# استخدام طريقة SOF لتقييم التكاليف الخفية

(دراسة ميدانية على عينة من الشركات الصناعية في محافظة السليمانية)

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Using the SOF method to evaluate hidden costs

(A Field Study on A Sample of industrial companies in the Sulaymaniyah Governorate)

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The objective of this study is to understand the construction of hidden costs and their causes that result in operating losses in industrial companies, In addition to its indicators and to show the mechanisms that companies put in place to control them, as well as explain measurement and evaluation through the SOF model, which consists of three measures: social, organizational and financial. This is based on the inductive approach when conducting the field study through a questionnaire, and it was distributed to 50 employees of industrial companies operating in the city of Sulaymaniyah. The results of the study show that there are hidden costs in these studied companies, consisting of multiple dysfunctions and in return, there are no mechanisms to control them. Among the most important recommendations is to work on adopting methods for measuring hidden costs using the SOF scale model in evaluating hidden costs. In addition to the need to control it by paying attention to the human element, which will reflect positively on improving the company's performance, which is considered a strategic approach to reducing costs.

Keywords: hidden costs, hidden cost indicators, SOF model, controlling hidden costs.

### المستخلص:

الهدف من هذه الدراسة هو فهم بناء التكاليف الخفية وأسبابها التي تؤدي إلى خسائر تشغيلية في الشركات الصناعية ، بالإضافة إلى مؤشراتها وبيان الآليات التي تضعها الشركات للسيطرة عليها ، وكذلك شرح القياس و التقييم من خلال نموذج SOF الذي يتكون من ثلاثة مقاييس: اجتماعي ، تنظيمي ومالي. وهذا يعتمد على المنهج الاستقرائي عند إجراء الدراسة الميدانية من خلال استمارة استبيان ، وتم توزيعه على ٥٠ من العاملين في الشركات الصناعية العاملة في مدينة السيقرائي عند إجراء الدراسة الميدانية من خلال استمارة استبيان ، وتم توزيعه على ٥٠ من العاملين في الشركات الصناعية العاملة في مدينة السليمانية. تنظيمي ومالي وهذا يعتمد على المنهج الاستقرائي عند إجراء الدراسة الميدانية من خلال استمارة استبيان ، وتم توزيعه على ٥٠ من العاملين في الشركات الصناعية العاملة في مدينة السليمانية. تظهر نتائج الدراسة أن هناك تكاليف خفية في هذه الشركات المدروسة ، من العاملين في الشركات الصناعية العاملة في مدينة السليمانية. تظهر نتائج الدراسة أن هناك تكاليف خفية في هذه الشركات المدروسة ، من العاملين في الشركات الصناعية العاملة في مدينة السليمانية. تظهر نتائج الدراسة أن هناك تكاليف خفية في هذه الشركات المدروسة ، من العاملين في الشركات الصناعية العاملة في مدينة السليمانية. تظهر نتائج الدراسة أن هناك تكاليف خفية في هذه الشركات المدروسة ، تتكون من اختلالات وظيفية متعددة، ولا توجد آليات للسيطرة عليها. من أهم التوصيات العمل على اعتماد طرق لقياس التكاليف الخفية باستخدام نموذج مقياس SOF في تقييم التكاليف الخفية. بالإضافة إلى ضرورة الاهتمام بالعنصر البشري ، الأمر الذي سينعكس إيجاباً على باستخدام نموذج مقياس SOF في تقييم التكاليف الخفية. بالإضافة إلى ضرورة الاهتمام بالعنصر البشري ، الأمر الذي سينعكس إيجاباً على باستخدام نموذج مقياس SOF في تقييم التكاليف.

الكلمات المفتاحية: التكاليف الخفية ، مؤشرات التكلفة الخفية ، نموذج SOF ، التحكم في التكاليف الخفية.

### 1. Introduction:

Reducing costs has become the goal of all companies and the most effective way to face the conditions of the competitive environment, its continuity and growth. Cost accounting has come to measure the cost to achieve certain purposes that help the management of the economic unit to perform its functions as effectively and efficiently as possible, through the optimal use of available resources. If the company is able to control its material energies, it is difficult for it to control the human element due to the susceptibility of its behavior to change over time, and this has led to a change in the administrators' view of the importance of human resource management. Which can benefit from human wealth with the highest possible efficiency and at the lowest costs of the organizational commitment of the individual is achieved, because of its clear impact on the nature of the performance and productivity of the company. There are some unacceptable and negative behaviors issued by some workers or by officials, which creates a lack of good clarity of the company's goals and interference in work and defining responsibilities, which negatively affects the company in improving its performance and lack of control over its costs. These costs are called hidden costs that come from dysfunctions that arise from human situations. Which requires the need to develop cost accounting and adopt modern methods and procedures in the field of measurement and analysis, so that it is able to control well its costs and takes into account both visible and hidden costs.

