDs and to analyse its role on the perception of wine tourists, assuming that the image of the destinations changes from tourist to tourist, depending on who has formed its perception after a real experience or not.

As previously specified, the used viewpoint – brand image (Keller, 1993; Kapferer, 1997) – is based on the ability of consumers to perceive the differences between destinations. In this perspective Echtner and Ritchie’s (1991) model has been adapted in the area of wine tourism (cf. Figure 1). This model states that a destination must be favourably differentiated and/or
positively positioned in the mind of the consumer and while evaluating the image of the destination, three fundamental dimensions must be considered:

- **Attributes vs holistic**: it is an itinerary that starts by identifying the single attributes directly bonded with the destination and ends by identifying the elements that describe, from a systematic point of view, their own mental image.

- **Functional vs psychological characteristics**: in such dimension, a concrete and visible characteristic may undergo a process of psychological abstraction and therefore be evaluated in relation to the sensation that the tourist feels.

- **Common vs uniqueness**: it allows to identify the distinctive elements of a WTD, distinguishing those that are considered common-generic for all destinations and those linked exclusively to specific destinations.

So, the research questions are:

**RQ1.** Which attributes and holistic image is linked to a WTD?

**RQ2.** What differences exist between the image of tourists who have visited the destination and those who do not have a real experience?

### 3.2 Data collection

For the above-mentioned reasons, an on field analysis has been carried out through the collection of data using a structured questionnaire. The questionnaire, validated by a pilot test and conveniently reviewed, is made up of open and multiple choice questions, divided in three sections.

The first part has allowed to outline the wine tourists who have joined the survey (nationality, age, etc.).

The second part of the questionnaire intended to define the destination image according to the perception of wine tourists (RQ1), moving from the major international WTDs. In fact, partly adopting the principles of benchmarking (Watson, 1995), the questionnaire asked which were the three main wine tourist destinations held by wine tourists to be

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**Figure 1.**

The components of destination image

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**Source**: Echtner and Ritchie (1991)
representative of excellence, based on the top-of-mind approach (the first-named brand in a recall task Aaker, 1996). So, taking into consideration the number of times that a destination has been mentioned and the number of times that the same has been nominated for 1st – 2nd – 3rd, we have assigned a value equal to: 3 if the destination has been mentioned for first, 2 if indicated at the second place and 1 if indicated as third.

This section of the questionnaire has allowed us to reach a mapping of the attributes that qualify the image of WTDs and responding to RQ1, as mentioned. So, the wine tourist has been asked to provide, referring to the destinations they have previously chosen with the top-of-mind approach, three indications (grading them for importance) regarding the following dimensions:

(1) Images and characteristics: elements that come to the mind of the tourist as he thinks of the destination.

(2) Atmosphere or mood: the mood that a precise destination creates in the tourist. It can come from factors that, although concrete, can raise symbolic-emotional and experiential elements.

(3) Distinctive or unique tourist attractions: distinctive and/or unique elements that connote the destination and identify it in an univocal way.

By this way, wine tourists explained the image attributes mainly perceived for each above-mentioned WTD. Referring to each of the three dimensions above (a, b, c), the list of the words used by the interviewed has been extrapolated, normalisation of terms and semantic synthesis[1] so, via congruous graded method, each of the predicted terms has had a value, taking into consideration the frequency and the relevance assigned from the wine tourist. At the end of this process, adapting Echtner and Ritchie’s model it has been possible to construct the mapping of the image attributes (cf. Figure 2).

The third and last section of the questionnaire asked the interviewed if they had visited the indicated locations with the purpose to resolve RQ2 and distinguish some possible differences between the perceptions of who have visited the destination and those who have not had a real experience. In this sense, the distinction analysed enhanced the E&R model assuming that the wine tourist perceptions change from tourist to tourist and allowed a comparison of the two perspectives.

The diffusion of the questionnaire took place using digital instruments by Web 2.0, seeking the involvement of as many wine tourists and wine-bloggers as possible, on a global scale (Nicoli and Papadopoulou, 2017). For this purpose, the link of the questionnaire has been many times posted on Facebook and Twitter pages, involving some well-known WTDs, identified thanks to the previous researches regarding excellent international WTDs (Scorrano, 2011), as believed to be “aggregators” for the treated matter, that is tourism and/or wine (e.g. “International Wine Tourism Conference”, “Châteauneuf du Pape”, “Chianti Classico”, national and international bloggers).

The activities of administering the questionnaires, observation of answer rates and consequent reminder, posts on Facebook and Twitter and frequent dispatch of the questionnaire, were led between March–May 2017; the fulfilment of the same has allowed, through samples of convenience, to consider valid 366 filled questionnaires.

4. Results

4.1 Sample profiling and chosen WTDs

The re-elaboration of the first section has allowed to outline the sample of wine tourists that took part in the survey: men (40 per cent) and women (60 per cent), aged between 18 and 60 (75.5 per cent), mainly with an academic education (85 per cent) and a professional employment (32.4 per cent). On the basis of the geographic origin, the majority of wine
### Functional Characteristics

#### Core Resources
- **Bordeaux**
  - Food: Wine, Bordeaux, White, Burgundy, Crisps, Cheese, Pork, Europe, Client, Vineyard
  - Landscape: Countryside

#### Phytogeography and Climate
- **Tuscany**
  - Food: Cheese, Wine, Sangiovese, Chianti
  - Sun, Weather: Sun, Rain and Sun
  - Countryside

#### Landscape Heritage
- **Napa Valley**
  - Grapevines, Food, Sun, Vineyard, Opus one
  - Nature: Sunny, Sun Summer, Sunshine

#### Culture and History
- **Bordeaux**
  - Exquisite Wine, Good wine, Good/great wine, Good food
  - Quality, Relaxing, Serenity, Charm, Classical, Enthusiastic, Young, Luminous, Crisp, Busy

#### Productive and Organizational Heritage
- **Bordeaux**
  - Wine, Grapevines, Quality, Relaxing, Serenity, Charm, Classical, Enthusiastic, Young, Luminous, Crisp, Busy

### Psychological Characteristics

#### Emotional Attributes
- **Bordeaux**
  - Excellent/good wine, Good wine, Good/great wine, Good food
  - Quality, Relaxing, Serenity, Charm, Classical, Enthusiastic, Young, Luminous, Crisp, Busy

#### Philosophical and Values
- **Tuscany**
  - Excellent/good wine, Good wine, Good/great wine, Good food
  - Quality, Relaxing, Serenity, Charm, Classical, Enthusiastic, Young, Luminous, Crisp, Busy

### Source
Our elaboration
tourists are Italians (38.7 per cent), followed by Germans (20.7 per cent), Californians (10.6 per cent), English (4.8 per cent) and Spanish (3.2 per cent).

The formulation of the ranking of the notoriety of destinations highlights that the first two famous destinations for wine tourists are also destinations of the oldest wine-producing tradition – Bordeaux and Tuscany – followed by areas with a younger vocation – Napa Valley –, that have started successful competitive wine-production processes.

The definition of the attributes of the image perceived by wine tourists must be led on the first three indicated destinations: Bordeaux, Tuscany and Napa Valley. The analysed sample is balanced between visitors and non-visitors of the destination[2].

4.2 Wine tourists’ perception of WTDs

The principal drivers of the image perceived by wine tourists (RQ1) have been identified through a process that contextualised the terms in comparison with the chosen destination (e.g. Champagne for Bordeaux has the ordinary usage of wine in the international contest). Subsequently, each driver has been assigned to the belonging macro group. The following mould (cf. Figure 2) presents the effects that driver macro groups have on single destinations, distinguishing the perception of wine tourists who have a direct experience and those who do not (RQ2).

