

# Benchmarking-BSC Integration for Building Strategic Performance Learning Matrix: Evidence from Jordan

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This research's focal point is to examine empirically the potential gained value from Benchmarking-BSC's financial perspective integration in building a reliable strategic performance learning matrix. Its methodology consists of administrating a comparative analysis of 8 agreed financial indicators (ROI, ROE, DR, DPS, EPS, MTBR, SMV, and SBV) as measures translating Jordanian public Shareholding Banks' strategic performance outcomes during 14 years of operation (2005-2018). A comprehensive benchmarking process reveals precious information flow concerning JPSBs performance comparisons; their general competitive positioning, best practice bank in each of the adopted 8 measures, the benchmarked banks' ranking list, and the relative strategic performance gaps separating each from the best-in-class. This research proved that integrating Benchmarking-BSC's financial perspective generates a synergic combination that enables building a reliable strategic performance learning matrix. The built matrix in this research enhances JPSBs' vital strategic aspects, supporting their efforts towards improvement, and sustainable future innovations. This research contributes to the literature by examining the significant role of the emerging 'Integrative' trend, opening additional horizons to the corporate's strategic performance issues, joining the ultimate shared cause of both genuine methodologies; 'Benchmarking' and 'BSC'. This research's built strategic learning matrix can be considered as a piece of original evidence.

**Key words:** *Strategic Performance, Benchmarking-BSC Integration, Learning Matrix, Jordan.*



## Introduction

While business firms are operating in a globally driven market, only those managers who realise the vital importance of innovations can imagine their potentialities in adding value to their firm's overall strategy-making process, and their firms' competitive strategic performance improvement as well. Thus, business firm management is deeply concerned in its corporate strategic performance outcomes, since corporate's performance translates the state of the firm's strategic objectives achievement, and ultimately, determines its competitive position within its targeted market scope.

Strategic performance has become an important factor in overcoming managing uncertainties, improving business, and creating sustainable firm success. (Erkan and Koksall 2016, p 16). Cambs and his colleagues went further considering that organisational performance is widely recognised as an important, if not the most important construct in strategic management research. Researchers agree the organisational performance is a multidimensional construct. (Cambs *et al* 2005, p 259).

During all stages of a business organisation's life cycle, strategic performance management earns its exceptional importance from the natures of its role, as a major contributor in formulating the strategic learning scope of the firm to its managers', owners, and strategists. The fulfillment of such a delicate role requires seeking convenient methodologies, measures and techniques. In this regard, two pillars are gaining a remarkable expanding worldwide successful use in dealing with strategic performance.

For the benchmarking, it was Robert Camp, the logistics engineer of Xerox Rank (one of the world's leading copier companies), who initiated Xerox's benchmarking program in 1979 and who is generally regarded as the guru of benchmarking movement. (Drgolea and Cotirlea 2009, p 813). Benchmarking is a way of measuring a firm's strategies and performance against "best-in-class" firms. The aim of benchmarking is to identify best practices that can be adopted and implemented by the organisation to improve a company's performance. (Freytag and Hollensen 2001, p 25).

For the balanced score and BSC, Kaplan and Norton first introduced it in a 1992 Harvard Business Reviews article, considering the "Balanced Score Card" as performance measurement that can translate company's vision and strategy, clarifies in a comprehensive balanced form, the status of the firm's performance by covering main four perspectives: Financial, Internal business processes, Customer, and the perspective of Learning and Growth. (Kaplan 2010, p 2).

The force that, both streams "Benchmarking" and "BSC" are still scoring success, proving separately, their outstanding contributions in dealing with competitive strategic performance different aspects, did not prevent the emergence of a third stream that can be called as an 'integrative trend'. Sharing the same interests, attempting to contribute through linking and integrating the Benchmarking and the BSC methodologies to be used in different combinations responding to the nature of organisational strategic performance's with its multidimensional characteristic: Shahin and Zairi model *IBBSM* (2006), Chenhall's *SPMS* model (2005), De Wet and De Jager's *BFSC* model (2007), Ercan and Koksall's *CSPB* model (2016).

This study aims to answer a core question: 'Do the integration of Benchmarking-BSC's financial perspective methodologies allows empirically a fair comparison to the Jordanian Public Shareholding Banks (JPSB) strategic performance, empowering building a learning matrix?. The combination of both methodologies, the Benchmarking, and the BSC's financial perspective, will be empirically tested based on evidence from a sample of 10 Jordanian shareholding banks, were 8 financial indicators are used as measures translating their strategic performance during 14 years of operation (2005-2018). We believe, in this study, that building such a strategic learning matrix, can add value by contributing in drawing a big picture of the competitive position, allowing the strategic management of each of the JPSB as main players in the Jordanian Banking Sector, to learn, meditate, and decide future improvement and means of sustaining innovative actions.

## Literature Review

A great deal of interest is devoted by authors, experts, as by practitioners in the organisation's strategic performance management. This expanding interest is justified while the intention is seeking a sustainable improvement of corporate competitiveness.

### *Benchmarking*

#### *Benchmarking Definition*

Freytag and Hollensen in their article in the TQM Magazine, considered benchmarking as more than giving marks, it is a way of measuring a firm's strategies and performance against "best-in-class" firms, both inside and outside the industry aiming identify best practices that can be adopted and implemented by the organisation to improve company's performance. (Freytag and Hollensen 2001, p 25).

Shahin and his colleague argued that since decision- making is part of management, benchmarking is a continuous activity that refers to all areas and aspects of management, and since business performance and long-term survival depend on competitors business and other

factors of the business environment, it is reasonable to build benchmarking systematically in the process of strategic management. this can improve the quality of decision –making and can become one of the company's competitive advantages. (Shahin and Zairi 2006, p 2).

For Anand and his colleague, benchmarking should be recognised as a catalyst for improvement and innovation. It has been a popular topic and its significance as a practical method in developing critical areas of business is indisputable as a management tool for attaining or exceeding the performance goals by learning from best practices and understanding the processes by which they are achieved. (Anand and Kodali 2008, p 258).

Curpan and her colleagues considered benchmarking as a modern instrument that firms can use to increase their competitiveness in the actual business environment, to help firms to surpass the problems, and to gain durable competitive advantages through the development of the strength and by reducing the weaknesses, Curpan *et al* (2008, p 201).

For Jovic,Kostic, and Radanov, benchmarking means the process of measuring an organisation's internal processes then identifying, understanding companies, regarding that it does not mean copying. (Jovic *et al* 2011, p 483).

Hong and his colleagues summarised the vital aspects of benchmarking concluding that, in brief, benchmarking has been essential in the achievement of sustainable learning and improvement through ongoing processes of measurement, comparison, improvement, continually, and learning in the effort to gain sustainable competitive advantage. (Hong et al 2012, p 446).

Jurevicius, for the "strategic management insight. defined benchmarking as a strategy tool used to compare the performance of the business processes and products with the best performances of other companies inside and outside the industry, without benchmarking, you would never know how successful your performance is in a market or whether you perform one or another task better than your competitor dose. (Jurevicius 2014, p 1).

