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Digital transformation and anti-money laundering compliance in emerging economies: The moderating role of institutional readiness

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ABSTRACT

The purpose of this paper is to analyze the impact of digital transformation on the effectiveness of anti-money laundering (AML) compliance in African economies, paying special attention to the moderating effect of institutional preparedness. The study uses a balanced panel dataset including twelve African countries from 2015 to 2024. AML effectiveness is measured using the Basel AML Index, while digital transformation measures include internet penetration and fintech infrastructure. To measure institutional readiness, regulatory quality, digital infrastructure, and human capital, variables are used. In addition, fixed-, random-, and robust-effect estimations are employed. The study found that better institutional quality enhances AML effectiveness and that the effect of digital transformation on AML is conditional. Digitalization contributes to the effectiveness of AML processes only within the context of a strong institutional environment, especially in terms of human capital. Besides, trade openness appears to raise risks for AML processes. The research findings imply that digital transformation must be supported by institutional strengthening and by human capital development. The study sheds new light on the problem under consideration and contributes to the literature on financial crimes.

Keywords

Africa; Anti-money laundering; Digital transformation; Institutional quality; Trade openness

1. Introduction

The digitalization of technology has changed financial transactions worldwide. Financial crimes can be influenced significantly. Digital platforms provide poor people with the banking services they need. But at the same time, they have helped criminals move money illegally into their assets, black-market deals, and legitimate financial capital (FATF, 2024). Mobile money transactions in Sub-Saharan Africa amount to \$1 trillion per year. Criminals can use the cryptocurrency market to launder funds and finance terrorism by moving billions of dollars (World Bank, 2025; Chainalysis, 2024). Even though technological advancements have led to greater information availability and traceability, the process is quicker for the same reason. In 2024, FATF reported that crypto-asset layering, synthetic identity fraud, and statistically generated transaction patterns to circumvent traditional monitoring systems have increased. Traditional AML strategies that focus on laws and banks are unsuccessful due to these changes.

Money laundering poses a significant challenge due to its extensive reach and persistence. As stated, illegal money flows will total 2%-5% of global GDP, equivalent to \$1.6 to \$4 trillion each year (UNODC, 2023). Risks also exist due to regulatory policies in emerging economies, which often seem inferior to those in developed nations. For instance, South Africa was recently categorized as a money laundering jurisdiction by the FATF in 2023. Also, Nigeria usually struggles to comply with certain regulations, especially those related to money laundering via digital channels. These cases show that legislative reform alone will not work and that effective AML regimes

need institutional capabilities to implement, supervise, and enforce compliance in increasingly complex digital contexts.

Few studies have examined the impact of RegTech and SuppTech in emerging nations. AI-driven monitoring systems have improved detection accuracy and reduced false positives in advanced regulatory countries, but not in developing environments. Technology adoption often seems symbolic rather than effective in identifying financial fraud, which has been called “empty compliance” (Bakhos Douaihy & Rowe, 2023). This implies that moving digital may not inevitably improve AML and may generate new vulnerabilities if institutions are weak.

This dilemma is rarely addressed in the literature. Most research has focused on advanced economies or digital anomalies, although institutional frameworks operate under specific scenarios. Financial criminal research has not integrated such ideas into regulatory theory or linked technological diffusion to financial crime. Why does the same technology yield different results in various places? We don't grasp this scenario or where to explore it. From an institutional preparation perspective, including rules, digital infrastructure, and human resources, the link between digital transformation and AML efficacy is unclear.

We investigate how institutional preparedness affects the efficacy of digital AML systems in emerging economies to address this gap. What effect does institutional readiness have on digital transformation's ability to improve AML compliance and anti-financial crime? The paper integrates institutional and innovation diffusion theories to construct a framework that views digital transformation as an optional way out whose effectiveness depends on how much national regulatory and enforcement systems can absorb it.

It makes three contributions to the financial crime literature. First, the study favours AML digital, stating that while digital systems are based on benefit-centred notions, technology may be used where it is not advantageous. Second, it links RegTech research to financial crime enforcement by putting technical capabilities into compliance outcomes or performance restrictions, such as effectiveness and limitations. Finally, institutional preparation and AML efficacy measurements establish the groundwork for future empirical study.

