

MODERN EDUCATIONAL SYSTEM AND INNOVATIVE TEACHING SOLUTIONS
ASSESSING THE IMPACT OF FINTECH SOLUTIONS ON FINANCIAL
RISK REDUCTION IN INTERNATIONAL TRADE: POST-WTO ACCESSION
ANALYSIS

Qodirova Laylo Otabekovna

Lecturer, Department of Economics

Asia International University

<https://orcid.org/0009-0002-7354-241X>

layloqodirova717@gmail.com

Annotation: *This research examines the influence of financial technology (FinTech) on mitigating financial risks within international trade transactions. Specifically, it analyzes the post-WTO accession period to understand how FinTech adoption has impacted risk reduction strategies for businesses engaged in global commerce. The study aims to quantify the effectiveness of various FinTech solutions in addressing currency fluctuations, credit defaults, and operational complexities in international trade.*

Key words: *WTO, finTech, AI solution, export, digital infrastructures, foreign trade*

Introduction. In accordance with the Resolution of the President of the Republic of Uzbekistan No. PQ-181 dated June 2, 2023, “On additional measures to accelerate the process of accession of the Republic of Uzbekistan to the World Trade Organization,” negotiations with foreign countries within the framework of accession have significantly intensified in recent years. As a result, Uzbekistan’s membership in the World Trade Organization is expected by 2026, a prospect also emphasized in interviews by its Director-General, Ngozi Okonjo-Iweala.

Naturally, accession to the WTO implies an expansion of foreign trade activities and opportunities. However, in line with the law of increasing needs, such integration also generates new demands that must be addressed. Despite the considerable opportunities anticipated in export and import operations following accession, the economy may also face certain adjustment shocks. In the context of the modern digital era, these challenges can be effectively mitigated by leveraging advanced technologies, particularly financial technologies, to enhance resilience and efficiency in international trade operations.

Main body. The acceleration of export and import activities under free trade conditions inevitably leads to increased exposure to various financial risks, including fraud risk, trust deficits, documentation delays, default risk, incorrect partner selection, foreign exchange-related challenges, payment disputes, contract breaches, regulatory compliance issues, as well as the risk of penalties and transaction blockages. In addition, fluctuations in exchange rates may result in significant financial losses.

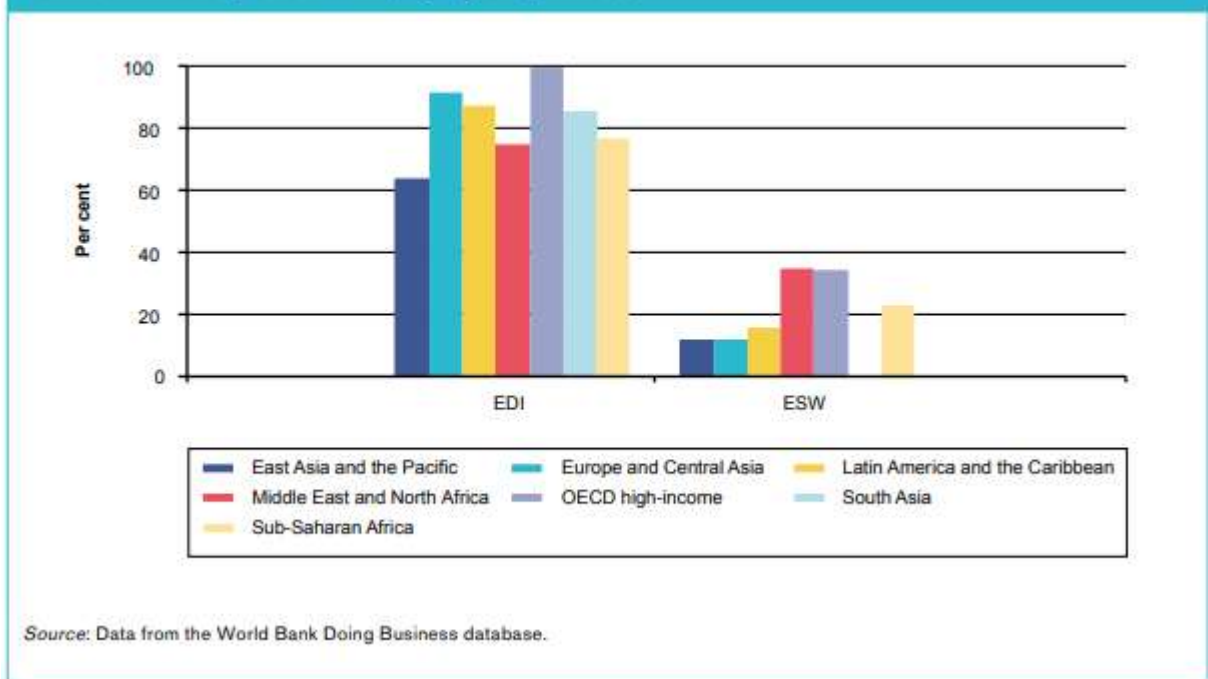
In such circumstances, the adoption of financial technologies enables a more efficient and secure organization of international trade operations. In particular, **blockchain technology** offers several key advantages.

