

Business Research in Developing Economies: Evidential MBA Theses Approach – Case of Jordan

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ABSTRACT

This study aims to scholarly analyze the trends in business research and its significance for developing economies. As a case-study approach, the trends and methodological issues in MBA theses during the span from 1996 to 2018 in Jordan have been considered. Further, keeping the broader research theme intact, significant attention has been given to the analysis of operations and information systems. A total of 283 MBA theses have been ascertained and analysed, where both descriptive and in-depth analyses of data have been conducted. The findings exposed a number of critical business-research problems. These problems affect both the applicability and quality of research works and limit their contributions in academic and practical fields. Several conclusions, policy implications and directions for future research have been suggested for academia and practitioners in business.

Keywords: MBA theses; Business research trends, Operations' management, Management information systems, Middle Eastern Arab countries, Developing economies, Jordan.

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بحوث الأعمال في الاقتصادات النامية: منهج أطروحات ماجستير إدارة الأعمال الإثباتية- حالة الأردن

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ملخص

هدفت هذه الدراسة إلى استكشاف وتحليل الاتجاهات البحثية في دراسات الأعمال في الاقتصادات النامية. بناءً على نهج دراسة الحالة، تم النظر في الاتجاهات والقضايا المنهجية في رسائل ماجستير إدارة الأعمال، خلال الفترة من 1996 إلى 2018، التي تمت في الجامعات الحكومية الأردنية، مع التركيز على موضوعي إدارة العمليات ونظم المعلومات الإدارية بشكل رئيسي؛ لأهميتهما الكبرى في حقل العلوم الانسانية. تم تحليل ما مجموعه 283 رسالة من خلال استخدام أسلوب التحليل الوصفي المعمق للبيانات مع مقارنة هذه الرسائل مع الأولويات البحثية الوطنية. وكشف التحليل عن عدد من مشكلات البحث العلمي الهامة التي تؤثر على قابلية تطبيق وجود الأعمال البحثية، بالإضافة إلى الحد من مساهمتها في المجالات الأكاديمية والعملية. بناءً على هذه النتائج، تم تقديم عدد من المقترحات والتوصيات للأكاديميين والممارسين في مجال الأعمال.

الكلمات الدالة: رسائل ماجستير إدارة الأعمال، اتجاهات أبحاث الأعمال، إدارة العمليات، نظم المعلومات الإدارية، دول الشرق الأوسط العربية، الاقتصادات النامية.

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1. INTRODUCTION

Universities and higher-education institutions (HEIs) have received significant attention due to their significant contribution in the socio-economic development of countries around the globe (Findler et al., 2019). According to a scholarly work conducted by Bessant et al. (2003) the contribution of HEIs as a valuable source can broadly be categorized into three traditional functions; namely, teaching, research and community service. The research function and its great impact on society and the economic-development process became especially important and can be divided into knowledge development and innovation, economic growth, enhanced capabilities of human beings and societal well-being and quality of life (Tripp et al., 2017). Therefore, how effectively HEIs contribute to meeting the social and economic needs is a crucial issue to study. Considering this significance, research as one of the three essential functions of HEIs is given high priority for the assessment of HEIs (Beattie & Goodacre, 2004; Groot & Valderrama, 2006). The quantity and quality of research produced by HEIs in turn add remarkably to the improvement of the performance and reputation of HEIs. Similarly, according to Groot & Valderrama (2006), the assessment of quality of research conducted in universities is of vital importance for receiving funds, hiring and promoting research staff, as well as establishing academic reputation. Furthermore, contemporary scholars are more apprehensive for assessing the research function, since it is accepted that research exposes the trends, topics and methodologies, along with providing directions for future research (Finlay et al., 2012; Rajkumar et al., 2016). Previous studies conducted in this area have highlighted the significance of business-administration research curricula (see for example, Beamish & Jonathan, 1989; Serey et al., 1989; Cavusgil, 1993; Voris, 1997; Manuel et al., 2001; Kedia et al., 2001; Al-Rasheed 2010; Findler et al., 2019). Grosse (2013) claimed that the global reputation of business schools around the world significantly depends on their

research publications in journals of international repute, which shows the respective business school research contributions in the advancement of knowledge in the field of business administration. Chartered Association of Business Schools (CABS) 2018 report states that business schools play a key role in producing academic research that adds to the development of business and economy. It is stated that the research output of business schools must be directly involved in and support the development drive of the economy. Therefore, it may be ever more important for developing economies to link with different business research approaches to achieve positive developmental outcomes (Dörrenbächer and Gam Melgaard, 2019). MBA students have the potential for helping developing economies by providing applicable research (Mansour, 2015). Presently, top business schools of the world have developed their curricula in a way that helps developing economies in finding solutions for their problems. However, it is also worth to be mentioned that a number of scholars greatly criticized business-school research due to its limited effect on business and organizations, along with its inability to provide practical solutions to the problems of developing economies (Fincham & Clark, 2009; Hodgkinson & Starkey, 2011). Although a significant amount of scholarly work has been allocated to analyse MBA theses, an insignificant body of work has been carried out in the context of developing economies. Jordan, being a developing economy, has been facing a number of remarkable challenges and difficulties. The research of the Jordanian HEIs and business schools is expected to have a key role in the Jordanian developing processes. On the contrary, according to Al-Rasheed (2010), Jordanian management and organization research is characterized by being formal, unilateral, traditional and imbalanced.

While several business topics have been

investigated, there is a need for identifying new research trends, gaps and future directions, as well as drawing attention towards some ignored topics, such as Operations Management and Management Information Systems (OM-MIS).

Thus, the objectives of this research are:

- (i) To identify and analyze current research trends and methodological issues in MBA theses in developing economies (case of Jordan).
- (ii) To identify current developing problems and research priorities in Jordan.
- (iii) To match current MBA trends and core research problems/priorities in an attempt to identify research gaps.
- (iv) To set a research agenda for upcoming MBA theses to be more oriented toward current business research issues.

To achieve these objectives, the rest of this paper has been organized as follows: part 2 presents a brief background and reviews related literature. Part 3 gives an overview of research priorities in Jordan, along with the identification of research trends and characteristics. Issues related to research methodology have been presented in part 4. Analysis, discussion, research gap and contemporary research priorities at MBA level are given in part 5. Finally, part 6 concludes this work and suggests future MBA research directions.

2. Background and Literature Review

There are various significant benefits derived from reviewing earlier research projects. At the first place, the review provides a comprehensive idea to the scholar about

what has been going on in the specific area of investigation, along with enabling the reviewer to understand how research has been conducted (Gubi et al., 2003). Secondly, the review helps in highlighting the research gaps and suggestions for future research. Hence, it suggests guidelines for topic selection and methodology to be used (Zhang et al., 2009). At the third place, it provides an opportunity for a comparative study of contemporary MBA theses with previous MBA theses (Zachariassen & Arlbjørn, 2010). An MBA thesis is the “*culmination of a rigorous formal educational process*” (Kushkowski et al., 2003: 2), aimed at showing a new significant contribution to the body of knowledge and providing evidence of academic achievement (Kushkowski et al., 2003). In the literature, there are several studies focusing on reviewing research projects in various business research areas, such as e-commerce (Varadarajan, 2002), quality management (Jack et al., 2001; Zain et al., 2001), taxation (Hulse, 2002), management accounting (Kihn & Näsi, 2017 and 2010; Riccio et al., 1999), Management Information Systems (Carr et al., 1986), management (Chang & Hsieh, 1997), Tourism and hospitality (Alhammad, 2020) logistics and supply-chain management (Rajkumar et al., 2016; Nakhata et al., 2013; Stock, 1987 and 1988; Stock and Luhrsen, 1993; Stock, 2001; Stock and Broadus, 2006). All these studies belong to published research rather than being MBA theses. Several studies summarized business research trends and issues in several countries, regions and sectors. Table (1) summarizes some of these studies.

