



THE IMPACT OF INTELLECTUAL CAPITAL ON THE USE OF CREATIVE ACCOUNTING METHODS

Alaa Mohammed Naif Al-Yasiri

Imam Alkadhim University College / Baghdad

alaa.naif@alkadhum-col.edu.iq

Article history:	Abstract:
Received: 10 th January 2025	This research aims to ascertain the influence of intellectual capital (human and structural) on creative accounting and its various methodologies employed by economic entities. Clarification of the idea of intellectual capital and its dimensions, along with an explanation of creative accounting and a description of the creative accounting procedures employed by most economic entities. Furthermore, the analysis of the research sample's responses, comprising private banks registered on the Iraqi Stock Exchange, was conducted utilising a questionnaire. Should a substantial consensus emerge regarding the influence of intellectual capital (human and structural) on creative accounting methodologies, coupled with the potential for their enhancement through the engagement of competent, experienced, and academically accomplished individuals, as well as the establishment of a conducive environment for accountants within economic entities, the research sample will facilitate the advanced application of creative accounting techniques to the benefit of the economic unit. The study revealed, utilising statistical techniques, a substantial correlation between intellectual capital and creative accounting among a sample of private Iraqi banks. The research also advocated for economic entities to hire skilled, innovative, and academically qualified personnel in their respective fields, enabling them to comprehend the principles, regulations, and accounting standards effectively to advance the interests of the organisation they serve. Furthermore, personnel are introduced to regular training courses that keep them aware about accounting advancements at both the Arab and international levels, as this is essential for the economic unit's sustained and progressive existence in its domain.
Accepted: 8 th February 2025	

Keywords: Intellectual capital - creative accounting- Human Capital - Structural Capital.

INTRODUCTION

Intellectual capital is a crucial cornerstone of economic entities. It also signifies the most critical aspect when juxtaposing economic entities (Zheng et al., 2024). If deemed a significant competitive advantage for the economic entity, it facilitates the development of its operations and future strategies. Recently, there has been a heightened interest in the examination and evaluation of intellectual capital, as well as the factors that influence its quality and effectiveness, both favourably and adversely. Due to its significant relevance in economic entities, it might influence the emergence of creative accounting, a method employed by these entities to distort financial reporting. Should the intellectual capital inside the economic unit has requisite experience and knowledge of accounting principles and regulations, along with the appropriate academic certification in the accounting domain, Creative accounting is distinct from fraud and forgery as it employs accounting practices flexibly to modify financial results. This project will conduct an exploratory

investigation on the potential for educated and experienced intellectual capital to design creative accounting methods and approaches that benefit the economic unit.

RESEARCH PROBLEM

The primary issue of the research pertains to the relationship between intellectual capital and the application of creative accounting, which may be distilled into the following enquiries: -

1. What is the influence of intellectual capital components on innovative accounting practices?
2. Does intellectual capital play a significant part in the research sample company?
3. Does the size of intellectual capital dimensions (human and structural) influence the application of creative accounting?

The significance of research



Research is essential due to the progress and interest in intellectual capital, as well as researchers' endeavours to measure it, considering its significance as a factor in economic organisations that maintain a competitive advantage in comparative assessments. This element is essential; therefore, it must be ensured that it can resolve the accounting issues faced by economic entities without engaging in fraud, deception, or deviation from accounting regulations and standards. Thus, in this case, he utilises innovative accounting that may benefit the economic entity while conforming to accounting principles and standards. Proficiency in all accounting principles, rules, and standards, along with necessary experience and education, is crucial for the proper implementation of creative accounting. These factors were considered for their significance in this investigation.

RESEARCH OBJECTIVES

1. Recognising intellectual capital, its significance, and its dimensions.
2. Recognising creative accounting and articulating its significance and aspects.
3. An assertion regarding the influence of intellectual capital on the application of creative accounting.
4. A declaration regarding the potential for cultivating intellectual capital in creative accounting and its methodologies.

HYPOTHESES FOR RESEARCH

The following theories establish the basis of the study:

1. Innovative accounting procedures can be developed with intellectual capital. This hypothesis leads to the following two hypotheses:
 - a) Human capital impacts the progression of contemporary accounting practices.
 - b) The development of innovative accounting procedures is influenced by structural capital.
2. In a sample of private Iraqi banks, a significant association exists between innovative accounting and intellectual capital.

INTELLECTUAL CAPITAL

1. The notion of intellectual capital

The emphasis of intellectual capital, a contemporary viewpoint that merges resource-oriented and knowledge-oriented approaches, lies in recognising and

managing all intangible resources and capital of the economic unit. In addition to labour, land, and capital resources, which were traditionally considered significant economic assets, knowledge and other intangible assets are now recognised as valuable resources whose value increases with utilisation (Bakhsh, Afraze, Esfanipour, 2018:p1). The economic worth of an economic unit's three classifications of intangible assets—human, organisational, and social capital—is referred to as intellectual capital. It can also be characterised as the capacities of a comprehensive or macroeconomic entity that arise from the innovative and adaptable coordination of its human resources, competencies, and capabilities, along with optimised procedures and experiences (Choudhury, 2010: p. 72). Intellectual capital is characterised as a non-monetary asset that finally yields economic advantages (Chahal & Bakshi, 2016: p. 62). It is believed that leveraging knowledge derived from intellectual capital enables an organisation to attain its objectives more effectively than relying solely on financial capital. The intellectual capital of employees can be assessed by the quality of their ideas, information, expertise, experience, and commitment. This intellectual capital is believed to substantially enhance the capacity of assets to increase earnings, performance, employee satisfaction, consumer contentment, and stakeholder engagement. Efficiency possessed significant potential for realisation and integration into the management process (Sulastri, Fitria, Andriani, 2019: p915).