Benchmarking; for Kaplan as one of the two introducers of the balanced scorecard, is a technique that is increasingly being adopted as a mechanism for continuous improvement. It is the establishment, through data gathering, of targets and comparators that permit relative levels of performance (and particular areas of underperformance) to be identified. And the adaptation of identified best practices should improve performance. For Kaplan, benchmarking, therefore, requires organisations to

- Identify what they do and why they do it.
- Know what the industry does and particular what competitors do.



- Be fully committed to achieving best practice.

Kaplan concluded that any activity can be benchmarked and an organisation should focus on: (those that are central to business strategy, those where significant improvement is required without increasing resources and those activities where the staff is committed and eager for improvement. (Kaplan 2010, ch16, p 554)

### ***Benchmarking Advantages and Disadvantages***

#### ***Benchmarking Advantages***

Benefits, advantages, and strengths are terms used by authors as indicates the positive side in favour of benchmarking. Reviewing; (Asrofah *et al* 2010), (Scott 2015), (Jurevicius 2014), (CSI Competitive Solution Inc. 2017), (Goncharuk *et al* 2015), (Korosec 2003); reveals several advantages that can be gained from benchmarking applications that can be summarised:

- Benchmarking measures a company against its local and international competition.
- It allows relating practices in place to company performance and rates it against the competition.
- It shows how a company compares profitability, sales, productivity, and relationships with customers and suppliers, staff, investment in the future, and manufacturing and services processes.
- It increases the awareness of the company's costs compared with rivals.
- It provides the company with an insight into how other companies organize their operations, processes facilitating cooperation between teams, units, and divisions.
- It stimulates the company's staff to achievement of new standards and aspirations to new development in the connected fields of activity, improve the motivation of the personnel.
- It documents the reasons for existing distinctions
- It promotes in an inexpensive way, creating of pool innovative ideas.
- It highlights problem areas and the potential for improvement, providing an incentive to change, assisting in setting targets and formulating plans and strategies.
- It helps in overcoming 'paradigm blindness' with means the inability to changing the way of thinking and doing things by regarding certain ways as the best ways because these are the ways that things have always been done.

#### ***Benchmarking Disadvantages***

Criticisms, limits, problems, weaknesses, and disadvantages are used as terms by different authors to indicate negative aspects of benchmarking.



For Kaplan, benchmarking certainly has its virtues. Comparing production time or the cost of a standard process to that of peer companies can yield important insights about your efficiencies- and ultimately, competitiveness. But, for Kaplan, benchmarking also has its limits. When ignoring the differentiated output that internal support or shared services groups provide, such straight-across cost numeric companies become meaningless. Kaplan considers that today's successful support unit earns its keep by being a trusted partner to the business units it serves, so, comparing its results to those in a benchmarking survey is counterproductive. And, for Kaplan, companies should save the benchmarking surveys for commoditised processes or services. Kaplan believes that benchmarking is not informative when it is used to compare fundamentally different processes or products. (Kaplan 2005).

For Jurevicius, benchmarking disadvantages can be summarised; hard to find a benchmarking partner, difficulties to assign a metric to measure a process, its initial costs could be huge for less experienced users, managers resist the changes that might be required to improve performance, some of the best practices won't apply for to your whole organisation. (Jurevicius for the Strategic Management Insight *SMI* 2014).

Goncharuk and his colleagues think that many problems, which can put obstacles in the way of successful execution of benchmarking; as time limits, resources shortage, competitive barriers inaccessibility .hard reach-of information about competitors, administrative and professional staff shortage, resistance to changes. (Goncharuk *et al* 2015, p 34)

For Scott, criticisms of benchmarking can be summarised; potential challenges include the need to ensure agreed outcomes for all benchmarking partners, challenges appear from focusing on processes and practices that are already occurring and only on another institution's best practices, difficulties concerning choosing the right partner organisation while some times it may be impossible to know which potential partner organisation is identified as the best in any specific area until data has been widely gathered and comparisons made. Finally, for Scott, data may not be comparable between different institutions, because of different reporting conventions, different instruments used. (Scott 2015, pp 4,5).

Hong and his colleagues concluded that the challenges of benchmarking are quite diverse, complex, and unsettling. The added that the benchmarking literature will continue to address the micro-technical and process-related issues of organisations in deeper ways while searching for effective comparative measures; and the need for appropriate assessment tools for macro. Socioeconomic entities will also increase. (Hong *et al* 2012, p 453).



## ***Balanced Scorecard (BSC)***

### ***Introducing the BSC***

Robert Kaplan wrote: our interest in measurement for driving performance improvements arose from a belief articulated more than a century earlier by a prominent British scientist, *Lord Kelvin*; **'if you cannot measure it, you cannot improve it' 1883**. The balanced score card's philosophy relays on a belief of its introducers that measurement was as fundamental for managers as it was for scientists, and companies were to improve the management of their intangible assets, they had to integrate the measurement of intangible assets into their management systems. Kaplan continues, David Norton and I introduced the balanced scorecard to provide a missing component and bridge among these various conflicting literature that had been developed in complete isolation from each other: the literature of quality and lean management, the literature on financial-economic and stakeholders theory, Kaplan reports, that the original balanced scorecard, with its four perspectives: financial, Customer, Internal Business Process, and Learning and growth, continued it is between evaluation, from its introduction to last developments in 2008, have informed the enhancement and capabilities of the original balanced scorecard. Perhaps the most interesting among these advances are the following two models: The 2006's 'Sources of Enterprise Synergy' model, and the 2008's 'Closed Loop Management System for Strategy Execution' model. (Kaplan 2010, p 3). However, even for its introducers, the BSC's financial perspective is distinguished for its importance due to results obtained from the analysis of financial targets for institutions in the competitive environment. Kaplan and Norton, (2000: pp. 9-15). Chitu and Opris demonstrated the same position in this regard, arguing that the company's strategy presents value-based business, and financial indicators are re[resented together with the vision, mission, and core values related to stakeholders. (Chitu and Opris, 2014, p 62).

### ***Balanced Score Card's Advantages and Disadvantages***

#### ***Advantages of the Balanced Scorecard***

The balanced scorecard was created primarily as a measurement system and an answer to criticism concerning the unilateral measurement of the performance ability of a company. It provides the cornerstone for a new strategic management system enabling organisations to introduce new governance and renew process focusing on strategy, it does additional function (Isoraite, 2008, p 26)

- Translate strategy into action, making strategy everyone's job.
- Manage the intangible assets, customer loyalty, innovation, employee capabilities.
- Leverage cross-functionality without changing the structure of the business.

- Measure what matters the critical few Vs. the important many in real-time, not just after the facts.
- Create a daily management system for the day-to-day navigation of the business.

For Stfanovska and Soklevski; a balanced scorecard provides equilibrium between multiple perspectives that will enable the organisation to develop equally all of its organisational capabilities. And the basic premise of the balanced card results for the organisation not to jeopardize their future opportunities for action, making the balance between business strategy and financial success. (Stefanovska and Soklevski 2014, p 165).

