Indicators of Technical Analysis as a Tool of identifying Business Cycle to support Investment Decision in Sports Clubs

[*] **Prof. Dr./** ***Hassan Ahmed Attia El Shafei***

[**] **Assistant Prof. Dr./** ***Reham Amin Hamza Shehab***

Research Problem and Importance:

Changing sports traditional philosophy from a social entertainment aiming at supporting individual to be considered as a future economic sector dependable for reviving international economy and sports intervention according to this concept under business cycle whether as a product or an economic partner.

Mahmoud Mohamed Dagher (2018), Amal Mohamed Babkr and others (2011) say that investment play a great role is developing communities and sports clubs in particular and to convert clubs to joint stock companies there should be a complete evaluation for sports club as a project including the club's assets. (18:288) (7:38)

John J. Murphy (2000), Mounir Ibrahim Heindy (2009) agree upon that there is a clear distinguishing point between basic analysis and technical analysis which is basic analysis studies causes of market movement. (28:45), (20:193)

Leigh Stevens (2002), Abdel Maguid El Mehlmy (2005), Debra I. Peterson (2006) agree upon that technical analysis is the study of market development depending on data base and maps to predicate future trends. (27:2) (1:158), (29:54)

Hoshiar Maarouf (2005) notes that technical analysis depends on the post analysis attempts to evaluate investment in the present through prices move in directions, history repeat itself, market expect everything. (15:211)

* Professor of sports Administration Department, Faculty of Physical Education for Girls, Alexandria University

** Assistant Professor, Sports Administration Department, Faculty of Physical Education for Girls, Alexandria University

Marilyn McDonald (2011) refers to technical analysis indicators as: some of mathematical treatments and equations applied to prices, movables means are the most common indicators of technical analysis used in making rational investment decision (30:29).

Muuray Rothbard (2002), Perez Carlota (2003), Steven Durlauf (2008) agreed upon subdividing business cycle stages to 4 stages "revivals, marketability, stagnation and slump" (32:114), (25:89), (33:211)

This business cycle is important in technical analysis as **Adel El Hemily (2017), Abdel Maguid El Mehlmy (2005)** note that circulation up and down is the basis of technical analysis on the short, middle and long term by using technical analysis indicators.

Of the most important investment company's in sports field is Al Ahram Agency for Advertising, Presentation Sport Agency specialized in Marketing Sports Rights and Sela Sports Company. (37) (38), (39)

The researchers reached the research problem from sports law, the new sports law for 2017 which is a starting point of creating an effective investment marked in the sports sector and that companies emerging to apply all sports services shall take a form of joint stock companies. (34), (35), (36), (37)

To respond to the new sports law, some great sports clubs board's including Al Ithad El Secondary club agreed upon establishing joint stock companies bearing these clubs name (6:5).

Also the researchers interviewed (7) sports clubs chairman, (3) investors to know the importance of transferring sports clubs to joint stock companies.

Also after looking into literature results and recommendations such as results of study of Mohamed **Helmy (2016) (19), Nahed Khdr Abo El Taif (2011) (21), Fateh Manaa (2008) (11)** indicating that technical

analysis is a very important tool used in predicting business cycles, also the study of **Ahmed El Aly (2017) (3), Ahmed Mohamed Hassan (2010) (5)** recommends depending on technical analysis and basic analysis in taking investment decision.

Which made researchers carry out this research titled:

"**Indicators of Technical Analysis as a Tool of identifying Business Cycle to support Investment Decision in Sports Clubs"**

Research Objective:

Identifying Indicators of Technical Analysis as a Tool of identifying Business Cycle to support Investment Decision in Sports Clubs through the concept and the importance of technical analysis and business cycle, technical analysis indicators and identifying business cycles to support investment decision in sports clubs.

Research Procedures:

First: Research Method: Survey descriptive method was used as suitable for the research nature.

Second: Research Community and Sample:

First Group: Included (34) subjects of board's members (5) sports clubs selected deliberately

Second Group: Included (59) officials of Control department of sports investment selected deliberately

Third Group: (13) subjects of business men and investors selected randomly.

Accordingly the total research sample reached (106)

Third: Data Collection Tools

A researcher designed questionnaire form was used

Scientific Coefficients of Questionnaire Form:

Validity of Internal Consistency for Questionnaire Form Statements

Table (1) Correlation Coefficient of Statement degree and the grand total of factor they relate to Questionnaire Form Statements

