

Evaluation Efficiency Of The Financial Performance Of The Dairy Sector For The Jordanian Dairy Sector For The Period 2010-2020

By

Omar Baban

Department of Business Administration, Al-Turath University College, Iraq

Email: Omar.baban@turath.edu.iq

Sufian.Sami

Department of Banking and Financial Sciences, Al-Turath University College, Iraq

Email: sufian.sami@turath.edu.iq

Mahmood Ibrahim

Department of Business Administration, Al-Turath University College, Iraq

Email: mahmood.ibrahim@turath.edu.iq

Abstract

There is no doubt that there is a direct impact of the efficiency of financial performance on the operational efficiency of operating economic institutions. In addition, the regulations and rules followed in banks will play an important role in the efficiency of the agricultural and industrial sectors. This study attempted to estimate the efficiency of financial performance in the Jordanian dairy sector for the period 2010-2020 using some financial evaluation criteria. The data collection sources used in the study are depend on the data published in the annual reports. The findings revealed that the efficiency of financial performance has declined in the Jordanian dairy sector for the period 2010-2020. The findings show that all averages of financial efficiency using the standards of financial ratios were high in relation to the size of debts and profits, especially in recent years as a result of the entry of large companies into the global market and the decrease in demand for them.

Keywords: Evaluation efficiency, financial evaluation, financial efficiency, Dairy sector

1. Introduction

Financial evaluations provide an important and necessary media in providing advice to expand and develop any society to face the economic fluctuations represented by recession and financial crises (Alabdullah, Kanaan-Jebna, & Ahmed, 2022; Anthony, Behnoee, & Pamucar, 2019). Undoubtedly, the sources of funding in such capital-intensive projects is extremely important and has a direct positive impact on the cost of capital in the factory units associated with that vital sector (Syriopoulos, Tsatsaronis, & Gorila, 2020; Al-Alawi, Alkindi, Al-Shukaili, & Ahmed, 2022). In addition, working capital management enables workers in the dairy sector to be able to operate their production activities easily and has the greatest impact on the quality of the financial performance of institutions (Alabri, Almanthri, & Ahmed, 2021; Alabdullah, & Ahmed, 2020; Kamande, 2015). The financial reports issued annually by dairy-producing institutions have a major role in managing quality, disclosing profits and recognizing losses (Suryanto & Komalasari, 2019; Alabdullah, Ahmed, & Kanaan-Jebna, 2022). The dairy sector plays an important role in global food security by efficiently converting milk into different dairy ingredients and products (Kanaan-Jebna, Alabdullah,

Ahmed, & Ayyasamy, 2022; Feil, Schreiber, Haetinger, Haberkamp, Kist, Rempel, & da Silva, 2020) The process of financial evaluation of the Jordanian dairy sector is important for drawing up the upcoming economic policies and showing the extent of the impact of this important sector on the economy (Dziamulych, Moskovchuk, Vavdiuk, Kovalchuk, Kulynych, & Naumenko, 2021). There are many indicators that can be applied in measuring the efficiency of the financial performance of the dairy sector, including the liquidity ratio and the debt ratio, as well as conducting correlation analysis to know the nature of the relationship between the different ratios and estimating the economic sustainability of dairy farms (Alsarmi, & Ahemed, 2022; Zorn, Esteves, Baur, & Lips, 2018).

2. Research Problem

The financial component is a reason for the success of any institution, and the preservation and proper use of money Necessary and important to maintain its strength, as the financial performance in the institution contributes positively to the assessment of the financial situation correctly in the field of planning, control and decision-making by individuals and parties within the institution And outside it, and in order for financial information to achieve the desired benefits, it should be accurate and appropriate. Based on that goal, economic institutions in the Arab world need to conduct annual evaluations, and among those sectors is the Jordanian dairy sector.

3. Research Objective

The research aims to evaluate the efficiency of the financial performance of the Jordanian dairy sector for the period 2010-2020 from multiple angles and in a way that serves the objectives of information users who have financial interests in the sector, with the aim of identifying strengths and weaknesses and then benefiting from the information provided by the financial analysis to them in rationalizing their decisions finance related to the project.

