The Impact of an Effective Management of the Education Rank on the Knowledge Economy Index
A Comparison Study Between Developed and Middle East Countries

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Abstract

This paper evaluates the relationship between the spending on the Education and the developing of the knowledge economy index, the paper depended on a quantities case study for top developed countries in knowledge economy index and some countries at the middle east (including Egypt), then we design a questionnaire to measure the impact and evaluate the data using SPSS test. Some of the findings are: (1) the knowledge economy index was affected by many factors like economic incentive regime, innovation, education and information communication technology (ICT) (2) the increasing of spending on the education as a percentage of GDP can be a factor (3) there was a gap

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between the performance of the developed countries and the middle east so the recommendation will be a developing plan for the middle east in the field of education. Enhancing the level of university education, Improve the publishing in international journal, cooperate with universities in developed countries to transfer its experience in develop the education, National Rewards for book chapter and working paper and training, start a new technique to improve the brainstorm for student and prepare national universities to teach for international student

Keywords: knowledge economy, economic incentive regime, Innovation, education, information communication technology.

JEL Code: A2, D8, F0, O3, H5.

ملخص

استهدف هذا البحث دراسة العلاقة بين الإنفاق على التعليم وتطوير مؤشر اقتصاد المعرفة، واعتمدت الباحثين على دراسة حالة لأفضل الدول المتقدمة في مؤشر اقتصاد المعرفة في مؤشر اقتصاد المعرفة وبعض دول الشرق الأوسط (بما في ذلك مصر)، تم تصميم استبيان لقياس الأثر وتقييم البيانات باستخدام برنامج التحليل الاحصائي SPSS . توصلت نتائج البحث إلى: تأثر مؤشر اقتصاد المعرفة بالعديد من العوامل مثل نظام الحوافز الاقتصادية والابتكار والتعليم وتكنولوجيا المعلومات والاتصالات ، (ICT)ويمكن زيادة الإنفاق على التعليم كنسبة مئوية من الناتج المحلي الإجمالي. بالإضافة الى ان كان هناك فجوة بين أداء الدول المتقدمة والشرق الأوسط لذا فإن التوصية ستكون خطة تطوير للشرق الأوسط في مجال التعليم. وتعزيز مستوى التعليم الجامعي، وتحسين

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النشر في المجلات الدولية، والتعاون مع الجامعات في الدول المتقدمة لنقل خبرتها في تطوير التعليم، وتشجيع نظام المكافآت على الابحاث والتدريب، وبدء تقنية جديدة لتحسين العصف الذهني للطالب وإعداد الجامعات الوطنية للتدريس للطلاب الدوليين.

الكلمات المفتاحية: اقتصاد المعرفة، نظام الحوافز الاقتصادية، الابتكار، التعليم، تكنولوجيا المعلومات والاتصالات.

1- Introduction section

1/1 introduce the problem

For many years , there was a real need for knowledge economy (KE) as a main source of the development measuring for economic in countries and reflected the competitiveness in many different economic sectors in a developed and Arabian countries . As a need to focus on that trend to evaluate the impact of that development, the paper provides evidence that the education spending can be a factor has an impact on the rank in knowledge economy index , when we implement the modern resources of the last ranks at the knowledge economy index for some countries of the top developed and some other countries from the Arabic region which explain the main point of the relationship between the high spending on education as a percentage of GDP and the development in the rank in the knowledge economy index , that refers to the problem in the gap between the developed countries and the Arabian countries on the way in treating the

spending on the education and the allocations of the resources for the education ,especially in knowledge-based-economies, such as investments in enhancing the education level by using the globalization tools in IT&C, high-technology learning, and highly skilled students. This education factor can be a fundamental factor of Knowledge economy index , as the present paper will state. The driver of Knowledge economy indeed more spending with the support of knowledge and the effective way in education by adding technology of information, all these can be a challenge dissemination. The hereby paper explains with a comparison evaluation and analysis of the treating of the education strategy in a developed economy versus the education on the Arabic countries in implementing the knowledge economy. Also, the paper defines the knowledge economy , focusing on the debate existing on the different between the top ten developed countries and the Arabian countries with its key characteristics and dimensions highlighting the educational process . with more details, the problem in the paper in explaining the challenges between the countries in developed and Arabian economy in the field of education by increasing the rank in knowledge economy index by increasing the value of spending on education as a percentage of GDP.

1/2 the importance of the research

The papers was important by focusing on the enhancing plan for the education by increase the level of spending in the middle east to control the gap in learning between the developed countries and some cases at the middle east.

1/3- A Literature Review section:

Powell, W. W., & Snellman, K. (2004). The knowledge economy reflects an activity to advance technical rapid develop ,the knowledge economy is a greater reliance on evidence in knowledge production, that integrated in the new trend in industry. The paper examines the relation between the technical implement and the development in industry , it argues whether the companies can implement the technology and change the style of production for automation with more managerial supervision, the economy in its new form will respect the a knowledge-based economy with a new challenge of inequality in salary due to the high job with technology.

