The Importance of Open Data in Finance and Analysis of Organizations in Türkiye that provide or can provide Open Data in Finance

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ABSTRACT

Copyright, patents, or similar protective methods, along with legal and regulatory restrictions, are not required for data, which is shared openly with the public [1]. Open data offers significant opportunities for the financial sector, as it does in many other industries [2,3]. Open data serves as the foundation for economic analysis, investment decisions, and policy development processes while ensuring transparency and accountability [4,5]. This study evaluates Türkiye's open data policies in the financial sector by comparing potential institutions that provide or could provide open data in Türkiye with examples from around the world. In our study, examples of open data from the financial sector in Türkiye and successful global cases will be used to visualize and analyze the data using business intelligence applications via Microsoft Power BI. This will provide insights into the quality of open data in the financial sector as research data. The effectiveness of decision-making processes in financial markets is directly related to access to accurate data. Open data reduces information asymmetry and increases trust in the markets by making the data of public and financial regulatory institutions available to a wide audience [2,3,6,7]. Key institutions providing open data in Türkiye include the Turkish Statistical Institute (TUIK), the Central Bank of the Republic of Türkiye, the Banking Regulation and Supervision Agency, the Capital Markets Board, and the Central Securities Depository. These institutions provide a range of data sources, from various economic indicators to exchange rate data, ensuring effective information flow [8,9,10]. On a global scale, institutional structures such as the World Bank, OECD, IMF, Eurostat, and the FRED database contribute to the promotion of open data by making macroeconomic data and financial time series available to researchers [5,6,11]. Our research has shown that financial institutions around the world provide more and more detailed data in this regard. However, potential data providers such as the Turkish Banks Association, the Financial Institutions Association, Borsa Istanbul, and the Ministry of Treasury and Finance should be more active in sharing open data. By doing so, they can significantly contribute to the sector by increasing the sharing of financial data. The use of data visualization tools like Power BI for open data analysis will help make economic data at both the national and global levels more comprehensible. These tools enable users to understand the data more easily, allowing for more informed decision-making [12]. To further develop open data in Türkiye, it is recommended that data formats be standardized, data platforms be updated, and systems supported by Application Programming Interfaces (APIs) be established. Ensuring the sharing of high-quality, accurate, and up-to-date data is critical to increasing the transparency and reliability of the financial sector, which is of paramount importance for economic development.

Keywords: Open data, financial sector, data management, data analysis, business intelligence.

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