For Rillo, one of the most important strengths that the balanced scorecard is claimed to possess is the strong causal interrelations between the different elements that are mapped using the care strategy of an organisation as a source as the financial measures have been considered merely a reflection of past activities already taken place. Non-financial enablers or leading measures that are shown in logical cause and effect relationship with financial measures should allow paying attention to the future potential of an organisation. (Rillo Marko 2004, p 155)

### ***Disadvantages and Limits of the Balanced Scorecard***

The wide world use of the balanced scorecard nowadays, the success that is gained from its outstanding contribution in different organisations, did not mean that BSC as a human invention, did escape from criticism. For Rillo 2004, the BSC method has been also thoroughly criticised, he argued some points of view such as, BSC is a static model without the dimension of time that would establish or follow a sequential set-up of measures of the balanced scorecard. And in the BSC's four classified perspectives model;(Learning and growth, internal presses, customer, Finance); the external environment and several interest groups are out of the picture.

### ***Benchmarking–BSC's Integrative Trend***

Bogeroft and his colleague defended the idea of linking BSC and interactive Benchmarking, as decision support approach, by which the BSC thinking provides a framework to ensure a balanced view of the organisation, on the other hand, interactive benchmarking is a management science tool that can support this process for ensuring a balanced view by helping to make intangible but important strategic ideas of the organisation more operational. (Bogetoft *et al* 2006, p 284).

Shahin and Zairi proposed a methodology for the integration of strategic management, Benchmarking and Balanced Scorecard(BSC), arguing that the integrated proposed model not only provides a holistic approach for performance evaluation, it still has great flexibility to be

future extended and integrated with other quality management approaches. (Shahin and Zairi 2006, p 8).

Four other research attempts concerning the integration of BSC and Data Envelopment Analysis (*DEA*) led successfully by (Chiang and Lin 2009), (Santos and Marques 2012), (Kadarova *et al* 2014), and (Golpira 2015). All the last four attempts meet ultimately in adopting an integrated framework to encompass the basic concepts of balanced scorecard and data envelope analysis for measuring and assessing performance.

Pelegri and his colleagues suggested the combination of the concepts of benchmarking and a balanced scorecard to be used by the Brazilian Electrical Energy Distribution Companies Association. (Pelegri *et al* 2009).

Kopecka proposed the Balanced Scorecard Implementation Integrated Approach (*BSIIA*), to improve BSC implementation effectiveness. Kopecka believed that his proposed framework requires three conditions to provide practical solutions: (translating and cascading strategy throughout an organisation channels, integrating approaches in operational procedure, and the design and use of indicators and its measurement). (Kopecka, 2015, p 59)

De Wet and De Jager proposed the Balanced Financial Score Card (*BFSC*), for better predicts shareholder value than traditional accounting ratios. They believed that their suggested balanced financial scorecard is part of the larger overall balanced scorecard, due it could make a significant contribution towards more elegant financial navigation (De Wet and De Jager 2007, p 98).

Chenhall, also proposed the Strategic Performance Measurement System (*SPMS*), considering it to be such as balanced scorecard, in assisting managers to develop competitive strategies. For Chenhall, a distinctive feature of SPMS is that they are designed to present managers with financial and non-financial measures covering different perspectives which, in combination, provide a way of translating strategy into coherent set performance measures. (Chenhall 2005, p 395).

Authors adopting the trend of integrating the two methodologies; Benchmarking and Balanced Scorecard, are perhaps responding to the same motive, the multidimensionality of organisational strategic performance that requires seeking adequate new means to be covered. Accordingly, variance in combinations chosen by each author becomes one of the most important factors that can distinguish each of their contributions.

This research purpose is to examine empirically the combination of two methodologies; the Benchmarking and the BSC's financial perspective aiming to provide an answer to its core



question: ‘Do the integration of Benchmarking-BSC's financial perspective methodologies allows empirically a fair, objective, and adequate comparison to the Jordanian Public Shareholding Banks (JPSB) strategic performance, empowering the built of a learning matrix?’.

### ***Previous Empirical Relevant Studies***

The review of some empirical attempts shows that their focus on organisations’ performance measuring and assessing based on using financial perspective indicators. These reviewed studies are mostly accomplished in banking and financial sector companies, within 17 different countries. Regardless their authors approach diversity, and the nature of their examined variables number in each, their meeting area is that they are, by their conclusions, confirming the significance and validity of the leading role of financial perspective indicators in providing a solid quantitative base for firms' performance outcomes measuring and assessing.

However, this significant leading role of the financial perspective still needs to be integrated and associated with other non-financial perspectives of the BSc's; (Customer, Internal business processes, and Learning and growth); to respond effectively to the multi-dimensionality nature of firms' strategic performance.

**Table 1:** summary of empirical studies by author, year, area of focus, place, and keyword

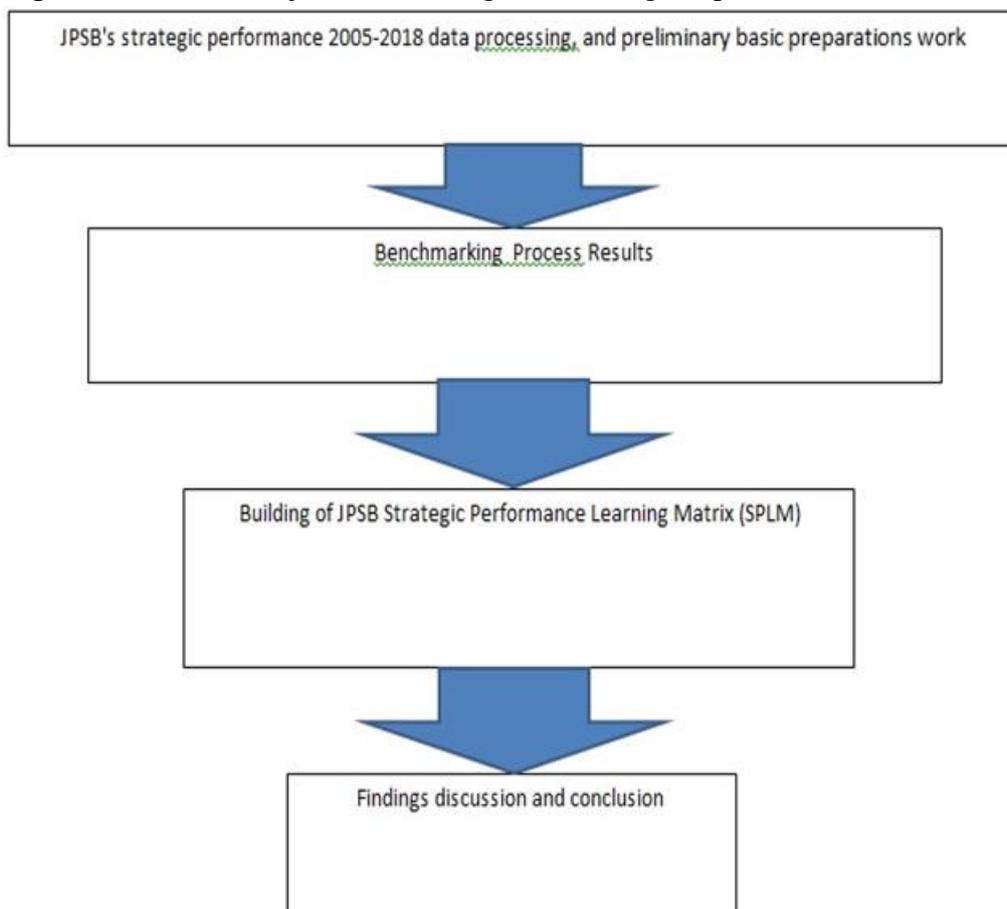
Author/ authors	Year	Area of focus by title	Place/ Country	Idea and Key words
Omoregie	2019	Improving Corporate Performance with Benchmarking: Some Contemporary Insight	Lagos-Nigeria	The paper presents an expository review of some new ideas and approaches to effective benchmarking and provides practitioners with some contemporary insights on approaches and tools for benchmarking as a way of improving corporate performance in a measurable way.
Al-abadallat	2019	The factors affecting the performance of the Jordanian Banks using Camels Model.	Jordan	Camels model, return on equity, return on assets, net income, Jordanian banks.
Bajwaa, Arif, and Ud-Din	2018	Benchmarking performance indicators: Evidence from Banking Sector of Pakistan	Pakistan	The aim is to provide insight regarding performance evaluation of twenty-four different banks in Pakistan with relation to the stock market.
Haidary and Abbey	2018	Financial performance of Commercial Banks in Afghanistan	Afghanistan	Financial performance of 15 commercial Banks was subject of a comparative process to cover their financial position, comprehensive income, changes equity and cash flow.
Baird	2017	The effectiveness of strategic performance measurement systems	Australia	The study examines the association between the three strategic performance measurement approaches: the use of multidimensional performance measures, the use of performance measures that are linked to value drivers, and the use of performance measures that are linked to strategy.
Abofaied	2017	Evaluation of bank's performance by using Balanced Score Card: Practical study in Libyan Environment.	Libya	Performance evaluation, management control, balanced scorecard.
Mizanur-Rahman	2016	Financial performance analysis of scheduled commercial banks in Bangladesh.	Bangladesh	Financial performance, Scheduled commercial banks, economic added value.
Rajnoha et al	2016	From financial measures to strategic performance measurement system and corporate sustainability: empirical Evidence from Slovakia.	Slovakia	Business measurement, performance, financial measures, strategic performance management system, corporation sustainability measurement system.
Ercan and Koksak	2016	Competitive Strategic Performance Benchmarking (CSPB) Model for International Construction Companies.	Turkey	The objective of the study is to develop a competitive strategic performance benchmarking model for large international construction Turkish companies.