Doz, Y., Santos, J., & Williamson, P. (2001),The OECD has produced a factors to set the investment as a main tool by "investment in knowledge" that focused on the main investment in Research and development in the education , the investment covered the internet technology .

.Doz, Y., Santos, J., & Williamson, P. (2001). The knowledge economy through innovation can satisfy the future need for

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customers ,the innovation can be linked with the local universities , the uncommon knowledge discovery, the key mission in new knowledge that meta national can use in innovation. ,

Hadad, S. (2017). ,

the author provides information on the factors of Knowledge economy index , by thoroughly evaluating the   academic literature for economy depends on knowledge. In the conclusion of the research, the main idea focused on the main   four dimensions s of Knowledge economy and their trends of assessment. The successful story for an economic fields that the Knowledge economy analyzed, as well as the main components of Knowledge Economy index , also known under the name of the four dimensions of Knowledge economy: the development in implementing the successful economic and institutional progress ; the employee with more level of education and skills that can benefits from the creation of knowledge economy index ; with a system for innovation able to invest the globalized knowledge in economy, match it and adjust it to some specifics international restrictions   and conditions; up-to-date information system and develop the infrastructure for knowledge and communication, information system and handling of using of the economy by information and knowledge.

Davis, D. R., & Dingel, J. I. (2019). A spatial knowledge economy. American Economic Review, 109(1), 153-170.

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The paper discussed the theories and implements of the modern generation in the using of information technology and the exchange of data with a recently discussion of the central role of the new system , it explains the equilibrium theory and the symmetric fundamentals with the idea with skills developing with cities of a link between sections by knowledge .

Švarc, J., & Dabić, M. (2017). Evolution of the knowledge economy: A historical perspective with an application to the case of Europe. *Journal of the Knowledge Economy*, *8*, 159-176.

The main role of this evaluation in the main concept of the knowledge economy on the sectors of services and science intensive production , the factors of science and innovation witnessed a transition in the global trend , the *new concept of the knowledge economy in the theoretical played a main role in a core paradigmatic shift, the paper evaluates the dimensions of the many interpretation of knowledge in the economy described in an intangible factors in innovations , creations, services , cultural and internet in the economy implementation.the industry production shifted into a knowledge economy depending on the expanding of the intangible economies in innovation and creation .*

Dubina, I. N., Carayannis, E. G., & Campbell, D. F. (2012). Creativity economy and a crisis of the economy? Coevolution of knowledge, innovation, and creativity, and of the knowledge

economy and knowledge society. *Journal of the Knowledge Economy*, *3*, 1-24.

In this paper, we explain conceptually the "innovation in economy" and prepare a model that built on innovation and creativity, knowledge, and globalization information economies. The "innovation and creation in economy" provide earlier explanations of the new concept in a creative economy and industries, creative implementation and occupations of knowledge . We discuss a challenges of a complicated relations between the implement of innovation concept and the start of a crisis in creative and/or innovative activities with the modern trend. Economic growth encouraged implement the new trend of innovation that support creativity and knowledge, that will be resulting in further economic progress and a systematic growth. However, at a high depending certain level, the process of implementing the creative and innovative activity may reflect in a complex relationship in context of the cycle of the economy, and the economic development and growth may not to be able to survive . the implement in the innovation heavily can be a cause of a crises in implement innovation,

 then this may be a negative side that may cause a challenges in the sense of systematic a shape of new structures, at the end we find that the innovation and creation need a change with totally new structures. The economic only cannot be the main drivers for

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that , there was a need for a cooperation with societies in systems to be more successful in doing that.

The paper discussed the knowledge , innovation and creativity as a core need in the society and the knowledge economy and the benefits for society in the best vision of its implementation , the level of progress in innovation can be a trend and a way for knowledge society development, the creativity is a main hand in the progress demanded for further knowledge economy high rank.

Marginson, S. (2010). Higher education in the global knowledge economy. Procedia-Social and Behavioral Sciences, 2(5), 6962-6980.

In many countries the policy in the public work on increasing the role of support education and investment in research in fostering knowledge economy development for countries, that gives an opportunity for public , encourage cultural diversity and trade , the society need a high level of education and cooperation at an international scale, the effective implement in globalization relays on the mechanism of high education , that led to a structure for a real progress in a significant effect as a feed back in the development in nations.

The high education knowledge cooperated with innovation and knowledge will be a way for a new trend in global nation , the government will depend on the education, the changing in the higher education toward the new global landscape, that identify the national

policy in any government , the develop in the university in education and updating the strategy of learning will be from international vision , the paper maps a changing in the structure of the work in education in student and academic staff.the progress in education trade and the enhancement in research methods , the use of language and the cooperation in the education , the idea of global education .the paper discussed the comparison study between the OECD, , UNESCO and the World Bank.