4.2.1 Functional characteristics/attributes of WTDs. The overall value of the I quarter of each destination, highlights the presence of common characters that revolve around the concept of wine, geo-naturalistic and climatic characteristics of the territory. Observing its composition in the imagination of who has visited the destination and who has not is more interesting. Comparing for example the elements that build up the two macro-groups, Napa Valley is principally known for elements strictly bonded to the territory (sun, summer, sunshine), while major identity elements referred to wine (Cabernet Sauvignon, Opus wine, bold/red wine, vineyard) for those who lived in that territory. If the same situation happens in Tuscany, associated to specific characteristic features (Chianti, Sangiovese), for the destination/territory Bordeaux, wine tourists who do not have a direct experience are those that outline the destination image with major accuracy (Claret, Burgundy, Castles, Terroir-cru, Burgundy).

4.2.2 Attributes/psychological characteristics of WTDs. Observing the III quarter it is noticeable, with a similar perception for all destination, that the common factor is excellent wine in all kinds of tourists. Moreover, for Tuscany and Napa Valley there is a cognitive perception in those who have visited the destinations, connected to the population (nice/lovely) and to elements like the link food-wine (good/great food) and wine-territory (beautiful vineyard).

4.2.3 Holistic/functional characteristics of WTDs. The comparison of the recorded data in II quarter where the evaluation of functional attributes happens at the interior of a wider system characterised by the perception between holistic bonds, allows some interesting observations, starting from the single destinations in which holistic resources are largely considered in every area. This highlights that in the consumer’s imagery, functional elements have connections that take on different combinations in each of the three destinations, forming the brand image. Lingering on the bond between culture-history-territory, it is distinguishable from the elements chateaux, famous/interesting history, traditional/cultured for Bordeaux as well as for Tuscany history/old, ancient properties, family generation; from what has emerged in I and III quarter, the image that non-visitors have of the French destination is almost the same as the wine tourists’ who have visited it, who enrich such imagery qualifying the known elements (famous, interesting chateaux). The principle differences are ascribable to productive and organisational heritage. It is obvious the contrast between the orientation of marketing, of
modern organisation (wine train) and the competitiveness of players of the New World (the words mostly used are: organisation, marketing, new world, competitive new player, organised, corporate, modern tourism, wine train) with the productive tradition, rich winemaking heritage, ancient vineyards and the professionalism of old producers (identified by the words: rich wine heritage, professionalism, product enhancement, family oriented, traditional winemaking, many guided visited, local festival, excellent marketing).

4.2.4 Holistic/psychological characteristics of WTDs. The IV quarter that includes the group philosophy and values, is the most interesting one, since it demonstrates both how sensorial and mood attributes are extremely important in the emerging process of the territory’s brand image and how the difference in perception between who has and who has not visited the destination is almost absent. Adjectives that characterize it are relevant: if on a hand every one recalls a calm, friendly, relaxed and back to the origins atmosphere, on the other it is evident how fascination, charme and sophisticated of the old wine region concepts substitute adjectives like open minded, welcoming, fun, young that express the more jolly and modern character of new wine region.

4.2.5 Common vs uniqueness dimension of WTDs. For the regions with an ancient winemaking tradition (Bordeaux and Tuscany) the fil rouge of the image is history, the tradition and their linkage with wine; data have allowed to observe that:

- wine is directly identified with specific denominations like: Champagne, Bordeaux, Burgundy, Bourgogne, Chianti;
- the bond between wine and food is well perceived, that is why cheese and wine, fine restaurants, cuisines are often named; and
- in the uniqueness dimension the historic-architectural heritage plays a major role (artistic cities and museums in Tuscany).

Instead, for younger areas (Napa Valley) references to American metropolis are important (San Francisco, Los Angeles), to specific environmental sites (Sonoma Valley Coast, Red Wood Forest) and to services like wine train, shopping, easy travelling, golf, indicative elements of a marketing vision looking for the enjoyment with secondary services.

5. Discussion and managerial implications
From the analysis, a different image for each destination has emerged from visitors and no visitors (RQ2). Napa Valley is characterised by elements strictly bonded to the territory and wine, besides the connection food-wine and wine-territory. To these a cognitive perception must be added to the relation between tourists and operators and the population in the destination, recurrent and appreciated element by who has visited the destination. The perception of the image, in a holistic way, is associated to a young destination as Napa Valley is, cosy and open minded, easy going but at the same time chic.

The image that tourists have on the wine destination Tuscany is ascribable to elements of territory, of wine with its bonds to food and the territory of origin as well as the population. Such image is agreeable mostly to who has lived in those places. In a holistic perception, tourists who talk about Tuscany, feel a strong tie between historic and cultural heritage and the territory of this destination, from which its charm and sophistication emerge.

Contrarily to what emerged from the first two destinations, the image connected to Bordeaux from wine tourists who have not visited it, not only is well defined, but also punctual with the features of the productive tradition, oenological heritage, landscape of ancient vineyards and chateaux, in which winemaker families live. The only differentiation element added by wine tourists who have visited the destination is the use of adjectives that emphasise the specificity and underline the refinement of the French experience.
While comparing the “new” and “old” wine destination image perception of the visitors and non-visitors of the chosen destinations, the results of the analysis could represent an important future development of both. A managerial lecture of results shows a bigger propensity for destination management of young destinations, as for Napa Valley, for the attention to marketing aspects as well as for the research of an always current organisational model, with a wide range of facilities, and following the sector trends; these aspects are able to largely influence the competitiveness of the destination.

Instead, in the destinations with an ancient tradition, as Bordeaux and Tuscany, although the important role of wines and territories (Sotiriadis, 2017), food traditions and the historic-architectural heritage (Pantano, 2011), it is important to highlight the scarce concern for the offered services.

Therefore, it appears to highlight that the positive value of tradition must not be associated to the static offer regarding the services. In this sense, besides a better communication of the experiences of wine tourists, it would be useful for the destination, to pay more attention to the human side, that is giving it a “face”. For example, through the operators involved in the service offer of that destination, in order to reduce the perception gap of wine tourists; in this way, destinations could change the stereotypes connected to single nationalities, relying on professionalism and hospitality of the destination.

This research could also be used for educational purposes as demonstrates the use of particular research models, as Echtner and Ritchie, and shows the subsequent opportunities on the destination image development of the proper marketing strategies.

6. Conclusions
Wine tourism is a growing sector that deserves deeper attention by researchers for its crucial role in the local economy.

The research tried to contribute to the literature of destination image filling the defined gap, in both academic literature fields where there is a paucity of research analysing the bond between the destination image and the wine tourists’ perception, applying a consolidated method of analysis on the theme of destination image to the wine tourism area for the first time (Fait, Cavallo, Scorrano and Iaia, 2015).

The research also enriched the E&R model because it assumes that the wine tourist perceptions change from tourist to tourist, depending on who has formed its perception after a real experience or not and comparing them.

Despite the results cannot be generalised because of the difficulties in defining the survey’s sample according to suitable statistic methods, in fact, they have nevertheless provided an overall outline of attributes, benefits and attitudes of an important category: wine tourists of Web 2.0.

In particular, from the analysis a conceptualisation of a brand image model came out that highlights how wine tourists from Web 2.0 perceive the image of destination through an organic process activated by recognising common resources to all wine regions (core resources, physiographic and climate), new and old ones.