## Methodology and Research Scope

### *Adopted Method and Research Objectives Attaining Methodological Paths*

This research adopts a combined approach integrating methodologies: benchmarking with the BSC's financial perspective. Such a combination will be empirically tested, using evidence from Jordanian public shareholding banks (JPSB). A methodological path is designed to serve to attain the research's objective which consists of building a strategic learning matrix, based on results of benchmarking 10 JPSB strategic performance during 14 years of operating 2005-2018. See Figure(1).

**Figure 1.** Research objective attaining methodological path



### *Research population and sampling*

The research population consists 16 active public shareholding banks in Jordan, six (6) banks were excluded: 3 Islamic Jordanian banks, 2 none Jordanian banks" Arab Banking Corporation (Jordan branch), *Banque De Societe Generale* (Jordanian), and 1 Jordanian the Jordan

Commercial Bank for missing data. Accordingly, the research sample consists of 10 Jordanian public shareholding banks representing 62.5% from total active Jordanian banks, which will be considered as the observation unit of this study. See table (2). The 10 JPSB research sample profiles by paid-up capital and by operation date. See table (3).

**Table 2:** Study's sampling process

Serial	Reuters Code	Banks Name
1	JOIB*	<i>Jordan Islamic Bank*</i>
2	JOKB	<b>Jordan Kuwait Bank</b>
3	JCBK**	<i>Jordan Commercial Bank**</i>
4	THBK	<b>The Housing Bank For Trade &amp; Finance</b>
5	AJIB	<b>Arab Jordan Investment Bank</b>
6	SIBK*	<i>Safwa Islamic Bank*</i>
7	UBSI	<b>Bank Al Etihad</b>
8	ABCO***	<i>Arab Banking Corporation ( Jordan )***</i>
9	INVB	<b>Invest Bank</b>
10	EXFB	<b>Capital Bank Of Jordan</b>
11	SGBJ***	<i>Societe Generale De Banque ( Jordanie )***</i>
12	CABK	<b>Cairo Amman Bank</b>
13	BOJX	<b>Bank Of Jordan</b>
14	AHLI	<b>Jordan Ahli Bank</b>
15	IIAB*	<i>Islamic International Arab Bank*</i>
16	ARBK	<b>Arab Bank</b>

**Table 3:** 10 JPSB research sample profiles by capital and by operation date

Serial	Jordanian Public Shareholding Banks JPSB	Paid-up capital in JODs	Operation date
1	<i>JOKB (Jordan Kuwait Bank)</i>	100,000,000	16-08-1977
2	<i>THBK (The Housing Bank For Trade &amp; Finance)</i>	315,000,000	01-01-1997
3	<i>AJIB (Arab Jordan Investment Bank)</i>	150,000,000	08-04-1978
4	<i>UBSI (Bank Al Etihad)</i>	160,000,000	24-05-1979
5	<i>INVB (Invest Bank)</i>	100,000,000	08-11-1982
6	<i>EXFB (Capital Bank Of Jordan)</i>	200,000,000	22-11-1995
7	<i>CABK (Cairo Amman Bank)</i>	180,000,000	05-08-1964
8	<i>BOJX (bank of Jordan)</i>	180,000,000	05-08-1964
9	<i>AHLI (Jordan Ahlibank)</i>	200,000,000	21-03-1963
10	<i>ARBK(Arab Bank)</i>	640,000,000	14-01-1930
Total invested capitals' amount in JOD		2,225,000,000	

\* One JOD (Jordan Dinar) value in 2019 fixed prices = 1.41\$ accordingly, total invested capitals amount in US dollars is equal approximately 3,137,250,000\$. Data Source: (SDC) Securities Depository Center. Available at: <https://www.sdc.com.jo>

### ***Research Scope, Assumptions, and Preliminary Basic Preparation Work***

#### ***Research Scope and Assumptions***

This research is dealing with published pieces of evidence concerning the strategic performance outcomes of a sample of 10 JPSB during 14 years of operation 2005-2018. The measurement scope of this research is limited in the use of eight (8) financial perspective indicators: (ROI, ROE, DR, DPS, EPS, MTBR, SMV, and SBV), as they translate by their achieved values, JPSBs strategic performance results in a quantitative form. Accordingly, this research analytical scope consists of achieving its benchmarking process, where results ultimately will provide building this research's aimed strategic learning matrix.

This research's objective attainment processes are carried on assuming:

- The validity of focusing on integrating the methodology of the BSC's financial perspective indicators, with the methodology of the Benchmarking in comparing JPSB's strategic performance and to achieve this research's purpose. Accordingly, this will include the assumption of neutralizing all other, internal and external, variables' impact in the regard.
- All the adopted 8 financial perspective indicators are significant, correlated associated in a mutual wise, and valid by their contributions to be used in illustrating the JPSB strategic performance. However, the MTBR indicator is distinguished for its exceptional significance, due to the Jordanian professional specialised institutions', Amman Stock Exchange precisely (ASE), approves that MTBR represents a barometer which indicates that a company succeeded in generating value for its respective owners. ASE, Amman

Stock Exchange (2019). Consequently, the MTBR with its two sub-indicators; the SMV, and the SBV, will be considered as a capstone between the 8 financial indicators adopted in this research. See table(4).