Table (1)
Related studies

#	Author(s), Year, Topic and Country	Examined variables	Dissertations' covered period
1	Rajkumar et al. (2016) Log. SCM Nordic Countries	Number and types of dissertations, primary entity of analysis, level of analysis arranged according to year of publication, research design, time frame and philosophy of science, dissertations distributed according to topic and country of origin, article-based dissertations	150 doctoral dissertations from 2009 to 2014
2	Nakhata et al. (2013) Log. SCM USA, Canada and Honk Kong	Subject area, author's name, title of dissertations, name of the degree- granting institutions, dissertation abstract identification number, abbreviated version of the abstract	609 doctoral dissertations from 2005 to 2009
3	Zachariassen & Arlbjørn (2010) Log. SCM Nordic Countries	year of publication, dissertation type, primary entity of analysis, level of analysis, main purpose of the dissertation, research design applied, time frame for the empirically-based dissertations, type of theory generated, elements of philosophy of science	Seventy doctoral dissertations from 2002 to 2008
4	Zhang et al. (2009) SCM. - China	Research topics, industry category, research issues and focuses, publication dates of the dissertations and degree-granting institutions	157 doctoral dissertations from 1999 to 2006
5	Stock & Broadus (2006) Logistics - USA	Subject area, author's name, title of dissertations, name of the degree- granting institutions, dissertation abstract, identification number, abbreviated version of the abstract	410 dissertation abstracts from 1999 to 2004
6	Gubi et al. (2003) Log. SCM. Scandinavia Nordic countries	Year of publication, dissertation type, primary entity of analysis, level of analysis, main purpose of the dissertation, research design applied, period of the empirically-based dissertations, type of theory generated and containing elements of philosophy of science	Seventy-five doctoral dissertations from 1990 to 2001
7	Stock (2001) Logistics and Logistics-related Areas	Subject area, author's name, title of dissertation, name of the degree- granting institutions, dissertation abstract, identification number, abbreviated version of the abstract	317 doctoral dissertations from 1992 to 1998
8	Zain et al. (2001) Quality Management-UK	Areas and issues investigated; research methodologies employed, research output and contribution to knowledge and research recommendations	Fourteen doctoral theses from 1988 to 1997
9	Vafidis (2007) Log. SCM Sweden and Finland	Research topic, research design applied (quantitative, qualitative or triangulation), type of contribution (disciplinary or practical, methodological approach (analytical, system or action research); logistics research theories espoused	Twenty-five doctoral dissertations from 1994 to 1998
10	Jack et al. (2001) Total Quality Management	Research themes (categorizing research), data collection, analysis methodologies and general trends	523 doctoral dissertation abstracts from 1981 to 1988

11	Chang & Hsieh (1997) Management Taiwan	Name of university, author, title, topic, discipline base, research design, research methodology, empirical analysis methods and industry of empirical analysis	120 doctoral dissertations 1988 to 1994
12	Stock & Luhrsen, (1993) Logistics and Related Areas USA	Subject area, author's name, title of dissertation, name of the degree-granting institution, dissertation abstract, identification number, abbreviated version of the abstract	422 doctoral dissertations from 1987 to 1991
13	Stock (1987, 1988) Logistics and Related Areas - USA	The basis of the professional subject areas, the dissertations addressed, which universities these PhDs came from and the quantities of PhDs produced	684 doctoral dissertations from 1970 to 1986
14	Carr et al. (1986) Management Information Systems - USA	Academic field of the author, methods of research, thrust of research, level of research, orientations, hypothesis testing, use of statistics, target and keywords	614 doctoral dissertations from 1972 to 1983

The summary provides information regarding publication year, topics of theses, examined variables, number of theses and covered period. Based on this, it can be noticed that:

- Few attempts have been made to examine the MBA theses and most of the published work is related to doctoral dissertations.
- The areas of logistics and supply-chain management have been devoted greatest attention and most studies are conducted in the context of developed economies, such as the USA and Scandinavian countries.
- In terms of the covered period of examination, it ranges from 4 years to 37 years; the number of examined theses in the mentioned studies ranges from 14 to 684 dissertations.

3. Research Priorities in Developing Economies: Case of Jordan

Identification of highly potential areas for development, problems and research priorities can significantly help in developing economies in terms of real development. It has been observed that there exists remarkable variation among

developing economies in terms of development dimensions, areas and priorities. In case of Jordan, there are different governmental organizations that work in collaboration for this identification and simultaneously direct research centers and universities in conducting research in the identified areas, such as the Scientific Research Fund (SRF, 2018) that has recently identified ten different sectors of vital potential for development. In the fields of humanities, economics and social sciences, the areas identified are: (1) entrepreneurship (2) governance (3) social responsibility and (4) Competitiveness. Similarly, Higher Council for Science & Technology (HCST, 2010) has conducted a large-scale study for the identification of scientific-research priorities in Jordan for the years 2011-2020. Using Delphi method, which was based on four rounds, 570 well-designed questionnaires were distributed among researchers, specialists and experts serving in different public-and private-sector industries. Table 2 shows the subjects and research issues of top priority.

Table (2)
Subjects and research issues of top priority (2011-2020)

#	Subject	Research issues of top priority
1	Business Ethics and Social Responsibility	<ul style="list-style-type: none"> - Studies of levels of transparency and honesty in offering public service in accordance with international standards. - The extent of social-responsibility practices in public-and private-sector establishments. - Assessment and development of work ethics in public and private sectors.
2	Human Resources Management	<ul style="list-style-type: none"> - Reviewing the effectiveness of the principles and standards of appointments for top-and middle-level employees in the public and private sectors. - Assessment of efficiency and effectiveness of employment and training organizations in the public and private sectors. - The impact of restructuring compensation and incentives system on the performance of public-and private-sector organizations.
3	Management Information Systems and Knowledge Management	<ul style="list-style-type: none"> - Application development of the superior management supportive systems in the Jordanian work environment. - Application development of the E-university. - Application development of the E-government.
4	Higher-education Outputs and Labour-market Needs	<ul style="list-style-type: none"> - Evaluation of the role of faculty-member development centres at Jordanian universities in building the academic and administrative capacities. - Developing “hard and soft skills” of higher-education institution graduates to be compatible with labour-market needs. - Academic characteristics (qualifications) of students, unemployed and employed graduates from universities in Jordan: Considerations for relevance. - The degree to which the outputs of higher education in Jordan are compatible with labour-market needs.

