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and Sustainable
Finance: OIC vs
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A Review of the
Strategic
Approaches for
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Popular Justice:
Erosion of the
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This article examines the emergence of green sukuk as an instrument situated at the intersection of Islamic finance, sustainable finance, and comparative financial regulation, with particular reference to the Organization of Islamic Cooperation (OIC) and the European Union (EU). The study argues that green sukuk may represent a distinctive mechanism for financing sustainable development because they combine Sharia-compliant financial structures with environmental, social, and governance (ESG) objectives, thereby linking ethical finance to climate-transition strategies. After outlining the legal and operational characteristics of sukuk and their evolution within Islamic finance doctrine and AAOIFI standards, the article analyses the increasing role of green sukuk in financing renewable energy, climate adaptation, and sustainable infrastructure projects across OIC jurisdictions...

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Index Terms: green sukuk • ESG • OIC • Europe • sustainable finance • Islamic finance law • comparative law

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This article examines the emergence of green sukuk as an instrument situated at the intersection of Islamic finance, sustainable finance, and comparative financial regulation, with particular reference to the Organization of Islamic Cooperation (OIC) and the European Union (EU). The study argues that green sukuk may represent a distinctive mechanism for financing sustainable development because they combine Sharia-compliant financial structures with environmental, social, and governance (ESG) objectives, thereby linking ethical finance to climate-transition strategies. After outlining the legal and operational characteristics of sukuk and their evolution within Islamic finance doctrine and AAOIFI standards, the article analyses the increasing role of green sukuk in financing renewable energy, climate adaptation, and sustainable infrastructure projects across OIC jurisdictions, particularly in Malaysia, Indonesia, Saudi Arabia, and the Gulf region. The article then explores the European dimension of sustainable Islamic finance through the lens of the European Green Deal, the EU Taxonomy Regulation, and the “Do No Significant Harm” principle, underscoring convergences and tensions between EU sustainability regulation and Sharia governance. Adopting a comparative-law methodology, the article highlights how green sukuk serves as a privileged vantage point for analyzing the broader transformation of contemporary financial law into a plural and transnational normative space. Finally, the article analyses the central role of the doctrinal formant in shaping Islamic financial law, focusing on AAOIFI Sharia Standard No. 62 and the transition from asset-based to asset-backed sukuk structures. It is argued that the future credibility of green sukuk markets depends upon the development of transnational governance mechanisms capable of preventing both greenwashing and “Sharia-washing” through stronger disclosure, environmental oversight, and interdisciplinary expertise. The article concludes that green sukuk may constitute an important component of global sustainable finance, provided that regulatory harmonization, secondary-market development, and integrated Sharia-environmental governance continue to evolve within an increasingly transnational legal framework.

ARCHIVAL RECORD

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This article examines the emergence of green sukuk as an instrument situated at the intersection of Islamic finance, sustainable finance, and comparative financial regulation, with particular reference to the Organization of Islamic Cooperation (OIC) and the European Union (EU). The study argues that green sukuk may represent a distinctive mechanism for financing sustainable development because they combine Sharia-compliant financial structures with environmental, social, and governance (ESG) objectives, thereby linking ethical finance to climate-transition strategies. After outlining the legal and operational characteristics of sukuk and their evolution within Islamic finance doctrine and AAOIFI standards, the article analyses the increasing role of green sukuk in financing renewable energy, climate adaptation, and sustainable infrastructure projects across OIC jurisdictions, particularly in Malaysia, Indonesia, Saudi Arabia, and the Gulf region. The article then explores the European dimension of sustainable Islamic finance through the lens of the European Green Deal, the EU Taxonomy Regulation, and the “Do No Significant Harm” principle, underscoring convergences and tensions between EU sustainability regulation and Sharia governance. Adopting a comparative-law methodology, the article highlights how green sukuk serves as a privileged vantage point for analyzing the broader transformation of contemporary financial law into a plural and transnational normative space. Finally, the article analyses the central role of the doctrinal formant in shaping Islamic financial law, focusing on AAOIFI Sharia Standard No. 62 and the transition from asset-based to asset-backed sukuk structures. It is argued that the future credibility of green sukuk markets depends upon the development of transnational governance mechanisms capable of preventing both greenwashing and “Sharia-washing” through stronger disclosure, environmental oversight, and interdisciplinary expertise. The article concludes that green sukuk may constitute an important component of global sustainable finance, provided that regulatory harmonization, secondary-market development, and integrated Sharia-environmental governance continue to evolve within an increasingly transnational legal framework.