4. Research Hypothesis

There is no relationship between the financial ratios and the level of performance efficiency.

The study aims to estimate the efficiency of the financial performance of the Jordanian dairy sector for the period 2010-2020 from multiple angles and in a way that serves the objectives of information users who have financial interests in the sector, with the aim of identifying weaknesses and strengths and then benefiting from the information provided by the financial analysis to them in rationalizing their decisions finance related to the project.

There is a close relationship between the financial ratios and the level of efficiency.

1. Evaluating the efficiency of financial performance is of great importance in the Jordanian dairy sector.
2. The performance appraisal process reflects the extent to which the organization has succeeded in achieving its goals.

5. Research Importance

1. Applying financial evaluation indicators to the Jordanian dairy sector.
2. Studying the financial position of the institution and highlighting the strengths and weaknesses.
3. Highlighting the main role of financial analysis tools in assessing the efficiency of the dairy sector.

6. Research Methodology

This study relies on the methodology of financial ratios that conform to the theoretical aspect. As for the practical side, it depends on the data of the annual reports and the financial ratios related to the concept of efficient financial performance and the ratios related to it. This study dealt with assessing the efficiency of the financial performance of the Jordanian dairy sector for the period 2010-2020.

7. Literature Review

Literature review this study will highlight previous studies in the past five years. The majority of studies found that the financial performance efficiency in some economic institutions is very weak or unstable for example Zorn, Estevez, Baur, & Lips, (2018). The financial position of enterprises affects the participation of CSR. And companies with better financial efficiency have higher efficiency in CSR activities, which ultimately leads to improved decision-making processes related to key issues. According to the study of Fijałkowska, Zyznarska- Dworzak & Garszka, (2018) achieving the financial performance of the company for a certain period leads to the achievement of capital adequacy, liquidity, efficiency, financial leverage and profitability. It is therefore important to understand technical and fundamental analysis to understand the financial behavior of a company through financial management, economics and accounting. Another study done by Widyastuti, (2019) Estimating the ratio of activity, liquidity, financial leverage and the efficiency of the financial performance of some of the food and beverage companies in Indonesia. The results showed that the liquidity ratio that is measured by CHR and QAR has a positive and significant impact on the efficiency of financial performance as calculated by NPM and ROA, and that financial performance has a significant positive impact on the company's economic value. Whereas, the activities measured by other methods did not significantly affect the financial performance and value of the company.

Gołaś., (2020) The study explained Impact of working capital management on business profitability: Evidence from the Polish dairy industry. The research paper aimed to measure the causal relationship between working capital management (WCM) and return on assets (ROA) in dairy processing companies for the period from 2008 to 2017 in Poland and it was found that some factors have a negative impact on return on assets, while the extension of DSO and DPO was Has a positive impact on the return on assets in the Polish dairy sector. Čechura, & Žáková Kroupová, (2021). Systematic failures in the efficiency of the use of inputs by measuring the technical competence of the European dairy industry. The aim of the study is to estimate the efficiency through the use of new developments in the measurement of productivity methods, efficiency analysis, and the estimation of the efficiency of the use of inputs in the European Union countries. And was able to achieve high efficiency at that time. On the other hand, it concluded that there is a great waste of resources from a technical point of view, and the reason for the general technical inefficiency (OTE) is mainly due to irregular

failures and short-term shocks. Qian, & Olsen, (2021) the research paper targeted many agricultural cooperatives and highlighted the study of the efficiency of the financial component. In the New Zealand dairy sector, the results showed the trade-offs involved in financial decisions, and the study showed that the achieved financial efficiency mitigates the risks and economic fluctuations that occur in institutions. Nurwita & Rodhiah, (2022) Profitability analysis and liquidity ratio measurement to show the financial performance of ULTRAJAYA TBK. The study aimed to measure the financial efficiency of PT Ulta Jaya Milk Industry & Trading Company Tbk from 2011 to 2020 using the financial ratio. The study used a quantitative descriptive approach in measuring and analyzing financial ratios. The results of the research revealed that the liquidity ratio from 2011-2020 is in good condition because the average value is 333% more than the manufacturing industry standard of 200%. Judging by the quick ratio, the company is struggling because the average value is 13% below the manufacturing benchmark of 30%. Rani, Banu , Kumar, & Yogalakshmi, (2022). The research aims to estimate the efficiency of the dairy industry along with the objective of assessing the impact of investments, imports and exports. Help quarterly data from 2006 to 2017. Study results show that import and export investments affect the productivity of the dairy industry in the Philippines. The study recommended that in order to be able to improve efficiency in the enterprises involved in the dairy industry, the government should provide more funding and assistance to dairy farmers.