Through a psychological abstraction process (Kock et al., 2016), they become emotional attributes and lose, once perceived in a holistic way, the dimension of simple attributes in order to become concrete attractors (landscape heritage, culture and history, productive and organisational heritage). Lastly, the holistic-psychological evaluation activates symbolic and emotional elements (philosophy and values) generating an integrated system in which each component, relating to others, becomes richer in immateriality, and consequently has more recognisable value (Pappu et al., 2006). This last step allows the destination image to become the result of a mechanism of relations activated or perceived by the consumer (Vrontis, 2011).

From the observations it is evident that the brand image can become a successful critic factor, able to promote and develop a territory and its products (Pikkemaat, 2004;
Stylidis et al., 2017) if, from a destination management point of view, brand identity policies tend to valorise and potentiate the mechanism where the brand image of a WTD is formed, in order to create uniqueness, recognisability and value (Apostolakis et al., 2015; Kislali et al., 2016).

The described reference framework can be considered an example of the elements that must be consolidated in order to strengthen the competitiveness between WTDs (Baloglu and McCleary, 1999), as well as a tool to ease communication and discussion between actors of a territory, in terms of definition of strategies needed to reinforce the immaterial components for the formation of the image, and towards the co-evolution of the value of territories and their productions (Viassone et al., 2016).

Further research to overcome the limitation of this study could be interesting to increase the sample of wine tourists, to extend the analysis to the nationality of the interviewed with the aim to nationalise results and develop appropriate marketing strategies for WTDs.

Notes
1. Transformation of plurals to singulars, of feminine to masculine, elimination of articles, adverbs, pronouns, etc. and grouping of words considered synonyms.
2. Bordeaux 52.5 per cent visitors; 47.5 per cent non-visitors; Tuscany 54.3 per cent visitors; 46.7 per cent non-visitors; Napa Valley 48.9 per cent visitors; 51.1 per cent non-visitors.

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The image attributes of a destination


**Further reading**


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Corporate social responsibility and future financial performance
Evidence from Tehran Stock Exchange

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Abstract
Purpose – The purpose of this paper is to investigate the relationship between corporate social responsibility (CSR) expenditures and firm financial performance in an emerging market.

Design/methodology/approach – The authors examine the hypotheses by performing panel data analysis on a sample of 159 companies listed on the Tehran Stock Exchange during 2010–2015.

Findings – The findings suggest that the investment in CSR initiatives is significantly and positively associated with firm financial performance as proxied by changes in return on assets. Moreover, the findings confirm a positive and significant association between CSR expenditures and firm financial performance as proxied by both the future changes in return on assets and the future changes in operating cash flows scaled by total assets.

Originality/value – The present study has examined the relationship between CSR and firm financial performance in a country where, to the authors’ knowledge as in most other developing markets, such a relationship has not been a subject of empirical research. Besides, the use of a three-dimensional measure of financial performance, primarily considering research undertaken in an emerging market, as a valuable contribution may be observed.

Keywords Financial performance, Corporate social responsibility, Tehran Stock Exchange, Developing market

Paper type Research paper

1. Introduction
The question of whether a publicly held company should involve in socially responsible behavior is still a subject of much debate and sharp disagreements in the literature. In this regard, the traditional economic logic suggests that the corporate managers are required to make decisions maximizing the wealth of a firm’s equity holders through increasing the present value of a firm’s future cash flows (Mackey et al., 2007). Nevertheless, the traditional financial logic argues that the socially responsible activities and practices should be avoided when they do not meet those economic objectives set by the traditional economic logic (Jensen and Meckling, 1976; Mackey et al., 2007). In this sense, prior literature introduces some particular types of socially responsible activities increasing the value of a firm’s future cash flows and thus maximizing the wealth of a firm’s equity holders. To illustrate, socially responsible behavior can act as a contributing factor in differentiating a given firm’s products in the market (McWilliams and Siegel, 2001), can help firms to avoid governmental fines (Bragdon and Marlin, 1972; Freedman and Stagliano, 1991) and can act as a risk shield for listed companies (Godfrey, 2005). Despite the preceding arguments and discussions, social responsibility theorists contend that there should be some social responsibility activities beneficial to employees, customers, suppliers and society at large although those activities lead to a reduction in the present value of firm’s cash flows (Mitchell et al., 1997; Mackey et al., 2007). Accordingly, the present paper attempts to address this issue by examining the conditions under which firms will engage in socially responsible activities even if those activities reduce the present value of a firm’s cash flows. Windsor (2001) terms these activities as “costly philanthropy” which lies against the term “profit maximizing ethics.”
Over the past few decades, the need for corporate social responsibility (hereafter “CSR”) has been accentuated even in countries where the shareholder-oriented ownership is dominant (Christensen, 2013). In the wake of recent corporate collapses like the case of Enron and similar affairs, the restoration of reputation appears to be the primary motivating factor for companies to adopt CSR practices. Corporate managers have reacted to such demand and incentivized to issue CSR reports and obtain their external assurance. Recent studies have focused primarily on the impact of these reports on shareholders’ value and the reason of why such reports, of themselves, are issued (e.g. Christensen, 2013). Moreover, prior literature indicates that firm’s reputation or brand protection is the most frequent reason given by corporate executives when interviewed and asked why they adopt CSR reporting (KPMG, 2011; Crespin, 2012; Christensen, 2013).

To the best of our knowledge, a large body of literature, to date, has focused on the relationship between CSR and firm financial performance (e.g. Aupperle et al., 1985; Marcus, 1989; Teoh et al., 1999; Wright and Ferris, 1997; Margolis and Walsh, 2003; Orlitzky et al., 2003; Mishra and Suar, 2010). Although these studies have provided mixed results, the positive relation between CSR and firm financial performance has been the prevailing result (Griffin and Mahon, 1997; Waddock and Graves, 1997; Margolis and Walsh, 2003; Orlitzky et al., 2003; Mishra and Suar, 2010). Furthermore, the vast majority of previously mentioned research studies have been conducted in developed countries, particularly in western ones. In other words, the empirical evidence on CSR and its relationship with firm performance is still lacking. In this regard, Mishra and Suar (2010) attribute the dearth of required evidence on CSR to the weaknesses of institutions, standards and appeal systems prevailing in developing countries. In Iran, the relationship between social responsibility and financial performance has been less studied. The reason is probably Iranian companies believe that the customers do not pay attention to CSR disclosure when they want to buy their products. The question one should ask is “do Iranian investors react to disclosure about CSR activities of a company?” Accordingly, the present study attempts to fill the gap and extend the current line of research on CSR and firm performance in developed and developing markets. Thus, an evaluation of the relationship between CSR and corporate financial performance (CFP) should help managers to understand the impact of investments in social responsibility on company growth. We argue that the provision of such evidence in a transition market like the TSE with its unique socio-economic, political and cultural characteristics could contribute substantially to current literature on CSR and establish the external validity of earlier findings.

The remainder of this paper is organized as follows: the next section frames the study into theoretical backgrounds of CSR. Section 3 summarizes the literature and develops the hypotheses. Section 4 outlines where data are obtained and the sample selection procedure. Section 5 presents the research design and methodology. Section 6 then presents the main results and implications drawn from statistical analyses and finally Section 7 concludes the paper and presents the concluding remarks.