2. Review of literature and hypothesis development

2.1 Digital Transformation and the Evolution of Financial Crime

The transformation of the financial system due to technological advances has changed the ways in which money laundering is conducted. The three main components of money laundering activities have been carried out in the digital world through mobile money services, online banks, and cryptocurrencies. Despite making money laundering activities trackable, technology enables faster money laundering through cross-border and anonymous transactions (Minto, 2024; Teichmann & Wittmann, 2025).

Newly emerging evidence suggests that the rise of digital financial ecosystems has not only generated more diverse laundering types. Cryptocurrency-based laundering is one such example: it exploits the pseudonymity of blockchain networks, allowing a single transaction to be linked to multiple wallets (Dupuis & Gleason, 2021). Similarly, trade-based money laundering, which for centuries has relied on cash invoices, increasingly relies on digitally generated records cross-referenced across various online platforms (Naheem, 2024). On the whole, these developments show how financial crime is taking an ever more technological, responsive and international form.

However, apart from such dangers, digitalization may be seen as a source of hope for AML regulation. Due to the fact that advanced technological solutions can be applied by financial institutions in order to analyze enormous volumes of transaction data, find inconsistencies, establish links between previously known tendencies, and uncover associations between the participants of financial transactions (Kurum, 2023), digitalization may be considered an area of hope regarding AML regulation. Some studies show significant reductions in false positives and improvements in detection rates; others point out persistent problems with model interpretability, data quality, and the cost of implementation (Bakhos Douaihy & Rowe, 2023). This difference shows that the relationship between digital transformation and AML effectiveness is not linear but depends on evolving institutional conditions.

H1: Digital transformation significantly improves anti-money laundering effectiveness in emerging African economies.

2.2 Regulatory Technology Adoption and AML Compliance Effectiveness

Some have seen regulatory technology, or RegTech, as a way out of the constraints of traditional AML systems. RegTech uses AI-driven transaction monitoring, e-KYC, blockchain analytics, and other digital tools to improve compliance and detection. These tools convert AML compliance from reactive, rule-based monitoring to clue-based intelligent detection (Kurum, 2023; Minto, 2024). Empirical research and practice favour such tools because they reduce false alarms and make it easier to trace money laundering networks (Pavlidis, 2023). Digital identification solutions allow remote customer onboarding while meeting customer due diligence standards.

By showing how cryptocurrency transactions are spread over the network, blockchain analytics tools provide transparency over previously opaque financial networks. (Chainalysis, 2024) Unfortunately, several emerging economies have substantial RegTech constraints. High installation costs and technological complexity limit small and medium-sized financial institutions' access to such systems. Second, these technologies depend on high-quality integrated datasets, which are rare in developing countries. Thirdly, regulatory uncertainty, especially in crypto-assets and data protection, hinders adoption (Shafie et al., 2025). However, several research findings have pointed out the concept of "symbolic compliance." The evidence-based religion is that banks use contemporary technologies not to enhance AML practices but just for compliance purposes (Bakhos Douaihy & Rowe, 2023). In such a case, contemporary technology does not add value to AML, casting doubt on its usefulness in practice.

H2: Institutional readiness significantly improves anti-money laundering effectiveness in emerging African economies.

2.3 Institutional Constraints and Enforcement Gaps in Emerging Economies

There is ample evidence that the efficiency of the AML system in emerging market economies depends on institutional factors, such as regulatory coordination, digital infrastructure, and human competence. These determine technology adoption, as well as the detection and prevention of financial crimes.

The fragmentation problem continues. Thus, many institutions with shared responsibilities are involved in overseeing the AML system, which creates problems with data sharing and coordination (Sanusi et al., 2025). In particular, fragmentation enables money laundering because regulators do not fully understand financial operations and thus fail to identify them. Research from Southeast Asia and Sub-Saharan Africa shows that criminal financial groups exploit the lack of effective coordination among agencies to move money unnoticed through their territories.

Digital infrastructure remains another challenge. The AML system requires efficient identity authentication, interconnectable payment systems, and a robust framework for information exchange. While some states have made considerable efforts to develop national digital identity management systems, others still rely on fragmented databases that do not enable e-KYC mechanisms (Demirgüç-Kunt et al., 2022). The lack of interoperability among financial systems hinders monitoring and facilitates money laundering.

Human capital limitations further compound these problems. To ensure effectiveness and transparency, data scientists, financial investigators, and digital forensic specialists need to execute and oversee sophisticated AML technology tools. However, many emerging economies lack this competence, limiting their ability to deploy and regulate RegTech solutions (International Monetary Fund, 2024).