**Research Questions:** In light of the above, the research problem can be formulated in the main question, which is: How can you measure hidden costs in industrial companies? The following sub-questions are derived from this main question:

1. Are there indicators by which hidden costs in industrial companies are determined?

2. What are the reasons behind the generation of hidden costs in industrial companies?

3. What are the means and mechanisms that industrial companies put in place to control their hidden costs? **Contributions and Significance of Research:** The importance of this research is as follows:

It represents the importance of research from a scientific point of view by enriching libraries and guiding researchers to the need to pay attention to the concept of hidden costs, to identify their causes and to indicate indicators of their occurrence, and the study of this type of costs that have to do with human resources and thus their direct impact on the company's performance.



The importance of this research appears from a practical point of view in trying to raise awareness and draw the attention of administrators about the importance of hidden costs and the importance of controlling them, and that what is provided translates directly into improving the performance and thus the profitability of the company.Thus, drawing the attention of managers to the most important resource in the company is the human resource, paying attention to them, encouraging them and creating the right atmosphere for them to affect the competitiveness of the company's production outputs and then its profitability.

**The Objective of the research:** This study aims to identify the concept of hidden costs and ways to control them, and to indicate the reasons behind their occurrence in companies. As well as how it can be calculated by recognizing its indicators and thus drawing the attention of companies to the existence of hidden costs in order to work on controlling it to achieve its planned goals.

**Research hypotheses:** The study is based on a basic premise that there is a lack of awareness and understanding of hidden costs and analysis of the cost of operations in general. Thus, to what extent can hide costs be controlled. The following sub-hypotheses are derived from this main hypothesis:

1. There is a statistically significant effect of the presence of indicators through which it is possible to identify hidden costs in industrial companies.

2. There is a statistically significant effect for the reasons behind generating hidden costs in industrial companies.

3. There is a statistically significant effect of the means and mechanisms set by industrial companies to control their hidden costs.

### 2. Theoretical framework and Literature review

### 2.1. The concept of hidden costs

Every organization uses many sources of energy, one of the most important of which is human energy. Those human resources are among the most important resources, as they can be reduced by using them efficiently and effectively in the performance of the production or service activity (Fawzia, 2016). For Richman (2015) the core of every business function is based on an organization's greatest asset: its human resources, which boasts great responsibility for the success or failure of an organization, which can generate fortunes or revenue through the use of its intellectual and physical skills. So it should the calculation of these costs is essential for any organization in order to achieve dimensional balance, both financial and human, Dehbi, (2019); by rationalizing the process of using the available resources necessary for its activity.

Following on from his book Enriching human work (1973) and his report to the Collège de France (1977); H. Savall in 1979, starting from an analysis of weaknesses in general and analytical accounting, proposed a global differential method of economic calculation of organizational change, perfected, tested and supplemented since then. H. Savall, is among the great authors of the theory of hidden costs, he is the founder and also president of ISEOR (Institute of Socio-economics of Businesses and Organizations), his team carried out a research which concluded the existence of an accumulation of dysfunctions every moment in time within the company. According to Savall (1995), a cost is hidden when it does not appear explicitly in company information systems such as budgets, general ledger, and cost accounting. There are many definitions related to hidden costs, For the author Savall (1995), the hidden cost, is an invisible cost, that the presence of these costs reveals the existence of dysfunctions and anomalies in the organization, that comes from a human dysfunction, namely absenteeism, turnover, quality defect etc. So the hidden cost is a cost the company incurs due to malfunctions or poor performance.

Define also by Peretti in the human resources dictionary (2015) as those costs related to corrections and adjustments to imbalances, and they do not appear and have no meaning in the enterprise information system, and these adjustments consume and use additional resources to reach the strategic objectives of the institution.

Bin GharsAllah, (2017) define as "Costs that are not recorded in the account, but their impact is clear, such as the cost of training while working in the chain production, as the new worker may perform his work slowly, disrupting to his colleagues in the same production chain, thus reducing production in some units, which makes the unit cost rise".