2. Theoretical foundation
2.1 Definition of CSR
One of the first discussions about CSR happened in 1932 with a series of articles by Columbia Professor Adolf A. Berle and Harvard Professor E. Merrick Dodd, presented in the Harvard Law Review journal (Cochran, 2007, p. 449). In the early twenty-first century, debate about the role of social responsibility in the global economy has increased because of the collapse of some companies and their financial scandal like Enron and Worldcom (Smith, 2003). But here is a key question in mind: what is CSR? As far as we know, no consensus in the literature has caused CSR defined in different ways by various researchers. Over three decades of intensive scientific
study in the field of social responsibility, scholars still disagree upon fundamental issues of what constitutes social responsibility (Aguilera et al., 2007). For instance, Van Beurden and Gossling (2008) defined CSR this way: “CSR is the persistent obligation by corporate to behave honorably and contribute to economic development, whereas improving the quality of life of the labor force and their families as of the native community as a whole.” According to Bhattacharya et al. (2009), CSR is commitment to improving the health of the community through volunteer activities and commercial assistance from company funds. Zhu and Tan (2008) noted that CSR is a process of wealth creation and improving the company’s competitive advantage. Despite all the definitions provided by different scientists, there is a general belief that the role of organizations in society is more important than maximizing the wealth of a firm’s equity holders (Babalola, 2012).

2.2 The benefits of CSR

Having a good CSR has many advantages for companies. The first case is risk reduction which means companies with high social responsibility are hardly ever the target of criticism and blame from others. In fact, companies with such characteristics do not violate human rights and the relationship with their workforce is really moral. As a result their earnings will grow (Hillman and Keim, 2001). In other words, social responsibility not only helps a company to make money but also increases corporate reputation in the market (Scholtenst, 2008). The second is relating to regulatory protection. It affords companies access to operating rights in possibly geographically sensitive areas (Hillman and Keim, 2001). The next advantage of CSR is brand equity. Sometimes it happens that customers are forced to have a choice between competitors. By and large, the companies work in a market full of ideas and thoughts, and those companies with use of CSR can influence on the confidence of customers (Brine et al., 2007). Yongqiang (2009) also expressed that organizations that are involved with social responsibility can attract customer insight into select brand. Another important benefit of CSR is employee productivity; firms that have a good employer–employee relationship are more willing to continue working with their staff, because they are always enthused and they also increase the efficiency of the company in total (Brine et al., 2007). Finally, the last advantage of CSR is regarding cost of capital. Succinctly, CSR will be able to decrease a firm’s cost of capital through socially responsible investment (SRI).

2.3 Different aspects of social responsibility

According to Carroll (1979), social responsibility consists of four aspects. Iranian companies define CSR similar to the legal pyramid of carol. In the first place, firms pay attention to economic dimension and then philanthropy (Vahidi and Fakhari, 2015).

In today’s world, economic responsibilities are the most important aspect of social responsibility in which the primary responsibility of each firm is achieving profit. Another part of the economic dimension also includes increasing profits for interest groups. The second is the legal dimension of CSR in which organizations should not break general rules. The difference of the ethical responsibilities from the first two dimensions is that the ethical responsibilities are not necessary but expected by society. In other word, ethical dimension deals with extra-legal issues. The philanthropic responsibilities stand at the top of the pyramid and to be a good corporate citizen and expand the quality of life for the society is the purpose of these accountabilities (Carroll, 1979).

2.4 CSR and financial performance

The investigation of the association between CSR and CFP can be observed from two viewpoints. The first view is the positive interpretation. This would suggest that
implementing good CSR practices will have an affirmative effect on the CFP of the companies (Ramchander et al., 2012). The second interpretation is the pessimistic viewpoint. This would suggest that CFP is adversely affected by actions that are deemed to be good CSR practices (Chipeta and Vokwana, 2011). Most previous research has tried to figure out the relationship between CSR and firm performance (Van Beurden and Gössling, 2008). The interesting point is that these studies have shown different results (Jiao, 2010). The different results show the different theoretical perspectives on the relationship between CSR and financial performance. Van Beurden and Gössling (2008) supposed that the different results achieved have been caused by the various methodologies used by the researchers. Barnett (2007) commented that we are unable to absolutely determine whether a one-dollar investment in social plans returns more or less than $1 in benefit to the shareholder. However, CSR is shown to decrease conflicts between corporations and society. As Wood (1991) said that CSP is a business organization’s principles of social accountability, process of social responsiveness and plans, strategies and obvious results as they deal with the firm’s social relationships. Investors rarely invest in companies with high social responsibility, because investment in social responsibility programs has high costs in the short term (Dusuki, 2008). Although the implementation of CSR includes the initial cost for a company, it ultimately leads to improve performance of the company (Podzi et al., 2009).

With respect to SRI has often been named the “financial cousin” of CSR, in that it developed as a market response to businesses that comprised sustainability practices and principles. But there is another definition of social responsibility in America in this way: “the process of integrating personal values and societal concerns into investment decision-making” (Schueth, 2003). SRI is an investment process that allows investors to combine financial purposes with their social ideals (Muñoz-Torres et al., 2004). Investors engaged in SRI do not pursue financial achievements at the expense of their social and environmental principles despite the fact that they are interested in receipt of high returns on their investments (Geczy et al., 2005). As a result, indicating it has acted in a socially and environmentally responsible method can provide a firm with four main benefits: improved corporate image and relations with stakeholders; better employment and maintenance of employees; improved internal decision making and cost savings; and improved financial returns (Adams and Zutshi, 2004).

2.5 Theories about CSR
Here are some theories of CSR discussed below.

2.5.1 Instrumental theories on CSR. First proposed by the renowned Friedman (1970) view, the instrumental theories on CSR imply that CSR is merely a strategic tool or instrument to achieve economic goals and subsequently increase the interests of those who have a stake in a given firm (i.e. the stakeholders). On the other words, from the instrumental theory viewpoint, the CSR practices are designed to contribute to wealth creation for shareholders and maximize their value. In this view, Friedman (1970) regards the maximization of shareholders value as the primary responsibility of business entities toward the society. Garriga and Melé (2004) identify three main groups of instrumental theories based on the economic objectives. The first group is the short-term profit-oriented group which measures the maximization of shareholder value by the share price. The second group indicates the long-term profits stemming from competitive advantage. Finally, the third group focuses on cause-related marketing. Taken together, the instrumental theories on CSR place emphasis on the investment in philanthropy and wealth creation for shareholders and other interested groups (McWilliams and Siegel, 2001; Garriga and Melé, 2004).
2.5.2 Political theories on CSR. Prior research suggests that there is a considerable stream of CSR theories and approaches on the interactions and connections between the power and position of business entities and their inherent social responsibilities which can be classified under two major categories as follows (Garriga and Melé, 2004).

2.5.3 Corporate constitutionalism. The seminal work of Davis (1960) extended the understanding of CSR by introducing business power as a new concept influencing the equilibrium of the market. Specifically, the theorist rejects the classical economic theory of perfect competition and wealth creation for shareholders and formulates two principles of social power management. His principle of “social power equation” focuses on social power of business entities which delineates their responsibilities toward society (Garriga and Melé, 2004). Indeed, he attributes the social responsibility of businessmen to the amount of social power they acquire. On the other hand, his “iron law of responsibility” takes account of situations where businesses fail to use their social power and accordingly they lose their power. This loss occurs because there are some other groups, termed as “constituency groups,” who seize the opportunity and occupy the unused social power (Davis, 1960).