Keywords: green sukuk, ESG, OIC, Europe, sustainable finance, Islamic finance law, comparative law

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1 Introduction

The United Nations 2030 Agenda has set seventeen Sustainable Development Goals (i.e., Sustainable Development Goals, “SDGs”): the SDGs recognize that ending poverty is closely interconnected with strategies that reduce inequalities and stimulate economic growth, all while combating climate change and preserving the environment.

In this context, it is believed that Islamic finance, with its fundamental ethical principles, can play a crucial role in promoting sustainable development and financial inclusion¹

The precepts that characterize the salient features of Islamic finance are: (i) the prohibition of *ribà* or “accrual”, commonly understood as the prohibition of interest; (ii) the prohibition of introducing elements of uncertainty (*gharar*); (iii) the prohibition of speculation (*maysir*); (iv) the prohibition of investing in prohibited activities (*haram*)²; (v) the principle of profit and loss sharing (i.e. *profit-loss sharing* or PLS); (iv) the duty to work for the satisfaction of needs, justice, efficiency, growth and freedom³. In addition, investments must be approved by a Sharia Advisory Board, which certifies their compliance with Sharia. This committee can operate either as an internal, yet independent, body

¹A. JIMOH, B. KOLAWOLE, *Islamic microfinance as a panacea for poverty alleviation*, in *EJIF*, 2024, 11(1), pp. 17-30.

²The *fiqh* grouped human actions into five different categories: obligatory, prohibited, recommended, discouraged, and free acts. Failure to perform an obligatory act or committing a prohibited act exposes the perpetrator of the action or omission to punishment. W.B. HALLAQ, *An Introduction to Islamic Law*, Cambridge, 2009, p. 20. A. PREDIERI, *Sharia e Costituzione*, Roma-Bari, 2006, pp. 121-125.

³Ex multis: M.N. SIDDIQI, *An Islamic Approach to Economics*, Washington DC, 1988.

of a bank or financial institution⁴, or as an external body to which a specific question is submitted and that grants an opinion (*fatwa*)⁵.

In this context, it is believed that Islamic finance can contribute to environmental sustainability goals, especially through the rise of green sukuk, or ESG-sukuk⁶. As further detailed below, sukuk are typical financial instruments of Islamic finance. Recent statistics indicate that sukuk assets amount to approximately \$900 billion, representing nearly half of global Islamic financial assets, with growth rates exceeding 10%. sukuk outstanding globally grew 15.5% year-over-year, reaching \$1 trillion at the end of the third quarter of 2025, of which 28% is in US dollars⁷. Among these, green sukuk issuance reached \$11.9 billion in the first nine months of 2024, up 18% from the same period in 2023. They accounted for 1.6% of total ESG bond issuance and 6.4% of total sukuk issuance⁸.

The issued sukuk have been labeled “green” in accordance with the Green Bond Principles (GBP) of the International Capital Market Association (ICMA). In addition to the GBP, several green sukuk qualify under the ASEAN Green Bond Standards of the ASEAN Capital Markets Forum⁹. Moreover, green sukuk issued in Malaysia and Indonesia follow not only the GBP and/or the ASEAN Green Bond Standards, but also the national ones, namely the Sustainable and Responsible Investment (SRI) Sukuk Framework of Malaysia and the Green Bond and Green Sukuk Framework of Indonesia¹⁰. Furthermore, in 2024, ICMA, the Islamic Development Bank, and the London Stock Exchange Group published new guidance on the issuance of green, social, and sustainability sukuk. This collaborative effort, announced at COP28, aims to provide practical information and promote standardized best practices, further developing the sustainable sukuk market¹¹. As of September 2020, \$10 billion in green sukuk has been issued by 11 institutions from four countries (in

descending order): Indonesia, Saudi Arabia, the United Arab Emirates, and Malaysia, as well as by a multilateral development bank¹². Notably, Saudi Arabia, Indonesia, and Malaysia are the undisputed leaders in this segment and are expected to continue growing, given strong demand from Gulf Cooperation Council countries, particularly for financing green and sustainable transition projects¹³. Green sukuk are issued by the four major sukuk issuing countries. As mentioned, more than half of sukuk (65%) and green sukuk (64%) are issued in the Asia-Pacific region (Indonesia and Malaysia). Indonesia is the largest issuer of green sukuk (54% of the market, valued at approximately \$5.5 billion), driven by the Indonesian government's issuance of these instruments. Although Malaysia is the smallest issuer of green sukuk (\$1 billion), it has the largest number of private issuers supported by subsidies and tax incentives for green bonds¹⁴.

Furthermore, a recent study analyzed the effects of green sukuk – in particular, those issued from 2018 to 2022 – on the negative consequences of climate change, arguing that, both in the short and long term, green sukuk can help reduce these negative effects in the issuing countries¹⁵.