Jordanian universities that seek to move forward to the entrepreneurial era need to reflect these research priorities to ensure higher strategic success levels (Al-Hawajreh, 2018). The actual ranking of these priorities in MBA theses is an acute problem. The analysis of current work gives a clear picture of research gaps and areas of improvement and highlights the MBA theses contribution in the first three priorities. According to a research report published by the Economic Policy Council (2019), the areas of information technology and advanced operations are the prime pillars of the investment policy in the Hashemite Kingdom of Jordan. It has been observed by the policies adopted by the government that extended attention has been given to supporting information technology and the communication

sector in terms of allocating investment funds to these areas. Similarly, Turnbull (2019) exposed that a sum of \$200 million has been allocated by the World Bank to support the information technology sector growth. Therefore, OM-MIS research fields should be among these research priorities and a basic part of the MBA theses.

4. Methodology

Based on the descriptive nature of the present study, data about MBA theses has been collected to understand and analyze business research in Jordan as a developing-economy case study. Then, along with the identification of contemporary research trends,

analysis outcomes have been linked to the research priorities to highlight the role of business research in such developing

economies. Figure 1 summarizes the methodology stages and steps.

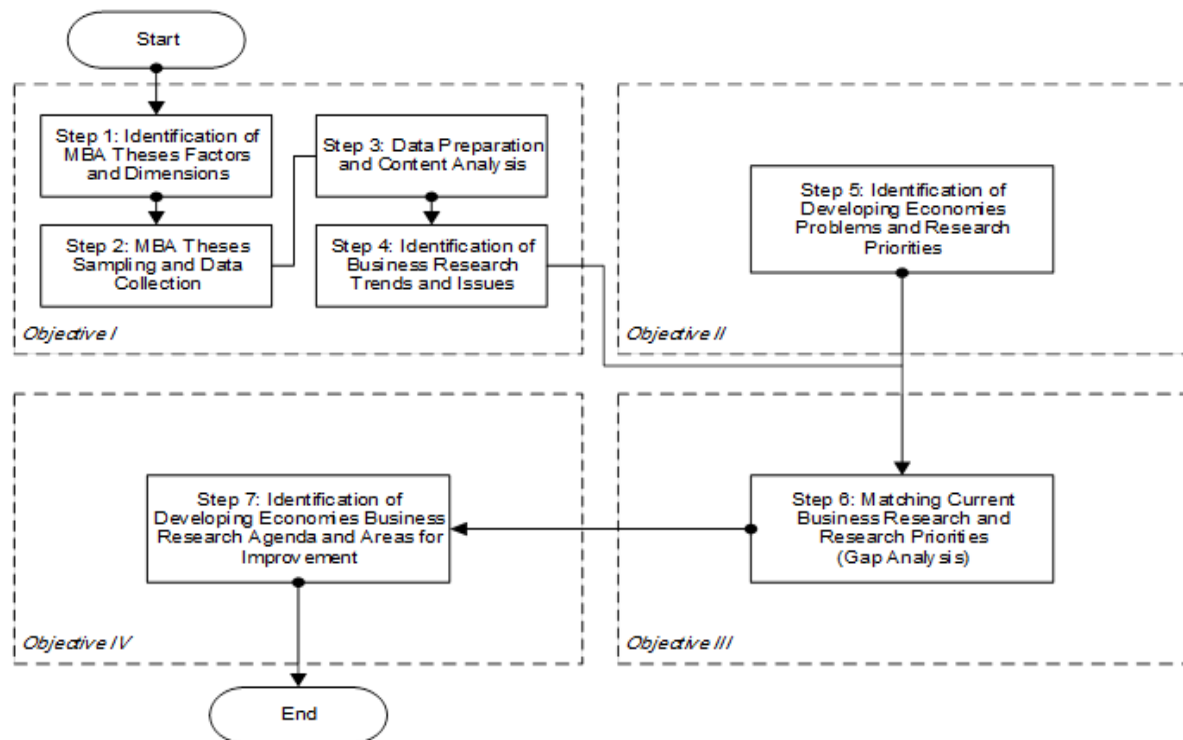


Figure (1)
Research methodology of MBA theses analysis

4.1. Data Collection, Preparing, Classification and Analyzing

In Jordan there are 31 Universities, out of them seven public and twelve private universities provide MBA programs. Further, public-sector University programs are superior in terms of students and theses submitted. During the past 25 years, a considerable number of theses have been developed. Unfortunately, not all universities provide an electronic form of these theses and therefore, accessibility is a crucial issue for this study. Based on this, there is a need for adopting a convenient-sampling procedure for collecting information from members (theses) that are conveniently available (Sekaran & Bougie, 2016). A total of 283 MBA theses that provided by public Jordanian universities have

been selected for the analysis. The study dimensions were selected based on social-science theories and similar studies discussed in this paper. According to Earl (2013), a prime characteristic of social-science theories is that they examine the existence of a research problem, considering conceptual framework, literature review, data and analysis and giving future-research prospects. The main dimension for the current study is composed of the following dimensions: year, research area, topic, women studies, country, sector, sub-sector, case study, data-collection tool(s), data type, data-analysis method(s) and results. For each dimension, several sub-dimensions have been used to classify and cluster MBA theses into groups. These dimensions/

sub-dimensions will be used to conduct two level of analysis:
(1) descriptive analysis and (2) in-depth analysis. Table 3

shows the eleven used dimensions with a brief description for dimension.

Table (3)
Study dimensions and their descriptions

No.	Key Dimensions	Sub-dimensions/Description / Range of Variations
1	Years	From 1996 to 2017
2	Research Area and Field	Human Resources (HR), Entrepreneurship (ENTRPRN), Innovation Issues (INNOVTION), Knowledge Management (KNOWLG), Management Information Systems (MIS), Marketing Issues (MKT), Operations Management (OPM), Organization and Performance Issues (ORG PERFOR), Public Management Issues (PUBLIC), Quality Management Issues (QUAL), Strategic Management Issues (STRG MGMT) and Mix Areas (MIX)
3	Women Studies	Yes, No
4	Country	Single (such as Jordan), Multi-national and International
5	Sector and Sub-sector	Construction, mixed Sectors, Education, Financial, Health, Industrial, Industrial and Service, Public, Public and Private and Service.
6	Case Study	Yes, no
7	Data Type	Primary, Secondary
8	Data-collection Tool(s)	Questionnaire, survey, interview, observation, report,
9	Research Design	Snapshot, longitudinal
10	Data-analysis Methods	System Comparison, SPSS, MS Projects, Scoring, Triangulation, Control Chart, System Analysis, Content Analysis, SPSS+ Excel.
11	Results	Basics + Recommendations, Applicable, Case-Related, Design of New Information System, Completion Level, Alignment & Success, Identifying Critical Success Factors (CSFs).

Accordingly, study limitations include that the analysis is limited to MBA theses; so, the results may not be valid to other research fields. Further, theses under review are related to public universities, Piivate universities can be included in future research. Additionally, with more time and resources, country-wide or regional studies can be conducted.

4.2. MBA Theses Structure

For each selected thesis, every study has been filtered and scanned for the mentioned eleven dimensions. First, focus

was given to the abstract. If information regarding pre-developed dimensions were not found there, other parts of the thesis were review. Based on the review outcomes, both descriptive analysis and in-depth analysis have been conducted and therefore theses were classified into different clusters. The two-fold analysis, descriptive and in-depth, provides more insights into the content and novelty of these theses. Analysis outcomes and theses classifications are briefly described in the following section.