2. The importance of intellectual capital

Intellectual capital has emerged as a crucial subject in management study, namely within accounting and strategic management (Faraji et al., 2022:p1). Intellectual capital, encompassing information, experience, personal skills, strong relationships, and technology, is seen as a significant resource for competitive advantage and a primary determinant of an economic unit's profitability. Intellectual capital, classified as an intangible asset, constitutes a significant asset inside the economic unit (Yeganeh et al., 2014: p. 603). Intellectual capital fosters innovation, thereby augmenting an economic unit's capacity to seek and obtain knowledge and technologies that surpass existing expertise. Consequently, the enhancement of intellectual capital within economic units facilitates the extraction of valuable and innovative knowledge from the market, the identification of market opportunities, the acquisition of essential knowledge, and the reconfiguration of processes to achieve superior performance relative to competitors (Farzaneh et al., 2022: p48). Intellectual capital is a unique resource



that is challenging to replicate at the economic unit level, contributing to competitive advantage (Andreeva et al., 2022:p1). Intellectual capital undoubtedly fosters the generation of wealth and valuable assets (Olarewaju & Msomi, 2021: p1). Recently, it has assumed a significant role in addressing the requirements of particular economic entities, offering advantages such as enhanced access to funding, improved reputational standing, and diminished transaction costs (Castro, Ramirez, Escobar, 2021: p238).

3. The dimensions of intellectual capital

Various theoretical references have defined intellectual capital as the integration of intangible assets that support the generation of competitive advantages, from the development of strategies aimed at the economic use of knowledge derived from operations, human resources and relationships with the external sector. For this reason, the dimensions of intellectual capital are human, structural and relational (Castillo& Pacheco& Fernandez& Manotas& Borrero& Silva, 2019: 568). And as follows :

A. Human Capital

Human capital is characterised as the capacity of an economic entity to derive economic advantages from the potential of its workforce, manifested in their knowledge, skills, experience, innovation, creativity, loyalty, competence, learning ability, and motivation for development (Andreeva & Garanina, 2017: p33). It pertains to the intellectual attributes and qualities of individuals within the economic unit who must adapt to market fluctuations and customer demands (Gogan et al., 2016:196). The efficiency of human capital is a crucial component of intellectual capital efficiency, enabling economic entities to sustain their competitive advantage. Numerous economists recognise that human capital efficiency significantly contributes to national wealth, and the quality of labour can be enhanced through investment in human capital, which is the most vital source for economic growth (Rehman, Aslam, Iqbal, 2022: p144).

B. Structural Capital

Structural capital denotes the integration and collaborative mechanisms inside an economic unit, as it connects human capital with relational capital and facilitates the reciprocal transformation among diverse components (Yuan, Xia, Guo, 2020: P21). The structural or organisational capital comprises the internal value drivers of the economic entity, including routine procedures, operations, customer records, databases, documentation, literature, and the organisational framework of the entity. Organisational capital comprises internal capital, which includes management

philosophy, intellectual property, administrative processes, and financial relationships. Information systems, networks, and the culture of economic unity (Mahmood & Mubarik, 2020: P3) serve as structural capital that shapes the distinctive perception and identity of the economic unit, enhancing its market competitiveness and reflecting the extent of human capital utilisation (Strelinikova, 2022: P54).

C. Relational capital

Social (relational) capital is characterised by values and attributes such as social interaction, mutual trust and understanding, and a shared vision and standards, enabling members of an economic unit to collaboratively achieve a goal (Ozgun et al., 2022: p2). It also pertains to the intellectual assets of the economic entity that facilitate the establishment, management, and maintenance of external interactions with customers, suppliers, marketing channels, and stakeholders (Shahzad et al., 2022: p23). Social capital is crucial in promoting adoption and mitigating the limitations imposed by insufficient financial, human, and natural resources. Social capital comprises horizontal interconnections among individuals, encompassing social networks and related norms that influence societal productivity and well-being (Hashim, Osman, Alhabshi, 2015: p209) .

This categorisation of intellectual capital is a proficient analytical method that facilitates the examination and administration of its distinct components. In actuality, they coexist and collaborate, generating a synergistic impact and establishing a new quality intrinsic to intellectual capital as a whole (Strelinikova, 2022: p25).

CREATIVE ACCOUNTING

1. The concept of creative accounting

Creative accounting encompasses novel, intricate, and innovative techniques that accountants employ to exploit the flexibility of accounting regulations, thereby manipulating the figures in the final accounts to serve the personal interests of a specific group (Al-Olimat, 2019: p171). The phrase "creative accounting" refers to accounting procedures that enable economic entities to present inaccurate financial outcomes of their operations, and is considered a form of deceptive accounting. It pertains to the utilisation of accounting expertise to adjust reported figures in compliance with accounting laws and regulations, thereby conveying management's preferred narrative to stakeholders rather than accurately reflecting the economic unit's true performance or position. (Emma & Obioma, 2020: p. 3). Creative accounting refers to the deliberate alteration of financial information within an economic entity for a specific objective, characterised as a process wherein accountants leverage their understanding of



accounting regulations to manipulate data in financial records (Adamikova & Corejova, 2021: p43). Despite the existence of robust accounting standards to regulate financial accounting practices, it might occasionally be unfeasible to avert the deceptive conduct of financial statement preparers, who seek to sway the decisions of financial service users to benefit their economic entities. (Bahsin, 2016, p. 144) Consequently, creative accounting was essential for the formulation of the financial statements, either to maintain share price stability or to employ revenue smoothing and profit management strategies to mitigate the risks associated with the financial figures. (Al-Natsheh & Al-Okdeh, 2020, p. 832).

2. Creative Accounting Techniques

While the techniques employed to delineate creative accounting are not novel, empirical evidence has demonstrated that they often incur significant costs. It is essential to engage the following stakeholders to appear advantageous to creditors, suppliers, shareholders, employees, and other parties of interest: (Akpanuko & Umoren, 2018: 6-8)

- A. **Organisational flexibility:** It permits the accounting organisation to select the most suitable policy in numerous instances.
- B. **Regulatory insufficiency:** Certain regions remain inadequately controlled. Currently, there are limited mandatory regulations pertaining to stock options accounting.
- C. **Scope of Administrative Judgement and Estimation of Discretionary Domains:** The administration possesses considerable discretion inside discretionary regions.
- D. **Timing of certain transactions:** The timing of actual transactions can be manipulated to create a specific impression in the financial statements of the economic entity.
- E. **Using artificial transactions:** Engaging in fictitious transactions allows for the manipulation of balance sheet figures and the transfer of earnings across accounting periods.
- F. **Reclassification and presentation of financial figures:** Economic entities may manipulate balance sheets to reclassify obligations, hence enhancing stated liquidity and leverage ratios.