2 Characteristics and evolution of the sukuk regulation

The development of the sukuk market was characterised by an intense doctrinal debate, particularly in the Islamic context: a significant portion of the interpreters believed that the sukuk issued (especially in the initial period) were entirely similar to traditional bonds, raising serious critical issues from the point of view of compliance with the Sharia¹⁶; conversely, another part of the doctrine has emphasized the structural differences between the two instruments, underlining the compliance of sukuk with the principles of Islamic finance and, according to some scholars, their lower levels of risk¹⁷, also thanks to the guidelines developed by a private institution, the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI)¹⁸. Hence, the AAOIFI's

⁴For an interesting analysis of the Italian context: P.P. BIANCONI, *Islamic Bank in Italy*, Torino, 2020.

⁵For an in-depth examination of the functions of the *Sharia Boards* see in particular: S. ALVARO, *La finanza islamica nel contesto giuridico ed economico italiano*, in *Quaderni Giuridici CONSOB*, 2014, 6, pp. 15-19. In particular, the main functions of *Sharia Boards* are believed to be: 1) certifying the Sharia compliance of the company's products, services, and contracts; 2) monitoring the company's compliance with religious rules; 3) auditing (again, in terms of Sharia law); 4) providing consultancy to management. *Ibidem*. In this perspective, a very important *fatwa* is the one issued in 1998 by *Sharia Board* of the Dow Jones Islamic Market™ Index (which began operating in 1999 precisely on the basis and as a result of the guidelines received), which makes use of an independent *Sharia* supervisory board, composed of four experts from distinct geographical areas, so as to ensure that all interpretative currents are represented. *Ex multis*: K. JOUABER-SNOUSI, *La finanza islamica - Un modello finanziario alternativo e complementare*, Milano, 2013, p. 43. For further information on the *Sharia* compliance standards of Islamic market indices: https://www.spglobal.com/spdji/en/documents/methodologies/methodology-dj-islamic-market-indices.pdf?utm_source=pdf_education. [the date of last access to all reported websites is May 14th, 2026].

⁶*Environmental, Social and Governance*: The first category is considered to include investment instruments in the areas of climate change and carbon emissions; natural resources, water management, pollution, and waste; the second category includes those relating to the health and safety of the workforce and its diversity and training; responsibility towards customers and products; community relations and charitable activities; the third category includes those relating to shareholder rights, composition of the board of directors (in terms of independence and diversity of composition); management remuneration policies; and prevention of fraud and corruption. *Ex multis*: AA.VV., *Sustainable and Green Finance: Conventional vs Islamic*, Report submitted at the *International Scientific Conference on economic and Social Development*, Porto, 12-13 July 2024: https://www.esd-conference.com/upload/book_of_proceedings/Book_of_Proceedings_esdPorto2024_Online.pdf#pag-e=142.

⁷B. AL NATOOR, S. SHAWQI, *The Know: The Rise of Sukuk in Global Finance*, 2025: <https://www.fitchratings.com/research/islamic-finance/global-outstanding-sukuk-to-cro-ss-usd1-trillion-in-2025-overallcredit-profile-stable-08-01-2025>.

⁸London Stock Exchange Group, *Green and Sustainability Sukuk Update 2024*, p. 6: https://www.lseg.com/content/dam/data-analytics/en_us/documents/reports/lseg-green-and-sustainability-sukuk-2024-report.pdf.

⁹WORLD BANK, *Pioneering the green sukuk. Three years on*, Washington DC World Bank, 2020: <https://openknowledge.worldbank.org/server/api/core/bitstreams/8fdcc7b-d4c-e-57e8-8d80-4e15df575c0f/content>.

¹⁰*Ibidem*.

¹¹<https://www.icmagroup.org/assets/documents/Sustainable-finance/ICMA-IsDB-L-SEG-Guidance-on-Green-Social-and-Sustainability-Sukuk-April-2024.pdf>.

¹²D. AZHGALIYEVA, *Green islamic bonds*, Asian Development Bank Institute, 2020: <https://www.adb.org/sites/default/files/institutional-document/691951/ado2021-bn-green-islamic-bonds.pdf>.

¹³REPORT REFINITIV, *Islamic Finance Development Report 2022 – Embracing Change*, London Stock Exchange Group, 2022, 6: https://lcd-ps.org/uploads/files/ICD%20Refinitiv%20fdi-report-20221669878247_1630.pdf.

¹⁴D. AZHGALIYEVA, *Green islamic bonds*, cit., p. 2.

¹⁵S. SURIANI ET AL., *Do Global Green Sukuk Affect on Climate Change? Evidence in Issuing Countries*, cit., *passim*.