N = 22

Statement No.	Internal Consistency Coefficient	Statement No.	Internal Consistency Coefficient	Statement No.	Internal Consistency Coefficient	Statement No.	Internal Consistency Coefficient
First Factor		**First Factor, Continued**		**Second Factor, Continued**		**Third Factor, Continued**	
First Dimension		**Second Dimension**		17/1	**0.630	29/2	0.653
1		7	**0.655	17/2	**0.721	29/3	0.707
1/1	**0.713	8	**0.724	17/3	**0.670	29/4	0.711
1/2		9	**0.707	17/4	**0.661	30	0.643
1/2/1	**0.683	10	**0.594	18		31	
1/2/2	**0.727	11		18/1	**0.714	31/1	0.717
1/2/3	**0.723	11/1	**0.672	18/2	**0.668	31/2	0.658
2	**0.713	11/2	**0.723	18/3	**0.634	31/3	0.644
3		11/3	**0.732	19		31/4	0.586
3/1	**0.591	11/4	**0.595	19/1	**0.622	31/5	0.708
3/2	**0.645	11/5	**0.631	19/2	**0.654	31/6	0.655
3/3	**0.706	12		19/3	**0.692	31/7	0.725
3/4	**0.614	12/1	**0.759	20	**0.721	31/8	0.722
3/5	**0.746	12/2	**0.659	21	**0.703	32	
4	**0.599	12/3	**0.669	22		32/1	0.670
5		12/4	**0.642	22/1	**0.720	32/2	0.684
5/1	**0.651	12/5	**0.756	22/2	**0.802	32/3	0.709
5/2	**0.754	13		22/3	**0.748	32/4	0.659
5/3	**0.597	13/1	**0.713	22/4	**0.704	32/5	0.599
5/4	**0.622	13/2	**0.702	23	**0.726	32/6	0.755
5/5	**0.661	13/3	**0.682	24	**0.671	33	
5/6		**Second factor**		25	**0.728	33/1	0.671
5/6/1	**0.610	14		**Third Factor**		33/2	0.743
5/6/2	**0.741	14/1	**0.599	26	0.701	33/3	0.639
5/6/3	**0.639	14/2	**0.639	27	0.634	34	0.664
5/6/4	**0.669	15	**0.772	28			
5/6/5	**0.676	16		28/1	0.805		
5/6/6	**0.661	16/1	**0.606	28/2	0.708		
5/6/7	**0.752	16/2	**0.724	29			
6	**0.682	17		29/1	0.646		

**** Significant at level 0.01 = 0.536**

It is clear from table (1) that all correlation coefficients of statements of questionnaire form are valid as they ranged between (**0.586:**0.805)

Second: Reliability:

- Reliability Coefficient Kronbach Alpha method

Table (2) Kronbach Alpha Reliability Coefficient of Factors and Dimensions of Questionnaire form

N = 22

		Kronbach Alpha Coefficient		
		For Dimension	**For Factors**	**For Questionnaire**
First Factor: Concept and importance of technical analysis and business cycles for supporting investment decision in sports clubs	**First Dimension: Technical analysis and importance to support investment decision in sports clubs**	**0.718**	**0.761**	**0.796**
	Second Dimension: Business cycles and their importance of supporting investment decision in sports clubs	**0.746**		
Second Factor:	**Indicators of technical analysis of supporting investment decision in sports club**	**0.739**		
Third Factor:	**Business cycles to support investment decisions in sports clubs**	**0.742**		

From table (2) it is clear that reliability coefficient of the dimension and the factor above ranged from (0.718: 0.761)

Statistical Treatments:

Repetition, percentage, K^2 between groups, total agreement percentage, correlation coefficient, reliability by Kronbach Alpha method

Research Results Discussion:

Table (3)

Repetition and Percentage of Research Sample Groups Response, K^2 and Percentage of Total Agreement of the First Dimension Statements: Technical Analysis and its Importance to Support Investment Decision of Sports Clubs of the First Factor Concept and Importance of Technical Analysis and Business Cycles to Support Investment Decision in Sports Club

N = 106

Statement No.	Statements	Sports clubs boards members N = 34			Central Department of sports investments of ministry of youth and sports N = 59			Businessmen and investors N = 13			K^2 between groups	Total research sample N = 106			
		Yes	No	Agreement Percentage	Yes	No	Agreement Percentage	Yes	No	Agreement Percentage		Yes	No	Agreement Percentage	Order
1	Technical analysis concept is represented in:														
1/1	Predicting price change in future to help in taking investment decision	30	4	88.24	51	8	86.44	11	2	84.62	0.08	92	14	86.79	1
1/2	Studying the market status through:														
1/2/1	Using price information	29	5	85.29	50	9	84.75	11	2	84.62	0.00	90	16	84.91	2
1/2/2	Shares trade quantity	28	6	82.35	48	11	81.36	10	3	76.92	0.21	86	20	81.13	3
1/2/3	Existing transactions	30	4	88.24	46	13	77.97	9	4	69.23	2.31	85	21	80.19	4
2	Technical analysis aims at identifying competitive ability for sports club and studying investment projects	32	2	94.12	52	7	88.14	10	3	76.92	1.76	94	12	88.68	
3	Factors to be considered when making technical analysis														
3/1	Number and type of services offered by the club	27	7	79.41	49	10	83.05	9	4	69.23	1.33	85	21	80.19	5
3/2	Club sources	31	3	91.18	55	4	93.22	11	2	84.62	0.45	97	9	91.51	2
3/3	Services success levels compared to other clubs	29	5	85.29	52	7	88.14	10	3	76.92	0.81	91	15	85.85	4
3/4	Club management ability to invent and service variegation	32	2	94.12	51	8	86.44	9	4	69.23	3.90	92	14	86.79	3
3/5	Share supply and demand power	30	4	88.24	56	3	94.92	12	1	92.31	0.25	98	8	92.45	1
4	Focusing on carrying out sports club technical analysis	26	8	76.47	39	20	66.10	10	3	76.92	1.02	75	31	70.75	