2.5.4 Corporate citizenship. It can be inferred from prior literature that the term “corporate citizenship” was initially used by practitioners in the 1980s in order to introduce a new aspect of the business and society relationship (Vidaver-Cohen and Altman, 2000; Garriga and Melé, 2004). Furthermore, there is a large body of recent research that investigate the concept of “corporate citizenship” and its popularity among managers and businessmen (e.g. Logsdon and Wood, 2002; Matten et al., 2003; Garriga and Melé, 2004). In this respect, some researchers have provided various meanings for “corporate citizenship.” Matten et al. (2003), for instance, identify three different views of corporate citizenship, namely the limited view (which is equal to corporate philanthropy and social investment), the equivalent to CSR view (which is considered as a new conceptualization of the role of business in society) and the extended view of corporate citizenship (which refers to corporate citizenship role in case of government failure).

2.5.5 Integrative theories on CSR. The integrative theories imply the importance of social demands and argue that the persistent existence and growth of businesses are highly dependent on their integration of social demands. Indeed, based on these theories, the way a business interacts with the society and meets its social demands is a contributing factor to its social legitimacy, publicity and acceptance (Garriga and Melé, 2004). There is also an approach, prevailing in the 1970s, that introduces the “social responsiveness” concept to businesses. This approach regards the social responsiveness as the gap between what the organization’s interested groups expect its performance to be and the organization’s actual performance and requires firms to choose a response in order to deal with it (Ackerman and Bauer, 1976; Garriga and Melé, 2004). This concept later extended and replaced by the concept “issues management” to reflect social and political surprises and serve as an early warning system for potential environmental threats and opportunities (Jones, 1980; Wartick and Rude, 1986). However, Post and Preston (2012) criticized both approaches as insufficient and use the term “public responsibility” to place emphasis on public process rather than those personal–morality views (Garriga and Melé, 2004).

2.5.6 Ethical theories on CSR. This group of theories on CSR includes ethical or moral requirements for the relationship between businesses and society and primarily focuses on things that are morally right and acceptable (Garriga and Melé, 2004). Of these, the normative stakeholder theory has been under much debate. The theory implies a balance between the legitimate interests of all stakeholders and not only the interests of firm’s shareholders. To put it simply, the normative stakeholder theory is the cornerstone of stakeholder management and credits all stakeholders with their legitimate interests in the corporation. Indeed, the theory grants all stakeholders intrinsic value (Donaldson and Preston, 1995;
In addition to the normative stakeholder theory, recent years have also witnessed a growing interest in human-right-based approaches for CSR. The UN Global Compact, for instance, first presented by the United Nations Secretary in 1999, has proposed nine principles taking into account human rights, labor and the environment (Garriga and Melé, 2004).

Another doctrine of ethical theories on CSR lies in “sustainable development” concept which came into wide spread use following the report of the World Commission on Environment and Development in 1987. The sustainable development concept originally included the environmental factors, but gradually has expanded to include the social and economic considerations (World Commission on Environment and Development, 1987; Garriga and Melé, 2004). In this respect, corporate sustainability is regarded as a custom-made process, implying organizational autonomy of choosing specific ambitions and approaches with respect to corporate sustainability (Van Marrewijk and Werre, 2003; Garriga and Melé, 2004).

Finally, the third group of approaches included in the ethical theories on CSR is the common good approach. In this approach, the common good of a society is considered as final end for a given business. In other words, a business has to operate along with other social groups and individuals in order to meet the common good of the society (Garriga and Melé, 2004). Providing goods and services in an efficient and fair way, wealth creation and respecting the fundamental rights of the individual are the ways a business can utilize to contribute to the common good of the society (Melé, 2002; Garriga and Melé, 2004).

3. Literature review and hypothesis development

In practice, prior literature on the relationship between CSR and CFP is indicative of an increasing number that demonstrates a positive correlation between CSR and financial performance (Waddock and Graves, 1997; Griffin and Mahon, 1997; Key and Popkin, 1998; Roman et al., 1999; Setayesh et al., 2012). However, the evidence on the relations between CSR and financial performance is mostly inconclusive or mixed (i.e. positive correlation, no correlation and negative correlation) and some studies suggest that these correlations ought to interpret with caution since the measurement of such correlation is difficult (e.g. Rowley and Berman, 2000). Furthermore, prior studies are indicative of an instrumental orientation of CSR initiatives (Margolis and Walsh, 2003). That is, the social goals are in line with the business goals where CSR is adopted for the sake of economic value creation (Mishra and Suar, 2010). Mackey et al. (2007) argue that investors may have motivations other than wealth creation ones when making their investment decisions and consider the balance between supply and demand of SRI opportunities as relevant when determining the economic value creation. More specifically, the scholars maintain that when the demand for SRI opportunities is greater than the supply of these investment opportunities, then such investments are likely to create economic value for a given firm. Recent evidence from an emerging market indicates that Indian stock-listed companies adopt responsible business practices and better financial performance than their counterparts (Mishra and Suar, 2010). The findings of the preceding research suggest that it is beneficial for Indian firms to use responsible business practices toward primary stakeholders. Lys et al. (2015) document that CSR expenditures do not contribute to enhanced future financial performance, but firms are inclined to adopt CSR practices in the current period when they expect better future financial performance.

Three typical explanations can be presented for the positive relationships between CSR and CFP. First, the application of CSR practices contributes to the company’s profitability
and financial performance (Ruff et al., 2001; Wu, 2006; Van der Laan et al., 2008). Second, it is argued that a firm with sound financial performance acquires more resources to deal with social problems, which, of itself, drives the firm to adopt CSR practices (McGuire et al., 1988; Chen and Wang, 2011). Third, both the CSR and firm financial performance can have a direct bearing on each other, particularly as spiral-shaped (Scholtens, 2008). There are other studies that provide a negative correlation (e.g. Vance, 1975; Davidson and Worrell, 1988; Becchetti and Ciciretti, 2006) or no correlation (Abbott and Monse, 1979) between CSR and firm financial performance. Furthermore, there are some other studies that indicate a U shape association between CSR and firm financial performance (e.g. Barnett and Salomon, 2002). In this regard, the evidence of Griffin and Mahon (1997) investigates a total number of 62 papers examining the relationship between CSR and firm financial performance and find that 33 research studies provide supporting evidence on a positive relationship, 20 studies support a negative correlation and a trivial number of 9 studies provide indefinite results. In a more recent research, Roman et al. (1999) replicated the work of Griffin and Mahon (1997) and extended their sample by adding four more paper published afterwards. The authors demonstrated that a proportion of 63 percent of their statistical population supports the positive correlation between CSR and firm financial performance, 10 percent supports the negative correlation and finally 27 percent of studies failed to provide any conclusive results on the relationship. The interchangeable role of CSR in empirical research studies had also been under scrutiny by recent articles. The work of Margolis and Walsh (2003), for instance, indicates that when CSR is used as independent variable, 50 percent of analyses yield a positive correlation, 25 percent a negative correlation, 20 percent a hybrid correlation and 5 percent an indefinite correlation. On the other hand, more than 70 percent of cases on CSR as a dependent variable suggest a positive correlation between CSR and firm financial performance. Furthermore, Di Bella and Al-Fayoumi (2016) found that stakeholders are very interested on CSR. So, CSR is an important factor in Islamic banking and Islamic countries. In another study Acar and Ozkan (2017) found that corporate governance and CSR mechanisms have strong effect on financial disclosure.

Accordingly, the present paper attempts to shed further light on the relationship between CSR and firm financial performance by using the data of the Iranian-listed companies and presents the following hypotheses:

$H1.$ There is a significant association between the investment in CSR and firm financial performance.

$H2.$ There is a significant association between CSR and firm financial performance.

