# Sentiment Analysis of Qardh Hasan Scheme

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This study aims to assess sentiments related to qardh hasan in scientific publications published in the period 2011 to 2023. The research method used is sentiment analysis by utilizing SentiStrength software, which serves to categorize sentiment into three levels, namely positive, neutral, and negative. The data used comes from scientific publications indexed in the Scopus database. The findings showed the dominance of neutral sentiment in scientific publications at 43%, followed by positive sentiment at 33%, and negative sentiment at 24%. In addition, the study revealed periodic fluctuations in the number of sentiments related to qardh hasan in scholarly publications, with 2023 showing the highest number of sentiments. The implications of the results include contributing to the literature on qardh hasan as well as highlighting the impact and challenges in the development of qardh hasan in different parts of the world.

Keywords: Qardh Hasan; Sentiment Analysis

### **OPEN ACCESS**

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Received: 11 October 2023 Accepted: 3 December 2023 Published: 31 December 2023

Citation: (2023) Sentiment Analysis of Qardh Hasan Scheme. Tamkin Journal. 2.2.

# INTRODUCTION

In Islam, the use of interest is considered a usury practice and is prohibited. As an alternative, Islam encourages the practice of qardh hasan-based lending, which is the giving of wealth to others that can be collected or requested back without any reward or interest. (Selim & Hassan, 2020). In classical figh literature, qardh is categorized as a ta'awun contract or mutual assistance contract, not as a commercial transaction. (Hasanah, 2015). Extending qardh hasan is seen as more beneficial than giving charity, because qardh hasan is a form of interest-free loan. Prophet Muhammad SAW, as a role model, practiced gardh hasan in his life. In a narration from Abu Rafi', Prophet Muhammad SAW borrowed a young female camel from someone. When he received zakat on camels, he ordered Abu Rafi' to send a young female camel as repayment of the loan. Abu Rafi' said to him, "I did not find among the camels but a she-camel ready to conceive." The Prophet said, "Give it to him; indeed, the best among you is the one who repays a loan with something better" (Al Muslim, Sahih Hadith No. 1224/3). This practice of gardh hasan reflects the values of justice, mutual aid, and kindness in Islam.

The reward of qardh hasan in Islam is considered greater than that of sadagah. A hadith from the Prophet Muhammad states, "On the night of 'Isra' I saw on the gate of Paradise written the reward of sadaqah tenfold and the reward of qardh al-hasan eighteenfold. Then, I asked the angel, "how is this possible?" The angel replied, "Because even though a beggar begs, he still has wealth, whereas a debtor must be in need." (H.R. Ibn Majah). In another hadith narrated by Abu Hurairah, the Messenger of Allah SAW said, "Whoever relieves a believer from difficulties in the world, Allah will relieve him of his difficulties and Allah will make it easy for him in this world and in the hereafter" (H.R. Muslim). Hence, gardh hasan is considered a good deed with a great reward. (Selim & Hassan, 2020). In Indonesia, the gardh hasan contract has a sharia foundation in the form of DSN MUI fatwa No. 19/DSN-MUI/IV/2000. In Indonesia, the qardh hasan contract has a sharia basis which is regulated in the DSN MUI fatwa No. 19/DSN-MUI/IV/2000. Qardh hasan is explained as an interest-free loan provided to finance welfare projects or short-term needs. The borrower is only required to pay the principal amount of the loan, but he can pay more as a form of appreciation. (Hasanah, 2015). Thus, qardh hasan is an

Islamic financial instrument that encourages kindness and mutual assistance in society.

When it comes to gardh hasan, there are variations in sentiment and ongoing debates in some situations. The general sentiment surrounding qardh hasan is largely positive, with an emphasis on its potential to help people in need (Selim & Hassan, 2020). However, on the other hand, there is also sentiment that triggers discussions about moral hazard in qardh hasan contracts. These moral risks include uncertainty about whether the borrower will fulfill repayment obligations in good faith, especially since there is no mechanism to incentivize interest payments. In this context, there is a potential lack of compliance with repayment obligations. (Ramdhani, 2019). This mixed sentiment reflects the diversity of views and needs surrounding qardh hasan, as well as the complexity of issues, opportunities, and challenges involving this contract. This ongoing debate could have a significant impact on the future direction of qardh hasan development. Therefore, research that delves further into sentiments related to qardh hasan is important to better understand the dynamics, perceptions, and potential improvements related to the use of this contract.

Sentiment analysis or opinion mining is a process that involves understanding, extracting, and automatically processing text data to obtain information about the sentiment contained in opinion sentences. The focus of sentiment analysis is to understand the tendency of opinions or opinions towards a problem or object by individuals, whether it is negative or positive. (Rusydiana & Marlina, 2020). Sentiment analysis on scientific literature has become increasingly relevant in recent years, along with the increasing availability of scientific publications. Scientific databases are an invaluable source of publication and citation information, where researchers can convey their ideas and research results. (Yousif et al., 2019). In this context, sentiment analysis on scientific publications has the goal of unearthing and analyzing the sentiments expressed by authors in their scientific works. This provides additional insights related to how researchers assess and convey opinions or views in their academic publications.