**Table 4:** Research adopted financial perspective indicators distributed by their strategic significance as performance outcomes of JPBS

Financial perspective indicators	Strategic significance as a performance outcome
ROI	Return on investment ROI=the ratio of money gained or lost relative to the amount of money invested on a project.
ROE	Return on equity ROE=measures the return earned on shareholder's investment in their equity.
DR	Debt ratio DR=ratio that indicates what proportion of debt a corporate has relative to its assets. The measure gives an idea to the leverage of corporate.
DPS	Dividends per share DPS= <u>measures the</u> portion of corporate profits paid out to shareholders.
EPS	Earnings per share EPS=portion of corporates' profit allocated to each outstanding share of stock.
MTBR	Market to book value MTBR=corporate share's market value to its book value. It is considered as capstone between other financial indicators due to it represents a barometer which indicates that a company succeeded in generating value for its respective owners.
SMV as sub-financial indicator related to MTBR value calculation	Corporate share's market value.
SBV as sub-financial indicator related to MTBR value calculation	Corporate share's book value.

Source: (SDC) Securities Depository Center. Available at: <https://www.sdc.com.jp>

### ***Research Preliminary Basic Preparation Works***

Sketching a reliable design that can help in building a comprehensive strategic learning matrix, requires some preparation works such as:

The calculation of *Mean* and *Standard Deviation* of each of the 8 financial perspective indicators' achieved values for each of the 10 JPBSs individually, as measures translating their accumulated strategic performance during 14 years of operation 2005-2018. See table ( 5 ).

**Table 5:** Mean and standard deviation of achieved value of 8 financial indicator as to translate the 10 JPSBs accumulated strategic performance outcomes during 14 years of operations 2005-2018

bank		ROI	ROE	DR	DPS	EPS	MTBR	SMY	SBY
	Mean	.65957	7.97771	89.25479	.08079	.15293	.96436	1.86143	1.67064
AHLI	N	14	14	14	14	14	14	14	14
	Std. Deviation	.353539	3.995436	1.324150	.042930	.076434	.441301	1.084037	.532419
	Mean	1.33000	9.31007	85.61664	.08000	.22586	1.10593	2.63286	2.40657
UBSI	N	14	14	14	14	14	14	14	14
	Std. Deviation	.732632	4.440707	2.742142	.040762	.120634	.837402	2.116355	.266601
	Mean	1.13550	7.53129	84.85771	.27657	.55679	1.81850	14.69643	7.17207
ARBK	N	14	14	14	14	14	14	14	14
	Std. Deviation	.361727	2.402372	1.606410	.081939	.262680	1.352424	15.572967	1.600023
	Mean	1.32950	9.84357	86.24307	.08714	.14414	1.35071	1.97766	1.43457
AJB	N	14	14	14	14	14	14	14	14
	Std. Deviation	.209361	2.330133	2.386857	.042323	.090991	.628146	1.030931	.168091
	Mean	1.75714	13.20907	86.26379	.14893	.26243	1.49300	2.85857	2.00964
BCJX	N	14	14	14	14	14	14	14	14
	Std. Deviation	.181548	3.053485	2.682148	.052116	.047293	.820372	1.048258	.246446
	Mean	1.64186	13.92164	88.18721	.11029	.31557	1.33671	3.11071	2.20350
JCBK	N	14	14	14	14	14	14	14	14
	Std. Deviation	.368807	3.020762	.967587	.035402	.133688	.625434	2.187406	.470738
	Mean	1.26236	7.09067	82.40036	.03264	.11371	.99486	1.52214	1.59079
EXFB	N	14	14	14	14	14	14	14	14
	Std. Deviation	.872667	4.716201	1.918762	.042045	.075628	.631546	.654102	.191316
	Mean	1.64879	11.68193	84.99864	.29929	.43021	2.33586	9.96214	3.67850
THBK	N	14	14	14	14	14	14	14	14

	Std. Deviation	.397658	2.740411	2.161391	.052837	.114242	.804184	3.250596	.315795
	Mean	1.68321	11.31864	84.33929	.06243	.18907	1.24329	2.00714	1.56136
INVB	N	14	14	14	14	14	14	14	14
	Std. Deviation	.968752	8.336058	2.888233	.044612	.188343	.648959	1.388837	.217547
	Mean	1.85414	13.80471	85.55043	.17500	.46350	1.46707	4.81857	3.65543
JOKB	N	14	14	14	14	14	14	14	14
	Std. Deviation	.479908	5.910659	2.746635	.058012	.110737	.957341	2.182380	.813457
	Mean	1.45021	10.51392	85.77119	.13291	.28552	1.40703	4.45479	2.77861
Total	N	140	140	140	140	140	140	140	140
	Std. Deviation	.619416	4.902867	2.803932	.092409	.193888	.841899	6.462808	1.779017

The calculation of the *Grand Mean* and *Standard Deviation* of each of the 8 financial perspective indicators' achieved values for the sum of the 10 JPSB as one unit, during 14 years of operation 2005-2018. See table ( 6 ). Based on the calculated Grand Mean and Standard Deviation, the *Pearson Correlation* test was used to verify that the 8 financial indicators adopted in this research, are correlated. And it was found that their correlations confirmed to be statistically significant at both, 0.01 level (*2-tailed*), and 0.5 level (*2-tailed*). See table (7).

**Table 6.** Grand mean and standard deviation of strategic performance of some of the 10 JPSB (as one unit) measured by 8 perspective indicators during 14 years of operating 2005-2018

	N	Minimum	Maximum	Mean	Std. Deviation
ROI	140	.054	4.965	1.45021	.619416
ROE	140	.330	39.841	10.51392	4.902867
DR	140	79.344	92.303	85.77119	2.803932
DPS	140	.000	.450	.13291	.092409
EPS	140	.005	1.137	.28552	.193888
MTBR	140	.452	5.991	1.40703	.841899
SMV	140	.790	63.300	4.45479	6.462808
SBV	140	1.177	10.566	2.77861	1.779017
Valid N (listwise)	140				

**Table 7:** Correlations matrix between research's adopted financial indicators using Pearson correlation coefficient

		ROI	ROE	DR	DPS	EPS	MTBR	SMV	SBV
ROI	Pearson Correlation	1	.882**	-.101	.132	.532**	.461**	.129	-.021
	Sig. (2-tailed)		.000	.235	.120	.000	.000	.128	.802
	N	140	140	140	140	140	140	140	140
ROE	Pearson Correlation	.882**	1	.335**	.050	.557**	.536**	.145	-.076
	Sig. (2-tailed)	.000		.000	.559	.000	.000	.088	.371
	N	140	140	140	140	140	140	140	140
DR	Pearson Correlation	-.101	.335**	1	-.104	.105	.162	.037	-.122
	Sig. (2-tailed)	.235	.000		.222	.218	.055	.663	.151
	N	140	140	140	140	140	140	140	140
DPS	Pearson Correlation	.132	.050	-.104	1	.625**	.216*	.459**	.724**
	Sig. (2-tailed)	.120	.559	.222		.000	.010	.000	.000
	N	140	140	140	140	140	140	140	140
EPS	Pearson Correlation	.532**	.557**	.105	.625**	1	.692**	.762**	.748**
	Sig. (2-tailed)	.000	.000	.218	.000		.000	.000	.000
	N	140	140	140	140	140	140	140	140
MTBR	Pearson Correlation	.461**	.536**	.162	.216*	.692**	1	.758**	.367**
	Sig. (2-tailed)	.000	.000	.055	.010	.000		.000	.000
	N	140	140	140	140	140	140	140	140
SMV	Pearson Correlation	.129	.145	.037	.459**	.762**	.758**	1	.749**
	Sig. (2-tailed)	.128	.088	.663	.000	.000	.000		.000
	N	140	140	140	140	140	140	140	140
SBV	Pearson Correlation	-.021	-.076	-.122	.724**	.748**	.367**	.749**	1
	Sig. (2-tailed)	.802	.371	.151	.000	.000	.000	.000	
	N	140	140	140	140	140	140	140	140

\*\* . Correlation is significant at the 0.01 level (2-tailed). \* . Correlation is significant at the 0.05 level (2-tailed).

