Observatoire ARGA

Automated AML Systems, False Positives, and the Risk of Institutional Disproportion: A Structural Assessment for the U.S. Financial System

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INTRODUCTION

The anti-money laundering (AML) system in the United States is among the most technologically advanced and comprehensive in the world. Financial institutions employ automated tools for transaction monitoring, customer screening, and risk assessment based on large-scale data processing.

The growth in transaction volumes, the complexity of international financial flows, and regulatory requirements have driven rapid digitalization of compliance processes. As a result, key decisions are increasingly made through algorithmic models.

This report analyzes structural risks arising from automated processing of AML signals, with particular focus on false positives, their institutional consequences, and their potential impact on the resilience of the U.S. financial system.

The purpose of this analysis is to identify where automation may generate disproportionate effects and how a more balanced relationship between monitoring efficiency and procedural resilience can be achieved.

EVOLUTION OF AUTOMATED AML SYSTEMS

2.1 Transition from manual control to algorithms

Historically, suspicious activity monitoring was conducted primarily through manual review. Modern systems now integrate:

– machine learning;
– behavioral analytics;
– automated risk scoring;
– cross-database matching.

2.2 Core data sources

AML algorithms rely on:

– sanctions lists;
– politically exposed persons (PEP) databases;
– adverse media;
– international notifications;
– internal transaction patterns.

2.3 Risk-based approach

Regulatory logic prioritizes prevention of systemic threats. Under conditions of uncertainty, financial institutions tend to adopt more conservative operational models.

THE PROBLEM OF FALSE POSITIVES

3.1 Structural causes

False positives may arise due to:

– name similarities;
– incomplete information;
– outdated data;
– algorithmic amplification of secondary sources;
– improper calibration of risk thresholds.

3.2 Scale of the phenomenon

In some financial institutions, false positives constitute a significant percentage of total alerts, leading to:

– overload of compliance departments;
– delays in processing genuine risks;
– increased operational costs.

3.3 Behavioral factor

Under conditions of high regulatory exposure, banks tend to:

– escalate even moderate signals;
– close accounts in cases of uncertainty;
– avoid complex or ambiguous cases.

INSTITUTIONAL DISPROPORTION

4.1 Defensive compliance

Fear of sanctions or regulatory penalties encourages excessive precautionary measures.

4.2 Reputational risk

Even temporary account restrictions or internal reviews may affect a client's business relationships.

4.3 Secondary impact on the financial system

Mass false-positive signals generate:

– increased SAR volume for FinCEN;
– reduced efficiency of analytical filtering;
– systemic "noise" that may obscure real threats.

SYSTEMIC IMPLICATIONS FOR REGULATORS

5.1 Information overload

An increase in SAR filings with a high proportion of false positives may:

– reduce analytical quality;
– extend processing cycles;
– create an illusion of escalating threats.

5.2 Regulatory imbalance

Excessive automation without adequate procedural filters may undermine the principle of proportionality.

5.3 Risk of declining trust

If affected actors perceive the system as disproportionate, this may negatively affect international cooperation and institutional trust.

COMPARATIVE PERSPECTIVE

6.1 European practice

The EU is actively developing supervisory guidance models for algorithm calibration and proportionality.

6.2 United Kingdom

The FCA places significant emphasis on proportionality and quality of internal risk assessment.

6.3 Global trends

There is growing interest in explainable AI and algorithm auditability within the financial sector.

RECOMMENDATIONS

Develop FinCEN guidance on management of false positives.

Encourage implementation of explainable AI in AML systems.

Establish standards for periodic recalibration of algorithms.

Develop proportionality guidance for cases lacking confirmed violations.

Strengthen dialogue between regulators and financial institutions regarding algorithmic risk.

CONCLUSION

Automation of AML processes enhances the detection of financial threats while simultaneously creating new structural challenges.

A balanced approach combining technological innovation with procedural resilience can strengthen trust in the U.S. financial system and improve the quality of regulatory analytics.

This report is intended to support professional dialogue on risks of algorithmic disproportion and pathways for mitigating them within the U.S. financial architecture.