Chapter 2
Investigation of Artificial Intelligence Models (AI) in Shariah Auditing of Islamic and Conventional Financing

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ABSTRACT

This paper aims to conduct a Shariah classification of various financing transactions granted to Tunisian commercial institutions listed on the stock exchange by Tunisian banks, whether Islamic or conventional. This classification consists of a Shariah automated audit issued from the artificial intelligence based on a set of Islamic financial jurisprudential principles to verify compliance in banking transactions. The study maintains complete objectivity and neutrality toward all banks, regardless of their affiliations and orientations The results indicate that the Logistic Regression Model proved to be the most effective, as it generated the lowest margin of error. However, the Islamic legitimacy of financing primarily depends on factors such as productive work, the principle of profit loss sharing, balance between money and goods, and the avoidance of debt-based trading. These artificial intelligence models can be programmed into computerized systems, making

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them automated and capable of real-time auditing

1. INTRODUCTION

Given the differences among members of society regarding the legitimacy of Islamic financing compared to conventional financing, and considering the similarities between both as shown by Gassouma et al (2022), contemporary financial pioneers have turned to Sharia compliance, also known as Sharia auditing of Islamic financial transactions.

Sharia auditing is often directed solely at declared Islamic financing. From the perspective of Sharia auditors, conventional finance is entirely illegitimate and, therefore, not subject to Sharia auditing, effectively placing it outside the scope of Islamic law. However, if conventional finance is inherently illegitimate, why has the Islamic world adopted it as a fundamental reference, adapted it, and framed it within a Sharia context? The response from Islamic scholars and banking experts is as follows: Islamic finance is essentially conventional finance that has been adapted to comply with Sharia, evolved over time, and no longer necessitates reverting to conventional methods. In fact, they argue that conventional finance is no longer viable in the Islamic world. (Sidiqqi, 1982).

Our discussion in this paper falls within these considerations. We acknowledge that the current state of Islamic finance requires further auditing and development. Additionally, Islamic finance, as practiced in contemporary banks, may deviate from true Islamic financial principles, often resembling financial transactions in form but not in substance. Conversely, conventional finance can, in essence, align with Islamic financial principles while differing in form. (Askari and Rehman, 2010).

By “form,” we refer to the structuring and binding nature of contracts for all parties involved. Islamic financial transactions and financing follow a legally structured framework of guidelines that ensure compliance with Sharia principles. However, in many cases, Islamic financing may adopt a rigorous legal and regulatory framework while lacking substantive Sharia compliance.

The content of financial transactions involves how financial mechanisms are structured, including profit calculation methods, investment rates, deferred payment pricing, debt repayment amounts, profit margins, and other financial factors. Sometimes, conventional financial mechanisms are merely

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