The researcher posits that the implementation of creative accounting techniques necessitates the presence of individuals within the economic unit who possess competence, experience, and a relevant academic foundation in accounting specialisation (intellectual capital) to effectively utilise the principles

of creative accounting for the benefit of the economic unit.

3. Creative Accounting Methods

Creative accounting typically involves the manipulation of fixed assets, liabilities, sales, revenue, and expenses, as well as alterations to accounting procedures and standards. These deceptive methods may encompass the following: (Arnis, Karamanis, Koli, 2019, p. 233).

- a) Engaging in real activity manipulation and offering substantial discounts on year-end sales.
- b) Modifying (augmenting) inventory at year-end, leading to an elevated gross profit and a diminished cost of goods sold.
- c) The accrual principle is violated, and accounts receivable are managed correctly.
- d) The procedure of recording various operating expenses, including the acquisition and enhancement of fixed assets as amortisable costs, is referred to as expense capitalisation.
- e) Typically, accounting events that influence the overall finances of the economic entity are not documented.

According to Gupta and Kumar (2020: p65), while it is impossible to entirely eradicate account manipulation, it can be mitigated to diminish the prevalence of creative accounting. However, it is essential to first comprehend the commonly employed ways as follows: (Gupta & Kumar, 2020, p. 399)

- a) Inventory manipulation.
- b) Management of prospective obligations.
- c) Alteration of financial statements.
- d) Modifying policies in accordance with the suitability of the economic unit's situation, including policies for dissolution.
- e) Alteration of income and expenditures.
- f) Exaggerating revenues via fictitious earnings and fraudulent transactions.
- g) Write-off of accounts receivable.

Cugova and Cug (2020: p4-5) addressed the subsequent inventive accounting techniques:

The liquidity of the economic unit is enhanced by intentionally classifying short-term assets and liabilities as non-current and vice versa. The economic unit's assets encompass those that are ineligible for inclusion due to their lack of economic benefits. These assets provide no economically justified advantages.

- h) For example, re-lease, wherein an economic entity divests its assets to a rental firm and subsequently leases them back, constitutes a form of asset repurchase.
- i) The institution neglects to establish reserves or allocations, or does so inadequately as per legal



requirements, so violating the precautionary principle.

The researchers assert that experience, scientific proficiency, and a conducive environment facilitate accountants in effectively leveraging accounting principles and standards to implement innovative accounting practices, as the accountant of the economic entity possesses comprehensive knowledge of all accounting principles and can apply them to benefit the economic unit.

METHODOLOGY

To attain the research objectives and evaluate the hypotheses, a questionnaire was utilised to gather information, supplemented by various statistical methods (including the Cronbach's Alpha test, arithmetic mean, and standard deviation). The questionnaire comprised 27 questions pertaining to the variable of intellectual capital and 11 questions related to the variable of creative accounting. The questionnaire was evaluated using the Smart PLS software version 3.3. The questionnaire was derived from the following sources, with certain paragraphs modified to meet the research objectives.

First: Assessing the quality and consistency of the research scale A- Assessing the quality and consistency of the intellectual capital variable's paragraphs Since the model will be evaluated using the following indicators,

1. The external saturations and Alpha Cronbach coefficient for the paragraphs pertaining to the intellectual capital variable are illustrated in

Figure 1. The variable consists of two primary dimensions and three subordinate dimensions for each dimension: Table 1 presents the values of the intellectual capital variable (CR), all of which are within acceptable limits, ranging from 0.832 to 0.897. This indicates the scale's stability, as the results exhibited a significant degree of consistency.

2. The findings indicate that the measurement tool has a good level of validity and reliability, as seen by the Cronbach's Alpha coefficients, which varied from 0.719 to 0.857, exceeding the threshold of 0.70.
3. Table (1) presents the external saturation (OL) values of the scale items for the variable (intellectual capital). The values varied from 0.669 to 0.861, signifying that the data about the intellectual capital variable are suitable for subsequent statistical analyses.
4. Table 1 clearly indicates that all extracted average variance (AVE) values for the intellectual capital variable are satisfactory, demonstrating convergent validity across the dimensions, with values ranging from 0.554 to 0.641, exceeding the threshold of 0.50.
5. Table 1 presents the computed T-Value, which varies from 15.054 to 46.075, exceeding the tabular value of 1.984, so reflecting their morale, a positive indicator. It also presents the significance level (P-Value), which is (0.000), falling below (0.05) for all items.

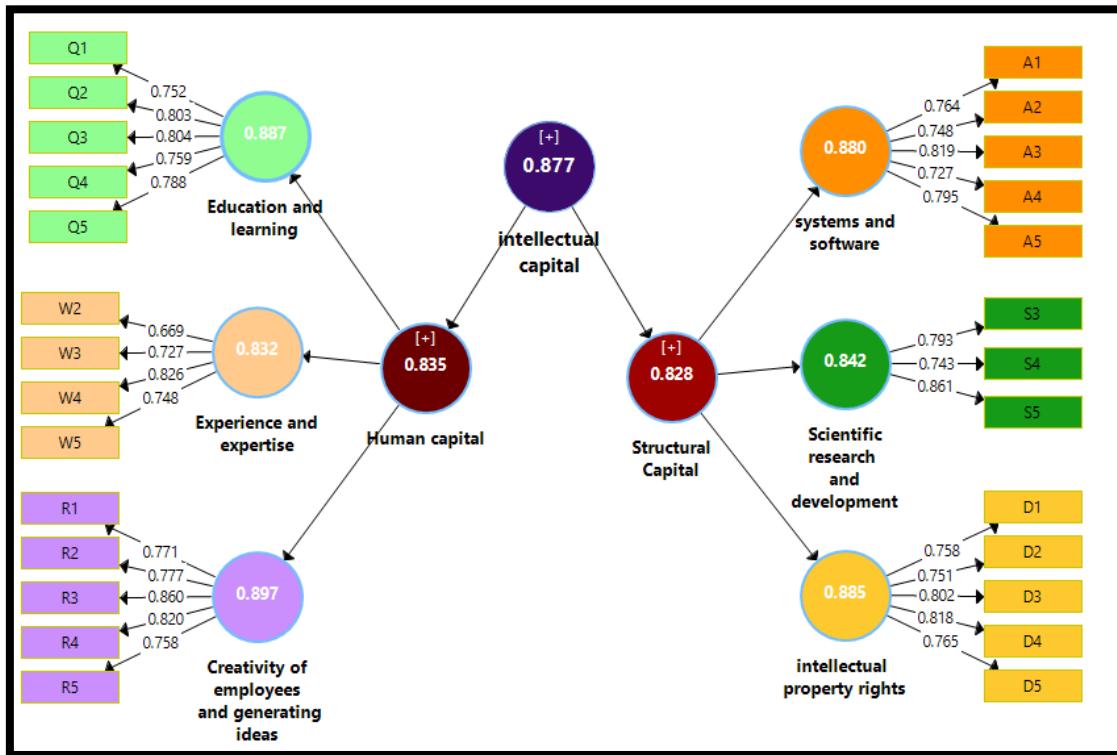


Figure 1: The complete model of the intellectual capital variable

Table 1: Findings from the intellectual capital variable's stability, complex consistency, and convergent validity tests.

