

Vendi-RAG Adaptive Retrieval Robustness in Legal and Financial QA Benchmarks

Assignee Research

May 31, 2026

Abstract

This report synthesises findings from 16 peer-reviewed papers addressing the following research question: Does Vendi-RAG’s adaptive approach improve robustness against adversarial or out-of-distribution queries in specialized domains such as legal or financial QA, as evaluated using metrics like BLEU or ROUGE-L. In the fast-paced financial domain, accurate and up-to-date information is critical to addressing ever-evolving market conditions. Retrieving this information correctly is essential in financial Question-Answering (QA), since many language models struggle with factual accuracy. 8 claims were extracted from source literature; 0 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 3.7/10. This report is a machine-generated literature synthesis and does not constitute original research.

1 Introduction

This paper examines: FinDER: Financial Dataset for Question Answering and Evaluating Retrieval-Augmented Generation. Research question: Does Vendi-RAG’s adaptive approach improve robustness against adversarial or out-of-distribution queries in specialized domains such as legal or financial QA, as evaluated using metrics like BLEU or ROUGE-L on domain-specific benchmarks?.

2 Methodology

Systematic literature search across multiple databases yielded 16 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 3.7/10.

3 Results

16 papers retrieved. 8 claims extracted; 0 independently verified. Quality review score: 3.7/10.

4 Limitations

This report is a machine-generated literature synthesis and does not constitute original research. Automated retrieval and verification may introduce errors or omissions. Review scores reflect automated assessment, not human peer review. Readers should consult primary sources for authoritative information.

5 Extracted Claims

Claim	Verified	Confidence
Neural methods outperform traditional approaches in capturing domain-specific semantics in financial datasets.	×	0.06
The decoder-based retrieval model (E5-mistral) demonstrates the best performance in all categories in terms of Context R	×	0.05
Encoder-based models generally outperform BM25 in financial datasets.	×	0.04
E5-mistral significantly surpasses other methods, consistently demonstrating superior Context Recall.	×	0.03
Neural embedding models uniformly outperform BM25 in financial datasets.	×	0.04
Real-world queries often suffer from brevity and ambiguity, significantly challenging retrieval performance.	×	0.11
Well-formed questions, manually rewritten by financial experts, show higher precision compared to real-world queries fro	×	0.10
Models rerank the top 10 contexts initially retrieved by e5-mistral-7b-instruct, selecting the five most relevant.	×	0.04

References

- <http://arxiv.org/abs/2402.12317v2>

- <http://arxiv.org/abs/2504.15800v3>
- <http://arxiv.org/abs/2502.11228v2>