Results and Discussion

8. Total Assets

The results of Table (1) indicate that the percentage of fixed assets in the total assets was characterized by fluctuation during the study period, between a minimum of (3464289) in 2015 and a maximum of (5648850) in 2020. (3486327) in 2010 and a maximum of (8404921) in 2020 As for the percentage of development in total assets, it ranged between a minimum of (8823056) in 2010 and a maximum of (21751841) in 2020.

Table (1) Total Assets

Years	Fixed assets	current assets	Total Assets
2010	3951530	3486327	8823056
2011	4080526	3669788	9200373
2012	4201101	4375378	10100665
2013	3778593	5418318	10827133
2014	3703947	6355875	11652263
2015	3464289	6292763	11601753
2016	3619154	6733726	13385478
2017	5305610	7230386	15025698
2018	4804472	7872310	16227798
2019	4885102	8330452	19168017
2020	5648850	8404921	21751841
Min	3464289	3486327	8823056
Max	5648850	8404921	21751841

Source: Annual Financial Reports

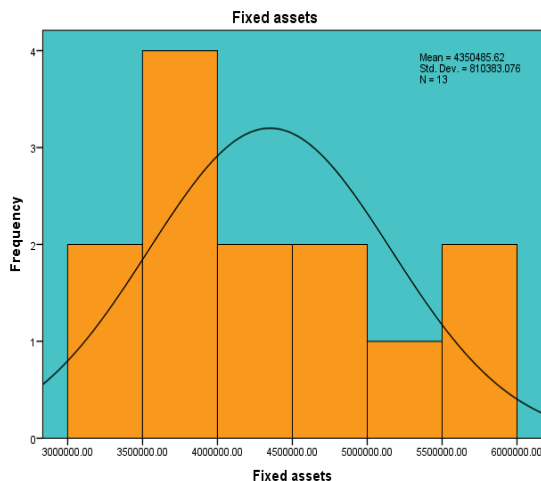


Figure (1) Fixed Assets

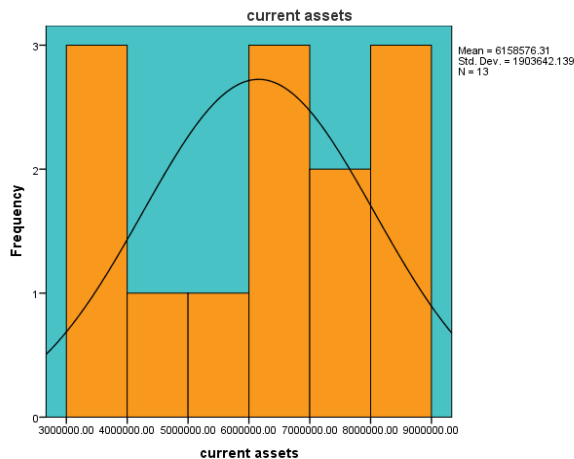


Figure (2) Current Assets

9. Borrowing Ratio

This ratio shows the sources from which the capital of the economic unit is composed. It measures the relationship between loans and total assets. Among these ratios is the ratio of borrowing to total assets. This ratio shows the extent to which loans can cover total liabilities. The lower this ratio, the better indicator of the economic unit. It is calculated according to the following mathematical formula:

$$\text{Borrowing ratio} = \frac{\text{total loans (short and long term)}}{(\text{total fixed and variable assets})} * 100$$

By observing the results of Table No. (2), it becomes clear to us that the borrowing rate was fluctuating between a minimum of (1.1 %) in 2014 and a maximum of (25%) in 2010, which is generally considered high, as the lower the ratio, this gives an indication that Dairy sector companies can raise their revenues by distributing their capital through loans to their activities in order to achieve efficient capital.