A new trend to support the cooperation in international higher education, the level of cooperation in knowledge economy depending on the high facilities and capacity in different nations and countries.

Bejinaru, R. (2019). Impact of digitalization on education in the knowledge economy. *Management Dynamics in the Knowledge Economy*, *7*(3), 367-380.

The digital economy needs a progress in knowledge and information technology , the development taking place in modern economy , the digital society in economy have become real.

The digital skills was a core in the work to achieve the success and personal development for any citizen , that personal vision need a basic identify of digital technology , the development in digital educational processes reflect the digitalization impact on the learning method in any educational sector , that can be a topic for an argument in different countries but the general acceptance

for the important of it , by the 2020 Strategy for the sector of education, and the level of research and development(R&D) at European and in Romania vision . Considering the progress of the digital education, in the evaluation, we will need to define more details and information about the process of digitalization for modern develop of the field of education. The discussion of this paper focused on the evaluation of the academic educated literature, of the papers   published and discussed by the European Commission and the data with evidence and statistics from the specialized educational institutions.

Peters, M. A., Besley, T., Araya, D., & Peters, M. A. (Eds.). (2014). *The new development paradigm: Education, knowledge economy and digital futures*. New York: Peter Lang.

This paper discuss a vision of twenty famous intellectuals from many countries in the field of develop education process, and encourage the knowledge economy with a working of a social entrepreneurship, , that serve the technology innovation.

The paper introduces the social networking and new media in education, the innovation and expansion of freedom refers to the development, the development in education supporting the knowledge economy, that led to an increase in   knowledge production, social networks, and the positive impact on the education. The papers evaluates the transformation of Education ,

then evaluates the education progress that is currently applied in United States.

Weber, A. S. (2011). The role of education in knowledge economies in developing countries. *Procedia-Social and Behavioral Sciences*, *15*, 2589-2594.

The papers was a deep evaluation of the academic education in universities, along with information communication technology progress, with a deeply identify and analysis in modern knowledge economies. In the face of global landscape and the free flow of capital in globalization, the idea of the core education in high academic education will necessarily be a main cause for a support of developing nations.

 The paper linked the innovation and self discovery with the education as a main stage for a good citizenship, the creation can be a reason for self-fulfillment , that should be included in the implementing of the national education.

The paper discussed the Arabian countries and reflected a real vision of an experience in educational project in the Arabian region , that through the working at Gulf-Qatar Foundation's Education City, that economic progress in current strategy and the future vision can change the core shape of the role of education , that supported the implement of high rank of the knowledge economies of MENA and the Arabian countries specially in Gulf region .

Durazzi, N. (2019). The political economy of high skills: higher education in knowledge-based labour markets. Journal of European public policy, 26(12), 1799-1817.

A successful implement of the education need an improvement in skills and knowledge , that is the core of progress in knowledge economy in the academic system at university , that provides a clever employment strategy, the paper linked the knowledge economy with the high skill formation in higher education at a discussion of the need of labor markets based on many dimensions as the   knowledge economy form and the competition.

The literature gap was at measuring the impact of spending on the education as a percentages of GDP and the improving of the knowledge economy index in the developed and compare that at the middle east to measure the impact of effective management for improving the rank.

1/ 4 State Hypotheses

Hypotheses

H0:There is a significant relationship between the knowledge economy index and the education to GDP ratio

H01:There is no significant relationship between the knowledge economy index and the education to GDP ratio

Sub hypotheses:

H1 A" there is a significant relation ship between the knowledge economy index and **the innovation** in developed countries more than in the middle east

H1 B" there is a significant relation ship between the knowledge economy index and the **economic incentive regime i**n developed countries more than in the middle east

H1 C" there is a significant relation ship between the knowledge economy index and **the ICT** in developed countries more than in the middle east

H1 D" there is a significant relation ship between the knowledge economy index and the **Education** in developed countries more than in the middle east

2-Methodology section

2.1 Participant (Subject) Characteristics

The analysis depended on the individual evaluation of the two categories in a developed and middle east countries

2.2 Sampling Procedures

a systematic sampling plan was used; the percentage of the sample approached that participated in questionnaire of (318) people.

2.2.1 Sample Size.

The questionnaire covered a sample of (318)people that measuring the impact of the education factors on the knowledge economy index rank..