*Multiple regression* was used to verify mutual contributions between the financial perspective indicators (ROI, ROE, DR, DPS, and the EPS), and the capstone indicators (MTBR, SMV, and SBV). And it was found that  $F$  value = 34.499 and it is statistically significant at 0.05 level, which means that there are a mutual impact-relationships and all of the 5 financial indicators (ROI, ROE, DR, DPS, and EPS) associates in explaining JPSBs' abilities in generating value to their respective owners. See tables( 8-a, 8-b, and 8-c)

**Tables (8a-8b-8c):** Results of using multiple regression to verify mutual impact- relationship between the financial perspective indicators (RoI, ROE, DR, DPS and EPS) and the capstone indicators (MTBR, SMV and SBV)

**Table (8a):** Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.750 <sup>a</sup>	.563	.546	.566965

a. Predictors: (Constant), EPS, DR, ROI, DPS, ROE

**Table (8b):** ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	55.448	5	11.090	34.499	.000 <sup>b</sup>
1	Residual	43.074	134	.321		
	Total	98.522	139			

a. Dependent Variable: MTBR b. Predictors: (Constant), EPS, DR, ROI, DPS, ROE

**Table (8c): Coefficient<sup>s</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
	3.597	3.509		1.025	.307
(Constant)					
ROI	-.402	.373	-.296	-1.078	.283
ROE	.067	.052	.391	1.300	.196
1					
DR	-.035	.041	-.116	-.850	.397
DPS	-2.669	.769	-.293	-3.471	.001
EPS	3.590	.434	.827	8.274	.000

a. Dependent Variable: MTBR

*Points method* was used, where the weight of 100 points is given to the best practice bank between the 10 JPSB for scoring the highest *Mean* value in each of the 8 financial perspective indicators as to translate its accumulated strategic performance during 14 years of operation. Using points method allows gaining two advantages; The first concern gaining the ability to sketch a downward ranking list, starting with the best practice among the 10 JPSB in each of the adopted 8 indicators, arriving at the worst practice, in the 10<sup>th</sup> position. The second advantage of using points method is that it allows illustrating JPSBs' strategic performance gaps that separate each from the best practice bank, translated in a quantitative measure in the form of a percentage.

### ***Results of Benchmarking JPSB's Strategic Performance Illustrated in a Built Learning Matrix***

Tracing this research designed objective attainment methodological path, we arrive at a point that enables building a learning matrix based on outcomes of benchmarking JPSBs' accumulated strategic performance during 14 years of operation 2005-2018. See table (9).

**Table 9:** JPSB strategic performance learning matrix based on integrating benchmarking BSC's financial perspective method lies measured by 8 financial indicator for the period (2005-2018) mean and standard deviation are adopted to illustrate best practices ranking.

Benchmarked of JPSB other Ranking Positions*	2 <sup>nd</sup> position	3 <sup>rd</sup> position	4 <sup>th</sup> position	5 <sup>th</sup> position	6 <sup>th</sup> position	7 <sup>th</sup> position	8 <sup>th</sup> position	9 <sup>th</sup> position	10 <sup>th</sup> position
ROI as indicator Best practice Bank (JOKB) M= 1.85414 SD=.479908	(BOJX) M= 1.75714 SD=.181548 Gap=-5.2%	(INVB) M=1.683 21 SD=.968752 Gap=-9.2%	(THBK) M=1.6487 9 SD=.3976 58 Gap=-11.07%	(CABK) M=1.64186 SD=.38880 7 Gap=-	(USBI) M=1.3300 0 SD=.7326 32 Gap=-28.2%	(AJIB) M=1.3295 0 SD=.2593 61 Gap=-28.3%	(EXFB) M=1.26236 SD=.872887 SD=-31.9%	(ARBK) M=1.135 50 SD=.361 727 Gap=-38.7%	(AHLI) M=.85957 SD=.3539 39 Gap=-53.6%
ROE as indicator Best practice Bank (CABK) M= 13.92164 SD= 3.020762	(JOKB) M=13.80471 SD=5.910659 Gap=-0.8%	(BOJX) M=13.25 907 SD=3.05 3485 Gap=-4.7%	(THBK) M=11.318 64 SD=8.336 058 Gap=-18.7%	(INVB) M=11.0819 3 SD=2.7404 11 Gap=-20.5%	(AJIB) M=9.8435 7 SD=2.330 133 Gap=-29.3%	(USBI) M=9.3100 7 SD=4.440 707 Gap=-33.12%	(AHLI) M=7.97771 SD=2.99543 6 Gap=-42.7%	(ARBK) M=7.531 29 SD=2.40 2372 Gap=-45.9%	(EXFB) M=7.0905 7 SD=4.716 291 Gap=-49.06%
DR as indicator Best practice Bank (EXFB) M= 82.40036 SD= 1.518782	(INVB) M=84.33929 SD=2.888233 Gap= 102.3%	(ARBK) M=84.85 771 SD=1.60 6410 Gap= 102.9%	(THBK) M=84.998 64 SD=2.161 391 Gap= 103.7%	(JOKB) M=85.5504 3 SD=2.7466 35 Gap= 103.8%	(USBI) M=85.616 64 SD=2.742 142 Gap= 103.9%	(AJIB) M=86.243 07 SD=2.355 857 Gap= 104.6%	(BOJX) M=86.26379 SD=2.68214 8 Gap= 104.7	(CABK) M=88.18 721 SD=.967 587 Gap= 107.2%	(AHLI) M=89.254 79 SD=1.224 150 Gap= 108.3%
DPS as indicator Best practice Bank (ARBK) M= .27657 SD=.081959	(THBK) M=.25929 SD=.052837 Gap= -6.2%	(JOKB) M=.1750 0 SD=.058 012 Gap= 34.13%	(BOJX) M=.14893 SD=.0521 16 Gap=-46.1%	(CABK) M=.11929 SD=.03540 2 Gap=-55.1%	(AJIB) M=.08714 SD=.0423 23 Gap=-68.5%	(AHLI) M=.08679 SD=.0429 30 Gap=-68.6%	(USBI) M=.08000 SD=.040762 SD=-71.07%	(INVB) M=.0624 3 SD=.044 612 Gap=-77.42%	(EXFB) M=.03364 SD=.0429 45 Gap=-87.8%
EPS as indicator Best practice Bank (ARBK) M= .55679 SD= .262680	(JOKB) M=.46350 SD=.110737 Gap=-16.7%	(THBK) M=.4302 1 SD=.114 242 Gap=-22.7%	(CABK) M=.31557 SD=.1336 88 Gap=-43.3%	(BOJX) M=.26243 SD=.04725 3 Gap=-52.8%	(USBI) M=.22586 SD=.1208 34 Gap=-59.4%	(INVB) M=.18907 SD=.1883 43 Gap=-66.04%	(AHLI) M=.15393 SD=.076434 4 Gap=-72.3%	(AJIB) M=.1441 4 SD=.050 546 Gap=-74.1%	(EXFB) M=.11371 SD=.0758 28 Gap=-79.5%
MTBR as indicator Best practice Bank (THBK) M=2.33586 SD= .804184	(ARBK) M=1.81850 SD=1.352424 Gap= -22.1%	(JOKB) M=1.467 07 SD=.957 341 Gap=-37.2%	(BOJX) M=1.4530 0 SD=.6203 72 Gap=-37.8%	(AJIB) M=1.35071 SD=.52814 6 Gap=-42.17%	(CABK) M=1.3367 1 SD=.5254 34 Gap=-42.7%	(INVB) M=1.2432 9 SD=.6489 59 Gap=-46.7%	(USBI) M=1.10593 SD=.837402 Gap=-54.6%	(EXFB) M=.9948 6 SD=.531 546 Gap=-57.4%	(AHLI) M=.96436 SD=.4413 01 Gap=-58.7%
SMV as indicator Best practice Bank (ARBK) M=14.69643 SD= 15.572987	(THBK) M=9.06214 SD=3.250596 Gap=-38.3%	(JOKB) M=4.818 57 SD=2.18 2380 Gap=-67.2%	(CABK) M=3.1107 1 SD=2.187 406 Gap=-78.8%	(BOJX) M=2.85857 SD=1.0482 58 Gap=-80.5%	(USBI) M=2.6328 6 SD=2.116 355 Gap=-82.08%	(INVB) M=2.0071 4 SD=1.388 837 Gap=-86.3%	(AJIB) M=1.97786 SD=1.03093 1 Gap=-86.5%	(AHLI) M=1.861 43 SD=1.08 4037 Gap=-87.3%	(EXFB) M=1.5221 4 SD=.6541 02 Gap=-89.6%
SBV as indicator Best practice Bank (ARBK) M= 7.17207 SD= 1.600023	(THBK) M=3.87850 SD=.315795 Gap=-45.9%	(JOKB) M=3.655 43 SD=.813 457 Gap=-49.03%	(USBI) M=2.4065 7 SD=.2686 01 Gap=-66.4%	(CABK) M=2.20350 SD=.47073 8 Gap=-69.2%	(BOJX) M=2.0096 4 SD=.2404 46 Gap=-71.9%	(AHLI) M=1.8706 4 SD=.2324 19 Gap=-73.9%	(EXFB) M=1.59379 SD=.191316 SD=-77.7%	(INVB) M=1.561 36 SD=.217 547 Gap=-78.2%	(AJIB) M=1.4345 7 SD=.1680 91 Gap=-79.9%