H3: Institutional readiness positively moderates the relationship between digital transformation and anti-money laundering compliance.

2.4 Theoretical Review

Institutional Theory developed by Paul DiMaggio and Walter Powell (1983) is at the heart of this research. The theory states that the behaviour and performance of organizations are determined by the institutional setting in which they operate, including formal norms, regulations, governance structures, and normative structures. Against the backdrop of AML compliance, the theory implies that the success of the digital transformation process will largely depend on the performance of the institutions involved in its implementation and control. Organizations do not live in a bubble; rather, their actions are defined by the institutional context in which they operate (Meyer & Rowan, 1977).

The institutional approach is particularly useful for analyzing AML compliance in developing countries. According to DiMaggio and Powell (1983), three mechanisms of institutional isomorphism influence organizational behaviour: coercive, mimetic, and normative pressures. In terms of AML, coercive pressures come from regulatory requirements and international standards (e.g., FATF recommendations); mimetic pressures emerge as financial institutions emulate the compliance activities of their peers or other financial institutions abroad; normative pressures result from professional networks and emerging industry norms. It is this combination of forces that allows for either increasing compliance or “symbolic compliance” (where compliance is not increased but rather simply shown through technological adoption) (Bakhos Douaihy & Rowe, 2023).

The Institutional Theory perspective underscores the significance of institutional complementarity, i.e., the understanding that institutional components are not standalone but complement and offset each other (Hall & Soskice, 2001). In regard to AML systems, this implies that the quality of regulation, digital technology infrastructure, and human capital do not just add up but also interact, affecting the overall efficiency of the system. Any weakness in any one area may offset the effects of development in others. This approach can be particularly useful when assessing the success of digital transformation, which yields different outcomes across jurisdictions despite the same technologies (Arner et al., 2020).

2.4.1 Framework

This framework suggests that digital transformation enhances AML compliance effectiveness, but the effect varies by institutional readiness.