2.2.2 Research Design

The research design in using a mean and Std. Deviation to measures the ratio of education to GDP

3. Results

It is divided into two sections :

1- **Part (1) :**An Economic Evaluation(**Figure1-8 , tables 1-4)**

Part (1) General knowledge Economy Index Data

ICT(information communication technology
KEI(knowledge Economy index)
KI(knowledge index)

Table No (1) the Evaluation of Knowledge Economy Index According to the Top Countries

Country	KEI	KI	Economic Incentive Regime	Innovation	Education	ICT
Denmark	9.58	9.55	9.66	9.57	9.8	9.28
Sweden	9.52	9.63	9.18	9.79	9.4	9.69
Finland	9.37	9.33	9.47	9.66	9.78	8.56
Netherland	9.32	9.36	9.18	9.48	9.26	9.36
Norway	9.27	9.27	9.06	9.06	9.6	9.16
Canada	9.21	9.14	9.43	9.43	9.69	8.74
Switzerland	9.15	9.03	9.89	9.89	8.54	9.52
United kingdom	9.09	9.03	9.18	9.18	8.77	9.38
United states	9.08	9.05	9.45	9.45	9.64	8.93
Australia	9.05	9.17	9.72	9.72	9.52	9.16

source :,https://apiportal.uis.unesco.org/bdds.

organization of UNESCO institute for statistics (UIS)(OCTOBER2022)

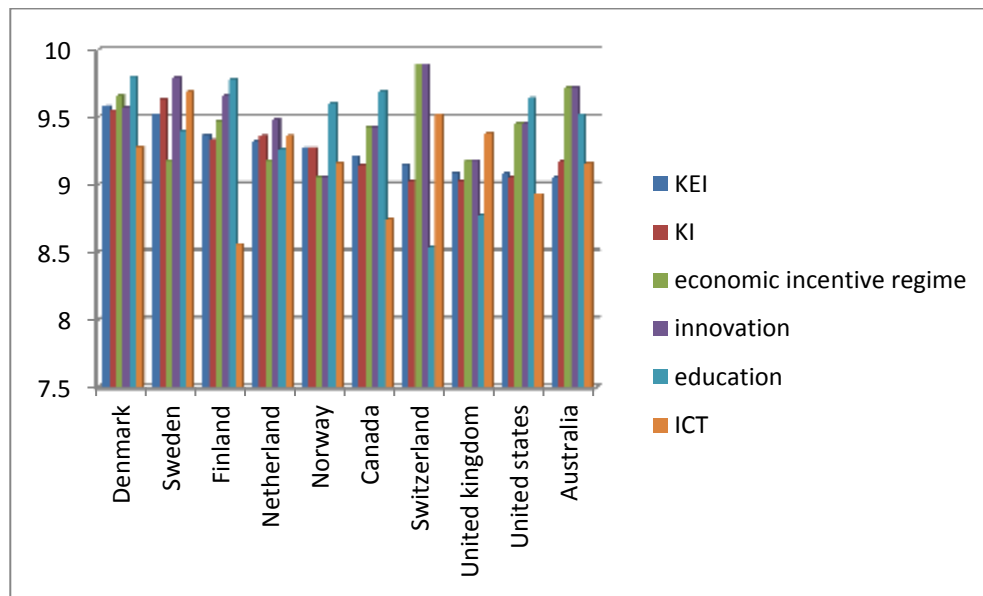## Statistics excluding high income countries

Switzerland education spending (www.macrotrends.net)

United kingdom-public spending on education (total)% GDP (https://tradingeconomics.com)

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Figure No (1): The Evaluation of Top Ten Knowledge Economy Index


Table No (2): The evaluation of knowledge Economy Index according to the Some Arabian Countries

Country	KEI	KI	Economic Incentive Regime	Innovation	Education	ICT
Qatar	6.15	6.2	5.99	5.77	5.29	7.56
Bahrain	6.02	5.68	7.01	5.05	4.82	7.22
Kuwait	6.01	6.38	4.06	5.77	4.87	5.45
Saudi Arabia	5.15	5.07	5.39	4.04	4.83	6.29
Egypt	4.03	4.19	3.57	4.55	4.35	3.66
Morocco	3.45	3.33	3.8	3.67	2	4.32
Syrian	2.9	3.34	1.55	3.44	2.91	3.68

source :,https://apiportal.uis.unesco.org/bdds.

organization of UNESCO institute for statistics (UIS)(OCTOBER2022)

Figure NO (2): The Evaluation of Some Arabian Countries in knowledge Economy Index According to the
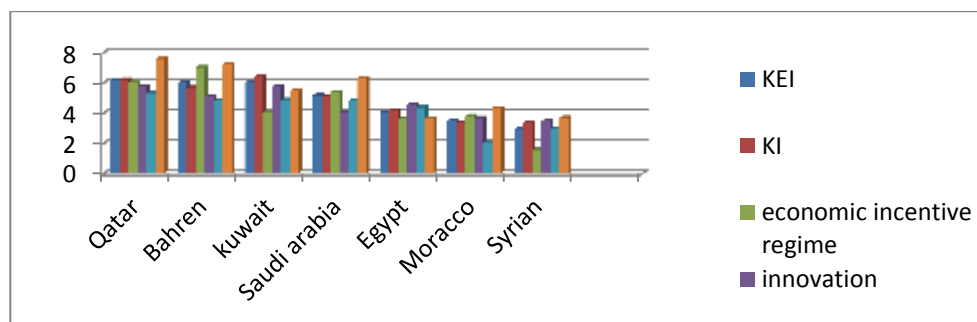
Part (2) Educational Statistics
Table NO (3): The Education to GDP for the Top 10 Countries at Knowledge Economy Index