4. Statistical sample and data sources

We obtain our required data manually from the hardcopy financial statements held in the TSE library (Codal[1]) for the period 2010–2015. To construct our sample for the paper’s hypotheses, we begin with all client-year observations on the Codel database. We then exclude observations with non-calendar fiscal year end (422 firm-year observations), observations with missing or insufficient variable data (249 firm-year observations) and observations with fiscal year change during 2009–2014 (334 firm-year observations). We also exclude firms operating in banking industry as well as financial and investment institutions (130 firm-year observations) to calculate the variables used in regression models. This leaves us with a primary sample of 795 firm-year observations in which the Iranian rial is applied currency. Our measure of CSR expenditures is the CSR scores reported in the TSE library and its supplementary software (known as Rahavard Novin Pars portfolio Software Informer). The CSR scores in this database only encompass social and environmental factors. The environmental component of CSR scores covers the issues
related to resource efficiency (i.e. the efficient use of natural resources and material in the production cycle and the enhancement of supply chain management) and air pollution management (i.e. a company’s potential capacity to control or reduce hazardous waste and air emissions which have an impact on environment). The social component of CSR scores also covers the issues related to workforce considerations such as high-quality job conditions, workforce health and safety and workforce persistent training and education. This category also takes account of product and services quality. As it is evident, the latter component lacks some of the components reported in Lys et al. (2015) who utilize the ASSET4 categories, namely product innovation, diversity and opportunity, human rights and community.

Our primary measurement to determine CSR includes the following factors which are considered by Iranian Department of Environment[2] according to companies’ environmental pollution and also extracted from disclosed information in companies’ financial statements.

4.1 Environmental factors

- Resource allocation: the way a company’s management commits and uses natural resource toward achieving an efficient allocation of limited resources in operational process. It explores a company’s potential power to reduce the consumption of raw materials, electricity, gas and water, and to find more applicable solutions by improving supply chain management.

- Pollution reduction: the way a company’s management commits toward reducing environmental emission in the production and operational processes. It explores a company’s ability to control air and other environmental emissions, and to accompany with environmental organizations to reduce the environmental impact of the company in the local or broader community. Furthermore, the exposed cost by Iranian Department of Environment.

- Product improvement: the way a company’s management commit toward supporting the research and development of eco-efficient products or services. It explores a company’s ability to decrease the environmental costs through innovating new market opportunities by new environmental technologies and processes or dematerialized products with extended durability.

4.2 Social performance factors

- Recruitment quality: the way a company’s management commits toward providing high-quality employment benefits and job conditions. It explores a company’s ability to improve its workforce productivity and loyalty by providing rewarding and fair employment benefits.

- Safety and health: the way a company’s management commits toward providing a healthy and safe workplace. It explores a company’s ability to improve its workforce productivity and loyalty by daily evaluating the physical and mental health, well-being and stress level of all employees.

- Workforce training: the way a company’s management commits toward providing training and development (education) for its workforce. It explores a company’s ability to improve its human resource capital, workforce productivity and loyalty by updating the workforce’s skills, perseverance, employability and careers in an entrepreneurial environment.
Customer/product responsibility: the way a company’s management commit toward adding extra value to products and services upholding the customer’s security. It explores a company’s ability to upgrade its license to operate by producing quality goods and services integrating the customer’s health and safety through providing necessary product information and its side effects.

5. Research design
5.1 Model specification and variable definition
The following specifications are used to examine the relationship between CSR expenditures and future financial performance:

\[ \text{ROA}_{t+1} = \alpha_0 + \alpha_1 \text{CSR}_t + \alpha_2 \Delta \text{ROA}_t + \alpha_3 \text{ROA}_{t-1} + \epsilon_{1t}. \]  
(1a)

\[ \text{CFO}_{t+1} = \alpha_4 + \alpha_5 \text{CSR}_t + \alpha_6 \Delta \text{CFO}_t + \alpha_7 \text{CFO}_{t-1} + \epsilon_{1b}. \]  
(1b)

\[ \text{SAR}_{t+1} = \alpha_8 + \alpha_9 \text{CSR}_t + \epsilon_{1c}. \]  
(1c)

Following Lys et al. (2015), we employ three proxies to measure firm performance: changes in return on assets (ΔROA_{t+1}) which is the most common proxy for firm performance (calculated as the difference between ROA_{t+1} and ROA_t). Future changes in operating cash flows scaled by total assets (CFO_{t+1}) which is calculated as the difference between CFO_{t+1} and CFO_t; size-adjusted stock returns for a 12-month period beginning on the firms day of fiscal year t+1 (SAR_{t+1}). Furthermore, similar to Lys et al. (2015), we split CSR expenditures into two different components to draw a distinction between CSR as an investment and CSR as a signal: CSR based on environmental and social performance factors:

\[ \text{CSR} = \beta_0 + \beta_1 \text{Firm Factors} + \beta_2 \text{Industry Factors} + \epsilon_2. \]  
(2)

The information shown in Table I is a succinct description of variables used in our models.

5.2 Pearson correlation matrix
Table II presents the results of Pearson correlation between the variables used in our models. As it is evident, there is a significant and positive correlation between ΔROA_{t+1} and CSR_t (p = 0.005). Moreover, based on the results shown in Table II, CSR_t and ΔROA_{t+1} are positively correlated, but the correlation is not significant at margin of error of 0.05 (or 0.95 significance level). However, this correlation can be considered as significant at 0.1 of significance error (p = 0.072).
<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Panel A: CSR expenditure variable</strong></td>
<td></td>
</tr>
<tr>
<td>CSR&lt;sub&gt;t&lt;/sub&gt;</td>
<td>2-factor CSR score, based on the information reported in the TSE library and its supplementary software known as Rahavard Novin Pars portfolio Software Informer</td>
</tr>
<tr>
<td>ENVSCORE</td>
<td>Environmental score, based on the information reported in the TSE library and its supplementary software known as Rahavard Novin Pars portfolio Software Informer</td>
</tr>
<tr>
<td>SOCScore</td>
<td>Social score, based on the information reported in the TSE library and its supplementary software known as Rahavard Novin Pars portfolio Software Informer</td>
</tr>
<tr>
<td><strong>Panel B: corporate accountability reporting variables</strong></td>
<td></td>
</tr>
<tr>
<td>CSRAUDIT</td>
<td>Dummy variable taking the value of 1 if the firm issues an audited CSR report and 0 otherwise, as disclosed in the financial statements of corporation's annual reports obtained from the TSE library</td>
</tr>
<tr>
<td>CSRGRI</td>
<td>Dummy variable taking the value of 1 if the firm’s report follows GRI guidelines and 0 otherwise, as disclosed in the financial statements of corporation’s annual reports obtained from the TSE library</td>
</tr>
<tr>
<td>CSRREPORT</td>
<td>Dummy variable taking the value of 1 if the firm issues a CSR report and 0 otherwise, as disclosed in the financial statements of corporation’s annual reports obtained from the TSE library</td>
</tr>
<tr>
<td><strong>Panel C: firm-level economic determinants of CSR expenditures</strong></td>
<td></td>
</tr>
<tr>
<td>ADVERTISING</td>
<td>Advertising expense scaled by net sales for fiscal year &lt;sub&gt;t&lt;/sub&gt;, calculated based on the information presented in the TSE library</td>
</tr>
<tr>
<td>ATO</td>
<td>Net sales divided by total assets at the end of fiscal year &lt;sub&gt;t&lt;/sub&gt;, calculated based on the information presented in the TSE library</td>
</tr>
<tr>
<td>CASH</td>
<td>Cash scaled by total assets measured at the end of fiscal year &lt;sub&gt;t&lt;/sub&gt;, calculated based on the information presented in the TSE library</td>
</tr>
<tr>
<td>CFO</td>
<td>Operating cash flows divided by total assets at the end of fiscal year &lt;sub&gt;t&lt;/sub&gt;, calculated using the indirect method and based on the values disclosed in the financial statements of corporation’s annual reports obtained from the TSE library</td>
</tr>
<tr>
<td>LEVERAGE</td>
<td>Total debt divided by total assets at the end of fiscal year &lt;sub&gt;t&lt;/sub&gt;, calculated based on the values disclosed in the financial statements of corporation’s annual reports obtained from the TSE library</td>
</tr>
<tr>
<td>LITIGATION</td>
<td>Litigation risk calculated as litigation expense scaled by net sales for fiscal year &lt;sub&gt;t&lt;/sub&gt;, as disclosed in the financial statements of corporation’s annual reports obtained from the TSE library</td>
</tr>
<tr>
<td>MTB</td>
<td>The ratio of market value of equity to book value of equity, as disclosed in the financial statements of corporation’s annual reports obtained from the TSE library</td>
</tr>
<tr>
<td>PM</td>
<td>Income before extraordinary items divided by net sales for fiscal year &lt;sub&gt;t&lt;/sub&gt;, calculated based on the values disclosed in the financial statements of corporation’s annual reports obtained from the TSE library</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>Research and development expenses scaled by net sales for fiscal year &lt;sub&gt;t&lt;/sub&gt;, calculated based on the values disclosed in the financial statements of corporation’s annual reports obtained from the TSE library</td>
</tr>
<tr>
<td>CGVSCORE</td>
<td>Corporate governance score, as reported in the TSE supplementary software known as Rahavard Novin Pars portfolio Software Informer</td>
</tr>
<tr>
<td>SIZE</td>
<td>Natural logarithm of total assets at the end of fiscal year &lt;sub&gt;t&lt;/sub&gt;, calculated based on the values disclosed in the financial statements of corporation’s annual reports obtained from the TSE library</td>
</tr>
<tr>
<td><strong>Panel D: control variables</strong></td>
<td></td>
</tr>
<tr>
<td>DDPS</td>
<td>Percentage change in dividend per share for fiscal year &lt;sub&gt;t&lt;/sub&gt;, calculated based on the values disclosed in the financial statements of corporation’s annual reports obtained from the TSE library</td>
</tr>
</tbody>
</table>