5. Analysis and Discussion

5.1. Descriptive Analysis

Number of Theses/Year: In general, there is a clear increase in the number of theses submitted per year (Figure

2). This increase is due to the awareness among people of enhancement in their academic qualification and job opportunities, along with the desire to serve the society.

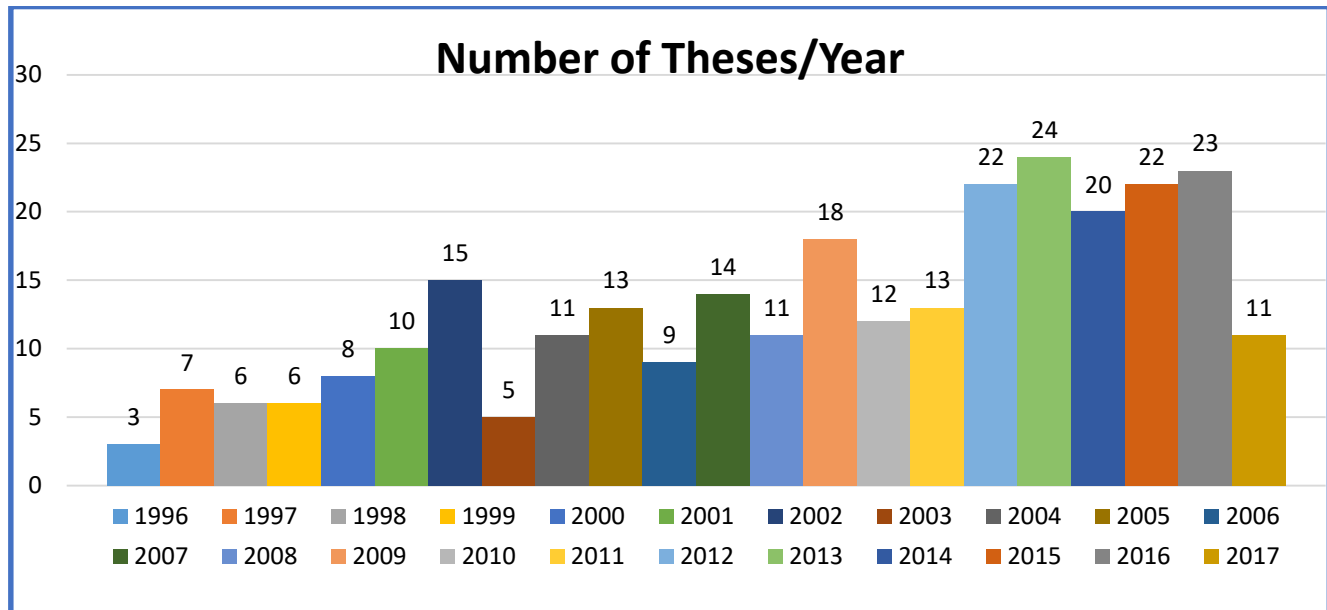


Figure (2)
Number of theses/year

There is a sudden increase in the number of students enrolled in MBA programs during 2008. This increase can be linked to the global financial crisis due to which many employees lost their jobs and therefore enrolled in MBA programs to increase their market worth.

Research Area: Based on the theses' topics and/or keywords, this study has identified a total of twelve research areas; 11 exclusive and one mixed: Human Resources (HR), Entrepreneurship (ENTRPRN), Innovation Issues (INNOVTION), Knowledge Management (KNOWLG), Management Information Systems (MIS), Marketing Issues (MKT), Operations Management (OPM), Organization and Performance Issues (ORG PERFOR), Public Management Issues (PUBLIC), Quality Management Issues (QUAL), Strategic Management issues (STRG MGMT) and Mixed areas (MIX). Figure 3 summarizes the distribution of MBA

theses based on these areas.

The most frequently researched topics are HR and strategic management, to which about 50 % of the efforts were allocated. Despite much importance given to these two areas, most of the developing countries are seriously suffering from human resource management problems, along with the absence of a clear vision to follow (Al-Rasheed 2010). Only one study has been conducted on the topic of organizational performance, while other performance-related studies have investigated the impacts of other factors, such as MIS and HR practices on performance. This unbalanced distribution indicates that other areas, such as entrepreneurship, knowledge management, innovation and marketing did not receive appropriate attention nor were well prioritized (Table 3).

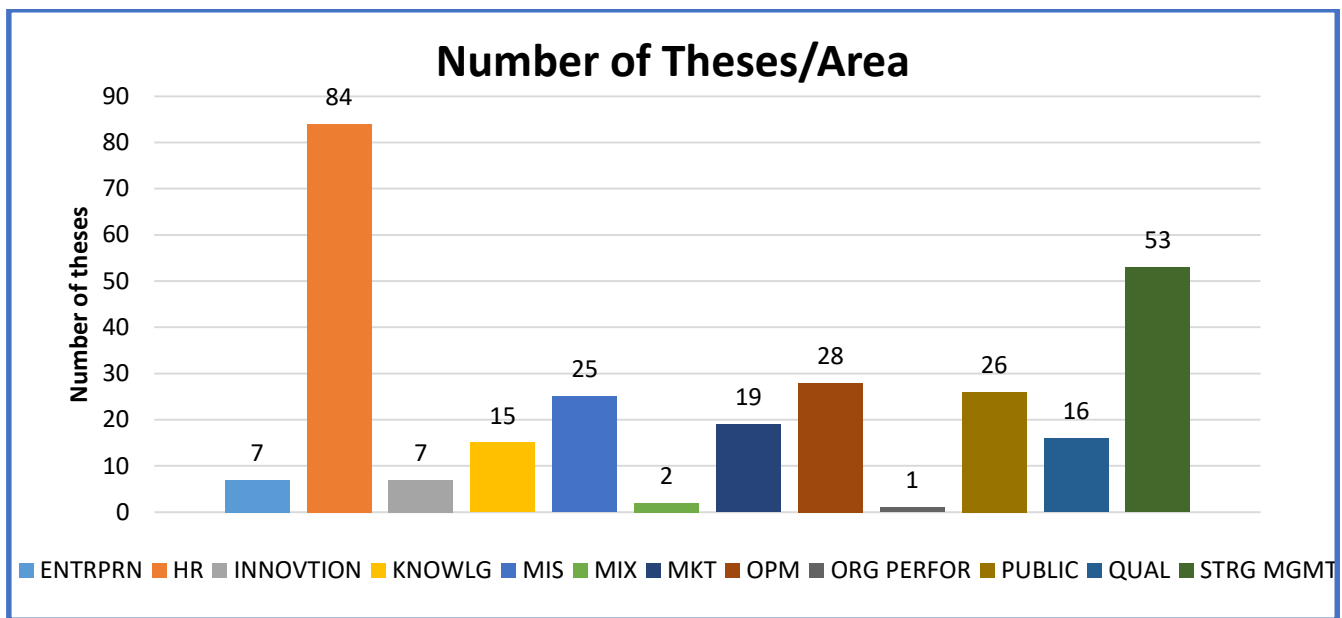


Figure (3)
Distribution of MBA theses according to research area

Women Studies: Only 3% of the theses have focused on problems faced by women in business community. Developing economies need more balanced gender studies that support both males and females in business to be developed fairly.