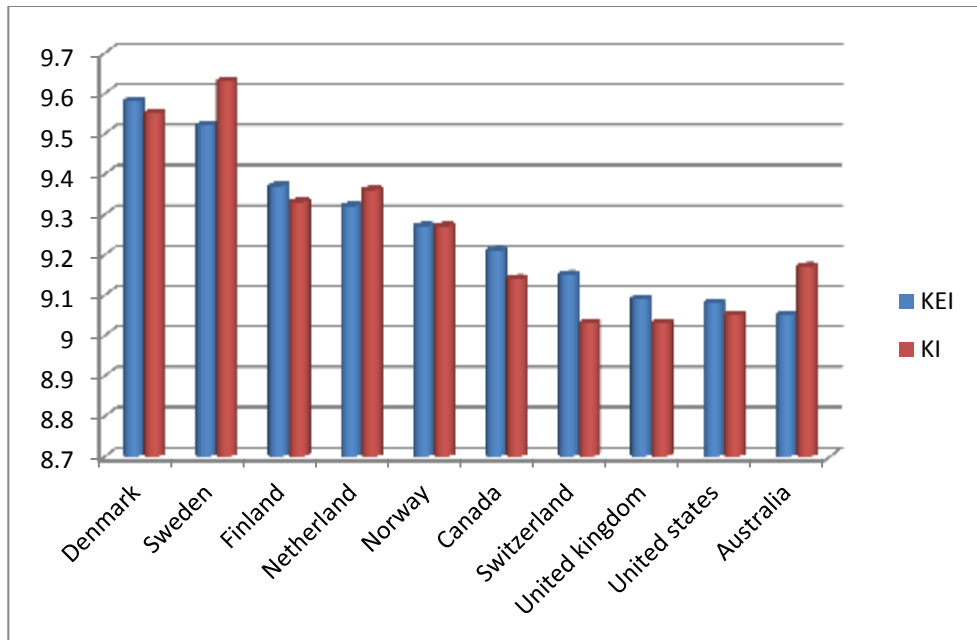| country	KEI	KI	Education	Education TO GDP
Denmark	9.58	9.55	9.8	6.38
Sweden	9.52	9.63	9.4	7.17
Finland	9.37	9.33	9.78	5.88
Netherland	9.32	9.36	9.26	5.3
Norway	9.27	9.27	9.6	5.9
Canada	9.21	9.14	9.69	5.17
Switzerland	9.15	9.03	8.54	14.24
United kingdom	9.09	9.03	8.77	5.53
United states	9.08	9.05	9.64	6.05
Australia	9.05	9.17	9.52	6.01

source :,https://apiportal.uis.unesco.org/bdds.

organization of UNESCO institute for statistics (UIS)(OCTOBER2022)
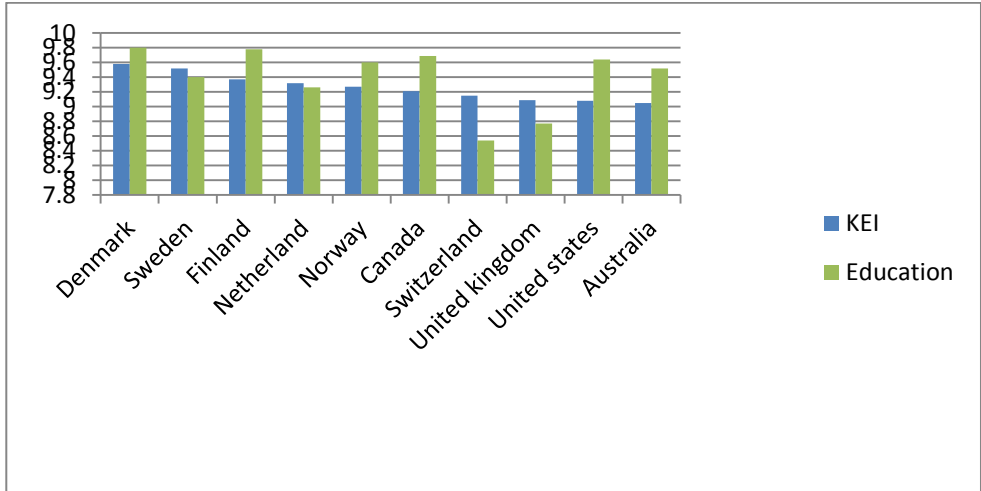
Switzerland education spending (www.macrotrends.net)

**United kingdom-public spending on education (total)% GDP(https://tradingeconomics.com)**

Figure NO (3) the Top 10 Countries in Knowledge Economy Index and Knowledge Index

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Figure No (4) The Top 10 Countries in Education and knowledge Economy Index