The issue of hidden costs is a major issue and essential to the performance of the organization because they affect the bottom line. In this regard, hidden costs are characterized by the complexity and difficulty of estimating and measuring them through accounting methods, Elktiril, (2020). Therefore, knowing how to calculate and determine costs is an essential phase for the organization and tracking is very important because they have a direct impact on the performance of accompanying and is a source of its improvement.





The literature highlights a number of studies on hidden costs and company performance, Elktiri, (2020); (Savall and Zardet, 1992) the most important of these is the examination and development of the hidden cost performance method by Professor Henri Savall.

### 2.2. Reasons for the emergence of hidden costs

There are five reasons that led to the emergence of hidden costs, which are working conditions, work organization, communication, time management, training, and from here it is clear how these factors led to the emergence of hidden costs (Kahina, 2015; Atros, 2013; Abdel Fattah, 2007; Masoud, 2012; Tayseer, 2008) cited by (Darwish, & Belmadan, 201<sup>A</sup>).

1- Working conditions: The importance of work in a person's life necessitates contact with many influences in the workplace, as the worker is affected by everything that surrounds him in his work, and the failure to provide suitable conditions for work leads to the emergence of hidden costs, which negatively affects the overall performance of the institution. Among the reasons that lead to hidden costs are: poor lighting, insufficient temperature availability, noise, work pressures and job dissatisfaction.

2- Organization of work: The organization of work is considered one of the direct causes for the emergence of hidden costs, so that whenever the organization of work is characterized by flexibility, the positive impact on its performance, while bad organization leads to a mismatch between an individual's capabilities and the role required of him to play, as his capabilities and desires may be greater than the requirements of his work. That is, the latter does not serve his ambitions, and thus he feels bored and dissatisfied with him, and it may be the opposite.

3- Poor communication: Ineffective communication contributes to the lack of optimal utilization of information, which appears to affect the quality of information, and this leads to the emergence of hidden costs. Perhaps the most prominent obstacles to achieving good and effective communication are: Organizational obstacles, humanitarian obstacles, language obstacles, specialization obstacles, size of the institution and its geographical location, obstacles related to the abundance of information or its lack of what is required, obstacles related to the absence of feedback, and obstacles specific to the environment.

4- Poor time management: Time is one of the factors on which the success or failure of institutions as well as individuals depends. Therefore, it is necessary to work on planning and recording time, or the use of criteria that help to make good use of it. However, there is wasted time during formal work that adversely affects the course of the production process.

### 5- Lack of training:

The main objective of carrying out the training process is to improve the performance of employees and develop their skills and abilities to perform the tasks assigned to them, to ensure the best possible return. However, there is a set of obstacles that can affect the lack of a clear and long-term vision, so that the training process is exposed to many problems and obstacles that lead to its failure, including obstacles related to management, and others related to the trainees.

Hidden costs, therefore, see their genesis in organizational dysfunctions often resulting from human behavior. All these disruptions lead to the consumption of financial or human resources. (Iacob et al., 2007). Therefore, it is very important to identify these dysfunctions, reduce them, record them and estimate their costs, because they constitute a source of improvement in the institution. (Mahdi, 2010) These in turn generate indicators of malfunctions that will need to be regulated.

### 2.3. Components and Indicators of hidden costs

The poor operation that the institution suffers from when using its resources will result in most of the time hidden costs that affect its economic performance, as these costs appear in the following elements that explain the existence of the wrong operation, namely: (Kinani, 2020)

Additional wages: (wages paid to workers without work due to justified absence)

Additional time or time allotted for modification and correction,

Additional consumption of energy and raw materials ... etc.,

Non-production: disruption due to stock outages or machine malfunctions

Non-creation of strategic potential: latent performance delayed due to malfunction.

Risks: non-forecasting or taking into account current or future risks.

Al-Madhoun (2021) indicated that the first three components, in the form of excessive loads (overloads), combinations constitute actual costs included in the various calculations of the actual burdens borne by the institution and that has a certain effect on its outcome and that the institution can avoid these burdens at least





partially if it is able to reduce the number of imbalances in it. The corporation will bear lower wages and compensation if it is able to reduce the percentage of absenteeism in it, it will obtain more sound production if it does not allocate more time to correct the deficiencies and defects in the products, and it will consume fewer materials, energy and purchases if it is not forced to deal with a greater number of imbalances, and until their effect is inevitable on The result of the year under study, that is, it directly affects the table of accounts for the results of the session.