Questions	Dimensions	(OL)	SD	T. test	Sig	Cronbach's Alpha	(CR)	(AVE)
Q1	Education and learning	0.752	0.039	19.30	0.000	0.841	0.887	0.611
Q2		0.803	0.027	29.74	0.000			
Q3		0.804	0.029	27.79	0.000			
Q4		0.759	0.037	20.75	0.000			
Q5		0.788	0.032	24.40	0.000			
W2	Experience and expertise	0.669	0.043	15.60	0.000	0.730	0.832	0.554
W3		0.727	0.048	15.10	0.000			
W4		0.826	0.025	32.97	0.000			
W5		0.748	0.039	19.27	0.000			
R1	Creativity of employees and generating ideas	0.771	0.031	25.28	0.000	0.857	0.897	0.637
R2		0.777	0.040	19.64	0.000			



R3		0.860	0.01 8	46.97	0.000			
R4		0.820	0.02 5	32.52	0.000			
R5		0.758	0.05 0	15.05	0.000			
A1	systems software	0.764	0.03 3	23.39	0.000	0.829	0.880	0.595
A2		0.748	0.03 8	19.723	0.000			
A3		0.818	0.02 0	40.325	0.000			
A4		0.727	0.04 2	17.409	0.000			
A5		0.795	0.02 6	30.812	0.000			
S3	Scientific research _and development	0.793	0.03 7	21.357	0.000	0.719	0.842	0.641
S4		0.743	0.04 2	17.643	0.000			
S5		0.861	0.02 0	42.546	0.000			
D1	intellectual property rights	0.758	0.04 0	19.162	0.000	0.838	0.885	0.607
D2		0.751	0.03 4	22.245	0.000			
D3		0.802	0.02 8	29.072	0.000			
D4		0.818	0.02 5	32.993	0.000			
D5		0.765	0.03 1	24.869	0.000			

Evaluation of the quality and conformity of the paragraphs of the variable Creative Accounting

Figure (2) shows the external saturations and the Fakronbach coefficient for paragraphs of the creative accounting variable, which consists of (8) basic paragraphs, as the model will be tested within the following indicators:

A. Internal stability and consistency

The Alpha Cronbach coefficient value of 0.922, exceeding 0.70, and the composite reliability (CR) value for the creative accounting variable, which is 0.923, are presented in Table 2. The results indicate that the validity and reliability coefficients of the measuring tool for the variable exhibit a good level of acceptance and stability.

B. Convergent honesty

The external saturation values of the scale items for the variable (Creative Accounting) are evident in Figure (2). The external saturation values varied between 0.686 and 0.813, signifying that the data for the creative accounting variable are suitable for investigation. The subsequent statistic. The extracted average variance (AVE) values for the creative accounting variable are presented in Figure 2. The value is 0.563, exceeding 0.50, indicating that the scale items possess convergent validity, a dependable indicator.

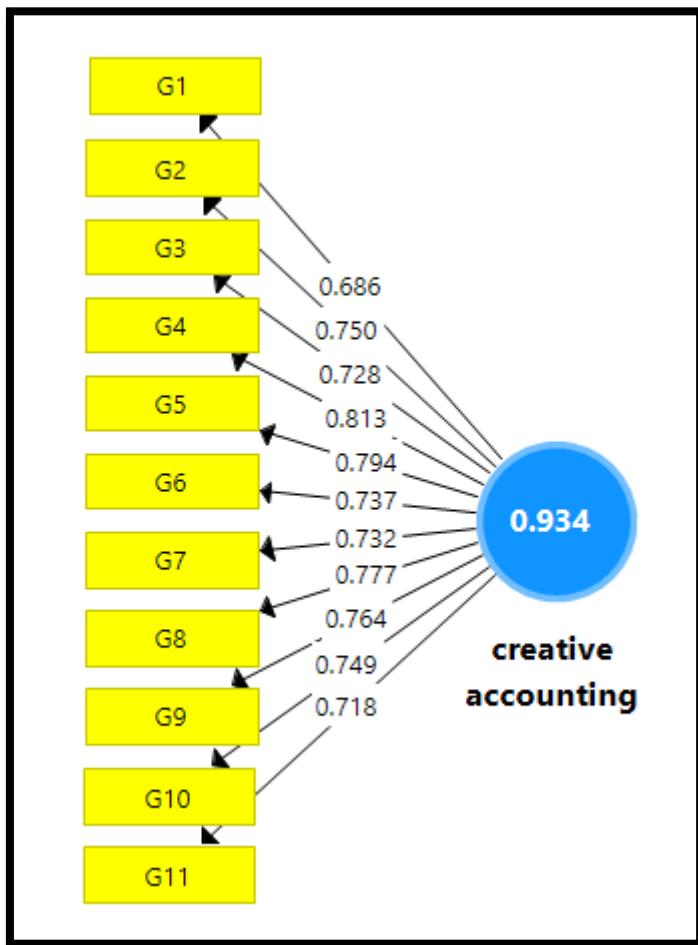


Figure 2: The complete model of the creative accounting variable.

Table 2: The outcomes of the creative accounting variable's tests for convergent validity, stability, and complicated consistency.