***K^2 Significant at level 0.05 = 5.99**

Table (3), Continued

Repetition and Percentage of Research Sample Groups Response, K^2 and Percentage of Total Agreement of the First Dimension Statements: Technical Analysis and its Importance to Support Investment Decision of Sports Clubs of the First Factor Concept and Importance of Technical Analysis and Business Cycles to Support Investment Decision in Sports Club

N = 106

Statement No.	Statements	Sports clubs boards members N = 34			Central Department of sports investments of ministry of youth and sports N = 59			Businessmen and investors N = 13			K^2 between groups	Total research sample N = 106			
		Yes	No	Agreement Percentage	Yes	No	Agreement Percentage	Yes	No	Agreement Percentage		Yes	No	Agreement Percentage	Order
5	The following methods shall be followed to carry out technical analysis:														
5/1	Using different statistical methods	32	2	94.12	52	7	88.14	12	1	92.31	0.21	96	10	90.57	2
5/2	Using graphical representations	31	3	91.18	51	8	86.44	11	2	84.62	0.26	93	13	87.74	3
5/3	Preparing charts to measure the sports market level as a whole then a certain club level	30	4	88.24	46	13	77.97	10	3	76.92	0.96	86	20	81.13	5
5/4	Studying the chart to take investment decision on time	31	3	91.18	45	14	76.27	11	2	84.62	1.33	87	19	82.08	4
5/5	Investigating financial reports and numbers taken from financial statements in sports club	33	1	97.06	58	1	98.31	12	1	92.31	0.21	103	3	97.17	1
5/6	Making more technical analysis for the sports club circumstances represented in:														
5/61/	Sales and profits directions	30	4	88.24	50	9	84.75	11	2	84.62	0.10	91	15	85.85	1
5/6/2	Sports club circumstances in terms of its age and used capacity	31	3	91.18	48	11	81.36	8	5	61.54	5.84	87	19	82.08	2
5/6/3	Sports services quality and prices	31	3	91.18	46	13	77.97	9	4	69.23	3.07	86	20	81.13	3
5/6/4	The sports club market share compared to other competitive ones	29	5	85.29	47	12	79.66	10	3	76.92	0.45	86	20	81.13	4
5/6/5	Value of investing in research and development	28	6	82.35	45	14	76.27	9	4	69.23	1.14	82	24	77.36	6
5/6/6	Sports club competence for developing services and operations	30	4	88.24	47	12	79.66	7	6	53.85	*8.67	84	22	79.25	5
5/6/7	Work circulation in sports club	29	5	85.29	40	19	67.80	7	6	53.85	*7.20	76	30	71.70	7
6	Technical analysis results profit is directly proportional to costs of obtaining the same which may reflect positively on investment decision	32	2	94.12	54	5	91.35	12	1	92.31	0.04	98	8	92.45	

*K^2 significant at level 0.05 = 5.99

From Table (3) of repetition, percentage of responses of the research sample groups, K^2 and total agreement percentage about the first dimensions phrases: technical analysis and its importance for supporting investment decision in sports clubs of the first factor: concept and importance of technical analysis and business cycles to support investment decision in sports clubs. No significant difference between research groups responses for all the first dimensions statements at level (0.05) as K ranged from (0.00:5.84) except for sentences number (5/6/6), (5/6/7) as K value was (*8.67), (*7.20) respectively.

The research sample groups agreed statement number (1) at percentage between (80.19:86.79 %) on that technical analysis concept is represented in expecting change in future price to help in taking investment decision.

Hayat Zeid study results (2015) (13) notes that technical analysis is a process of observing the market past givens and representing such information graphically to predict the future prices.

Both researchers note the importance of information and data available by technical analysis inside sports clubs to study investment opportunities and taking their final decisions.

But for statement number (3), the research sample agreed at percentage between (80.19:92.45 %) that factors to be considered to make technical analysis are supply and demand for share, size of club resources, club's management ability to create and services variegation.

Hawari Sewisi (2007) (12) note that technical analysis is a tool used in taking decisions related to stock investment.

Statement number (5) notes research sample groups agreement at percentage between (71.70:97.17 %) on that methods followed for carrying out technical analysis are represented in (investigating financial

reports, and sums extracted from financial statements in sports club, using different statistical methods, using graphical representations)

Results of study of **Ibrahim Masoud El Fergany, Khaled Zidan El Fadly (2016) (16)** confirm the investor's awareness of technical analysis importance as it observes all information of trade such as price, size and date.