Table I. Variable description and data sources (continued)
5.3 Specification tests (diagnostics) in panel data models

We conduct several diagnostic tests to estimate the most appropriate models. What follows is a succinct explanation of these tests at 0.05 significance level. We employ F-limer specification test (also known as Chow test) to specify the appropriate model between the panel data model and the ordinary least square (OLS) model. The null hypothesis of this test is the preference of the OLS model. As shown in Table III, all models are significant at 0.05 margin of error \( \rho = 0.000 \); thus, the panel data model is preferred. While the results of specification tests confirm the preference of panel data model, the results of the Hausman test indicates that all models are better fitted using fixed effects model \( \rho = 0.000 \), except for model 6 \( \rho = 0.021 \). Specifically, we conduct the Hausman test to choose the appropriate model between fixed effects model and random effects model. As it is evident, the results of specification tests indicate that the panel of fixed effects has been the most appropriate model. A brief summary of above-cited tests is shown in Table III.

6. Estimation results

Table IV presents the estimation results of model (1a). As it is obvious, the model is strongly significant at 0.05 margin of error \( F = 5.616; \rho = 0.000 \). Additionally, the results shown in
Table IV are indicative of a significant and positive association between investment in social responsibility (CSR) and the changes in return on assets in the next fiscal year ($\Delta$ROA$^{t+1}$) ($C = 0.0237; p = 0.004$). Considering the $t$-statistic on this variable, the results suggest that the coefficient on CSR is significant. Therefore, the findings provide supporting evidence for HI, implying the significant relationship between investment in social responsibility and firm financial performance as proxied by the changes in return on assets in the next fiscal year.

The figures shown in Table V are the estimation results of model (1b) as our second proxy for firm financial performance. The coefficient on CSR suggests a positive association with the changes in return on assets in the next fiscal year ($\Delta$ROA$^{t+1}$) ($C = 0.0237; p = 0.004$). Considering the $t$-statistic on this variable, the results suggest that the coefficient on CSR is significant. Therefore, the findings provide supporting evidence for HI, implying the significant relationship between investment in social responsibility and firm financial performance as proxied by the changes in return on assets in the next fiscal year.

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The figures shown in Table V are the estimation results of model (1b) as our second proxy for firm financial performance. The coefficient on CSR suggests a positive association with the changes in return on assets in the next fiscal year ($\Delta$ROA$^{t+1}$) ($C = 0.0237; p = 0.004$). Considering the $t$-statistic on this variable, the results suggest that the coefficient on CSR is significant. Therefore, the findings provide supporting evidence for HI, implying the significant relationship between investment in social responsibility and firm financial performance as proxied by the changes in return on assets in the next fiscal year.
relationship between investment in social responsibility and the changes in future operating cash flows $\Delta \text{CFO}_{t+1}$.

However, this relationship is not significant ($p = 0.2576$) and accordingly does not provide supporting evidence for $H1$ at the 0.95 significance level. That is, there is no significant relationship between investment in CSR and future firm performance as proxied by future operating cash flows. Furthermore, the figures shown in Table V suggest that the model (1b) is highly significant ($F = 6.1030; p = 0.000$).

Finally, the estimation results of our last proxy for financial performance (i.e. model (1c)) are shown in Table VI. The model is again significant at 0.05 margin of error ($F = 29.8432; p = 0.000$). The coefficient on CSR, indicative of a positive but non-significant relationship between investment in CSR and size-adjusted stock returns as the third proxy for firm financial performance ($C = 0.0967; p = 0.000$). Therefore, $H1$ is not supported again.

Table VII reports the estimation results of model (3a). The results confirm that model (3a) is significant at the 0.05 significance level ($F = 5.588; p = 0.000$). Moreover, they provide supporting evidence for $H2$ since the coefficient on CSR is also significant at 0.05 margin of error ($C = 0.0048; p = 0.000$). That is, CSR is significantly and positively associated with future changes in return on assets as a proxy for firm financial performance.

Table VIII summarizes the estimation results of model (3b). The model is again significant ($F = 6.0712; p = 0.000$) and the coefficient on CSR suggests a significant and positive association between CSR and future changes in operating cash flows $\Delta \text{CFO}_{t+1}$ ($C = 0.0101; p = 0.000$). Consequently, the results provide supporting evidence for $H2$. More specifically, there is a significant relationship between CSR and firm financial performance as proxied by future changes in operating cash flows.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Symbol</th>
<th>Estimated coefficient</th>
<th>SE</th>
<th>$t$-statistic</th>
<th>$p$-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>$C$</td>
<td>0.4650</td>
<td>0.0015</td>
<td>297.5273</td>
<td>0.0000***</td>
</tr>
<tr>
<td>Investment in CSR</td>
<td>$\text{CSR}_t$</td>
<td>0.0967</td>
<td>0.2601</td>
<td>0.3719</td>
<td>0.7101</td>
</tr>
<tr>
<td>$R^2$</td>
<td></td>
<td>0.186</td>
<td>0.179</td>
<td>1.656</td>
<td>29.8432</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td></td>
<td>0.186</td>
<td>0.179</td>
<td>1.656</td>
<td>29.8432</td>
</tr>
<tr>
<td>Durbin–Watson statistic</td>
<td></td>
<td>2.142</td>
<td></td>
<td>0.0000***</td>
<td></td>
</tr>
<tr>
<td>$F$-statistic</td>
<td></td>
<td>5.588</td>
<td>0.483</td>
<td>2.142</td>
<td>5.588</td>
</tr>
<tr>
<td>$p$-value</td>
<td></td>
<td>0.0000***</td>
<td>0.0000***</td>
<td>0.0000***</td>
<td>0.0000***</td>
</tr>
</tbody>
</table>