Figure NO (5) the Top 10 Countries Education to GDP and knowledge Economy Index
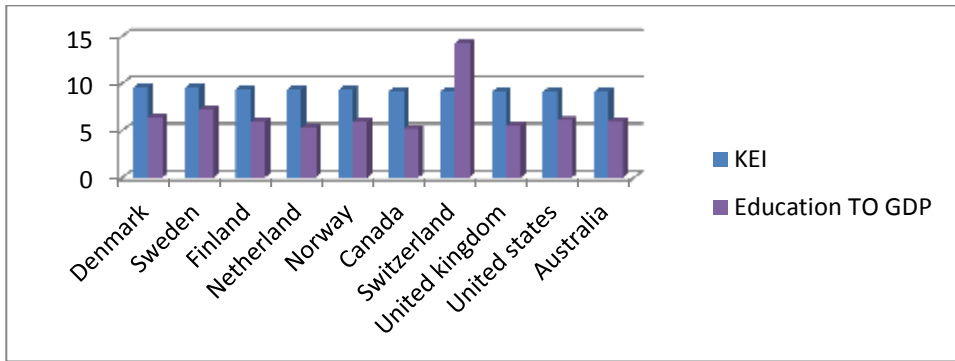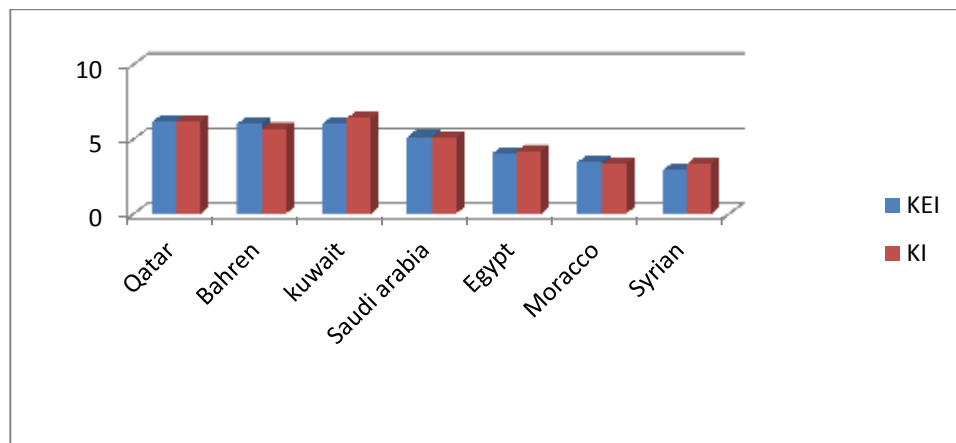
Table No(4) the Education to GDP for some Arabian Countries at knowledge Economy Index

country	KEI	KI	Education	Education TO GDP
Qatar	6.15	6.2	5.29	3.23
Bahrain	6.02	5.68	4.82	2.14
Kuwait	6.01	6.38	4.87	6.55
Saudi Arabia	5.15	5.07	4.83	7.8
Egypt	4.03	4.19	4.35	2.48
Morocco	3.45	3.33	2	6.75
Syrian	2.9	3.34	2.91	5.13

source :,https://apiportal.uis.unesco.org/bdds.
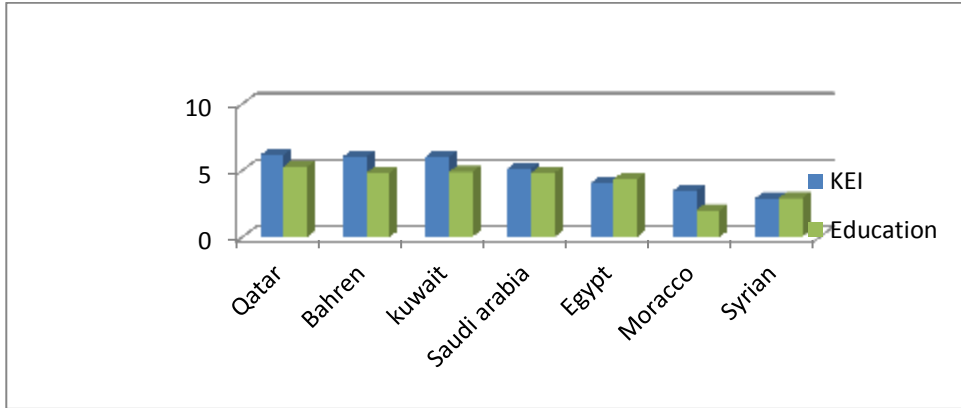
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Figure No (6) The Arabian Countries in knowledge Economy Index and knowledge Index

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Figure No (7) the Arabian Countries in education and knowledge Economy Index