Several previous studies that have examined aspects of Islamic economics and finance using the sentiment approach have been conducted. One of them is research conducted by Rusydiana (2018) which aims to determine public sentiment towards waqf practices in Indonesia. The results of this study concluded that the assessment of the existence of waqf in Indonesia showed a positive and very positive sentiment of 66% of

the public, a negative sentiment of 11%, and a neutral sentiment of 23%. Another relevant research was conducted by Maulida et al. (2023) who measured sentiments related to Islamic accounting standards around the world using data published by Scopus journals. The results of this study show that neutral sentiment dominates with a percentage of 39%, followed by negative sentiment of 32%, and positive sentiment of 29%. Furthermore, Maulida & Rusydiana conducted research related microinsurance sentiment using SentiStrength. The results showed that neutral sentiment dominated with a percentage of 58%, followed by negative sentiment of 22%, and positive sentiment of 20%. Riani et al. (2022) analyzed the sentiment generated from twitter social media applications regarding cash waqf. The results showed that positive sentiment was the highest result with a percentage of 53%, followed by neutral sentiment of 32.1%, and negative sentiment of 14.8%. Overall, these studies provide insight into how the sentiment of the public or stakeholders towards various aspects of Islamic economics and finance, contributing to the understanding and development of this field.

Based on a number of studies that have been conducted, it can be concluded that until now, research that specifically examines sentiment analysis on qardh hasan still does not exist specifically. Therefore, the purpose of this study is to evaluate the extent to which existing research addresses qardh hasan. This research aims to gain a deeper understanding of how the public and stakeholders respond to and interact with the concept of qardh hasan in general. By focusing on scientific studies, this research will produce an in-depth descriptive qualitative approach to qardh hasan. It is hoped that this research can be a meaningful contribution to complement the literature on qardh hasan and open up opportunities for further research in this context.

# RESEARCH METHODOLOGY

This research uses the qualitative research method of sentiment analysis or better known as "opinion mining," which is a process for identifying sentiment words or phrases that indicate emotions. (Dalipi et al., 2021; Riani & Rusydiana, 2023). This research utilizes secondary data from various scientific publications over the period 2011 to 2023 on the theme of "qardh hasan" to reveal sentiments. Extracting sentiments from scientific publications, which reflect the authors' attitudes towards a topic, is known as sentiment analysis, as described by (Yousif et al., 2019). Although

social media platforms have so far been the main source of opinion information, this study proposes a new view by highlighting that scientific databases are now a promising domain for evaluating author sentiment through analyzing citation information in academic publications, in accordance with the research of Alvarez & Gómez (2014). Extracting author attitudes from digital library documents is a complex task, and citation opinion information regarding entities such as topics, ideas, and theories is challenging due to the need to avoid criticism in academic writing. (Akhtar et al., 2016).

The sampling technique used in this research is purposive sampling method, which aims to fulfill certain information in accordance with the desired research objectives. Data collection is done by searching for journals indexed in the Scopus database by typing the keyword "qardh hasan". After that, scientific articles or journals that are relevant to the research theme will be selected based on the publication data that has been collected. There are 49 scientific publications from the research theme "qardh hasan". As for seeing the sentiment in each journal related to "qardh hasan", the author uses SentiStrenght software. SentiStrenght is an algorithm for opinion mining that uses a dictionary or lexicon-based approach that works by detecting each word or phrase from an abstract text by checking terms that contain sentiment and then the resulting output is the weight of the word or phrase that was successfully detected. By utilizing lexical with a dual scale system, SentiStrength wants to show that humans can feel positive emotion and negative emotion simultaneously, to a certain extent independently. (Sianipar & Setiawan, 2015).

Sentiment classes consist of high positive, positive, neutral, negative and high negative sentiments. Each sentiment class has a different score interval, high positive has a score of 3-5, positive has a score of 1-2, neutral score 0, negative score -1 to -2 and high negative has a score of -3 to -5. The sentiment score is then calculated by summing up the sentiment score of each sentence submitted by the researcher in the SentiStrength software. Positive sentiments are opinions from researchers that are positive and tend to be optimistic in responding to the theme raised. Meanwhile, negative sentiments are the opinions of researchers that are negative and tend to express criticism in examining the theme.

Meanwhile, several relevant studies related to Islamic economics and finance using sentiment analysis methods in publications have been conducted including As-Salafiyah et al. (2021), Rusydiana (2021), Rusydiana

& Izza (2022), Maulida (2022), Maulida & Marlina (2022), and Maulida et al. (2023).