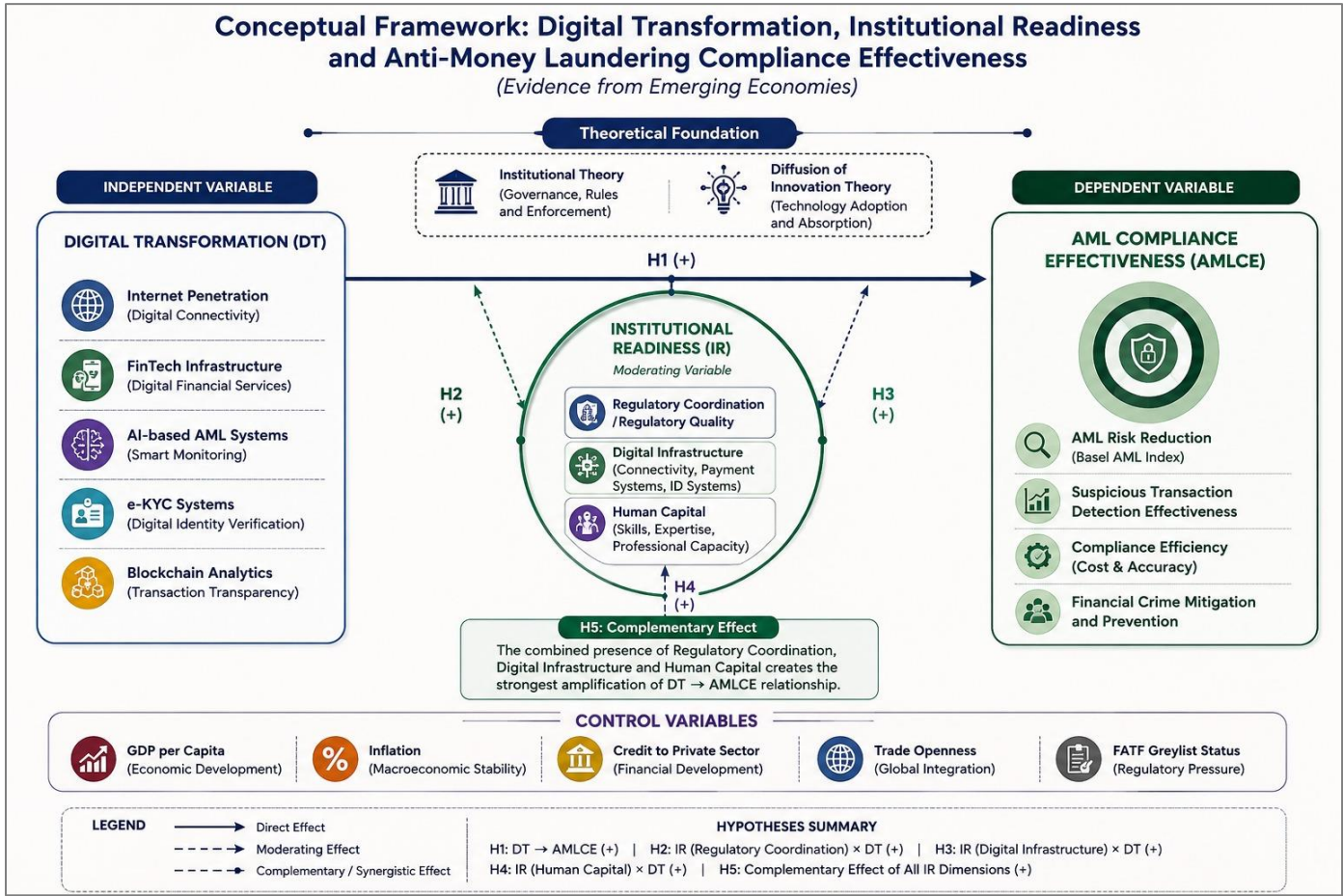


Figure 1: Conceptual Framework of the Study

The conceptual framework (Figure 1) reflects the study's empirical findings by distinguishing between direct and moderating effects of institutional variables. While regulatory quality and infrastructure directly influence AML compliance effectiveness, human capital plays a dual role, both directly affecting AML outcomes and moderating the relationship between digital transformation and AML effectiveness. This indicates that the impact of digitalization on financial crime mitigation depends on the availability of skilled human resources to effectively implement and manage digital AML systems. Control variables, including macroeconomic and financial indicators, are incorporated to account for structural differences across countries.

3. Methodology

This study uses a Quantitative approach to understand how digital technology changes the effectiveness of AML compliance in selected African countries, all the while looking at how prepared institutions are in the outcome. This is particularly appropriate in our panel framework, as it allows us to combine both cross-country variation and a dynamic dimension over time. The interaction term always exists in the background – so to ensure we have accurate estimates, this theoretical idea should not be ignored simply because people used awkward expressions.

The article employs a panel of 12 African nations (Algeria, Benin, Botswana, Cape Verde, Egypt, Ghana, Morocco, Mozambique, Nigeria, Senegal, South Africa, and Tanzania) over the 2015-2024 period, yielding 120 country-year observations. Our sample countries are chosen on the basis of reliable, calculable statistical consistency across data sets for AML risk (respective indicators drawn from universal or regional databases), internet development, and institutions relevant to international AML regulation.

All data used in this article come from internationally recognized sources. AML compliance effectiveness is measured using the Basel AML (Anti-Money Laundering) Index, which provides an overall estimate of the risk of money laundering and terrorist financing. Digital transformation is based on the measurement of internet penetration rate: the more access there is to digital information within a country, then the higher people's desire for innovation becomes. We also include a FinTech proxy that captures the national infrastructure for digital financial services and electronic transactions with broadband penetration (broadband access).

Although institutional readiness is a multidimensional concept that includes regulatory quality, digital infrastructure, and human capital. Regulatory quality is measured using governance indicators that capture governments' ability to formulate and implement sound policies. Digital infrastructure is evaluated through mobile and telecommunications penetration, as technology serves as the bedrock of digital payments systems. Human capital is estimated using the secondary schooling participation rate, as measuring human capital across nations can be very difficult.

To avoid omitted-variable bias, some control variables are included in the estimation models based on their popularity in international finance and financial crime studies. They include log GDP per capita as a proxy for economic development, the inflation rate as an indicator of macroeconomic instability, domestic credit to the private sector as a proxy for financial development, trade openness (measured as total trade divided by GDP), and a dummy variable representing the FATF greylist indicator.