Questions	Dimension	(OL)	Standard Deviation	T. test	P-Value	Cronbach's Alpha	(CR)	(AVE)
creative accounting	G1	0.686	0.044	15.63	0.000	0.922	0.923	0.563
	G2	0.750	0.035	21.38	0.000			
	G3	0.728	0.042	17.44	0.000			
	G4	0.813	0.023	35.35	0.000			
	G5	0.794	0.033	24.06	0.000			
	G6	0.737	0.041	17.84	0.000			
	G7	0.732	0.035	21.04	0.000			
	G8	0.777	0.035	22.36	0.000			
	G9	0.764	0.032	24.10	0.000			
	G10	0.749	0.035	21.67	0.000			
	G11	0.718	0.038	19.11	0.000			

Table (2) clearly indicates that all parameter estimates for the paragraphs related to the creative accounting variable were significant, as the calculated T-Value ranged from 15.638 to 35.35, above the tabular value of 1.98, and the value



of P. The calculated value of 0.000 for each paragraph was below 0.05, indicating that every paragraph is significant, which is a positive sign.

Descriptive analysis of research variables

A- The intellectual capital variable

Table (3) demonstrates that the structural capital dimension had the greatest general arithmetic mean (3.67), a good level with a standard deviation of 0.489 and a coefficient of difference of 13.32, indicating that this dimension was at the top of the relative importance scale. As a result, we can see that the economic unit must provide training programs for its employees, as well as employ all of the unit's efforts to attract employees with a high ability to learn and innovate, and the adoption of the research and development process and the development of clear strategies by the management of the economic unit, all of which affects its productivity and profitability, in addition to supporting its employees to provide their best for the benefit of. Thus, in terms of relative relevance and influence on the growth of creative accounting approaches, this dimension came out on top. With a reasonable level, standard deviation, and coefficient of difference of 0.54 and 14.83, respectively, the human capital dimension had the lowest general arithmetic mean (3.64), placing second in terms of relative importance. As a result, personnel with a solid education (in accounting specialisation) and extensive experience in their sector will have an impact on the economic unit's profitability and productivity. Therefore, they can apply creative accounting approaches and develop them in a way that is beneficial to the unit. The economic unit should encourage its employees to learn new things and share them with their coworkers, as well as urge them to stay up to date on economic changes and strive to capitalise on them in order to increase the economic unit's market worth.

In total only, Because this dimension ranked first in terms of relative importance at the variable level, the overall arithmetic mean of the intellectual capital variable reached 3.65, which is a reasonable level, with a standard deviation of 0.455 and a coefficient of variation of 12.44. Here, we observe the high relative importance of intellectual capital in general, as well as its impact on creative accounting and its methods, and the possibility of growing them by the working group that employs these methods (accountants).

B- The creative accounting variable

The creative accounting variable was placed second in terms of relative importance at the variable level, with a general arithmetic mean of 3.55, a high level, a standard deviation of 0.636, and a coefficient of variation of 17.87. Here, it comes out that creative accounting and its procedures are influenced by intellectual capital and its dimensions in the direction that serves the economic unit and its interests, with the possibility of boosting its profitability, productivity, and market value. As a result, there are countless innovative accounting methods available, and human capital versed with accounting principles, standards, and concepts may always find new solutions while supplying the necessary structural capital. It should not violate accounting rules and standards while also allowing the economic unit to improve its profitability and market positioning.

Table 3: The arithmetic mean, standard deviation, coefficient of variation and the relative importance of the research variables

Dimensions	M	SD	Variation coefficient	Relative importance
Education and learning	3.727	0.704	18.889	5
Experience and expertise	3.597	0.616	17.125	2
Creativity of employees and generating ideas	3.598	0.723	20.094	6
Human capital	3.641	0.540	14.831	2
Systems and software	3.654	0.671	18.363	4
Scientific research and development	3.721	0.521	14.002	1
Intellectual property rights	3.635	0.665	18.294	3
Structural Capital	3.670	0.489	13.324	1
Intellectual capital	3.655	0.455	12.449	First
Creative accounting	3.559	0.636	17.870	Second

Testing research hypotheses

This section addresses the evaluation of predetermined effect hypotheses, utilising the calculated value (T), the coefficient of determination (R^2), the adjusted coefficient of determination (R^2), the marginal inclination coefficient (β), the effect size (f^2), and (Q^2), which reflects the model's accuracy and predictive capability, as follows :

Table 4 and Figure 3 present the statistical indicators for hypothesis testing for the human capital factor in creative accounting.

The calculated t-value of the predicted model has become 19.03. Furthermore, it surpasses the tabular value (t) of (1.98) at the significance level (0.05), illustrating the significance of the marginal tendency of the human capital component and highlighting the vital and effective impact of human capital on creative accounting. Table 4 and Figure 3 present the statistical indicators for hypothesis testing on the human capital dimensions of creative accounting. The calculated t-value of the predicted model has become 19.03. Moreover, it surpasses the tabulated value (t) of (1.98) at the significance level (0.05), illustrating the relevance of the marginal propensity of the human capital dimension and highlighting the vital and impactful role of human capital in creative accounting. The adjusted coefficient (R^2) of 0.390 signifies that the human capital dimension may explain 39% of the variations in creative accounting. The results clearly indicate that the human capital component had a significant effect size (f^2), with a value of (3.17), surpassing (0.35). The results indicated that the model has predictive relevance, as the predictive connection index (Q^2) for the human capital component was 0.213, exceeding zero. The results indicated that the model has predictive relevance, as the predictive connection index (Q^2) for the human capital component was 0.213, exceeding zero.

Table 4: Indicators of statistical correlation between the human capital elements in creative accounting

Human capital	B	T	Sig	Effect size f^2	(R ²)	Adjusted (R ²)	Q^2
	0.627	19.03	0.000	3.17	0.393	0.390	0.213