M= mean value, SD= standard deviation value, and Gap= percentage [- / +] of other banks achieved value comparing with best practice bank considering achieved value having the weight=100 % for each of the 8 adopted financial measures. Source of all data used in this matrix are available at: <https://www.sdc.com.jp>

This research's built learning matrix reveals some important results concerning JPSB's competitive position seen from a quantitative perspective using recognised 8 financial indicators.

- The JPSB's competitive position seen from the angle of their abilities in achieving a return on investment (ROI), shows that the best practice position was occupied by the (JOKB), realizing the highest mean value 1.85414, with a standard deviation = (0.479908). Yet, the strategic gap that separates the (JOKB) as best-in-practice from the worst practice bank, the (AHLI), represents( -53.6%). Each of the remain 8 banks: (BOJX), (INVB), (THBK),

(CABK), (USBI), (AJIB), (EXFB), and the (ARBK), occupied the 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup>, 8<sup>th</sup>, and 9<sup>th</sup> downward ranking positions; With strategic gaps separates them from the best practice of -5.2%, -9.2%, -11.07%, -11.4%, -28.2%, -28.3%, -31.9%, and -38.7% successively.

- JPSB's competitive position seen through their abilities in achieving a return on equity(ROE), shows that among the 10 JPSBs' the best practice bank position was occupied by the (CABK), realizing a mean value of (13.92164), with a standard deviation of (3.020762). In this regard, the strategic performance gap that separates the (CABK) as best practice from the worst practice bank, the (EXFB), was (-49.06%). Each of the remain 8 banks: (JOKB), (BOJX), (INVB), (THBK), (AJIB), (USBI), (AHLI), and the (ARBK), occupied the 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup>, 8<sup>th</sup>, and 9<sup>th</sup> downward ranking positions; With strategic gaps separates them from the best practice of -0.8%, -4.7%, -18.7%, -20.5%, -29.3%, -33.12%, -42.7%, and -45.9% successively.
- In case of using the Debt Ratio (DR), for illustrating JPSBs' competitive position, the best practice position was occupied by the (EXFB) for proving its ability in decreasing this ratio achieving a mean value of (82.40036) with a standard deviation of (1.0518782). The (AHLI) occupied the worst practice position with a strategic gap separating him from the best practice of (+ 108.3%).

Each of the remain 8 banks: (INVB), (ARBK), (THBK), (JOKB), (USBI), (AJIB), (BIJX), and the (CABK), occupied the 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup>, 8<sup>th</sup>, and 9<sup>th</sup> positions; With strategic gaps separates them from best practice of: +102.3%, +102.9%, +103.7%, +103.8%, +103.9%, +104.6%, +104.7%, and +107.2% successively.

- The 10 JPSB's competitive position, based on their abilities measured in form of portioning their respective bank's profits paid out to shareholders/ dividends per share (DPS); The best practice position was occupied by the (ARBK), achieving a mean value of (0.27657) and a standard deviation of (0.81959). Comparing with worst practice banks in the regard, the (EXFB), with a strategic performance gap reaching – 87.8%. Each of the remain 8 banks: (THBK), (JOKB), (BOJX), (CABK), (AJIB), (AHLI), (USBI), and the (INVB), occupied the 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup>, 8<sup>th</sup>, and 9<sup>th</sup> downward ranking positions; With strategic gaps separates them from the best practice of -6.2%, -34.13%, -46.1%, -55.1%, -68.5%, -68.6%, -71.07%, and -77.42% successively.
- The competitive position of the JPSB, viewed from the angle of their abilities in portioning profit allocated to each outstanding share of stock/ Earnings per share (EPS); The (ARBK) proved to be the best practice achieving a mean value of 0.555679, and a standard deviation = (0.262660). The worst practice position in the regard was occupied by the (EXFB) having a strategic performance gap that reached -79.5%. Each of the remain 8 banks: (JOKB), (THBK), (CABK), (BOJX), (USBI), (INVB), (AHLI), and the (IAJIB), occupied the 2<sup>nd</sup>,

3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup>, 8<sup>th</sup>, and 9<sup>th</sup> downward ranking positions; With strategic gaps separates them from the best practice of -16.7%, -22.7%, -43.3%, -52.8%, -59.4%, -66.04%, -72.3%, and -74.1% successively.