The fourth and fifth in the form of opportunity costs (not produced), which can be called unrealized outputs, constitute hidden burdens that do not appear in the institution's accounts, as they are unfinished and unsold products. Accordingly, they are hypothetical costs or an opportunity cost that affects the various output accounts (this is certainly in relation to non-production, given that the credit balance of the output accounts would have been greater) and then on the result of the current cycle and the results of the next cycles, but indirectly.And the last relates to the risks incurred by the company.

These hidden costs are presented by the following indicators: (Masoud, Boubyoun, 201<sup>9</sup>)

1- Absenteeism: it is among the most important indicators, but it can be said that it is the main cause of dysfunction. Absenteeism is defined as: "The period during which the employee is not present to perform his work, while he must be present."

Y- work accidents: It is any accident that occurs during the course of the work, and that leads to physical or mental harm and includes severe injuries, and accidents in this way can be recognized medically. Work accidents are considered an indicator of hidden costs and no less important indicator of absenteeism.

3- Turn over: It expresses the change in the number of individuals working in the organization during a certain period of time, and this is for several reasons: resignation, transfer, promotion, disability, dismissal and death, and it also includes workers who are authorized for long periods and those affected by chronic work accidents.

4- Non-quality: There are several definitions in defining the concept of quality, and non-quality is the opposite of quality and can be defined as the lack of product performance over the customer's requirements. 5- The under-productivity: Productivity is a criterion for measuring the efficiency of the institution in using its resources and is expressed in the ratio between outputs and inputs, and productivity is defined as the relationship between the resources used in the production process (to produce a good or service) and the outcome of that process.

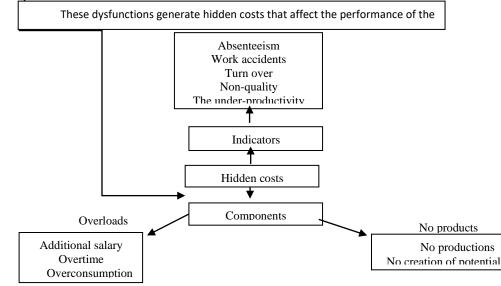


Figure 1: the different components and indicators of hidden costs

Source (Savall & Zardet, 2005, p.132)

#### 2.4. Measure hidden costs

Reliance on accounting information systems has an important role in evaluating and improving the performance of the institution, especially on hidden costs, which increases the ability of the system to achieve the required level of performance, accordingly, researcher Henri SAVALL suggested, within the framework of socio-economic analysis, finding an appropriate way to assess this type of costs and try to control them, according to three metrics represented in the social, organizational, and financial measure. It is the application of the three measures to the five indicators of hidden costs.



# العراقية

### Using the SOF method to evaluate hidden costsdy on A Sample of

1- Social measure: It depends on conducting interviews with workers and supervisors, analyzing documents that include statistics on absenteeism, work accidents, work turnover....etc. In addition to relying on direct observation of some phenomena that occur at work. (Almadhoun, 2021).

Among the most important objectives of the social measure are: (Munira, 2010)

- Ensure that there are operating losses and put them on the list.

- Finding the reasons for the operating losses.

2- Organizational measure: It is considered as a basis for conducting a comprehensive and sequential inventory of operating losses and their various effects over time. It also allows sorting the intertwined and complex methods of treatment and judging their compatibility with the economic goal of the institution. And it is a mandatory stage because it is the main source of information that will be relied upon in the financial measure. (Fawzia, 2016)The objectives of the Organizational measure are: (Abdul-Jabbar, 2018)

- Mode appropriate methods of handling operating losses.

- Conducting an inventory of the economic effects of treatment methods: The size of the time, the amount of excess depreciation, loss of production.

3- Financial measure: In order to make a financial assessment of the amount of time and materials consumed during the process of handling operating losses, reference is made to the elements of costs and prices recorded within the accounting documents of the institution. As for the elements that could not be evaluated financially, they can be retained as qualitative or quantitative data, or both, complementary to the financial information. (Almadhoun, 2021)The objectives of the financial measure are: (Munira, 2010)

- Search about unit costs and prices for processing components.

- Evaluation of the economic effects of methods of handling operating losses.