The empirical model is specified within a panel regression framework that captures both direct and interaction effects. The baseline model is expressed as:

$$AMLit = \beta_0 + \beta_1 DIGit + \beta_2 INSTit + \beta_3 (DIGit \times INSTit) + \beta_4 Xit + \mu_i + \lambda_t + \epsilon_{it}$$

where $AMLit$ represents AML compliance effectiveness, $DIGit$ denotes digital transformation, $INSTit$ represents institutional readiness, and the interaction term captures the moderating effect. The vector Xit includes control variables, while μ_i and λ_t represent country-specific and time-specific effects, respectively.

To provide more granular insights, institutional readiness is further decomposed into its constituent components—regulatory quality, digital infrastructure, and human capital—allowing for the estimation of separate interaction effects between digital transformation and each institutional dimension.

The fixed-effects model was adopted because it controls for unobserved heterogeneity across countries that may correlate with explanatory variables (Baltagi, 2021). The random-effects model was estimated for comparison purposes and evaluated using the Hausman specification test (Hausman, 1978).

A dynamic panel estimation approach helps address endogeneity concerns due to reverse causality and omitted variables. The System Generalized Method of Moments (GMM) estimator is therefore employed, using a lagged dependent variable and internal instruments to address endogeneity bias. Other robustness checks included specifying different models and conducting sensitivity analyses to assess the stability of the results.

4. Results

4.1 Summary statistics

Table 1 represents the summary statistics of the study. Panel A provides the summary statistics of the categorical variable.

Table 1. Summary statistics

Variable	Obs.	Mean	Std. dev.	Min	Max
AML Index	120	6.206	0.95	4.36	8.28
Digital Index	120	47.462	23.714	6.5	91
Fintech Proxy	120	2.978	3.171	0.01	12.01
Regulatory Quality	120	-0.383	0.484	-1.39	0.73
Infrastructure	120	109.83	32.375	42.16	179.03
Human Capital	120	67.695	25.846	25.64	106.44
GDP per Capita	120	3165.55	2082	441.49	8328.71
Inflation	120	7.081	7.823	-1.41	38.11
Credit to GDP	120	30.567	17.948	7.41	67.87
Trade Openness	120	63.43	26.35	20.3	135.28
Greylist Dummy	120	0.192	0.395	0	

Table 1 depicts the summary statistics of the study. According to the descriptive statistics, there is significant heterogeneity among the selected African countries. This is because the mean value of the anti-money laundering index, at 6.206, indicates a moderately high risk of money laundering across the selected countries, with significant heterogeneity within the dataset. Digitalization, which entails individuals' use of the Internet, also shows high heterogeneity (mean = 47.46; SD = 23.71). Similarly, the institutional variables also demonstrate heterogeneity regarding regulatory quality (mean = -0.383). This is expected, as the sampled African nations do not have strong governance structures. On the positive side, infrastructure and human capital have higher average values than other institutional indicators, though there is dispersion in these two factors.

The correlation matrix (**Table 1a**) shows that digitalization and institutional indicators are negatively correlated with AML risk. In other words, the higher the values of these factors, the lower the AML index score. Notably, there is no existence of extreme correlation values. Moreover, a Variance Inflation Factor (VIF) score of 4.36 further ensures that multicollinearity will not affect the regression model.

Table 1a. Correlation Matrix

Variable	AML
Digital Index	-0.631*
Fintech Proxy	-0.335*
Regulatory Quality	-0.474*
Infrastructure	-0.675*
Human Capital	-0.487*
GDP (log)	-0.646*
Inflation	-0.097
Credit to GDP	-0.359*
Trade Openness	0.128
Greylist	-0.115

4.2 Regression results and discussion

Table 2 presents the regression results for the relationship between digital transformation, institutional readiness, and AML compliance effectiveness.

Turning to our variables of interest, the OLS results show that regulatory quality is negatively and statistically significantly related to AML risk at the 1% significance level ($\beta = -1.122$, $p < 0.01$), indicating that better governance is associated with lower money laundering risk. This finding supports our hypothesis 2 and aligns with prior studies (Koyuncu & Yilmaz, 2009; Gani, 2017) which demonstrated that institutional effectiveness and regulatory enforcement arrangements play an essential role in reducing illegal financial activities.