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1. First, it helps prevent document forgery by ensuring the authenticity of trade documents such as invoices and bills of lading.
2. Second, it enables real-time tracking of payments and shipment movements, thereby improving transparency.
3. Third, it enhances trust among trading partners while reducing the need for intermediaries.
4. Finally, blockchain can further reduce the cost of cross-border financial services by streamlining processes and minimizing operational inefficiencies.

An increasing number of start-ups are leveraging distributed ledger technology with a view to further reducing the cost of cross-border payments, in particular transaction fees, exchange rate costs and costs related to correspondent banking. A US start-up, Circle (<https://www.circle.com>), provides blockchain-based cross-border payment services for zero fees and a zero exchange rate mark-up. The company, which started in the United States before moving to Europe, recently entered the Chinese market with the aim of connecting Chinese consumers to the rest of the world. Another US-based company, Ripple (<https://ripple.com>), has ambitions to circumvent the correspondent banking model through its distributed ledger platform. It gives banks the ability to convert funds directly into different currencies in a matter of seconds and at little to no cost, without relying on correspondent banks.

Figure C.4: Proportion of countries using EDI and ESW for the electronic processing of customs documents for exports in 2017, by region (per cent)



The chart compares two types of electronic processing systems across seven global regions. EDI (the more established system) has much higher adoption rates globally compared to the newer ESW systems.

1. Electronic Data Interchange (EDI) Adoption

EDI shows high penetration across all regions, with most seeing over 60% adoption.

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- Highest Adoption: OECD high-income countries lead the group, reaching 100% adoption.
- Strong Performance: Europe & Central Asia (~92%) and Latin America & the Caribbean (~88%) also show very high usage.
- Lowest Adoption: East Asia and the Pacific has the lowest EDI usage among the listed regions, at approximately 65%.

2. Electronic Single Window (ESW) Adoption

ESW systems were significantly less common in 2017, with no region exceeding 40% adoption.

- Highest Adoption: Middle East & North Africa and OECD high-income countries are the leaders here, both hovering around 35%.
- Lowest Adoption: East Asia and the Pacific, Europe & Central Asia, and South Asia show the lowest levels, all grouped around 10-12%.

Smart contracts also play a crucial role in mitigating risks such as payment disputes and contract breaches, as they operate on an “if-then” principle, ensuring the automatic execution of contractual obligations once predefined conditions are met.

Furthermore, **regulatory operations** can be conducted more efficiently through RegTech (Regulatory Technology). It enables the automation of AML/KYC processes, as well as the verification of sanctions and export control requirements. Through KYC (Know Your Customer) technologies, identity documents such as passports and corporate records are automatically verified and cross-checked with global databases, preventing the inclusion of fraudulent clients in the system. Meanwhile, AML (Anti-Money Laundering) systems allow real-time monitoring of transactions, detection of suspicious activities, and identification of anomalies through artificial intelligence.

The effective implementation of financial technologies enhances a country’s investment attractiveness and contributes to an increase in foreign investment inflows. To support the development of FinTech startups, the following measures are recommended:

- ❖ the establishment of a regulatory sandbox by the central bank;
- ❖ providing startups with a controlled environment for testing without excessive regulatory constraints;
- ❖ offering tax incentives;
- ❖ allocating venture capital funds and FinTech grants through public-private partnerships;
- ❖ enabling access to banking data via open banking initiatives;
- ❖ fostering collaboration with global FinTech platforms;
- ❖ and implementing joint projects with international institutions such as the World Bank and the International Monetary Fund.

Conclusion. FinTech technologies play a significant role in reducing financial risks in foreign trade operations by improving transparency, efficiency, and regulatory compliance. Advanced tools such as blockchain ensure secure and tamper-proof transaction records, minimizing fraud and enhancing trust between trading partners. Artificial intelligence and big data analytics enable accurate risk assessment, helping

firms evaluate counterparties and predict potential defaults. RegTech solutions automate compliance processes, including AML and KYC procedures, reducing the likelihood of legal penalties and transaction blockages. In addition, digital payment systems accelerate cross-border transactions, lowering settlement risks and operational delays. These innovations also reduce information asymmetry, allowing better decision-making and financial planning. As a result, FinTech not only strengthens the resilience of financial systems but also supports the sustainable growth of international trade by creating a more reliable, secure, and efficient financial environment for all participants.

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