The objectives of each module are presented in the table below:

	Table 1 The SOF modules					
Module	Objective					
Social	-Detect elementary malfunctions (inventory of malfunctions).					
Look for relationships and causal links between dysfunctions by mean						
-[Structures $\times$ Behavior] $\rightarrow$ Dysfunctions						
Organizational	- Highlight the modes of regulation of malfunctions:					
	Study of effects.					
	- Draw up an inventory of the economic impacts of the regulations:					
Quantities of time, consumption, "loss" of production.						
Financial - Research prices and unit costs of the regulation components.						
	- Evaluate the economic impact of regulations in monetary units.					

Source: Savall & Zardet, "Controlling hidden costs and performance", 2015p.135.

Hidden costs, therefore, see their genesis in organizational dysfunctions often resulting from human behavior. All these disruptions lead to the consumption of financial or human resources. Therefore, it is very important to identify these dysfunctions, reduce them, record them and estimate their costs, because they constitute a source of improvement in the institution.(Mahdi, 2010) These in turn generate indicators of malfunctions that will need to be regulated.

### 3. Research Methodology:

The deductive method was used to build the theoretical framework for the research through systematic analysis and scientific interpretation by reviewing the studies that dealt with the variables of the study and related topics.

As for the practical aspect the study relied on the inductive approach when conducting the field study by preparing a questionnaire that includes a number of questions covering the study variables, and 50 forms were distributed to accountants, financial managers and human resources managers for a sample of industrial companies operating in the city of Sulaymaniyah. The returned and valid forms amounted to 47 forms or 94% of the forms distributed.

The five-level Likert scale was chosen to determine the available response alternatives, as shown below: Strongly Agree = 5, Agree = 4, Empath = 3, Disagree = 2, Strongly Disagree = 1Statistical tools used: In order to test the hypotheses and to analyze the collected data, many statistical methods were used (Cronbach's



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Alpha Coefficient for the validity and reliability of the questionnaire, frequencies and percentages, arithmetic

mean and standard deviations, T-test in addition to regression tests and Pearson correlation coefficient) Through which the variables are described and the relationship between them is determined, using the SPSS statistical analysis program.

### 4. Results and analysis

### First: The validity and reliability of the questionnaire:

Conducting a reliability test for the questionnaire questions consisting of all data using the "Cronbach's Alpha Coefficient" and the scale is good and appropriate if the value of Cronbach's Alpha exceeds (60%). It was found as shown in Table (2) for each axis separately and the scale as a whole.

Axles	N of Items	Cronbach's Alpha
The first axis	15	0.901
The second axis	5	0.854
The third axis	15	0.761
All questionnaire phrases	35	0.890

### Table (2) stability coefficient (Cronbach's Alpha method)

Table (2) shows that the value of Cronbach's alpha coefficient for all the questionnaire expressions is (0.890), and this value expresses a high degree of stability, which reflects the stability of the respondents' answers. This in turn indicates the high ability of the study administration to measure what it was designed for. **Second: Statistical description of the study population:** 

In this element, the results related to the first section of the questionnaire will be presented and analyzed to show the demographic characteristics of educational qualification, the job title (administrative) and years of experience.

### **1- Educational qualification**

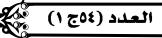
Table (3) Level o	f study	
Level of study	Frequency	Percentage %
Higher Diploma	5	10.6
Bachelor's	36	76.6
Master's	6	12.8
PhD	0	0
Total	47	100.0

Table (3) show that 76.6% of the population studied f Bachelor's, 12.8% for Master's and10.6% for Higher Diploma. It is noteworthy that most of the study population has good academic qualifications, which means their ability to understand the paragraphs of the questionnaire and to answer them effectively.

### 2- The job title (administrative)

Table (4) shows that 46.8 % of the study population is an Accountant, 21.3 % is an Accounts Officer, while 17.0 % is an HR Officer, 10.6 % is another Account manager and a 4.3 % is a Financial Manager. We can say that the diversity of job titles of the respondents leads to a diversity of views on the subject under study.