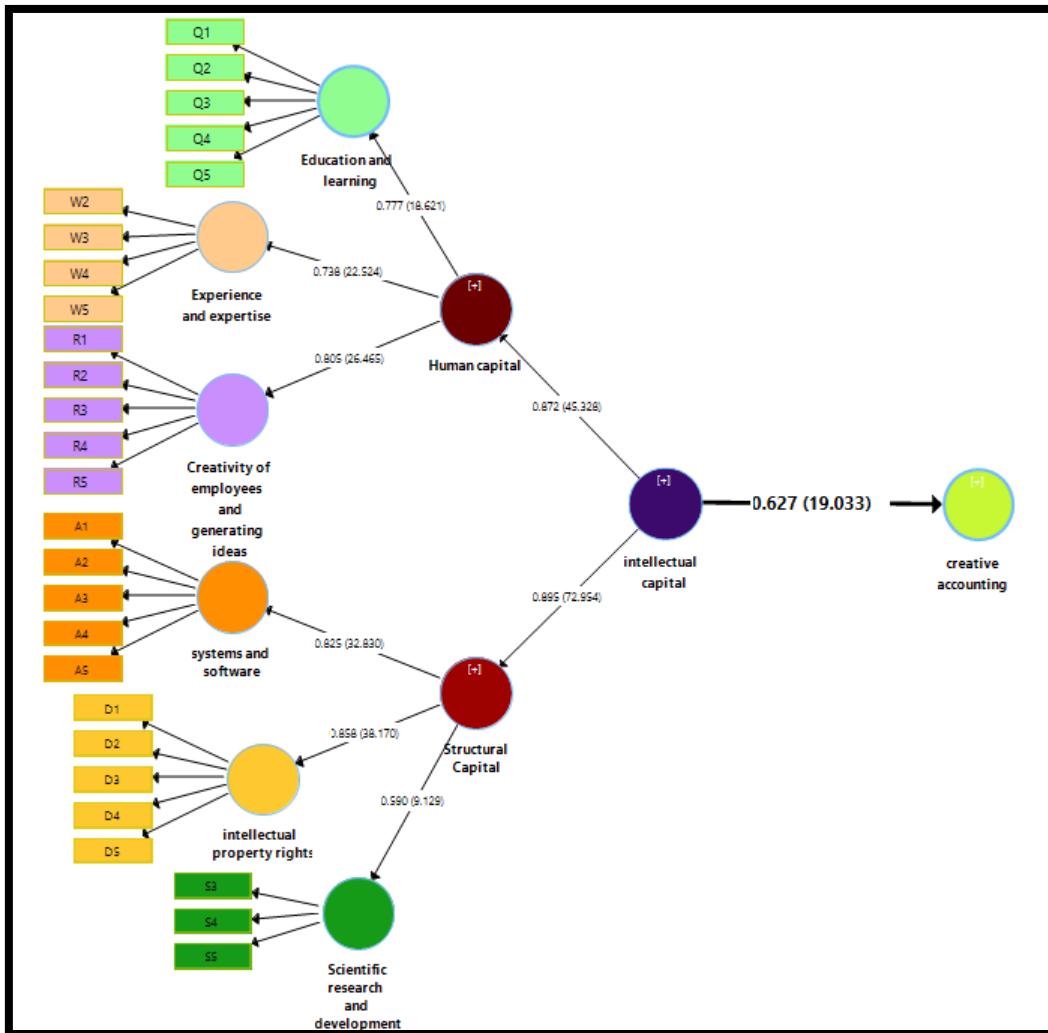


Figure3: The impact of the human capital dimension on creative accounting



The statistical metrics for assessing the hypotheses on the dimensions of structural capital in creative accounting are presented in Table 5 and Figure 4. The calculated (t) value of the predicted model was 8.089. Furthermore, it surpasses the tabular value (t) of (1.98) at the significance level (0.05), underscoring the relevance of the marginal slope of the structural capital dimension. We acknowledge the notion that a strong relationship exists between the structural capital dimension and creative accounting, indicating that the structural capital dimension exerts a vital and impactful influence on creative accounting. The Adjusted Determination Coefficient (R^2) of 0.186 indicates that the structural capital dimension may explain 18% of the variations in creative accounting. The results indicate that the effect size (f^2) for the structural capital dimension was medium, as its value (0.234) was within the range of 0.15 to 0.35. The results indicated that the model possesses predictive significance, as the predictive relationship index (Q^2) for the structural capital dimension was (0.098), exceeding zero. The marginal slope coefficient of the structural capital dimension was 0.436, indicating that each unit increase in this dimension corresponds to a 43% growth in creative accounting.

Table 5: Statistical Measures of Creative Accounting's Structural Capital

Structural capital	B	T	Sig	Effect size f^2	(R^2)	Adjusted (R^2)	Q^2
	0.436	8.08	0.000	0.234	0.190	0.186	0.098