Study of Menkhoff and Taylor (2006) (31) recommends the importance of using different technical analysis methods.

Both researchers refer to the importance of variegation in using technical analysis methods to identify the sports club financial position as this is not limited to financial statements but illustrate and analysis these statements and predict the future club's circumstances.

Table (4) Repetitions, Percentage of Responses of Research Sample Groups, K^2, Percentage of Total Agreement on Statements of the Second Dimension: Business Cycles and their Importance in Supporting Investment Decision making in Sports Clubs in the First Factor: Concept and Importance of Technical Analysis and Business Cycles to Support Investment Decision in Sports Clubs (N = 106)

Statement No.	Statements	Sports clubs boards members N = 34			Central Department of sports investments of ministry of youth and sports N = 59			Businessmen and investors N = 13			K^2 between groups	Total research sample N = 106			
		Yes	No	Agreement Percentage	Yes	No	Agreement Percentage	Yes	No	Agreement Percentage		Yes	No	Agreement Percentage	Order
7	Business cycle means regular fluctuations affecting economic activity level moving from activity and marketability to shrinkage then marketability and prosperity again	32	2	94.12	58	1	98.31	12	1	92.31	0.20	102	4	96.23	
8	Investors shall consider fluctuations and business cycle ascending and descending as a part of natural market mechanism	29	5	85.29	52	7	88.14	12	1	92.31	0.28	93	13	87.74	
9	The investor is able to regain equilibrium, ability to self correction with no need to government intervention	28	6	82.35	42	17	71.19	9	4	69.23	1.35	79	27	74.53	
10	State economic policies, as a tool, play a role in reducing business cycle acuteness	29	5	85.29	57	2	96.61	8	5	61.54	*7.90	94	12	88.68	
11	Business cycles causes:														
11/1	Banks expansion in loaning and financing sports projects to achieve profits	28	6	82.35	52	7	88.14	10	3	76.92	0.76	90	16	84.91	3
11/2	Sports club expansion in investing more than should be "hyper investment"	29	5	85.29	54	5	91.53	8	5	61.54	*6.30	91	15	85.85	2
11/3	The importance of expecting business cycle stage to avoid its negative effects and assets prices.	31	3	91.18	55	4	93.22	11	2	84.62	0.45	97	9	91.51	1
11/4	Financial policy non stability governmental outlay fluctuations	32	2	94.12	55	4	93.22	10	3	76.92	2.13	97	9	91.51	1
11/5	Effect of sports club board on the club prosperity and development	32	2	94.12	56	3	94.92	9	4	69.23	4.95	97	9	91.51	

*K^2 significant at level 0.05 = 5.99

Table (4), Continued
Repetitions, Percentage of Responses of Research Sample Groups, K^2, Percentage of Total Agreement on Statements of the Second Dimension: Business Cycles and their Importance in Supporting Investment Decision making in Sports Clubs in the First Factor: Concept and Importance of Technical Analysis and Business Cycles to Support Investment Decision in Sports Clubs
(N = 106)

Statement No.	Statements	Sports clubs boards members N = 34			Central Department of sports investments of ministry of youth and sports N = 59			Businessmen and investors N = 13			K^2 between groups	Total research sample N = 106			
		Yes	No	Agreement Percentage	Yes	No	Agreement Percentage	Yes	No	Agreement Percentage		Yes	No	Agreement Percentage	Order
12	Business cycle stage nature can be identified through studying:														
12/1	Level of providing services	28	6	82.35	49	10	83.05	9	4	69.23	1.55	86	20	81.13	3
12/2	General level of assets prices	30	4	88.24	53	6	89.83	11	2	84.62	0.16	94	12	88.68	1
12/3	Income and employment level	27	7	79.41	48	11	81.36	9	4	69.23	1.11	84	22	79.25	4
12/4	Supply and demand level	32	2	94.12	51	8	86.44	11	2	84.62	0.58	94	12	88.68	1
12/5	Bank Credit	31	3	91.18	50	9	84.75	10	3	76.92	1.21	91	15	85.85	2
13	For measuring different business cycle stage:														
13/1	Leading indicators: previous indicators (preceding) business cycle	30	4	88.24	54	5	91.53	11	2	84.62	0.27	95	11	89.62	3
13/2	Coinciding indicators: Indicators coinciding with economic activity level and illustrating economic movement	32	2	94.12	52	7	88.14	10	3	76.92	1.76	94	12	88.68	2
13/3	Later indicators: indicators follow (defaulting) business cycle stages and illustrative achieved after finishing the same	28	6	82.35	50	9	84.75	8	5	61.54	4.28	86	20	81.13	1

***K^2 significant at level 0.05 = 5.99**

From Table (4) of repetitions, percentage of research sample groups responses, K^2 and percentage of total agreement upon the second dimensions statement: business cycles and their importance to support investment decision, it is clear that there are no significant differences between research groups responses for the second dimension statements at level (0.05) as K ranged between (0.16:4.95) except for statements number (10), (11/2) as K value was (*7.90), (*6.30) respectively.