Table (4) the job title	Table (4) the job title (administrative)					
The job title	Frequency	Percentage %				
Accounts Officer	10	21.3				
Accountant	22	46.8				
Account manager	5	10.6				
Financial Manager	2	4.3				
HR Officer	8	17.0				



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Total 47 100.0

### 3- years of experience

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Table (5) years of experience						
Years of experience	Frequency	Percentage %				
less than 5 years	8	17.0				
Between 5-10 years	16	34.0				
Between 10-15 years	15	31.9				
15 years and over	8	17.0				
Total	47	100.0				

The above table shows that 34% of the study community members had years of experience between 5-10 years, with a number of 16 individuals, and in the second place came years of experience between 10-15 years, where their number reached 15 with a percentage of 9. 31%; While the category 15 years and over and less than 5 years are 17% for each of them. Given these results, we find that 83% of the study population members are those with more than 5 years of work experience. This indicates the appropriate level of expertise, which makes it possible to distinguish the answers to the questionnaire by relative accuracy, this, in turn, leads to the validity and integrity of the results to be achieved.

### Third: Analyzing the results and testing the hypotheses of the study

The first axis: There are indicators to identify hidden costs in industrial companies

Table 6 shows the mean, standard deviation and T-test for the indicators to identify hidden costs in industrial companies

	Phrases	Mean	Std.	T test	Sig.
			Deviation		
	There are cases of employee absences at work that	t lead to th	ne emergence	of hidden co	osts
1-	The reasons are personal - family responsibility, other obligations lead to employee absences	3.96	0.908	3.454	0.001
2-	Reasons for the style of supervision and leadership, it leads to employee absences	3.45	1.080	-0.338	0.737
3-	Reasons for low wages and lack of motivation it leads to employee absences	3.85	1.042	2.309	0.025
	Average	3.75	0.740	2.331	0.024
	There are frequent accidents at work that lead	l to the en	nergence of hi	dden costs	
4-	Lack of training and inability to keep up with technolog main cause of accidents at work that occur to the employee during his working hours	3.87	1.115	2.288	0.027
5-	Lack of regular maintenance is the main cause of accidents at work that occur to the employee during his hours	3.77	1.005	1.815	0.076
6-	Unsafe working conditions such as lack of protection and other means is the main cause of accidents at work that occur to the employee during his working hours	3.62	1.226	0.655	0.516
	Average	3.75	0.939	1.838	0.072
	There is a policy of employee turnover that lea	ds to the e	mergence of l	hidden costs	
7-	Work pressures and lack of motivation is the cause of employee turnover.	3.60	0.925	0.710	0.481
8-	Poor pay and supervision style is the reason for employee turnover.	3.74	1.093	1.535	0.132
9-	The instability of the job position and the formula of pre-employment contracts is the cause of employee turnover.	3.64	1.051	0.902	0.372
	Average	3.66	0.835	1.309	0.197
	There are products and services that are not	of high $\overline{q}$	uality for the o	company	

Table (6) the indicators of hidden costs

	£	Using the SOF method to evaluate hidde	n costsd	y on A Sam	ple of	
العرامية	10-	Re-repair it, and this requires other costs to reproduce it	3.81	0.924	2.289	0.027
	11-	Selling products as is or at a lower price	3.50	0.997	073	0.942
	12-	Throwing it and this may cause other expenses (transportation and throwing expenses)	3.47	1.167	-1.938	0.059
		Average	3.59	0.742	-0.098	0.922
		There is a lack of productivity and lack of access to the planned production level due to lack of optimal exploitation of productive resources				
	13-	Lack of experience and skill as required (lack of field training)	4.11	1.005	4.136	0.000
	14-	Lack of maintenance and monitoring of machines, and this leads to the breakdown of some machines	3.83	1.028	2.199	0.033
	15-	Stopping production for a certain period due to the breakdown of some machines, especially old ones	3.64	1.150	0.824	0.414
		Average	3.86	0.900	2.728	0.009
		Total	3.72	0.681	2.034	0.048

Through table (6), we conclude that the axis of determining the indicators of hidden costs consists of five main paragraphs, which include (absence, accidents at work, work turnover policy, lack of quality and lack of productivity), and all the paragraphs branch into a set of phrases.

First, with regard to the absence paragraph, it came in the general form at the level of the absence paragraph, it came with an arithmetic mean (3.75) and a standard deviation (0.740), and the calculated T value (2.331) is greater than its tabular value (0.024), this indicates that the absence index is one of the main indicators of imbalances functional.