Figure No (8) The Arabian Countries Education to GDP and knowledge Economy Index
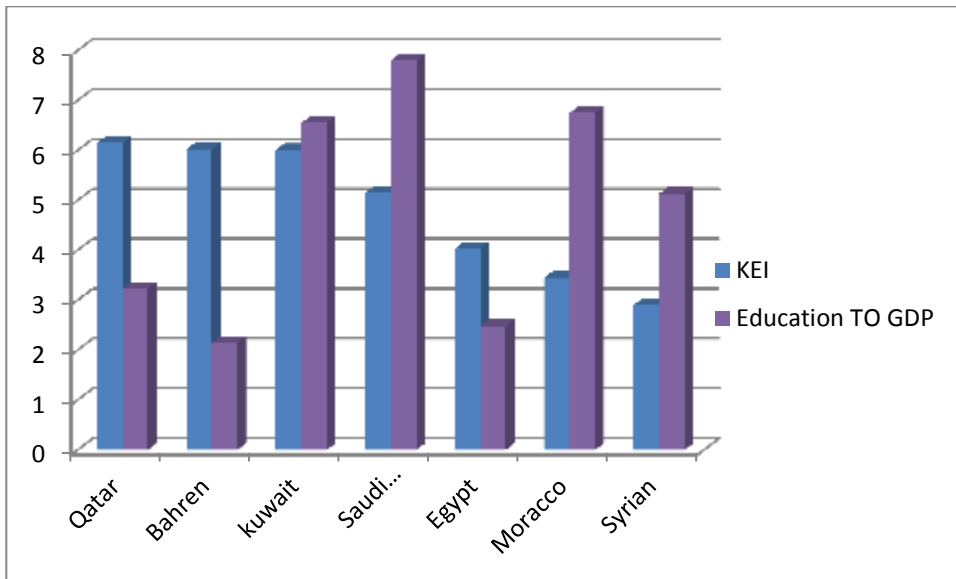
Part (2) Statistic Evaluation using SPSS

table No (5): List of Variables

Variable	Type of Variables	Code
economic incentive regime	Dependent	EIR
innovation	Dependent	INN
education	Dependent	EDU/GDP
Information communication technology	Dependent	ICT
knowledge economy index	Independent	AS

4-Measurement

A questionnaire exploring the bonding factors between an Effective Management of the Education Rank on the knowledge Economy index. All scale used a 0–5 scale system with 5 being "strongly agree" and 0 being "strongly disagree".

Primary Database

The survey randomly selects 318 respondents from faculty members. All 318 respondents provided complete responses resulting in 318 observations available for analysis. The sample selected according to the following variables: age, gender and the type of institution, as shown in table 1.

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Table (6)

Distribution of the sample according to the study variables

Variable	Categories	N	%
Age	20 to 29	144	45.3%
	30 to 39	102	32.1%
	40 to 49	48	15.1%
	50 to 60	24	7.5%
Gender	Male	168	52.8%
	Female	150	47.2%
Institution	governmental	135	42.5%
	private	183	57.5%

Validity and Reliability of The Questionnaire:

To the reliability of the questionnaire, a pilot study was conducted on (318) teaching staff, the Cronbach Alpha formula was used which amounted to (0.81) that was considered acceptable for the present study. Table 2 shows the reliability coefficient (Cronbach Alpha) for the questionnaire domains and questionnaire as a whole.

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Table (7)

Reliability coefficient for the questionnaire domains and questionnaire as a whole

Domains	Number of items	Reliability Coefficient
Education	9	0.7
Knowledge economy index	6	0.63
Total	15	0.81

Results Descriptive Statistics for Mean and the SD:

Table (8)

Means, standard deviations and mode of the sample responses on the items of the two questionnaire domains

Domain	No. of item	Item Text	Mean	Standard deviations	Mode
education rank٥	1	There is a relation between the knowledge economy and education spending.	3.1604	1.18458	3
	2	There is a relation between the spending of developed countries like the Switzerland (14% of GDP) and being with the top four countries in knowledge economy index.	3.6792	1.11384	4
	3	Egypt can compete with the Middle east in education field if it increases its rank in KEI (Education).	3.6981	1.23949	5
	4	The knowledge economy in Egypt was affected by the level of innovation and technology.	3.7830	1.18352	4
	5	The information communication technology has an impact on ou level of knowledge economy.	3.8774	.95021	4
	6	Analyze the information in business enhance the level of knowledge economy in the index.	4.0283	.99644	5
	7	Some Arabian countries need to keep its policy in spending on education while Egypt need to develop it.	4.0472	.97653	5
	8	United State can compete with united Kingdom in knowledge economy if it ؟increase the level of education to cover the decrease in ICT?	4.0849	.87140	4

	9	Denmark at the top of Knowledge Economy (KEI) because of the top rank in education.	4.1038	.97213	5
	For all items of the domain		3.8291	.57485	**4.11**
knowledge economy index	10	Egypt should implement a policy approaches to faster growth of knowledge economy.	3.6698	1.25128	4
	11	There is a clear identify in Egypt for knowledge economy and implementation in educational institutions.	3.9245	1.02675	4
	12	Your institutions can implement a knowledge economy.	4.0566	.98086	4
	13	There are some challenges in Egypt in implement the new approaches of the knowledge economy.	4.0660	1.12837	5
	14	The value of knowledge economy mixed in modern economy in Egypt.	4.2358	.89744	5
	15	Education factor has an important impact on Knowledge Economy index (KEI) between ICT, Innovation and economic incentive regime.	4.1038	.90141	4
	For all items of the domain		4.0094	.61219	**4.33**

Table 4 shows that the **education rank** is an average for the scale, where the mean is (3.83)with a standard delimitation of (0.57), and the mode (most frequently occurring value) is 4 and finally the domain of "**knowledge economy index**" with a mean of (3.504)a standard delimitation of (0.61), and the mode is 4.