Research sample groups agreement on statements (7:9) at percentage from (74.53:96.23 %) upon that business cycles means regular fluctuation that may affect economic level are movable from activity and marketability to shrinkage is clear.

Statement number (10) has statistical significant differences as K^2 was (*7.900 and total agreement percentage was (88.68 %) with fact that state economic policies play their role as a tool of reducing economic cycle acuteness.

Paul – Samo Wilson and others (2001) confirm that business cycle represents semi regular quivering or frequent fluctuations in economic growth rate (22:585)

For statement number (11) the research groups agreed at percentage of (84.91:91.51 %) upon that causes of business cycles are represented in the importance of predicting business cycle stage to avoid its negative effects.

Results of study of **Dahman Abo Ali Samir, El basher Abdel Kareem (2017) (10)** notes that different causes of business cycles may change policies followed for dealing with.

It is clear from statement number (12) that research groups agreed at (79.25:88.68 %) that business cycle nature can be identified through studying the general level of assets prices, supply and demand level, banking credit, services provision level, income and employment level.

Results of **Ragaa Khodir El Rabeai (2017) (23)** notes that inflation fear, stump and stagnant are deep-rooted in capital economy subject to regular development law in which it moves from activity to stagnation through crises, then redevelop.

Table (5) Repetition and Percentage of the Research Sample Groups' Responses, K^2 and the Total Agreement Percentage of the Second Factor Statements: Indicators of Technical Analysis to Support Investment Decisions in Sports Clubs (N = 106)

Statement No.	Statements	Sports clubs boards members N = 34			Central Department of sports investments of ministry of youth and sports N = 59			Businessmen and investors N = 13			K^2 between groups	Total research sample N = 106			
		Yes	No	Agreement Percentage	Yes	No	Agreement Percentage	Yes	No	Agreement Percentage		Yes	No	Agreement Percentage	Order
14	Technical analysis indicators represent an assistant factor to predict:														
14/1	Market status	32	2	94.12	55	4	93.22	11	2	84.62	0.61	98	8	92.45	1
14/2	Shares prices	31	3	91.18	54	5	91.53	11	2	84.62	0.34	96	10	90.57	2
15	Technical analyst's opinions and advices shall be considered for taking investment decision	29	5	85.29	51	8	86.44	12	1	92.31	0.32	92	14	86.79	
16	Computer programs shall be used in:														
16/1	Computing technical indicators	33	1	97.06	56	3	94.92	12	1	92.31	0.12	101	5	95.28	1
16/2	Drawing charts	32	2	94.12	57	2	96.61	12	1	92.31	0.10	101	5	95.28	1
17	When using technical analysis tools for taking investment decisions the following shall be depended on:														
17/1	Analysis published on means papers and satellite channels	27	7	79.41	49	10	83.05	12	1	92.31	1.04	88	18	83.02	3
17/2	Financial markets website analysis	25	9	73.53	51	8	86.44	11	2	84.62	1.20	87	19	83.08	4
17/3	Special technical analyst	29	5	85.29	55	4	93.22	12	1	92.31	0.42	96	10	90.57	1
17/4	Previous forms results	30	4	88.24	54	5	91.53	10	3	76.92	1.37	94	12	88.68	2
18	When taking investment decisions, priority shall be given to:														
18/1	Points of support and resistance sale and purchase operation or inactivity	29	5	85.29	54	5	91.53	11	2	84.62	0.33	94	12	88.68	2
18/2	Technical analysis indicators	31	3	91.18	56	3	94.92	12	1	92.31	0.08	99	7	93.40	1
18/3	Technical analysis drawings	30	4	88.24	53	6	89.83	11	2	84.62	0.16	94	12	88.68	2
19	When using graphical representations, it is preferable to use:														
19/1	Numbers and points charts	33	1	97.06	56	3	94.92	10	3	76.92	2.73	99	7	93.40	1
19/2	Simple line charts	32	2	94.12	54	5	91.53	11	2	84.62	0.54	97	9	91.51	2
1/3	Columns charts	31	3	91.18	56	3	94.92	12	1	92.31	0.08	99	7	93.40	1

***K^2 significant at level 0.05 = 5.99**

Table (5), Continued
Repetition and Percentage of the Research Sample Groups' Responses, K^2 and the Total Agreement Percentage of the Second Factor Statements: Indicators of Technical Analysis to Support Investment Decisions in Sports Clubs
(N = 106)