Table (2) Ratio of loans to total liabilities

Years	Total loans	Total Assets	Borrowing ratio
2010	2173277	8823056	25.8
2011	915990	9200373	10.9
2012	454255	10100665	5.77
2013	300000	10827133	4.1
2014	75000	11652263	1.1
2015	125000	11601753	1.9
2016	240120	13385478	3.7
2017	200000	15025698	3.6
2018	144000	16227798	3.2
2019	95000	19168017	2.5
2020	275000	21751841	7.8
Min	75000	8823056	1.11
Max	2173277	21751841	25.8

Source: Annual Financial Reports

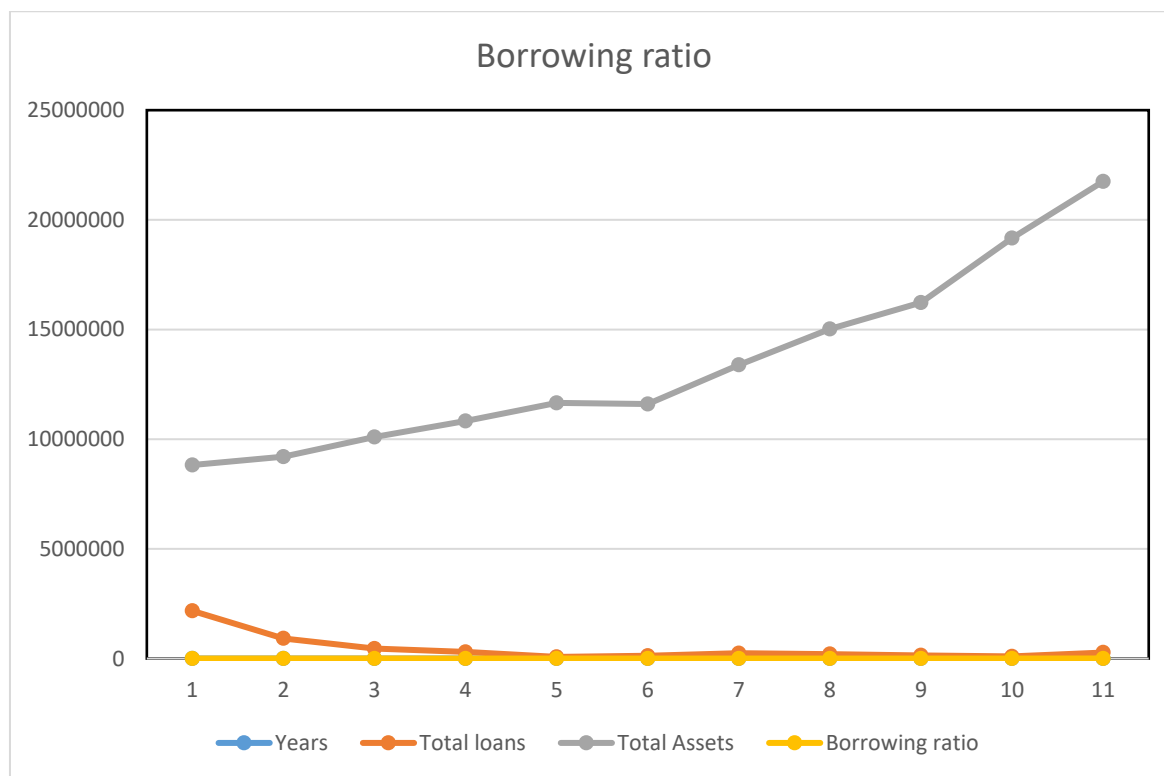


Figure: (3) Borrowing ratio

10. Liquidity Ratio

It is the ratio that measures the ability of the economic unit to face its short-term obligations. The liquidity ratio indicates the company's ability to face current liabilities, which are represented in creditors, allocations, and a group of short-term financing elements. By observing the results of Table No. (3), it becomes clear to us that the trading ratio during the study period has It was characterized by fluctuation between a minimum of (1.1) in 2010 and a maximum of (2.96) in 2015, and all ratios in total were greater than one, and this means that current assets cover current liabilities and the liquidity ratio is greater than one.