Hypotheses Testing

To test the hypothesis, say that There is a significant relationship between the knowledge economy index and the education rank, the study applied (**One Way ANOVA)**

Table (9)
ANOVA

Dependent variables	r	r^2	r^2 adjusted	SE of estimate	ANOVA	
					F	p-value
education rank	0.68	0.458	0.456	0.4	21.2	0.000

Tables 4 report our empirical findings. Model tests hypothesis, which investigates the impact of the knowledge economy index on education rank. The model is significant, and their P - values are below 0.01, reflecting their validity. There is a significant relationship between the knowledge economy index and the education to GDP ratio. r^2 for the model is 0.46.

Significance test results of regression coefficients

	Coefficients	t - test	Significance
B_0	1.3	8.122	0.000
B_1	.64	16.347	0.000

From the model coefficients for $B_0\ and\ B_1$ are significant, regression model in this case is

$$\hat{y} = \hat{B}_0 + \hat{B}_1 x_1$$
$$\hat{y} = 1.3 + 0.64 x_1$$

Where
$\hat{y}$: education rank
x_1: knowledge economy index

5- Conclusion:

By the evaluation of the knowledge economy index, the education input measure, we can identify three groups of knowledge economies index : High knowledge economies of developed economy that had a high level of spending per cent of GDP on the education between 5.3 and 14.24 per cent of GDP that will affect the rank in knowledge economy index ,on the other hand lower knowledge economies of some Arabian countries, spending between 2.14 and 6.75 per cent of GDP in education as a percentages at GDP.

We accept the hypotheses H1 There is a significant relationship between the knowledge economy index and the education to GDP ratio, and " there is a significant relationship between the knowledge economy index and **economic incentive regime, innovation ,ICT** in developed countries more than in the middle east

The literature gap in the comparing between different developed and Arabian countries with vary level of spending on education as a percentages of GDP, and the researchers tried to fill the gap by discussing the way that each country can develop its Knowledge economy rank through enhancing the level of education**.**

6-The suggestion model

Table NO (10) :Suggestion Model for an Action Plan for Egypt

Mission	Sub mission	Respond	Date
Enhance the level of university education	Develop the content of the books Add practical cases Add a training in companies	Ministry of high education (a national plan)	2024
Encourage the block transfer co op in national universities	Cooperate with universities in developed countries to transfer its experience in develop the education	International relation unit in universities	2025
Improve the staff quality	Improve the publishing in international journal . National Rewards for book chapter and working paper and training.	Quality center in universities	2026
Start Anew plan for international cooperation for dual degree and joint degree	Start a new technique to improve the brainstorm for student and prepare national universities to teach for international student to improve its rank.	University scale	2027

Conflict of interest

The authors declare no conflicts of interest regarding the publication of this paper.

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Questionnaire

Demographics:

1.Gender:

☐ Male   Female ☐

2. Age:

From30 to 39   ☐   From 20
to 29   ☐

50 or Above   ☐   From
40 to 49   ☐

3.Institution

governmental   ☐   private   ☐

N	Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	There is a relation between the knowledge economy and education spending.					
2	There is a relation between the spending of developed countries like the Switzerland (14% of GDP) and being with the top four countries in knowledge economy index.					
3	Egypt can compete with the middle east in education field if it increases its rank in KEI (Education).					

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4	Egypt should implement a policy approaches to faster growth of knowledge economy.					
5	The Knowledge Economy in Egypt was affected by the level of Innovation and Technology.					
6	The Information Communication Technology has an impact on our level of knowledge Economy.					
7	Analyze the information in business enhance the level of knowledge economy in the index.					
8	There is a clear identify in Egypt for knowledge economy and implementation in educational institutions.					
9	Your institutions can implement a knowledge economy.					
10	there are Some Challenge in Egypt in implement the new approaches of the knowledge economy.					
11	The value of knowledge economy mixed in modern economy in Egypt.					
12	Some Arabian countries need to keep its policy in spending on education while Egypt need to develop it.					
13	United State can compete with United Kingdom in knowledge economy if it increases the level of education to cover the decrease in ICT?					
14	Denmark at the top of Knowledge Economy (KEI) because of the top rank in education.					
15	Education factor has an important impact on Knowledge Economy index (KEI) between ICT, Innovation and economic incentive regime.					