Statement No.	Statements	Sports clubs boards members N = 34			Central Department of sports investments of ministry of youth and sports N = 59			Businessmen and investors N = 13			K^2 between groups	Total research sample N = 106			
		Yes	No	Agreement Percentage	Yes	No	Agreement Percentage	Yes	No	Agreement Percentage		Yes	No	Agreement Percentage	Order
20	Financial indicators are depended on apart from other factors "political, economic" affecting supply and demand	23	11	67.65	29	30	49.15	7	6	53.85	3.25	59	47	55.66	
21	Technical analysis takes a long time for preparation and accordingly, available investment opportunities are limited	28	6	82.35	51	8	86.44	10	3	76.92	0.56	89	17	83.96	
22	To calculate share price movable averages, arithmetic mean of number of sequence level in time chain shall be depended on subject to:														
22/1	Giving a fixed relative weight of computing movable average "simple movable average"	28	6	82.35	49	10	83.05	10	3	76.92	0.28	87	19	82.08	4
22/2	Giving a higher, relative weight for new periods compared to old ones "exponential movable average"	29	5	85.29	50	9	84.75	10	3	76.92	0.53	89	17	83.96	3
22/3	Putting weights in an ascending order to make the sooner time period obtains the highest relative weight among all periods "average movable by weights"	31	3	91.18	53	6	89.83	11	2	84.62	0.27	95	11	89.62	1
22/4	Giving the movable average support and strong resistance used by analysts to predict future share behavior	30	4	88.24	53	6	89.83	11	2	84.62	0.16	94	12	88.68	2
23	Investor shall move in the direction of the movable average after technical analysis	28	6	82.35	52	7	88.14	9	4	69.23	2.35	89	17	83.96	
24	Investors shall not risk at average movable fluctuation points	29	5	85.29	51	8	86.44	10	3	76.92	0.65	90	16	84.91	
25	The hesitating average is undesired and need a longer period of time to obtain an average guiding line to make use of	33	1	97.06	57	2	96.61	12	1	92.31	0.14	102	4	96.23	

***K^2 significant at level 0.05 = 5.99**

From table (5) of repetition and percentage of the research sample response, K^2 and percentage of total agreement on the second factors statements: indicators of technical analysis to support investment decisions in sports clubs, it is clear that there are no statistical differences between research groups responses for all statements of the second factor at level (0.05) as K ranged between (0.08:3.25)

It is clear from statements number (14), (15) that the research sample groups agreed at percentage (86.79:92.45 %) by considering opinions and advices of the technical analyst to take investment decision.

Andrei Shynkevich (2012) (24) prove financial markets increasing care of technical analysis results for taking investment decision.

And it is clear from statement number (17), (18) that research groups agreed at (82.08:90.57 %), (88.68: 93.40 %) respectively on that when using technical analysis tools for taking investment decision (technical analyst, investment results, newspapers and satellite channels analysis, website analysis) are depended on.

Study of Bashar Zanon El Shokrgy and others (2010) (9) Cheol Ho Park (2007) (26) recommends that technical analyst shall select indicators and technical charts to help in taking decision.

For statements number (20, 21, 23, 24, 25) research sample groups responses agreed at percentage (55.66:96.23 %) on depending on hesitating average is undesired and needs a longer period to obtain a guiding average line that can be profitable.

From statement number (22) it is clear that research groups agreed at (82.08: 89.62 %) on that for calculating the share percentage share prices movable average, the movable average by weights, exponential movable average and simple movable average are depended on.

Results of Study of Ahmed Hussein Batal El Any (2016) (4) confirmed the importance of economic expectations which may enable decision makers to compile future economic and social policies.

Both **researchers** believe that economic predictions help in identifying circumstances of sale or purchase increase of sports clubs shares.

Table (6) Repetitions, Percentage of Research Sample Groups' Responses, K^2 and Total Agreement Percentage about the Third Factor Statements: Business Cycles to support Investment Decision in Sports Clubs

(N = 106)

Statement No.	Statements	Sports clubs boards members N = 34			Central Department of sports investments of ministry of youth and sports N = 59			Businessmen and investors N = 13			K^2 between groups	Total research sample N = 106			
		Yes	No	Agreement Percentage	Yes	No	Agreement Percentage	Yes	No	Agreement Percentage		Yes	No	Agreement Percentage	Order
26	Business cycles help in predicting economic events and expected performance of sports club for next periods to help in taking investment decision.	33	1	97.06	57	2	96.61	12	1	92.31	0.14	102	4	96.23	
27	Business cycles analysis results received by investors in time may help in taking investment decision.	30	4	88.24	52	7	88.14	11	2	84.62	0.10	93	13	87.74	
28	Comparing business cycles of different periods facilitate investment decision at the level of:														
28/1	the club itself	29	5	85.29	51	8	86.44	9	4	69.23	2.31	89	17	83.96	1
28/2	Other clubs	27	7	79.41	48	11	81.36	8	5	61.54	3.22	83	23	78.30	2
29	The sports club activity stage is accompanied with the following:														
29/1	Prices general level tends to be fixed	30	4	88.24	50	9	84.75	9	4	69.23	2.54	89	17	83.96	4
29/2	Slow total economic activity increase	31	3	91.18	51	8	86.44	10	3	76.92	1.24	92	14	86.79	3
29/3	Low interest rate	31	3	91.18	52	7	88.14	10	3	76.92	1.32	93	13	87.74	2
29/4	Observed expansion in bank credit, settlements and deposits	32	2	94.12	54	5	91.53	11	2	84.62	0.54	97	9	91.51	1
30	Agreement between capital value calculated for club, the guarantee cash value and positive value of expected return	31	3	91.18	52	7	88.14	11	2	84.62	0.25	94	12	88.68	