Table (3) Liquidity Ratio

Years	Trading assets	Traded opponents	circulation ratio
2010	8404921	7141735	1.18
2011	8330452	5194116	1.60
2012	7872310	4413452	1.78
2013	7230386	3883062	1.86
2014	6733726	3346877	2.01
2015	6292763	2123327	2.96
2016	6355875	2813749	2.26
2017	5418318	2534765	2.14
2018	4375378	2315395	1.89
2019	3669788	1859135	1.97
2020	3486327	1336696	2.61
Min	3486327	1336696	1.18
Max	8404921	7141735	2.96

Source: Annual Financial Reports

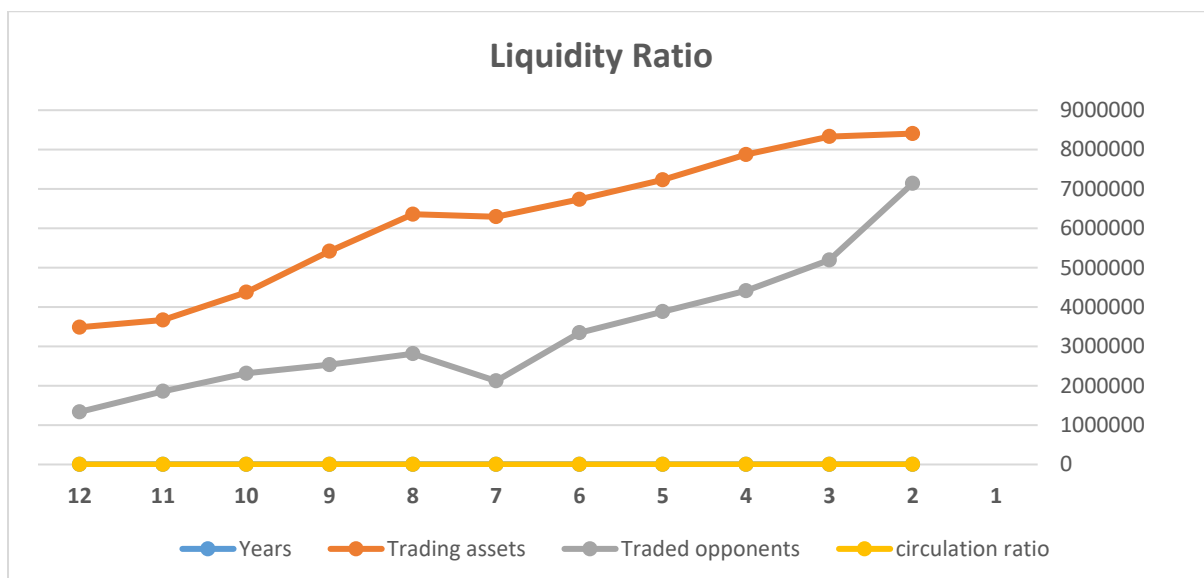


Figure: (4) Liquidity Ratio

11: Quick Turnover Ratio

This ratio measures the degree of liquidity available now to meet short-term obligations. It can be calculated through the following mathematical formula:

$$\text{Quick turnover ratio} = (\text{current assets} - \text{commodity inventory}) / \text{current liabilities}$$

By observing the results of Table No. (3), it is clear to us that the rapid liquidity ratio was characterized by fluctuation during the study period between a minimum of (1.01) in 2010 and a maximum of (2.32) in 2015, and this means that the ratio in general was greater than the correct one, and this It indicates that current liquid assets cover current liabilities according to the standard standard (1:1), where the standard assumes that at least one dinar of quick assets must be available without resorting to inventory to cover every dinar of current liabilities without being affected by the normal and operational activities of the establishment by that payment.