Country: Most of the MBA students in the Jordanian universities are Jordanians; therefore, most theses are Jordan-oriented. Almost no importance has been given to regional, international and comparative studies. Comparing business cases among regions and countries leads to significant findings from the experiences of developed economies.

Sectors: Ten identifiable sectors have been clarified among 264 theses. Only fifteen theses were multi-sector studies and one study was across all sectors (Figure 4).

Service sector is the most researched area of MBA theses (35%). This high interest in service sector can be explained

by the fact that this sector contributes 67.7% to the GDP of Jordan's economy; a service-oriented economy (CBJ, 2018). However, for a balanced and stable growth, developing economies need to study and develop all sectors. Hence, efforts should be made to conduct research in other sectors as well.

Case Study: The distribution of theses in terms on case-study has been illustrated in Figure 5. In public-sector twenty-six theses, forty were case studies. In most of the cases, problem and gap identification required an in-depth analysis. Applying case-study theses can support developing economies through providing better understanding of problems and therefore improving crucial businesses that play a key role in their sectors. Again, the service sector has a substantial proportion of the case-study theses due to the substantial number of theses in this sector.

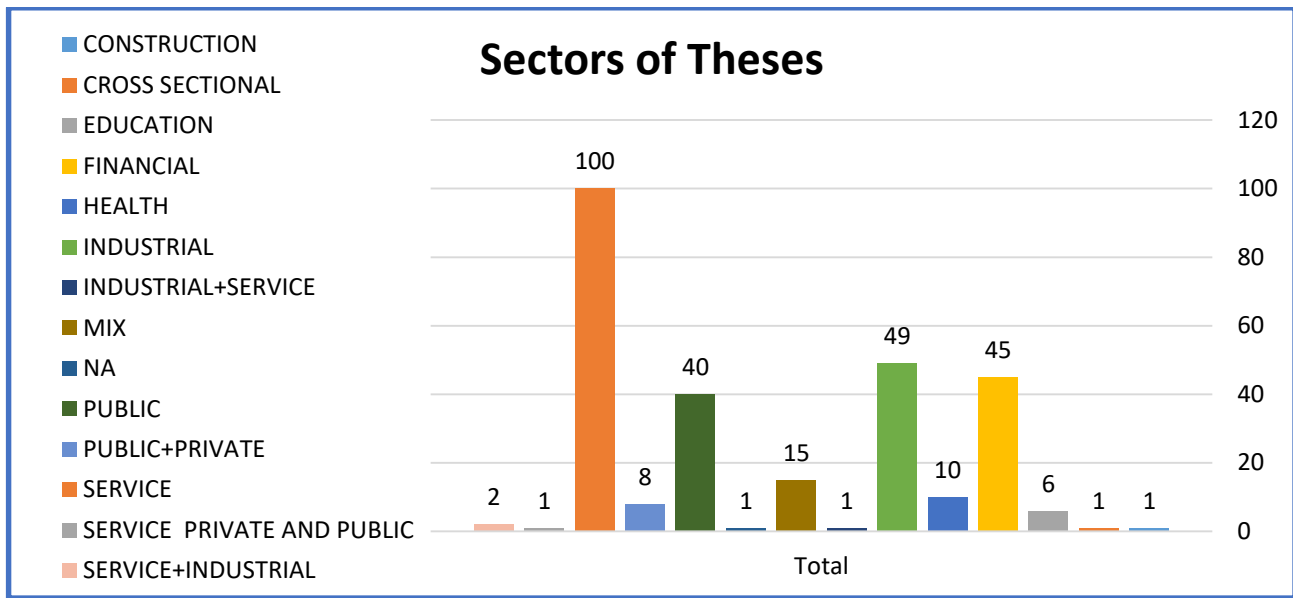


Figure (4)
Sector distribution for MBA theses

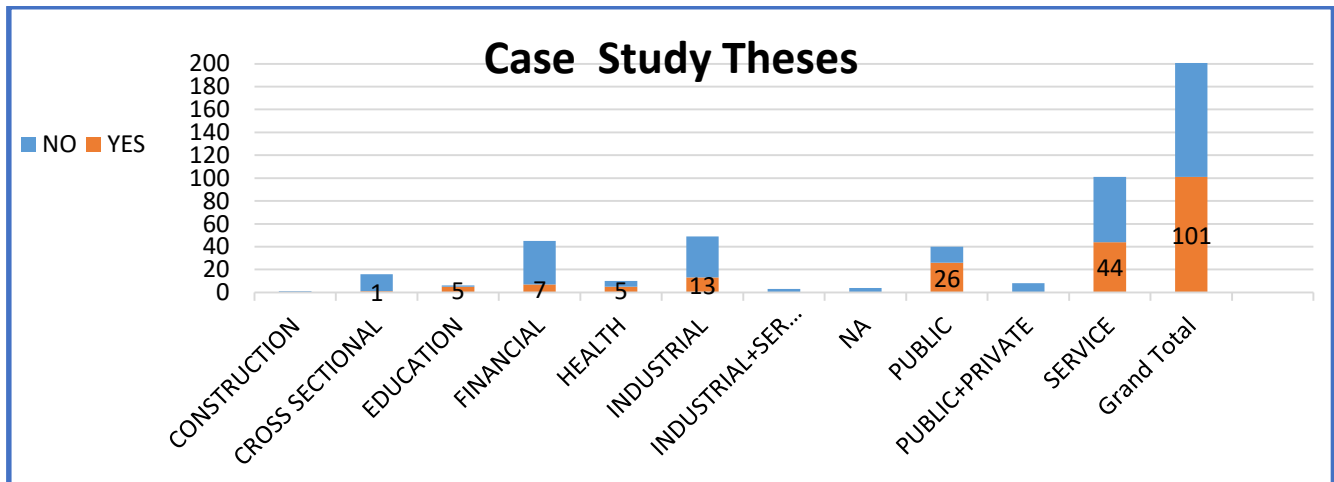


Figure (5)
MBA case study theses

Data-Collection Tools/Sources: Out of the 283 MBA theses, 231 (81.6%) used questionnaire alone, 11 (3.8%) used survey, three theses (1%) used interview and the rest used mixed data-collection tools. Use of questionnaire as a data-collection tool significantly limits the ability of the scholar to conduct an in-depth analysis of an issue and can harm data analysis. Contrary to this tool, using expert

interviews, direct observations and mixed data-collection tools is more objective oriented and can lead to more robust data analysis and findings.

Time Frame: Due to time constraints, all theses were snapshot-oriented. Only one study applied the longitudinal time frame pattern. Giving more time for the MBA students can open the door for more

longitudinal, cross-sectional, regional and comparative studies.

Research Area and Field: Figure 3 presents the main areas and fields of theses under revision. These areas are distributed in a defragmented way without clear pattern or classification. The summary provided in Figure 3 suggests that 226 theses (79%) have been submitted in the areas; Human Resources (HR)/eighty-four, Strategic Management Issues (STRG MGMT)/fifty-three, Operations Management (OPM)/thirty-eight, Public Management Issues (PUBLIC)/twenty-six and Management Information Systems (MIS)/twenty-five. Therefore, each research area received more in-depth analysis to discover whether there is a specific focus of MBA theses. Results of this analysis revealed that there is no concentration within each area and that there is no dominating field/ pattern to follow.