***K^2 significant at level 0.05 = 5.99**

Table (6), Continued

Repetitions, Percentage of Research Sample Groups' Responses, K^2 and Total Agreement Percentage about the Third Factor Statements:

Business Cycles to support Investment Decision in Sports Clubs

(N = 106)

Statement No.	Statements	Sports clubs boards members N = 34			Central Department of sports investments of ministry of youth and sports N = 59			Businessmen and investors N = 13			K^2 between groups	Total research sample N = 106			
		Yes	No	Agreement Percentage	Yes	No	Agreement Percentage	Yes	No	Agreement Percentage		Yes	No	Agreement Percentage	Order
31	Marketability stage characteristics:														
31/1	Directly proportional share prices increase	32	2	94.12	55	4	93.22	11	2	84.62	0.61	98	8	92.45	1
31/2	Club's services quantity high increase	29	5	85.29	51	8	86.44	10	3	76.92	0.65	90	16	84.91	4
31/3	Income and employment level increase	30	4	88.24	50	9	84.75	11	2	84.62	0.10	91	15	85.85	3
31/4	Using financial and human resources as a whole	32	2	94.12	55	4	93.22	11	2	84.62	0.61	98	8	92.45	2
31/5	Manpower and same resources shortage	26	8	76.47	46	13	77.97	8	5	61.54	2.29	80	26	75.47	6
31/6	Credit facility excess	27	7	79.41	45	14	76.27	7	6	53.85	5.57	79	27	74.53	7
31/7	Sports clubs assets over estimation	26	8	76.47	48	11	81.36	7	6	53.85	*6.11	81	25	76.42	5
31/8	Encouraging debts against assets	25	9	73.53	47	12	79.66	5	8	38.46	15.47	77	29	72.64	8
32	Slump is accompanied with the following:														
32/1	Low price	33	1	97.06	53	6	89.83	9	4	69.23	4.88	95	11	89.62	1
32/2	Commercial fear	24	10	70.59	41	18	69.49	8	5	61.54	0.73	73	33	68.87	6
32/3	Low income and service level	32	2	94.12	50	9	84.75	11	2	84.62	0.68	93	13	87.74	2
32/4	High unemployment rates	23	11	67.65	43	16	72.88	8	5	61.54	0.96	74	32	69.81	5
32/5	Low bank facilities	30	4	88.24	53	6	89.83	10	3	76.92	1.17	93	13	87.74	3
32/6	Low bank settlements deposit with high interest rate	31	3	91.18	52	7	88.14	10	3	76.92	1.32	93	13	87.74	4
33	Stagnation is accompanied with:														
33/1	Low shares prices	30	4	88.24	58	1	98.31	11	2	84.62	1.11	99	7	93.40	2
33/2	Unemployment	31	3	91.18	57	2	96.61	10	3	76.92	2.34	98	8	92.45	4
33/3	Economic activity slump in general	31	3	91.18	57	2	96.61	12	1	92.31	0.18	100	6	94.34	1
34	Governmental intervention is important for avoiding crises	32	2	94.12	56	3	94.92	11	2	84.62	0.72	99	7	93.40	3

K^2 significant at level 0.05 = 5.99

It is clear from table (6) of repetition, percentage of research sample group responses, K^2 and total agreement percentage about the third factor statements: Business cycles to support investment decision in sports clubs, no statistical differences between research groups responses for all the second factor statements at level (0.05) as K ranged between (0.10:5.57) except for statement number (31/7) as K was (*6.11).

Statements number (26, 27, 30) prove the research sample opinions agreement at (87.74:96.23 %) on that business cycles help in predicting economic events which may assist in taking investment decision.

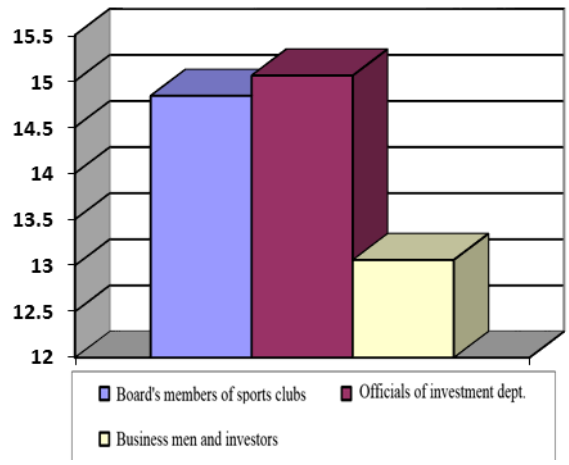
About statement number (28) the research sample opinions agree at 978.30:83.96 %) on that business cycles comparison in different periods may facilitate investment decision.