The work accident's indicator is also one of the indicators that cause additional costs, it came in general with an arithmetic mean (3.75) and a standard deviation (0.939), and all the paragraphs came with an arithmetic mean of more than 3.5 degrees, which is the limit of the test level with which the arithmetic means are compared for the phrases, this indicates Most of the paragraphs answered by the respondents are acceptable and agreeable. And the calculated T-test value (1.838), which is much greater than its tabular value and the probability value (0.072), is a statistically significant value at the confidence level ( $\alpha \le 0.05$ ). Thus, all paragraphs of work turnover, lack of quality and lack of productivity came with an arithmetic average of more than 3.5 degrees, which is the limit of the test level with which the arithmetic circles are compared for the expressions. The hidden costs, as well as for the calculated T-test value were (2.728), which are greater than their tabulated value, and the probability value (0.009) is a statistically significant value at the confidence level ( $\alpha \le 0.05$ ).

Finally, with regard to the indicator's axis for determining hidden costs, it seems to us that the first hypothesis is accepted as follows: There is statistically significant effect for the presence of indicators through which it can be determined hidden costs in industrial companies, because the value of the T-test (2.034) is higher than its tabular value, and the probability value (0.048) is a statistically significant value at the confidence level ( $\alpha \le 0.05$ ); The overall average for all items was (3.72) compared to the approved test level, which is (3.5). The second axis: There are reasons that generate hidden costs in industrial companies.

### The second axis: There are reasons that generate hidden costs in industrial companies

Table 7 shows the mean, standard deviation and T-test for the reasons that generate hidden costs in industrial companies.

Table (7) the reasons that generate hidden costs in industrial companies

1-			Std. Deviation	T test	Sig.
	There are no suitable working conditions for the employee, such as heat, cleanliness, noise, lighting, moral relations with workers and the administrative ladder.	3.81	0.970	2.181	0.034
	Work is not organized between individuals to define responsibilities and activities.	3.79	0.954	2.064	0.045
3- ]	There are no appropriate means of communicating information and instructions between the different administrative levels.	3.17	1.090	-2.074	0.044
	Time is not managed optimally to complete the tasks in the specified time period so that the time cost is not calculated accurately and this leads to the emergence of hidden costs.	3.85	0.932	2.582	0.013

	Using the SOF method to evaluate hid	den co	stsdy on A Sa	ample of	
5-	There is a lack of holding training courses to improve	3.72	0.826	1.854	0.070
	the performance of employees and develop their abilities				
	and skills, which leads to the emergence of hidden costs.				
	Total	3.67	0.426	2.706	0.010

The results from the previous table that the arithmetic averages of the answers of the sample members to the hypothesis questions are mostly greater than the mean of the measurement tool (3.5). Except for paragraph (3), it concerns the appropriate means of communicating information and instructions between the different administrative levels, to which the respondents answered that they are not acceptable and whose arithmetic averages are less than the test level. It is also shown that the sum of the arithmetic averages of the questions combined amounted to (3.67) which are greater than the average of the measurement tool; it indicates that the degree agrees in responding to the paragraphs of this field.

Regarding the second hypothesis in general, it was the calculated T-test value (2.706), which is greater than its tabular value, and the probability value (0.010) is a statistically significant value at the confidence level ( $\alpha \le 0.05$ ), and this indicates that there are the reasons behind generating hidden costs all of the bad working conditions, the lack of organization of work, the defective time management and the lack of holding training courses in companies.

This is accepted the hypothesis that: There is a statistically significant effect for the reasons behind generating hidden costs in industrial companies.

# The third axis: the use of the means and mechanisms developed by industrial companies to control their hidden costs

Table 8 shows the mean, standard deviation and T-test for the means and mechanisms set by industrial companies to control their hidden costs.

Table (8) the means a	and mechanisms develo	pped by industrial	companies to control	their hidden costs