- In case of using the capstone between other financial indicators adopted in this research, meaning the MTBR considering that (MTBR= SMV to SBV), to assess JPSBs' competitive position; results show that the (THBK) proved to be the best practice for its ability in generating a highest value for its respective owners were the achieved MTBR's mean value was (2.33586), and a standard deviation= (0.804184) comparing with all of the remained 9 JPSBs. Yet, the worst practice bank position, in the same regard, was occupied by the (AHLI), with a strategic gap reaching -58.7%. However, what is remarkable is that 2 between the 10 JPSBs sample of this research, in their accumulated strategic performance did not succeed in generating value to their respective owners, due to their MTBR's achieved mean values during 14 years of operation, were less than one, as Integrate Number. This was the case of both; (EXFB), and the (AHLI), achieving mean values of (0.99488), and (0.96436), with standard deviations of (0.531546), and (0.441301) successively.
- In a general view, results of benchmarking JPSB's strategic performance show also that the highest frequency (4 times) in occupying worst practice/10<sup>th</sup> position downward ranking was for the **EXFB** within (ROE, DPS, EPS, and SMN) as financial perspective indicators. In the same regard, the **AHLI** with (3) frequencies, occupied the last /10<sup>th</sup> position within (ROI, DR, and MTBR) financial perspective indicators. However, the top three strategic performing positions were sustained by; **JOKB**, **ARBK**, and **THBK** with frequencies of 7, 6, and 5 successively within all 8 financial indicators.

## Discussion and Practice Implications

This research's main exercise was to examine empirically the practical gained value from combining the benchmarking-BSC's financial perspective methodologies. Evidence from the Jordanian Public Shareholding Banks' (JPSB) strategic performance during 14 years of operation was analysed by following this research's methodological path. And the obtained results are illustrated in this research's built learning matrix. Accordingly, findings of this research appoint the following strategic aspects where it can contribute in practice:

1. Outcomes of integrating Benchmarking-BSC's financial perspective has generated an information flow rich in quantity as in quality, that can supply and support JPSBs' actual strategic information system, and further, it encourages the building of a benchmarking database.

Fruits of combining two methodologies; the Benchmarking and the BSC' financial perspective, prove to add value in form of; providing learned lessons, creating deeper comprehension of the

JPSBs' competitive position's big picture, enhancing their organisational knowledge and fostering of their managers' strategic consensus. These different forms of knowledge improvement will better stimulate generating creative ideas for JPSB future innovation trends. In this regard, our findings meet with; (Kotano and Kuzminal-Merline 2012 p 223),( Srivastava et al 2013), (Abdul-Baki *et al* 2014, p 94), and (Mahto and Davis 2012, p 9).

2. In this research, we find that Benchmarking-BSC's financial perspective combination succeeded in illustrating some significant learned lessons that contribute to improving the JPSBs' managers, strategy makers, and shareholders' insight about their bank's strategic performance outcomes during 14 years of operation 2005-2018. Learning from performance experiences improves JPSBs' managers and strategy makers' abilities in establishing cause-effect relationships, allowing higher accuracy to their diagnosis, improving at the same time their strategic decision-making processes effectiveness. Accordingly, expectations of the JPSBs' strategists will be improved, and their future scenario building process will become easier. In this regard, our findings confirm those of; (Abufaid 2017, p 13), (Memic and Memic 2013, pp7-8), (Anna 2019, p 33), (Kianfar *et al* 2016, p 87), (Rajwaa, Arif, and Ud-Din 2018, p 16), (Goncharuk and Getman 2012, p 381), (Goncharuk 2014, p224), (Tinggi, Jakpar, and Ling 2015, p 144), (Rajnoha, Lesnkova, and Koraus 2016, p 149).
3. In this research, the built learning matrix based on integrating Benchmarking-BSC's financial perspective combination has repositioned JPSBs' managers and strategy makers to be in a spot where they can have a clearer panoramic view of their banks' strategic performance outcomes, allowing wider opportunities for better development of their banks future sustainable competitive advantages. In this regard, our findings meet with; (Ozcelik and Ozturk 2014, p206), and with; (Sekhar 2010, p 885).

## Conclusion

Over 40 years pass since the initiation of the 'Benchmarking' methodology, and over a quarter-century passes since the introducing of the 'BSC' methodology, they never stop the flow of their both remarkable contributions to the field of strategic management, and the corporate's strategic performance in particular as well. We believe that the emerging 'Integrative' trend proves also its success in scoring additional contributions serving the same cause; sustaining improvement and innovation for all business organisations. Thus, the focal point of this research was to examine empirically the potential gained value from the integration between two methodologies, Benchmarking, and the BSC's financial perspective to the corporate's strategic performance issue. Accordingly, the core question in our study was raised to determine whether such combination can provide through its outcomes, the built of a strategic learning matrix adding practical value to managers and strategy makers of the JPSBs. Obtained results indicate that this research succeeded in providing an answer to its core question and by

consequences, attained its objective by proving that the integration between the Benchmarking and the BSC's financial perspective methodologies, can generate a synergic combination that empowered the building of a reliable learning matrix of the JPSBs' strategic performance.

The fairness of this research's built learning matrix can be justified through:

- The built learning matrix gives a time-space of (14 years of operation 2005-2018), which should be wide enough to all JOBs to prove their abilities in performing within the same market scope.
- The homogeneity between the benchmarked partners is justified, because the 10 JPSBs research's sample, is a public shareholding corporation, operates in the same banking sector, with a quarter-century of accumulated experience for the minimum.
- The uniformity of measures used in all of the BPSBs strategic performance comparisons.

The objectivity of this research's built learning matrix can be justified through:

- JPSBs' strategic performance outcomes are translated in form of the adopted 8 financial perspective indicators measures, are agreed and approved by two main concerned Jordanian official institutions; The (SDC)Securities Depository Center, and the (ASE), Amman Stock Exchange.
- All information concerning the 10 JPSBs' strategic performance operations, subject of analysis in this research, were based on preliminary data, from its direct sources published by SDC, in 2019.
- The ultimate intent of this research was to ensure the accuracy of the obtained results of integrating the benchmarking, and the BSC's financial perspective indicators. To do so, this research was committed to using only quantitative givens in all its analytical phases within its designed methodological path, to gain the advantage of obtaining accurate results.

Accordingly, such reliable results formed a solid and trusted base for building this research's learning matrix. Accuracy of the built learning matrix applies to; JPSBs' competitive position illustration, pointing the best practice bank, the banks' ranking list, and the relative strategic performance gaps separating each from the best-in-class bank in each of the adopted measures during the covered period 2005-2018.

However, notwithstanding the gained added value, and the practical contributions in this research, the limitations of this study must be acknowledged. In this regard, main three limitations should be mentioned; the excluding of the nonfinancial aspects within the BSC' (Internal business operations, Customers, Learning and growth), the excluding of probable external environment variables effects, the benchmarking process of this research remains within the local narrow scope of Jordanian banking sector industry, and the study focused only



on 8 indicators, from perhaps a larger list of other financial indicators as measures translating the JPSBs' strategic performance.



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