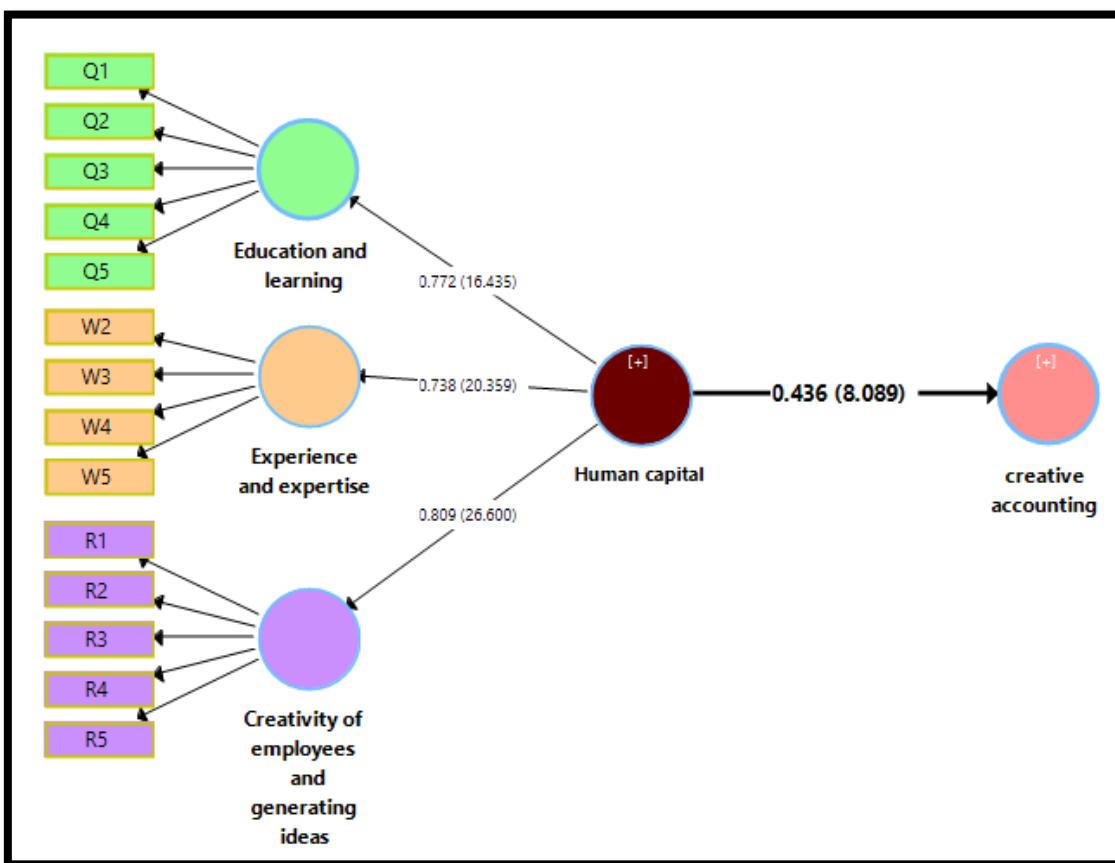


Figure 4: The effect of structural capital on creative accounting

Table (6) and Figure (5) show the statistical indicators for testing the hypotheses between the intellectual capital variable in creative accounting. reached the estimated model's computed value of (t) (19.25). In light of this finding, we accept the hypothesis that there is a significant effect between the variable of intellectual capital and creative accounting, indicating that the variable of intellectual capital has an effective and fundamental effect. It is greater than the tabular value (t) of (1.98) at the level of significance (0.05), demonstrating the significance of the marginal tendency of the variable of intellectual capital. The corrected (R^2) coefficient of 0.456 makes it evident that the variable of intellectual capital may account for 45% of the variations in creative accounting. The findings make it evident that the intellectual capital variable had a big effect size (f^2) because its value (0.846) was higher than 0.35. The findings demonstrated that the model had predictive relevance since the predictive relationship index (Q^2) for the intellectual capital variable

obtained a value of (0.248), which is higher than zero. The findings showed that the intellectual capital variable's marginal slope coefficient was 0.679, meaning that a one-unit increase in the intellectual capital variable would result in a 67% increase in (creative accounting).

Table 6: Statistical Measures of Creative Accounting's Intellectual Capital

Intellectual capital	B	T	Sig	Effect size f^2	(R ²)	Adjusted (R ²)	Q ²
	0.679	19.25	0.000	0.846	0.458	0.456	0.248

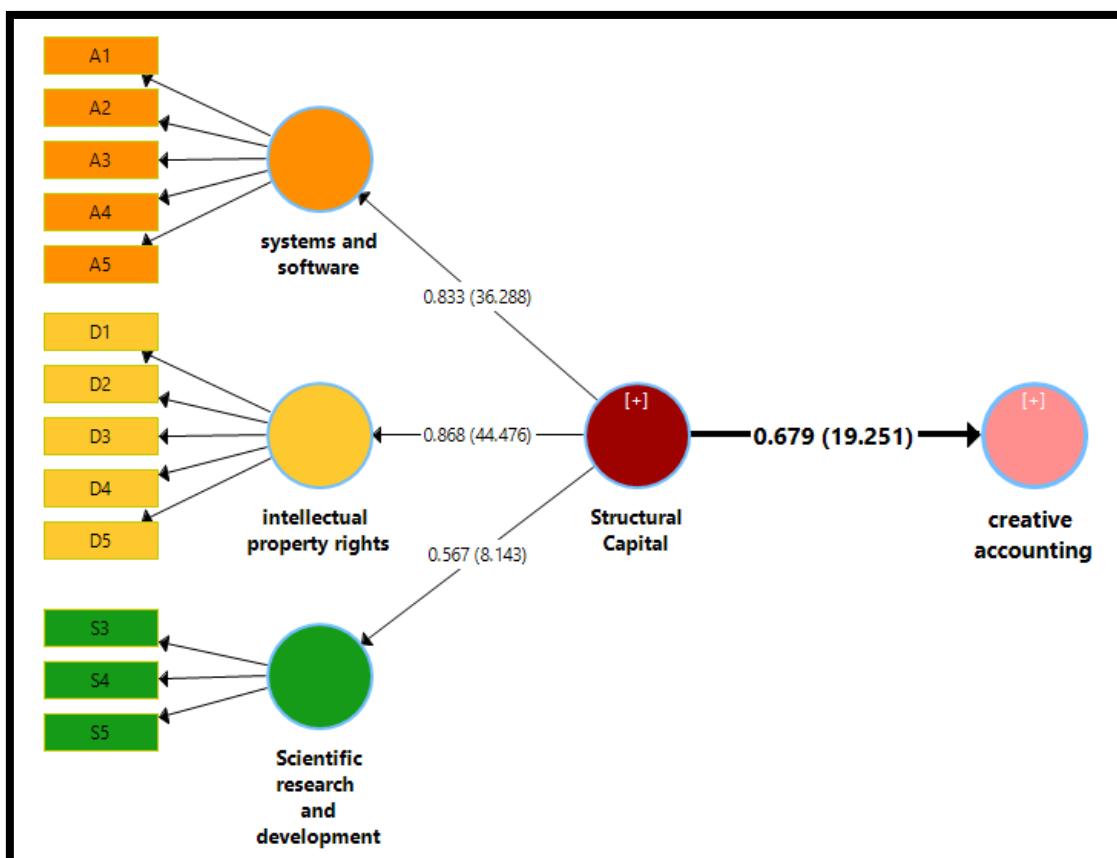


Figure 5: The impact of intellectual capital on creative accounting

CONCLUSION

This study examines the impact of intellectual capital on the use of creative accounting methods and the possibility of developing them. To achieve its goal, this study was tested on a sample of Iraqi banks. Managers in the research sample banks were given the questionnaire, and the study used the smart software to analyze it and demonstrate the influence of intellectual capital and its human-structural dimensions, particularly in the application of innovative accounting techniques.

First, as indicated in Tables 1 and 2, the study found that the measurement tool's validity and reliability coefficients are widely accepted. To that purpose, the quality and conformance of each of the research variables' paragraphs (intellectual capital - creative accounting) were evaluated using the stability,

compound consistency, and convergent validity tests. And stability, as it ranges from 0.719 to 0.857 for creative accounting and 0.922 for intellectual capital.