Data Type: About 96.4 % of the reviewed theses used questionnaires for collecting primary data. The quality of primary data depends upon research methodology, sampling process and quality/professionalism of the correspondents. Such factors affect the objectivity of these sources and therefore the trustability of the results. Very insignificant numbers of theses have used secondary data.

Data-analysis Methods: Using one type of data affect the research ability to conduct multiple analysis tests. Therefore, most of the MBA theses use the SPSS statistical tests to describe samples and evaluate hypotheses. Almost 260 theses (91.8%) applied simple and basic SPSS tests to analyse the collected primary data. Several multi-criteria decision-making approaches, qualitative techniques and interdisciplinary analysis methods can improve the quality of MBA theses and enrich the applicability of their results. The next section analyzes the use of data-analysis methods with data types and data-analysis methods with results.

Results

It has been concluded that any limitation in data collection and data analysis can significantly harm the outcomes' applicability. The present section has been

allocated to analyze up to what extent the outcomes of MBA theses are applicable. Based on the analysis outcomes, 90.8% of the reviewed theses have provided the simple recommendation of doing further research in the field or have stated their results in terms of significant and insignificant relationships. These shallow results and general recommendations are a direct outcome of the previous research problems.

Along with these points, the summary shows that 249 scholars were Jordanian nationals, while twenty-five were from other Arab nationalities. According to Abu Orabi (2016), less openness to international collaboration is a common attribute of higher-education research in the Arab region (including Jordan) and is negatively affecting the Arab countries' move towards internationalizations in terms of research and teaching. There is a need for more regional and international collaboration that can help students work on issues related to international business. Moreover, English is considered as a common language for business research. Contrary to this, most of the MBA theses included in this study were written in Arabic; hence, it is certain that publishing in international journals will be a challenging and frustrating process. In two independent studies by Al-Mansour (2016) and Al-Mansour and Kempner (2017), it has been exposed that writing in Arabic is one of the main barriers that diminish the internationalization and global spread of Arab scientific research. Based on these points, the following crucial research problems and gaps are to be considered in developing economies:

- There is an increasing number of MBA students conducting business research.
- There is a clear focus on HR and strategic-management issues.
- Limited number of women business research.
- Jordan-oriented/Arabic language-oriented business research.

- Service-oriented business research.
- Case-study research approach is considered and adopted.
- Questionnaire-oriented business research with primary-data focus and limited analysis tests.

5.2. Multi-disciplinary Analysis

The analysis dimensions used in the sectors can provide more information and can give clearer insight about the MBA theses in developing economies. Research sector, data collection tool, data analysis and results are the most important dimensions. This section analyses the relationships between these dimensions as follow:

- Sectors and Sub-Sectors
- Research Area and Filed
- Data Tool and Sectors
- Data Type across Sectors
- Data Types and Data Analysis
- Data Analysis and Results
- Sectors and Results

5.2.1. Sectors and Sub-sectors

Service sector is the most studied one in the Jordanian economy (101 theses out of the total 283 theses). Further, banks and hospitals are the sub-sections that are most frequently investigated within this sector. For example, forty-two theses have been conducted on banks under the finance sector. Other sub-sectors have various levels of attention; some are in the right track, while others are not. For example, there are thirteen theses for 'electricity' and forty theses on public issues (public perspectives). Although electricity and public issues are of great importance to masses, there are still other sectors that need much concern too. Another significantly important trend has been observed in MBA theses; 27 MBA theses are submitted on topics related to 'telecommunication' and 30 MBA theses are conducted in the 'health' sub-sector (12 out of the thirty are under the 'service' sector). There are twenty-six theses about 'universities': fourteen from the 'public' perspective, six for educational issues, four from the 'service' perspective and

two from different perspectives. Although there are MBA theses that investigate 'universities' issues in developing economies, there is a clear need to review the track that these universities follow in their research issues and the way in which they manage their economic problems. According to Al-Hawajreh (2018), the strategic success of developing economy universities is heavily depending on their ability to match business-intelligence capabilities and organizational entrepreneurship, where business research can be a significant help.

Summing-up, most of the Jordanian MBA programs at HEIs have been missing the right direction, hence following no clear vision. The existence of a substantial number of sub-sectors in business research distracts the attention of scholars from the main problem, which is of serious concern and hence needs investigation. There are several very crucial sub-sectors that did not receive the needed attention yet: airlines, the Aqaba special economic zone, construction, entertainment, entrepreneurship, fashion, food, hotels, IT & programming, marketing, pharmaceutical industry, Qualified Industrial Zones (QIZs), small businesses, tourism and water. There is a possibility that these sectors can serve to a great extent the economy in terms of creating job opportunities. QIZs are special industrial areas with unique features that allow investors to export their products and services to the US market directly. Among the reviewed theses, only one study has been submitted to investigate issues related to QIZs.

5.2.2. Data Types across Sectors

As most of the theses (88.3%) have used questionnaires for data collection, opinions and primary data have been collected for analysis. However, the quality of the data collected depends upon the sample design, the quality of the data-collection tool and the objectivity of researchers and

respondents. Consequently, it is concluded that expected benefits of primary data in terms of originality, relevancy to the topic and accuracy are affected by the quality of data. In addition to that, respondents' experience, knowledge, seriousness and objectivity highly affect the quality of data collected. Only twenty-five theses (8.8%) integrated primary and secondary data and only seven theses (2.4%) used secondary data alone.

5.2.3. Data Type and Data Analysis

Data-analysis methods are used to understand cases along with finding results. It has been observed that a substantial number of these studies that used primary data collected through questionnaires used specific descriptive analysis and regression SPSS tests for data analysis. The data-analysis techniques have been used with knowing the need for the study design. The review of business-research literature suggests that content analysis, quantitative methods, system analysis and comparison, as well as control charts and multi-criteria decision-making techniques are more suitable methods to be used in business research.

5.2.4. Data Analysis and Results

The use of different analysis tools can lead to meaningful outcomes. It is worth to highlight that due to limitation of data-collection tools and inappropriate analysis methods used by theses under study, the results of these theses are limited and not applicable. Only a percentage of (7.4%) of the theses provides applicable results, which can partially help business organizations solve their problems and improve the existing situation. In addition to the 257 theses that provide simple basic results with general recommendations, the results of other theses have been classified into 'alignment and success', 'competition-level', 'case-related', 'designing new systems' and 'identifying CSFs'.

5.2.5. Sector and Results

Although there is a limited number of applicable theses,

the number of these theses varies across sectors. In terms of 'applicable' results, the industry sector is the most beneficiary one (10 applicable theses), the financial sector is the only sector where the MBA theses provide 'alignment and success,' 'case-related' and 'competition-level' results. Meanwhile, 'industrial' sector is the only sector where the MBA theses provide 'designing new systems' and 'identifying CSFs' results. In terms of 'basic results and recommendations,' one hundred theses (35.3%) were in the 'service' sector, forty-one theses (14.4%) in the 'financial' sector and 40 (14.1%) in the 'industry' sector. Based on this analysis, the MBA theses insignificantly contribute to the economic development of developing economies.