**Table VI.** Estimation results of model (1c)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Symbol</th>
<th>Estimated coefficient</th>
<th>SE</th>
<th>$t$-statistic</th>
<th>$p$-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>$C$</td>
<td>0.0979</td>
<td>0.0066</td>
<td>14.7760</td>
<td>0.0000***</td>
</tr>
<tr>
<td>Investment in CSR</td>
<td>$\text{CSR}_t$</td>
<td>0.0048</td>
<td>0.0099</td>
<td>5.1140</td>
<td>0.0000***</td>
</tr>
<tr>
<td>Return on assets</td>
<td>$\Delta \text{ROA}_t$</td>
<td>$-0.7658$</td>
<td>0.0704</td>
<td>$-10.8740$</td>
<td>0.0000***</td>
</tr>
<tr>
<td>Return on assets</td>
<td>$\Delta \text{ROA}_{t-1}$</td>
<td>$-0.8830$</td>
<td>0.0697</td>
<td>$-12.6538$</td>
<td>0.0000***</td>
</tr>
<tr>
<td>$R^2$</td>
<td></td>
<td>0.588</td>
<td>0.483</td>
<td>2.142</td>
<td>5.588</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td></td>
<td>0.588</td>
<td>0.483</td>
<td>2.142</td>
<td>5.588</td>
</tr>
<tr>
<td>Durbin–Watson statistic</td>
<td></td>
<td>2.142</td>
<td></td>
<td>0.0000***</td>
<td></td>
</tr>
<tr>
<td>$F$-statistic</td>
<td></td>
<td>5.588</td>
<td>0.483</td>
<td>2.142</td>
<td>5.588</td>
</tr>
<tr>
<td>$p$-value</td>
<td></td>
<td>0.0000***</td>
<td>0.0000***</td>
<td>0.0000***</td>
<td>0.0000***</td>
</tr>
</tbody>
</table>

**Table VII.** Estimation results of model (3a)
Finally, the estimation results of model (3c) suggest a significant model ($F = 29.937; p = 0.000$) and a non-significant relationship between CSR and size-adjusted stock return ($C = 0.0292; p = 0.3366$). Accordingly, the findings do not provide support for $H2$ (Table IX).

7. Concluding remarks
What stands out from the studies about CSR is that it is a financial overhead expense for firms and has a negative impact on the financial performance (Jensen, 2001). But on the other hand, if organizations want long-term vital, should pursue their profitability goals through practices accepted by society because CSR has a financial value and creating innovation in the long-term period (Dagilienė, 2013). Of note, it is assumed that there is a positive relationship between CSR and financial performance and accordingly the aim of this study was to investigate the above-mentioned relationship.

In comparison with developed markets, emerging markets seem to be places where making substantial trading profits is likely to increase, alongside with weak- and quite-strong-form market inefficiency. In this regard, we provide an important addition to the evidence concerning the CSR expenditures and complement other studies conducted in European countries, particularly in a transition market characterized by unique socio-economic, political and cultural characteristics. We propose two distinctive hypotheses covering both the CSR and the investment in CSR practices. Using a sample of 795 firm-year observations from companies listed on the TSE during 2009–2014, our findings indicate that there is a significant and positive association between investment in CSR activities and firm financial performance as proxied by changes in return on assets. Consistent with findings of Key and Popkin (1998) in the UK, Karagiorgos (2010) in Greece, Miralles-Marcelo et al. (2012) in Spain, Ducassy (2013) in France, Brzeszczynski and McIntosh (2014) in the UK and Mollet and Ziegler (2014)
in the USA and Europe, our findings provide supporting evidence for a positive relationship between CSR and firm financial performance.

With regard to employing distinctive measurements for CSR’s variable, our results contrast with findings of Matin et al. (2011) in Iran, Fiori et al. (2007) in Italy, Afonso et al. (2012) in Portugal and Humphrey et al. (2012) in the UK. The important point of different findings seems that the type of industry has created different results compared to domestic investigation. In this regard, Kang et al. (2010) and Lee et al. (2013) believe that the impact of CSR on the company’s performance depends on the features of the industry. Another reason for the distinction should be noted that more current searches have shown that some of the main reasons behind the variable results achieved have been caused by the diverse methodologies used by the scholars (Van Beurden and Gossling, 2008). The difference in these methodologies is implied by the different accounting or market procedures used to determine the CFP aspect in the relationship between CSR and CFP (Brammer and Millington, 2008). Moreover, due to employing the disclosure reports, websites and DJSI, respectively, by Fiori et al. (2007), Afonso et al. (2012) and Humphrey et al. (2012) as proxies for CSR, no significant association is found in their investigations.

The findings of the paper would suggest that there is a relationship between corporate social responsibilities and CFP as on average the financial performance of companies with SRI is better than their competitors. Iran is still a developing country and as such CSR practices, views and effects may yet to be fully realized. As the market continues to grow, different factors will handle greater significance. One of these factors may well be the influence of good CSR practices. Ofori (2006) referred to the belief that the greater the international influence on a company in an evolving country, the more healthful their attitude toward CSR becomes. The adoption of good CSR practices should be encouraged although the CFP results are yet to be experienced. Taken together, the comparison between TSE and European countries in this field of literature suggest that expensing CSR leads to improving firms’ financial performances in both types (emerging and developed) of markets.

8. Research limitations
The limitations of this research are presented as follows:

(1) Lack of providing notes to the financial statements (audited) by some companies listed on the stock exchange during the period of investigation.

(2) By reason of the seasonal activities of some firms, income components of this type of companies that are affected by type of their activities will be severe fluctuations. And on the other hand because performance reports is tested, should consider the fact that lack of consistency among the reporting date in the sample companies could lead to the complete elimination of many companies in the statistical population.

9. Further to the studies
The general trend suggests a relationship exists; however, there are a number of studies that have documented no noteworthy relationship. This ambiguity gives premise for the need for further research to be undertaken on the topic (Ogola and Dreer, 2012). As regards research topic and since it is conducted in stock companies, this subject can be attractive for stock brokers, corporate managers, potential and active investors in various sectors such as institutional, public and legal investors, accounting and financial management teachers and students and other individuals who are interested in this topic.
Thus, the following suggestions are offered based on results obtained and analyses performed in this paper:

1. One possible suggestion for further study would be to investigate the effect of different dimensions of CSR on earnings management in companies that are members of the stock exchange.

2. Another area of further study would be to determine the effect of different aspects of CSR on tax avoidance in firms that are members of the stock exchange.

3. A further part of possible study includes investigating the changes in the association between CSR and CFP over given time period intervals. Brammer and Millington (2008) suggest that the results relating to CSR and CFP might not be purely linear and as such could be subject to lessening returns. A method of reaching this could be to evaluate the relationship between CSR and CFP at two to three year distances and plot the results to gain insight into the trends that exist.

4. The latest proposal case of further study would be to examine the other factors affecting company performance such as capital structure, existence of internal auditor, financial leverage, firm size, different fiscal year, etc.

Notes
1. www.codal.ir
2. www.doe.ir/

References


Further reading


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