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Fraud Repression through EDucation2

“Contributions for the development of the European Anti-Fraud Observatory: a statistical perspective”

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the National Anti-Fraud Strategy (NAFS) stands as a pivotal defense against fraudulent activities, particularly in the realm of budget allocations and project funding. In this context, the establishment of an Observatory equipped with robust statistical methodologies presents an invaluable asset in combating fraud effectively. This paper proposes a comprehensive framework for the Observatory's contributions to the NAFS, focusing primarily on a statistical perspective. Key contributions of the Observatory include: estimation of Fraud Size and Determinants: Utilizing statistical techniques, such as quantile regression, the Observatory can estimate different aspects of fraud, shedding light on its prevalence and underlying determinants. By quantifying the impact of each determinant on fraudulent activities, policymakers gain a nuanced understanding essential for devising targeted interventions. The statistical method uses a variety of techniques estimating the size and drivers of fraud, risk profiling, inspection planning, taxonomy of irregularities and dissemination of knowledge. Statistical methods, coupled with machine learning algorithms, serve as the backbone for analyzing complex data patterns and deriving useful information. Like this the Observatory can develop risk profiles for projects, quantifying the probability of fraudulent behavior based on project characteristics. The purpose of this approach allows for a more efficient allocation of inspection resources and maximizes the effectiveness of monitoring while reducing costs. Drawing from empirical laws like Benford's law, the Observatory enhances inspection planning by identifying suspicious spending patterns indicative of potential fraud. Whether through random or risk-driven selection, statistical methodologies optimize inspection strategies, ensuring thorough scrutiny of high-risk areas. The Observatory using Benford's Law improves inspection planning by identifying suspicious spending patterns. Using group techniques, the Observatory constructs irregularities by creating the classification of the severity of fraud and informing preventive measures. This structured approach allows for a systematic understanding of fraud dynamics, allowing stakeholders to address vulnerabilities effectively. The Observatory serves as a hub for disseminating insights through internal meetings, scientific conferences, and research publications.

By fostering collaboration among stakeholders and sharing best practices, it catalyzes continuous improvement in anti-fraud efforts. The proposed framework underscores the crucial role of statistical analysis in fortifying the NAFS. By harnessing data-driven insights, the Observatory equips policymakers with the tools necessary to combat fraud comprehensively and proactively safeguard public resources.