5.3. MIS and Operations Management (OM) Theses

Out of the 283 MBA theses under study, ninety theses have been conducted in the topics of MIS and OM. In these theses, MIS and OM topics/variables and their relationships with other variables have been evaluated both as dependent and independent variable. Although substantial number of theses have been conducted in the MIS and OM areas, all these theses have not discussed technicalities of these fields in depth, hence limiting their applicability for developmental works. More specifically, theses submitted in the broader area of MIS have been further classified as: twenty-four theses on MIS roles in general, fifteen theses on Knowledge management and seven theses on Innovation issues. Theses conducted in the broader area of OM are classified as: twenty-eight theses on operations and production management (OPM) and sixteen theses on quality-management issues. Most of the students preferred to conduct research on the service, industrial and financial sectors (76% out of the MIS theses and 88.6% of the OM theses). The MIS theses are distributed in a balanced way among these three sectors. In contrast, theses

submitted on OM are skewed towards the service and industrial sectors. Technically, MIS and OM studies need direct observation and accurate secondary data to analyze systems, understand situations and suggest applicable solutions for these two crucial areas. MIS and OM studies have used primary data collected through questionnaires, which limited the applicability of their results. Also, the recommendations are not that promising. The majority of MIS theses (85%) and OM theses (75%) provide general basic results and limited recommendations.

In light of the analysis, 23% of the OM theses presented applicable results that Jordanian sectors can benefit from, while only 9% of the MIS theses' results are applicable. Only one MIS thesis was case-related and one has developed a new study system. Jordan and other developing countries can achieve superior progress in their developing process by focusing more on these two areas.

5.4. Trend Analysis for Research Area and Sector

Along with the results presented in the previous section,

analyzing business-research trends can add more insights into the importance of these issues and highlight business-research potentials for the next periods. On the average, an MBA student with a thesis track needs 3 to 4 years to fulfil the program requirements and in some cases, this takes up to 5 years. Therefore, theses are clustered into intervals that cover from 4 to 5 years, Figure (6) summarizes the business-research areas and trend analysis. As a general notice, there is an increase in the number of theses prepared in all the research areas during the 20 years of the study. Based on the research area, human resources (HRs), strategic management and operations management have been widely studied and a further increase is expected in the future. A decrease has been observed in the number of theses conducted on the topic of MIS. Surprisingly, there is a clear interest in the 'public' sector within the MBA theses. More attention is needed to direct future research trends toward business issues.

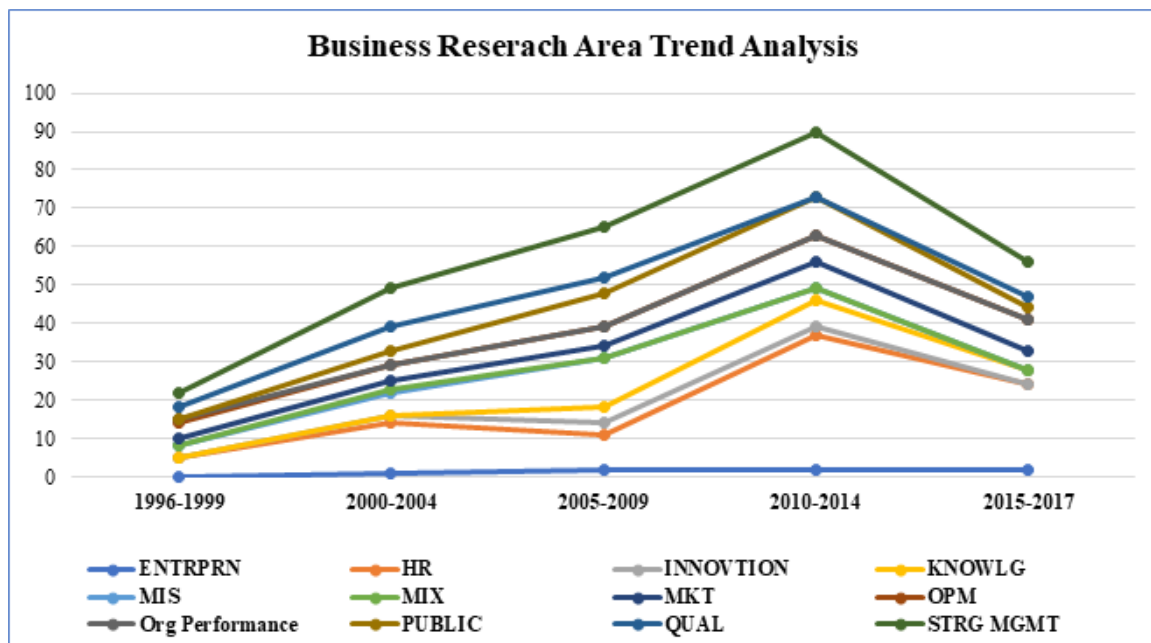


Figure (6)
Business-research area trends

In terms of research ‘sectors,’ the most frequently studied ones are the service, industrial, financial and public sectors, respectively. Further, the service sector is the most frequently studied sector. There is an incremental trend on the service-sector issues, a decreasing trend on the industrial

sector and an almost steady trend on the financial sector. More attention is needed to direct research trends toward other crucial sectors, such as construction, health and tourism. Figure (7) summarizes these trends.

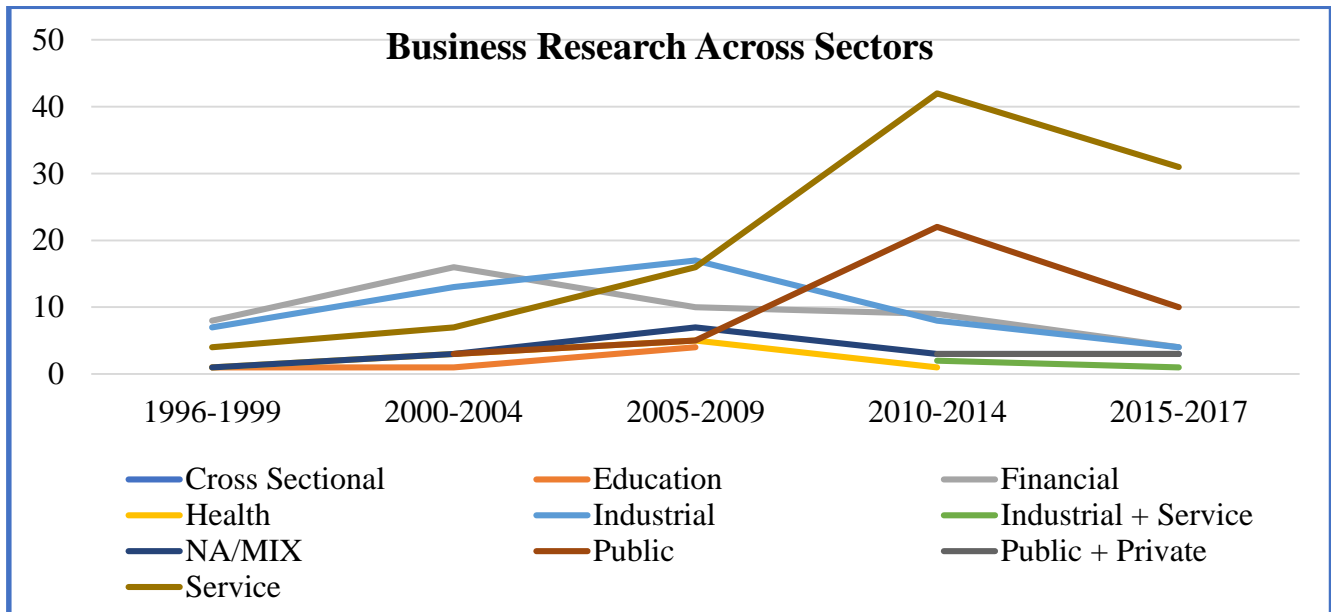


Figure (7)