	Phrases	Mean	Std. Deviation	T test	Sig.
1-	The company is obligated to strictly respect the work and limit in the case of unjustified and repeated absences by punitive means.	2.89	1.165	626	0.535
2-	Compensating the absent worker with a multidisciplinary worker to ensure that orders are completed in the specified times and with the required specifications	2.98	1.189	123	0.903
3-	Internal transfer of some workers from workshops that is similar to the production process.	2.85	1.161	880	0.384
4-	The company's concern for providing the right atmosphere for work as a means of work and protection	3.04	1.179	.247	0.806
5-	Transporting and aiding the injured worker, providing the appropriate health environment for employees and health care in case of illness, and arranging administrative procedures	3.23	1.108	1.449	0.154
6-	Forming a specialized team to inspect the machines before they are used.	3.30	1.041	1.962	0.056
7-	The company works to reduce work turnover to motivate employees with bonuses and incentives and improve their salaries.	3.34	1.069	2.183	0.034
8	The company is working to clarify urgent and pre-planned goals such as contracts and pre-operating instructions in order to reduce worker turnover and thus to reduce the emergence of hidden costs.	3.23	.983	1.633	0.109
9-	The company is working to activate the role of quality control to avoid the recurrence of manufacturing defects in the future.	3.13	1.096	.799	0.429
10-	Preparing training and educational programs in the field of quality management in the company.	3.19	1.076	1.220	0.229
11-	Working on the need to discover defective products at the beginning of the production process in order to constantly improve the level of quality of services provided to customers.	3.06	1.309	.334	0.740
12-	Carrying out after-sales service procedures by replacing defective units with healthy ones and compensating customers for accepting products below the specified quality level.	3.04	1.285	.227	0.821
13-	The company is working to simplify production processes and	2.87	1.172	746	0.459



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	good arrangement of machines to maintain the standard production				<b>Y</b>
1.4	volume.	2.00	1 1 0 0	000	1 000
14-	Reducing the lack of productivity, The company works on improving the physical environment for work (ventilation, lighting reductionetc.), and carrying out periodic maintenance.	3.00	1.180	.000	1.000
15-	The company is working to improve work productivity in terms of increasing additional hours, dividing tasks and defining responsibilities accurately.	2.91	1.213	481	0.633
	Total	3.07	0.383	1.296	0.201

The results from the previous table found that the arithmetic averages of the answers of the sample members to the hypothesis questions are mostly less than the mean of the measurement tool (3.5), it is also clear that the sum of the arithmetic averages of the questions combined amounted to (3.07), which is less than the average of the measurement tool, and the standard deviation was (0.383), which means that no hidden cost control methods are used in industrial companies operating in Sulaymaniyah province. And it is clear through the axis that the highest paragraph in the axis according to the arithmetic average is the paragraph which reads "The Company works to reduce work turnover to motivate employees with bonuses and incentives and improve their salary". It is clear that the last paragraph in the axis according to the arithmetic average is the paragraph that reads "Internal transfer of some workers from workshops that is similar to the production process ".

For the third hypothesis, the calculated T-test value (1.296) is greater than its tabular value, and the probability value (0.201) is a value that is not statistically significant at the confidence level ( $0.05 \le \alpha$ ), and this indicates that the company's management is not working on finding means and mechanisms that industrial companies put in place to control their hidden costs. This confirms the rejection of the hypothesis, which states that: There is a statistically significant effect of the means and mechanisms developed by industrial companies to control their hidden costs.

### Conclusion

Through this study, in which we tried to understand the composition and evolution of hidden costs in industrial companies, which were the cause of the collapse and bankruptcy of many companies, and the importance of being able to structure management control likely to reduce them to increase efficiency. There are reasons for generating hidden costs in industrial companies, including the poor internal climate for work, the lack of qualification of employees due to a lack of training courses to develop their capabilities, etc...

There are indications of hidden costs in a sample of industrial companies, there are cases of employee absences for various reasons, including personal, low wages and lack of motivation, the policy of work turnover compulsory for employees, is followed which leads to lack of productivity and failure to reach the planned production level due to lack of experience, skill and periodic maintenance, and this leads to the recurrence of accidents at work. There are no mechanisms to control hidden costs (not reducing absenteeism, not reducing work turnover, and not paying attention to human resources) in the industrial companies operating in Sulaymaniyah.

Adopting the method of evaluating hidden costs through three measures Social measure, organizational measure, financial measure (SOF); this method allows collecting sufficient information about operating losses and measures to address them.

Based on the results obtained, some recommendations can be given, which are:

The necessity to work on realizing the importance of hidden costs, clarifying their concept, identifying their causes, and using the SOF scale model in evaluating hidden costs.

The necessity to pay attention to the human element in all respects and levels, which will reflect positively on improving the company's performance; As well as creating courses to teach workers to use machines to avoid work accidents.

The necessity of adopting mechanisms to control indicators of hidden costs in industrial companies through Expediting the treatment of dysfunction from the beginning; reducing employee turnover by motivating employees with rewards and incentives and improving their salary, and the necessity of arranging administrative procedures in case of illness and providing an appropriate healthy environment for employees. **References:** 

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