Study of Heider Hussein Al Teama, Fadel Moussa El Malky (2013) (14) recommends the importance of making use of financial markets indicators and economic changes leading to or controlling economic activity level.

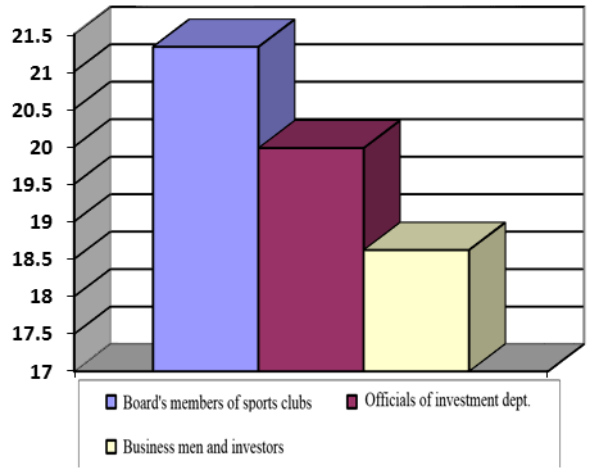
It is clear from statements number (29, 31, 33, 32) the agreement of the research samples opinions between (68.87: 94.34 %) on that sports club's activity shall be accompanied with a considerable expansion in bank credit, provided marketability is accompanied with a directly proportional increase in shares prices, slump states is accompanied by low prices and low income and service provision as stagnation is accompanied with low shares prices as governmental income is important for crisis avoidance.

Results of study of Kamal Pasour, Mohamed Hany (2015) (17) indicates that state intervenes in national economy via many mechanisms of controlling business cycles, according to economic cycles stage.

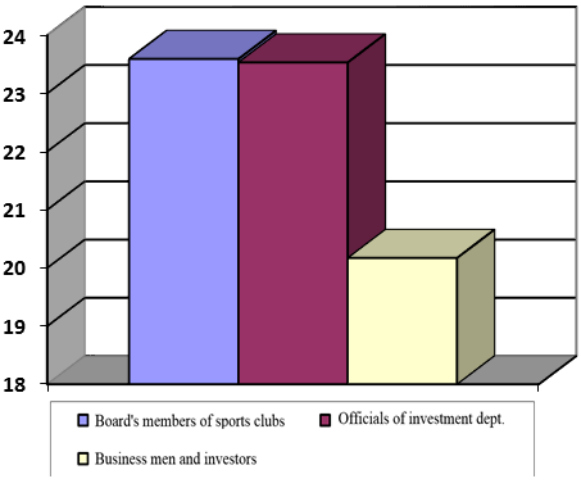
Both researchers believe that economic powers and their fluctuation in sports clubs environment may affect investors' decisions and activities.



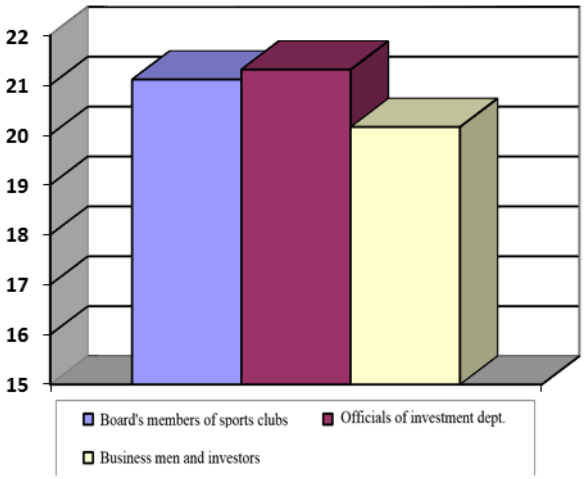
Second Dimension: Business cycles and their importance of supporting investment decision in sports clubs



First Dimension: Technical analysis and importance to support investment decision in sports clubs



Third Factor: Business cycles to support investment decisions in sports clubs



Second Factor: Indicators of technical analysis of supporting investment decision in sports club

Figure (1): Arithmetic mean for the three groups (Board's members of sports clubs, Officials of control department of sports investment, Business men and investors) for the questionnaire dimensions and factors

Conclusions:

- Technical analysis predicts future price change, identifying sports club competitive capacity and investment projects study.
- Technical analysis indicators are a catalyst for predicting market status and shares prices, technical analyst's opinions and advices shall be considered to take investment decisions.

- Using graphical representation, it is preferable to use charts of numbers, points, representation columns and simple lines charts.
- Business cycles assist in predicting economic events and sports club expected performance for next period to help in taking investment decision.
- There is an agreement between the capital value calculated for sports club and the cash value of guarantee and pursuant to expected returns.

Recommendations:

- Establishing investment companies able to manage sports clubs to enhance their competitive position and using shares sale fund to expand sports clubs activity and to be independent from government.
- Encouraging investors to invest in the sports field.
- Establishing a unit to carry out club's economic researches.
- Creating an information system depending on modern statistical techniques in collecting information and data and treating the same statistically to take suitable investment decisions.

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