# **RESULT AND DISCUSSION**

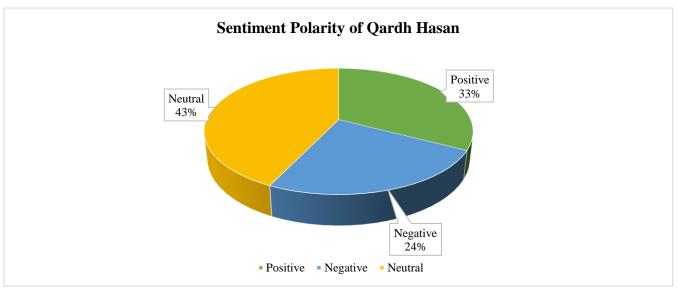


Figure 1. Sentiment Polarity of Qardh Hasan

The figure above reflects the polarity of sentiments in the literature related to "qardh hasan". From the data provided, it can be seen that neutral sentiment dominates with a percentage of 43%, followed by positive sentiment at 33%, and negative sentiment at 24%. Interestingly, the positive sentiment is more dominant than the negative sentiment. This indicates a positive acceptance of the use of qardh hasan contracts among the public, with little criticism expressed.

This analysis highlights that qardh hasan contracts have significant support and minimal controversy in the literature. However, to further understand this phenomenon, further in-depth research is required, exploring various aspects related to qardh hasan. Further studies could address the practical implementation, economic impact, or legal aspects related to the use of this contract. Such in-depth studies can provide more comprehensive insights and capitalize on the positive momentum seen from the sentiment analysis results.

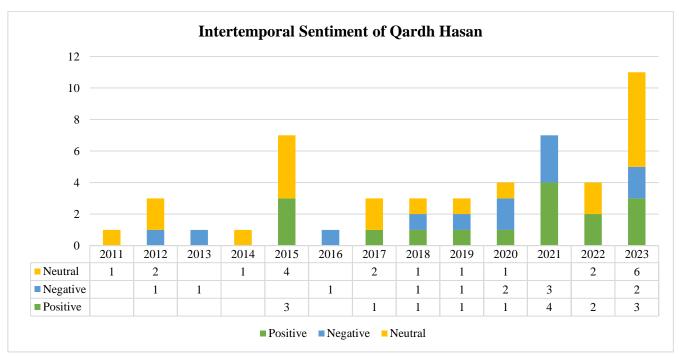


Figure 2. Intertemporal Sentiment of Qardh Hasan

The figure above reflects the periodic development of the number of qardh hasan sentiments in scientific publications. In general, it can be seen that the sentiment of qardh hasan fluctuates, with 2023 showing the highest number of sentiments, reaching 11 sentiments, which are dominated by neutral sentiments. However, what is interesting is the positive development in the number of positive sentiments from year to year, as shown by the green bar chart.

The analysis illustrates that although there are fluctuations in the sentiment of qardh hasan, there is a positive trend that shows an increase over time. This indicates that the interest or positive perception of the topic of qardh hasan in the scholarly literature may have increased over time. To gain a deeper understanding of the factors driving this positive development, further research can be directed towards analyzing such trends and the factors that influence them.

### **Findings**

Qardh Hasan, also spelled as Qard Hasan or Qard al-Hasan, is an Arabic term in Islamic finance that refers to an interest-free or benevolent loan. In Islamic finance, the concept of riba, or the charging of interest (usury), is prohibited. Qardh Hasan provides a way for individuals to obtain loans without incurring interest charges.

Here is how Qardh Hasan works. First, it is an interest-free loan. Qardh Hasan is essentially a loan given out of goodwill, and the borrower is only required to repay the principal amount borrowed. Secondly Benevolence and Charity. The lender offers the loan as an act of charity or goodwill, without seeking financial gain from the transaction.

Third, No Interest Charges. Unlike conventional loans, there are no interest charges associated with Qardh Hasan. The borrower is obliged to repay only the amount borrowed. This concept is in line with Islamic principles that aim to promote fairness and economic justice. Qardh Hasan is often used in situations where individuals or communities need financial assistance without the burden of interest payments. It reflects Islamic values of compassion, generosity, and helping those in need.

Qard Hasan refers to an interest-free or benevolent loan in Islamic finance. It is a loan provided on the basis of goodwill, where the borrower is only required to repay the principal amount of the loan, without any additional interest charges. This concept is in line with Islamic principles that prohibit charging or paying interest (riba), known as "usury" in Islamic finance. Qard Hasan is considered charitable and is often used to help individuals in need without burdening them with interest payments.