Second, the study discovered that there is an impact of intellectual capital and its dimensions (human-structural) on creative accounting methods and the possibility of developing them through descriptive analysis of the research variables as in Table (3 and 4), as the analysis revealed that the educational level (in the field of accounting specialisation) and experience They have a significant impact on the profitability and production rate of the economic unit, and workers in the economic unit with a high level of education and accounting specialisation can use creative accounting methods in the interest of the economic unit, in addition to the experience that allows them to develop these methods and creativity in finding accounting methods



that can make the financial statements of economic units highly profitable.

Third, the study verified that providing modern systems and programs for employees, as well as management support in the form of training programs and the construction of an acceptable alternative for each job position, aids accountants' advancement and development. The adoption of the economic unit's operations for scientific research and development, attention to intellectual property rights, and the establishment of defined strategies and processes all have an impact on the economic unit's productivity and profitability. This study is useful for economic units in general, and their departments in particular, because it highlights the importance of hiring employees with experience, a good education, and accounting skills that enable them to use and develop creative accounting methods for the benefit of the economic unit in which they work. To assist them in their work, in addition to introducing them to continuous training courses that keep them up to date on accounting advancements, they will employ everything that is current and produced for the benefit of the economic unit in order to increase productivity and profitability.

REFERENCE:

1. Bakhsha, A., Afraze, A., & Esfahanipour, A. (2018). Identifying the variables of intellectual capital and its dimensions with the approach of structural equations in the educational technology of Iran. *Eurasia Journal of Mathematics, Science and Technology Education*, 14(5), 1663–1682.
2. Bhasin, M., & Lal Bhasin Professor, M. (2016). *SURVEY OF CREATIVE ACCOUNTING PRACTICES: AN EMPIRICAL STUDY* (Vol. 23, Issue 1).
3. Castillo, A. E., Pacheco, G. V., Fernandez, L. H., Manotas, E. N., Borrero, T. C., & Silva, J. (2019). Factorial analysis in the intellectual capital's dimensions on micro, small and medium-sized export enterprises. *Procedia Computer Science*, 160, 567–572.
4. Chahal, H., & Bakshi, P. (2016). Measurement of Intellectual Capital in the Indian Banking Sector. *Vikalpa*, 41(1), 61–73.
5. Choudhury, J. (2010). Performance Impact of Intellectual Capital: A Study of Indian it Sector. *International Journal of Business and Management*, 5(9).
6. Cugova, A., & Cug, J. (2020). Motivation for the use of creative accounting techniques in the conditions of the globalized business environment. *SHS Web of Conferences*, 74, 01004.
7. Faraji, O., Asiae, K., Rezaee, Z., Bontis, N., & Dolatzarei, E. (2022). Mapping the conceptual structure of intellectual capital research: A co-word analysis. *Journal of Innovation and Knowledge*, 7(3).
8. Farzaneh, M., Wilden, R., Afshari, L., & Mehralian, G. (2022). Dynamic capabilities and innovation ambidexterity: The roles of intellectual capital and innovation orientation. *Journal of Business Research*, 148, 47–59.
9. Fitria, Y., & Andriani, C. (2020). *Exploration of Dimensions and Measurement in Intellectual Capital Modeling*.
10. García Castro, J. P., Duque Ramírez, D. F., & Moscoso Escobar, J. (2021). The relationship between intellectual capital and financial performance in Colombian listed banking entities. *Asia Pacific Management Review*, 26(4), 237–247.
11. Gogan, L. M., Artene, A., Sarca, I., & Draghici, A. (2016). The Impact of Intellectual Capital on Organizational Performance. *Procedia - Social and Behavioral Sciences*, 221, 194–202.
12. Gupta, C. M., & Kumar, D. (2020). Creative accounting a tool for financial crime: a review of the techniques and its effects. In *Journal of Financial Crime* (Vol. 27, Issue 2, pp. 397–411). Emerald Group Holdings Ltd.
13. Hashim, M. J., Osman, I., & Alhabshi, S. M. (2015). Effect of Intellectual Capital on Organizational Performance. *Procedia - Social and Behavioral Sciences*, 211, 207–214.
14. Mahmood, T., & Mubarik, M. S. (2020). Balancing innovation and exploitation in the fourth industrial revolution: Role of intellectual capital and technology absorptive capacity. *Technological Forecasting and Social Change*, 160.
15. Okoye, E. I., & Obioma, J. (n.d.). *Impact of Creative Accounting Techniques on Firm Financial Performance: A Study of Selected Firms in Nigeria*.
16. Olarewaju, O. M., & Msomi, T. S. (2021). Intellectual capital and financial performance of South African development community's general insurance companies. *Helijon*, 7(4).
17. Ozgun, A. H., Tarim, M., Delen, D., & Zaim, S. (2022). Social capital and organizational performance: The mediating role of innovation activities and intellectual capital. *Healthcare Analytics*, 2, 100046.



18. Shahzad, F., Baig, M. H., Rehman, I. U., Saeed, A., & Asim, G. A. (2022). Does intellectual capital efficiency explain corporate social responsibility engagement-firm performance relationship? Evidence from environmental, social and governance performance of US listed firms. *Borsa Istanbul Review*, 22(2), 295–305.
19. Strelnikova, L. (2022). Formation and use of intellectual capital as a factor of the innovative development of Russian the transport complex enterprises. *Transportation Research Procedia*, 63, 2053–2063.
20. Ur Rehman, A., Aslam, E., & Iqbal, A. (2022). Intellectual capital efficiency and bank performance: Evidence from islamic banks. *Borsa Istanbul Review*, 22(1), 113–121.
21. Yeganeh, M. V., Sharahi, B. Y., Mohammadi, E., & Beigi, F. H. (2014). A Survey of Intellectual Capital in Public and Private Insurance Companies of Iran Case: Tehran City. *Procedia - Social and Behavioral Sciences*, 114, 602–609.
22. Yuan, B., Xia, H., & Guo, C. (2021). An evaluation index system for intellectual capital evaluation based on machine learning. *Alexandria Engineering Journal*, 60(1), 1519–1524.
23. Zheng, G., Haq, M. Z. U., Huo, B., Zhang, Y., & Yue, X. (2024). Leveraging intellectual capital for building a supply chain circular economy system: A knowledge-based view. *International Journal of Production Economics*, 272, 109225.