Chapter 11
Ethics and Regulation in FinTech and AI-Driven Finance:
Shaping the Future of Policy

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ABSTRACT

The landscape of financial services is on a changing trajectory with all the promises of enhanced efficiency, reach, and innovation by FinTech evolution and AI-driven financial systems. There is a flip side to this: it raises serious ethical dilemmas and regulatory challenges. This chapter looks into the dynamic and ever-evolving space at the border of ethics, AI, and fintech: the current issues including algorithmic bias, data privacy, transparency and accountability, and systemic risk. The chapter analyses in a critical manner the application-level governmental regulatory regimes

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across major jurisdictions to ascertain whether contemporary modes of governance can again contend with the identified issues. It puts forward a more forward-looking view of human-centric policymaking in AI-driven finance, with emphasis on regulatory sandboxing, guiding digital ethics principles, and cross-border coordination for responsible innovation.

INTRODUCTION

The global financial landscape is experiencing a major upheaval, with the coming together of FinTech and AI. In other words, two tremendous disruptive forces are intervening in activities that were traditionally considered human-centric: How financial services are accessed by the masses, by every individual, and every institution, and every government from digital banking to robo-advice or even using blockchain for transactions. These innovations could, in fact, democratize the capital markets, reduce transaction costs, and enhance risk assessment; however, they have posed serious ethical, legal, and regulatory questions. The use of AI in financial services creates complex issues of fairness, transparency, data privacy, accountability, and systemic risk, among which many are beyond the scope of current regulations-evolving frameworks (Thakur & Sharma, 2024a).

Fintech widely referred to the application of technology to improve financial services and delivery. These include innovations in areas such as mobile banking, peer-to-peer credit, crowdfunding, cryptocurrency and smart contracts. AI, on the other hand, enables the machines to do such work, such as learning, logic and decision-making, when applicable to finance, it can automate underwriting, find fraud in real-time, and over trading strategy. AI and Fintech are shaping the digital-first financial ecosystem that works at unprecedented pace, scale and complexity. Nevertheless, these very characteristics make it difficult to apply traditional governance models, many of which were created for analog systems with human inspection (Islam & Faria, 2025).

The moral implications of AI-driven finance are good sized. Algorithmic choice-making—specially in regions like credit scoring, coverage underwriting, and investment suggestions—can embed or even make bigger biases if no longer cautiously controlled. Machine getting to know models skilled on historical economic information can also inadvertently mirror past discrimination, reinforcing social inequalities. Moreover, the opacity of AI structures, often called the "black box" problem, poses serious challenges for transparency and accountability. If purchasers or regulators cannot apprehend how financial decisions are made, it turns into nearly not possible to contest consequences or put in force rights (Kamuangu, 2024).