This study aims to analyze sentiments related to qardh hasan in scientific publications during the period 2011-2023. The research findings reveal several results that can be the main focus. First, in the context of scientific publications, qardh hasan has a neutral sentiment tendency. This indicates that most scientific publications have neutral characteristics without a strong tendency towards positive or negative. This neutral sentiment may reflect the presentation of general facts or information without special emphasis on positive or negative values. Most likely, this is due to the tendency of scientific publications to avoid criticism in academic writing (Akhtar et al., 2016) Therefore, the information presented in scientific literature tends to be objective.

Furthermore, there is a positive sentiment of 33%, reflecting an optimistic view or support for qardh hasan expressed in scientific publications. The majority of scientific publications analyzed show a positive attitude towards the concept of qardh hasan compared to negative sentiments. Meanwhile, there is also a negative sentiment of 24%, indicating that there are a number of scientific publications that express less favorable views towards qardh hasan. This may include criticism, concern or disapproval of certain aspects of qardh hasan. The determination of sentiment is based on an analysis of the words used in the scholarly publications, where the words are ranked in negative, neutral or positive intervals.

The second finding from this data shows that most scientific publications show a higher percentage of positive sentiments compared to negative sentiments in response to the existence of gardh hasan. Therefore, the potential for positive public acceptance of this concept should continue to be strengthened. The concept of qardh hasan is known as an effective alternative in overcoming financing or credit problems for micro, small and medium enterprises (MSMEs), which in turn can have a positive impact on the real sector of the economy. (Ramdhani, 2019). Although qardh hasan is in principle intended for those in need, it should be noted that it cannot be assumed that people in need will automatically come to Islamic banks to seek gardh hasan. The practice of qardh hasan itself can vary greatly between banks (Farooq, 2011). Besides being used in banking practices to help those who are financially

underprivileged, qardh hasan can also be applied in monetary policy by central banks (Selim & Hassan, 2020). This suggests that qardh hasan has a wide application potential and can be integrated in various economic sectors.

On the other hand, the concept of qardh hasan is still not widely developed, even in Islamic financial institutions such as Baitul Maal wat Tamwil (BMT) has not yet reached an optimal level in managing qardh hasan financing. As a result, the contribution of qardh hasan as an alternative financing has not been fully felt by Micro, Small and Medium Enterprises (MSMEs). This is related to the risks involved in qardh hasan financing. (Ramdhani, 2019). Realizing that the qardh hasan contract involves the principle of ta'awun or mutual assistance, the risk of qardh application in the implementation of qardh hasan is high due to the various risks faced by small and micro businesses. In addition, qardh is considered as unsecured financing (Antonio, 2001). (Antonio, 2001). Qardhul hasan products often do not get good attention because they do not generate profits like other products in the profit framework, and in practice often lead to bad debts, showing repayment difficulties to Islamic financial institutions. (Ramdhani, 2019).

By limiting qardh to qardh hasan or interest-free charitable loans, contemporary Islamic finance faces the important challenge of presenting a financial alternative that is both interest-free and fair in its risk sharing. The concept of qardh hasan, which involves lending without interest in good faith, has become an integral part of the strategies of Islamic financial institutions, especially in the commercial context. (Farooq, 2011). Islamic financial institutions utilize the concept of qardh hasan to design important components of their financial structure. In this context, qardh hasan provides a Shariah-compliant alternative, promotes fairness, and reduces reliance on the interest system that is considered incompatible with the principles of Islamic finance. In the implementation of the qardh hasan contract, risk management is crucial to reduce the negative impact of loan risk. (Sari, 2020). By understanding and carefully managing risks, Islamic financial institutions can maintain the stability and sustainability of their operations, while adhering to sharia principles.

# CONCLUSION

This research measures sentiment related to the topic of qardh hasan using the Scopus digital database from 2011 to 2023. The results showed that neutral sentiment dominated the discussion on qardh hasan

during the observation period, reaching 43%. Positive sentiment took second place with a percentage of 33%, while negative sentiment accounted for 24%. Through intertemporal analysis of qardh hasan sentiments, it can be observed that the number of sentiments related to this topic fluctuated over the observed time period. It was noted that the year 2023 showed the highest number of sentiments compared to the previous years. This study provides an insight into the distribution of sentiments in scholarly publications related to qardh hasan over the period under study.

Based on the research results, the authors provide recommendations for further research:

- As neutral sentiments dominate the discussion on qardh hasan, future research could dig deeper to understand the reasons behind this neutrality. Is it due to a lack of information supporting positive or negative sentiments, or are there other factors that influence neutrality.
- 2. Future research could conduct comparative studies through social media platforms. Comparing sentiments expressed in academic literature with sentiments that appear on social media platforms could be an interesting area of research. This comparison could provide a more comprehensive understanding of the public's perception of qardh hasan.
- 3. Future research can use advanced, more sophisticated sentiment analysis methods, such as machine learning or deep learning, to gain deeper and more accurate insights from the data.

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