Table 2. Results

Variable	OLS Model	Interaction Model	Fixed Effects	Random Effects
Digital Index	-0.004	-0.012***	0.018**	—
Fintech Proxy	-0.066**	—	—	—
Institutional Readiness	—	—	-0.991**	-1.041*
Regulatory Quality	-1.122***	-1.139***	—	—
Infrastructure	-0.009**	-0.002	—	—
Human Capital	-0.009*	-0.016***	—	—
Digital × Regulatory	—	-0.004	—	—
Digital × Infrastructure	—	-0.0002	—	—
Digital × Human Capital	—	0.00049**	—	—
Digital × Institutional	—	—	-0.017***	-0.013*
GDP (log)	0.288	0.297	—	—
Inflation	-0.019**	-0.01	—	—
Credit to GDP	0.003	0.004	—	—
Trade Openness	0.015***	0.02***	0.012*	0.013*
Greylist	-0.141	-0.071	—	—

Where AML = anti-money laundering effectiveness, Digital Index = internet penetration rate, Fintech Proxy = digital financial services infrastructure, Regulatory Quality = governance indicators, Infrastructure = mobile and telecommunications penetration, Human Capital = secondary schooling participation rate, GDP (log) = economic development proxy, Inflation = macroeconomic instability indicator, Credit to GDP = financial development proxy, Trade Openness = total trade divided by GDP, Greylist = FATF greylist indicator. Standard errors are reported in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

The result further shows that infrastructure is negatively and statistically significantly related to AML risk at the 5% significance level ($\beta = -0.009$, $p < 0.05$), suggesting that better digital infrastructure is associated with lower money laundering risk. Similarly, human capital is negatively and statistically related to AML risk at the 10% significance level ($\beta = -0.009$, $p < 0.10$), indicating that countries with higher educational attainment have better AML effectiveness. These findings are consistent with the institutional theory perspective, which emphasizes that formal rules, enforcement capacity, and government structures shape financial system compliance outcomes (DiMaggio & Powell, 1983; Meyer & Rowan, 1977).

In terms of digital transformation indicators, the fintech proxy is negatively and statistically significantly related to AML risk at the 5% significance level ($\beta = -0.066$, $p < 0.05$), suggesting that better fintech infrastructure is associated with lower money laundering risk. However, the digital index (internet penetration) shows no significant relationship with AML risk in the baseline model. This implies that although certain financial infrastructures in digital form are significant, the presence of the internet cannot necessarily guarantee AML effectiveness – an idea that contradicts the idea that digitization automatically increases AML effectiveness.

From the interaction model, more information can be provided on the impact of institutional preparedness in light of digitalization on AML effectiveness. After controlling for interaction effects in the regression model, the direct impact of digitalization is evident, with a negative coefficient ($\beta = -0.012$, $p < 0.01$). This suggests that the application of digitalization enhances AML effectiveness, even as other institutions are considered. This finding supports hypothesis 1 partly. Regarding interactions, human capital shows a positive, statistically significant moderating effect ($\beta = 0.00049$, $p < 0.05$). Thus, the higher the level of human capital, the greater the effect of digitalization on AML effectiveness will be. It follows that the use of digital technology helps fight money laundering more effectively when human capital has the relevant expertise to deploy it. This conclusion provides strong support for hypothesis 3 and is consistent with the human capital–innovation relationship, according to which the effectiveness of investments in technology depends on an economy's ability to absorb skills and knowledge (Aghion et al., 2009). The finding is also in line with the existing evidence suggesting that an increase in educational attainment leads to better effectiveness and stability of financial systems (Fungáčová et al., 2015).

However, no statistically significant moderating effects of digital transformation on regulatory quality and infrastructure were found. Thus, regulatory quality and infrastructure contribute to the effectiveness of AML policy independently of digitalization. The above result helps refine the assumption in the current literature that all institutions contribute equally to the effectiveness of technological change. This implies that the institutional factors considered have a direct influence on AML outcomes and do not moderate the impact of digitalization.

The Fixed Effects Model, which accounts for heterogeneity across countries, confirms the importance of institutional readiness. The composite institutional index is negatively associated with AML risk at the 5% significance level ($\beta = -0.991$, $p < 0.05$), while its interaction with digital transformation is also negative and statistically significant at the 1% level ($\beta = -0.017$, $p < 0.01$). Therefore, the efficiency of digital technologies in mitigating money laundering depends directly on the quality of the institutionally oriented framework. This finding further confirms the institutional theory perspective and supports the law-and-finance framework, which holds that whether technological or financial innovations are beneficial depends on legal and regulatory quality (La Porta et al., 1998).