Table (4) Quick Turnover Ratio

Years	Commodity stock	circulation ratio
2010	1136846	1.01
2011	1040438	1.40
2012	1464373	1.45
2013	1659866	1.43
2014	1411738	1.59
2015	1354116	2.32
2016	1901486	1.58
2017	1672941	1.47
2018	1639636	1.18
2019	1414574	1.21
2020	1169409	1.73
Min	1040438	1.01
Max	1901486	2.32

Source: Annual Financial Reports

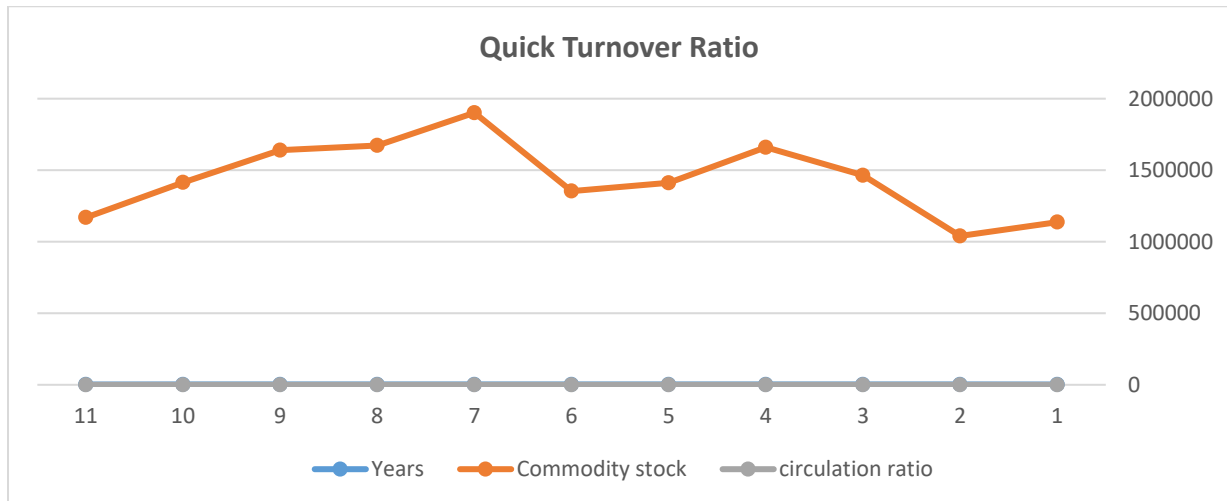


Figure: (5) Quick Turnover Ratio

12: Indebtedness Ratio

It is the ratio through which the financial analyst studies the contribution of liabilities to financing the acquisition of assets and can be calculated according to the following mathematical formula:

$$\text{Debt ratio} = \text{total liabilities} / \text{total assets}$$

Where the sum of liabilities includes all types of short and long-term liabilities, and assets also include fixed assets. This ratio is considered one of the indicators of financial leverage in the establishments, through which the percentage of assets financed by loans is indicated. By observing the results of Table No. (5) it becomes clear to us that the indebtedness ratio was Low for the year 2015 at a rate of (0.18), which is considered fairly low, but this percentage soon began to rise for subsequent years until it reached its highest level in 2018-2020 at a rate of (1) which is a not good indicator. This means that the ability of companies to pay debts in the long term is weak, and this in turn makes New lenders are reluctant to grant loans to these facilities.

Table (5) indebtedness ratio

Years	Total assets	Total liabilities	indebtedness ratio
2010	10553657	5648850	0.49
2011	8192165	4885102	0.43
2012	5365799	4804472	0.33
2013	4091007	5305610	0.27
2014	3411035	3619154	0.25
2015	2123327	3464289	0.18
2016	2813749	3703947	0.24
2017	2534765	3778593	0.23
2018	10100665	4201101	1.00
2019	9200373	4080526	1.00
2020	8823056	3951530	1.00
Min	8823056	2123327	0.18
Max	21751841	10553657	1.00

