Neural Network Analysis of Factors Influencing Forgotten Financial Remittances in Yemen

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ABSTRACT

Remittances are vital for economic growth, especially in developing nations like Yemen. However, the phenomenon of forgotten financial remittances poses significant threats to Yemen's financial stability, as these unreceived transfers negatively impact its economy. Therefore, this study aims to identify the main causes of this phenomenon. These causes include logistical and economic factors of senders and beneficiaries, and features of banks and money exchange firms. The study surveyed 931 Yemeni respondents who experienced forgotten financial remittances, answering 15 possible reasons with "yes" or "no" in the questionnaire. Descriptive statistical measures were employed to characterize the sample, while neural network analysis (NNA) primarily identified the main factors contributing to forgotten financial transfers. The analysis revealed three key dimensions leading to this problem. The first dimension involves communication or access problems between the sender and recipient. The second dimension involves logistical obstacles that hinder remittance flows, including technological, financial, administrative, and bureaucratic challenges. These barriers can be associated with the senders, recipients, or exchange companies. The final dimension is related to the operations of money exchange companies and the uniformity of their rates. To ensure the stability of the results, Bootstrapping technique was utilized based on a random sample of size 500 observations from the original dataset. Thus, the results demonstrated stability and reliability for all samples larger than 30% of the original sample size.

Key Words: Forgotten remittances, Yemeni financial system, Neural Networks Analysis, Exploratory factor analysis, Centrality measures, Bootstrap technique.

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