Business research across sector trends

Based on these points, business research in Jordan - as a developing economy - can be summarized as follows:

- Most of the MBA students conducting the theses under study (258) are Jordanian nationals, while the rest of students (25) are from other Arab countries.
- The economy of Jordan is characterized by small markets and low international competitiveness. The theses conducted are related to the local business environment. Consequently, the potential and possibility of publishing research in international journals are low.
- Most of the reviewed MBA theses are written in Arabic language, which might be considered as a reasonable cause that increases difficulties in publishing in international journals.
- There is a defragmented wide range of sub-sectors at

which the MBA theses under study conduct their research.

- Services finance and industrial sectors are the most studied ones using questionnaires to collect primary opinions and data.
- Although there is a limited number of theses that used integrated data-collection tools, most of the applicable results and outcomes were in the ‘industrial’ sector
- Mixed data sources have been used only in the industrial sector. Consequently, this sector was somehow able to apply different data-analysis approaches using several techniques.
- Most of the applicable results and outcomes have been derived from ‘system analysis’ theses that

used mixed data sources.

- Although there is a reasonable proportion of MIS and OM theses, the wide range of research areas and the nature of the fields of study limit the ability to support the developing economies' efforts.
- Analysis of the research trends exposed that research in the areas such as HR, operations and strategic management has increased during the past 20 years.
- Less attention is given to innovation, quality and entrepreneurship areas, as well as to the industrial sector.
- There is a clear absence of digital economy, smart

businesses, big data, internet of things, circle economy and industry 4.0 areas.

6. Business Research Gap: MBA Outcomes and Research Priorities

Based on the MBA theses analysis outcomes in previous sections and compared with the business-research priorities identified by the Scientific Research Fund, the following gaps have been identified (Table 4):

Table (4)
MBA theses outcomes and research priorities

Research Priority	Main MBA Outcomes	Research Gap
Entrepreneurship	Minimal attention (2.5%) No focus	There is still a research priority in all sectors, especially in MIS and OM areas.
Governance	There are no special theses that investigated this issue	There is still a research priority in all sectors.
Social Responsibility	Minimal attention	All sectors suffer from the absence of social-responsibility studies.
Competitiveness	Only one thesis investigated firms' competitiveness	There is still a major research priority for Jordan and developing economies in general.
Marketing	One thesis investigated the marketing sub-sector	There are still valid topics to investigate.

Comparison of current-work results with that of HCST study reveals those areas of top priority still need

considerable research attempts. Table 5 summarizes the level of attention on each of these top priorities.

Table (5)
Research gap based on higher council top research priorities

Subject	Research issues of top priority	Level of attention in MBA thesis	Research gap
Business Ethics and Social Responsibility	<ul style="list-style-type: none"> - Studies of levels of transparency and honesty in offering public service. in accordance with international standards - The extent of social-responsibility practices in public and private. Sectors' establishments. - Assessment and development of work ethics in public and private sectors. 	<ul style="list-style-type: none"> - Very Low - Very Low - Very Low 	Still Valid Research Top Priorities.
Human Resources Management	<ul style="list-style-type: none"> - Reviewing the effectiveness of the principles and standards of appointments for top -and middle-level employees in the public and private sectors. - Assessment of efficiency and effectiveness of employment and training organizations in the public and private sectors. - The impact of restructuring compensation and incentives system on the performance of public and private sector's organizations. 	<ul style="list-style-type: none"> - Moderate - Moderate - Low 	Some areas under this dimension still valid, while others have been studied before. MBA theses about HR areas should be selective.
Management Information Systems and Knowledge Management	<ul style="list-style-type: none"> - Application development of the superior management supportive systems at the Jordanian work environment. - Application development of the E-university. - Application development of E-government. 	<ul style="list-style-type: none"> - Low - Low - Low 	MIS and e-applications are still valid areas for business research.
Higher Education Outputs and the Labour-market Needs	<ul style="list-style-type: none"> - Evaluation of the role of faculty members' development centres at the Jordanian universities in building the academic and administrative capacities. - Developing "hard and soft skills" of higher-education institutions' graduates to be compatible with labour-market needs. - Academic characteristics(qualifications) of students, unemployed and employed graduates from universities in Jordan: Considerations for relevance. 	<ul style="list-style-type: none"> - Low - Low - Low to moderate 	Some areas under this dimension are still valid, while others have been studied before. MBA theses about HEIs' output areas should be selective.

	- The degree to which the outputs of higher education in Jordan are compatible with labour-market needs.	- Moderate	
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These results show fragile matching between research priorities and the MBA theses in Jordan. The results suggest an obvious mismatch between research priorities and MBA programs. The findings in this regard are reliable, similar and consistent with several studies in the Arab world (see for example Alkasabi, 2003; Al-Rasheed, 2010; Issa & Siddiek, 2012; Abu-Orabi, 2016; Ahmed & Albuarki, 2017). For example, Abu-Orabi (2016) argued that higher-education systems and scientific research in the Arab world are suffering from low consistency of research priorities. Similarly, Ahmad and Albuarki (2017) and Alkasabi (2003) asserted that there is a weak integration between higher-education research, market needs and trends is common features in the Arab world. Further, Farah (2014) and UNDP (2004) argued that higher-education systems in the Arab world are suffering from the absence of strategic research planning as well as clear visions and policies that govern the entire educational system. Therefore, it is significantly important to identify crucial research areas and establish effective research agenda for the higher-education system in the Arab world.

6.1. Research Agenda for MBA Studies in Developing Economies

To conclude, this study has reviewed the content of 283 MBA theses in Jordan as one of the developing economies, with the prime aim to scientifically identify business-research trends and compare them with business research priorities. The review has helped in the identification of significant research gaps and potential opportunities for developing economies and HEIs. The study has adopted two levels of analysis: descriptive and in-depth. The outcomes

are then compared with contemporary research priorities identified by the concerned government authorities in Jordan. The study concluded that MBA students conducting MBA research should modify their research in terms of research methods, data collection and data analysis tools to match with market needs, economy priorities and context requirements. Further, there is a need for conducting research on international business problems. There are other sectors besides the service, financial and public sectors that are important and hence need to be studied. Moreover, cross-sectional and multi-sector studies are needed for accelerating growth and developing programs. More focus on MIS and OM areas is highly needed, especially within the regional and international contexts. Linking HEIs and other related institutions with local and international business is required to build on these identified business research priorities and update them in a regular base. Crucial areas that represent continuous research priorities for developing economies include IT and MIS, OM and quality issues, need more attention. Finally, open the door for more cooperation between business and other faculties especially IT and engineering to direct the MBA theses toward the digital economy and smart businesses.

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