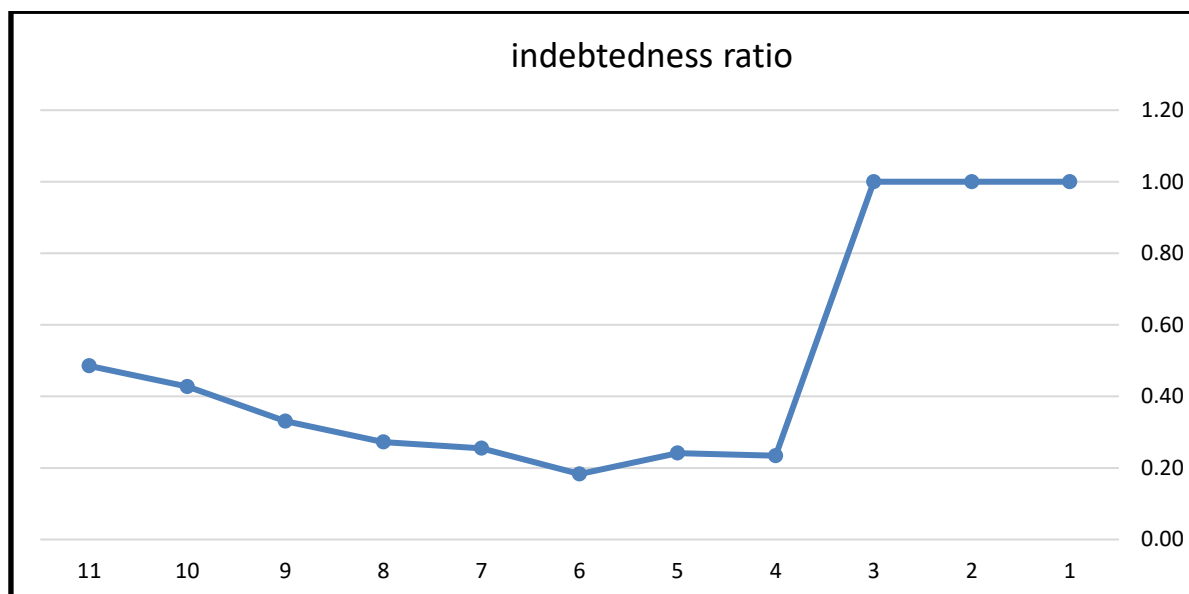


Figure: (6) *indebtedness ratio*

13: Implication

The findings highlighted in this research lead to two implications, theoretical and practical.

Theoretical perspective

First, the findings of this research enrich concepts related to financial analysis. Moreover, this research was contributed to informative the levels of financial efficiency in the Jordanian dairy sector to avoid wasting monetary system. Subsequently, this research-contributes to both responsible individuals and academic. The findings may have several essential implications for economic policy.

Practical perspective

The importance of improving financial efficiency in dairy companies will be considered a guide for employees in that sector. Institutions working to withdraw loans will know their limitation in practicing their business activities, which should not go beyond the limits of logic and influence the financial efficiency of that sector negatively and cause a loss of liquidity. Thus, regulators must make an attempt to encourage operating enterprises to compete with each other to achieve optimal efficiency-levels.

14. Recommendation and Limitations

The current research focused on assessing the efficiency of the financial performance of the Jordanian dairy sector for the period 2010-2020. This research recommends that subsequent studies can take into account the use of other criteria for financial evaluation, and comparison with the dairy sector in developed countries to know the size of the production gap. this study suggested test the same ratios but another method such as risk analysis and the adoption of statistical methods in addition to financial.

The study was limited to giving another perspective on the financial analysis criteria for the dairy sector in Jordan for the period 2010-2020.

15: Conclusions

This research introduces the results of evaluating the efficiency of the financial performance of the Jordanian dairy sector, using some financial criteria for the period 2010-2020. The research focuses on the efficiency of the sector through the criterion of borrowing, the profit criterion, the indebtedness ratio, the volume of fixed and current assets, and the extent of their contribution to the production process, because they are among the important criteria in economic institutions. These time periods allowed us to estimate the efficiency of the Jordanian dairy sector to achieve the main objective of the efficiency analysis which is to channel the inputs correctly. In general, the findings revealed a decline in some financial ratios in recent years as a result of the entry of large institutions into the global market, such as Almarai Company(KSA). The results show that the indebtedness ratio was characterized by fluctuation during the study period by 0.18 and a maximum of 1. It is generally high and requires the management of operating institutions to reduce it to achieve better efficiency. Likewise, the rest of the ratios began to fluctuate between their upper and lower limits.

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