Turning to the control variables, trade openness is positive and significantly associated with AML risk across all model specifications (β ranging from 0.012 to 0.02, with significance levels from $p < 0.05$ to $p < 0.01$). This finding demonstrates the downside of globalization, as international financial transactions increase the risk of money laundering in poorly regulated environments. The findings are consistent with the existing literature, which shows that globalization and financial openness without proper regulation create a favourable environment for money laundering (Unger & Busuioc, 2007; Walker & Unger, 2009). The correlations show the intricacies of the open economy, in which, apart from facilitating economic development, international business also provides more opportunities for crime.

On the other hand, inflation has a statistically significant and negative impact on AML risk ($\beta = -0.019$, $p < 0.05$). Yet this effect becomes insignificant in the interaction model, suggesting that inflation could have an indirect impact through other variables. Other control variables, such as GDP per capita, credit-to-GDP ratio, and the greylist variable, do not show any statistically significant relationships with AML risk.

In all, these findings underscore the importance of having regulatory quality and infrastructure in place as a baseline for the effectiveness of AML. But human capital can serve as a supplementary element in the success of AML. Technology by itself is not enough to combat financial crime; it either succeeds or fails depending on the robustness of the governance frameworks and the availability of human capital. This highlights the need for a coherent policy approach that integrates technology, institutions, and human capital in developing countries.

5. Conclusion

This study investigates the influence of digital transformation and institutional capacity on the effectiveness of anti-money laundering (AML) policies in a set of African countries from 2015 to 2024. The results of the panel estimation show that the quality of institutions continues to play a pivotal role in the success of AML policies, whereas the effect of digital transformation is conditional on institutional quality. According to the findings, the quality of regulations and human capital play significant roles in lowering the risk of money laundering. Nevertheless, adopting digitization to enhance anti-money laundering effectiveness without considering other factors may not yield positive outcomes. There is evidence that a complementary relationship emerges when digitalization complements institutions' readiness, particularly human capital. It would appear that for digitalization to be successful, institutions must have appropriate capacity.

This finding is consistent with institutionalism and law-and-finance theories, which stress the crucial role of governance structures in shaping the performance of financial systems (La Porta et al., 1998; Koyuncu & Yilmaz, 2009). The relationship between openness to foreign business and vulnerability to money laundering helps illustrate the potential risks associated with increased connections among the financial systems of different countries. This paper's findings support previous studies showing that globalization increases the likelihood of illegal financial transactions when regulatory mechanisms are absent (Unger & Busuioc, 2007; Walker & Unger, 2009).

They are not just about investments in digital financial technologies – greater emphasis must also be placed on institutional strength and on strengthening the frameworks to regulate this new development sphere. Policy makers need to put human capital development at the forefront of their agenda and increase capacity-building programs, recognizing that monitoring digital AML systems can be effectively achieved if they do so. Also, improvements in management and coordination across government departments will enhance the overall efficiency of AML regulation.

This research highlights issues in trade supervision and makes recommendations regarding change. With economic integration in the financial sector, it becomes important to improve the surveillance system and analysis

capabilities. This includes the use of technology, including the use of artificial intelligence and data analytics; however, the whole exercise should be supported by strong institutions.

The focus of this research is on theoretical development. The paper extends the existing literature and, for the first time, introduces the concepts of 'digital transformation' and 'institutional readiness' into the study of how effective anti-money laundering systems may be in a particular place. It provides empirical evidence that human capital is a crucial conduit through which digitalization drives sustainable compliance. Compared with existing studies, this contribution adds new insights to the literature by showing that not all institutions function equally effectively in reversing the direction of digitalization, which is critical for advancing understanding of the institutional impact on technology in preventing financial crimes.

This paper offers several insights into the existing discussion on the effectiveness of anti-money laundering policies in African economies. A substantial body of evidence, based on a complete dataset and the application of econometric analysis, provides sufficient grounds for formulating policy recommendations. Nevertheless, this research has certain drawbacks as well. First of all, proxies are used to measure AML effectiveness, which means the complexity of financial crime dynamics is not properly accounted for. Second, there was a need to use proxies because data availability restrictions were faced during the investigation of institutional dimensions. Specifically, human capital was investigated with the help of proxies.

To conclude, the results presented above suggest that the fight against financial crimes requires an institutional-based approach that combines the use of digital technology with factors such as institutional reinforcement and human capital. Thus, a more complex approach to addressing financial crimes is needed, as only such measures will enable improved AML compliance effectiveness.

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