¹⁶For example: M.T. USMANI, *Sukuk and their Contemporary Applications*, AAOIFI Sharia Council Meeting, 2007: [¹⁷S. CAKIR, F. RAEI, *Sukuk vs Eurobonds: Is There a Difference in Value-at-Risk?*, International Monetary Fund - Working Paper WP/07/237, 2007; N. ALAM, ET AL., *Are Islamic Bonds Different from Conventional Bonds? International Evidence from Capital Market*, in *Test. Borsa Istanbul Review*, 2013, 13\(3\), p. 22 ff.](https://d1wqtxts1xzle7.cloudfront.net/19945996/sukuk-and-their-contemporary-applications-libre.pdf?1390866399=&response-content-disposition=inline%3B+filename%3DSukuk_and_their_contemporary_application.pdf&Expires=1764409562&Signature=YFbTUWkMY8GuYrE6MLiaGUrvEI8TsHGgzlX5-S15lm9gf4R7pEpF4w4TMqQRhAA9ion901s9gxmHRJG1TSg3pTe61bPk83IAYoad15-1KzVscXBdtiWYTu00YQaE8dQ3Ux1dJF0~OTtoXT0GsxLIQcnd3BDtF0pSuLeXQlhmlaDKgdhQY0tDveAUgJgRefot37XRxEwFzDR77JfmJBZiqlE2Jxr4HQLVd-rPkvsW916RnNxUpBFXNhACiQvXyXwvdQ8im36f3cWtGmtm796HBCEAoy2v7~8zPVtU3mfmxExqWzqmNM7rPn-t1A-h5yalY4NkvjNA__&Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA; N. MILLER ET AL., <i>UK Welcomes the Sukuk</i>, in <i>International Financial Law Review</i>, 2007, 26(5), pp. 24-25; S. RAHIM, S. N. AHMAD, <i>Stock Market Reactions Following Sukuk Announcement: An Analysis of Dow Jones Islamic Market Index (2004-2011)</i>, in <i>IOSR Journal of Economics and Finance</i>, 2014, 5(6), pp. 29-35; R. WILSON, <i>Innovation in Structuring of Sukuk Securities</i>, in <i>Humanomics</i>, 2008, 24(3), pp. 170-181.</p>
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¹⁸AAOIFI is a private institution, founded in 1991 in Bahrain, and is considered “the leading international not-for-profit organisation primarily responsible for development and issuance of standards for the global Islamic finance industry. It has issued a total of 100 standards in the areas of *Shari'ah*, accounting, auditing, ethics and governance for international Islamic finance. It is supported by a number of institutional members, including central banks and regulatory authorities, financial institutions, accounting and auditing firms, and legal firms, from over 45 countries. Its standards are currently followed by all the leading Islamic financial institutions across the world and have introduced a progressive degree of harmonisation of international Islamic finance practices”: <https://aaoifi.com/our-history/?lang=en>.

specific choice to call sukuk “investment sukuk” to differentiate them from conventional stocks or bonds. In any case, there is no doubt that green sukuk are now universally recognized as suitable instruments for pursuing sustainable development objectives, in a Sharia-compliant context¹⁹.

From this perspective, the evolution that has affected the activity of AAOIFI, as well as other private institutions of reference for Islamic finance, is particularly significant²⁰: over time, and particularly from 2008 to the present, the standards and guidelines for Islamic finance developed by these institutions have been periodically revised to better regulate the structure and functioning of Islamic finance instruments from a Sharia-compliant perspective. The AAOIFI’s work of interpretation aimed at standardizing and harmonizing financial practices and reporting in accordance with Sharia precepts has been remarkably successful in the Islamic (and non-Islamic) world, so much so that the AAOIFI Sharia Standards are considered mandatory requirements in Bahrain, the United Arab Emirates, Jordan, Mauritius, Nigeria, Oman, Pakistan, Qatar and the Qatar International Financial Centre (QIFC), the Kyrgyz Republic, Sudan, Syria, and Yemen²¹. These standards have also been adopted by the Islamic Development Bank Group and used as the basis for national Sharia guidelines in Indonesia and Malaysia. In other jurisdictions and/or institutions, such as Afghanistan, the Dubai International Financial Center, Kuwait, and Lebanon, these standards have been voluntarily adopted by leading Islamic financial institutions as internal guidelines²².

The sukuk is commonly referred to as an “Islamic bond” and is often equated with a conventional bond, although the two differ in various respects²³. More properly, it has been observed that sukuk should be defined as “Islamic investment certificates”, since they are participation certificates that represent undivided ownership shares in an estate consisting of tangible assets²⁴. Specifically, the differences between conventional bonds and sukuk primarily concern the nature of the underlying asset: in the former, it is typically purely financial, whereas in the latter, it corresponds to one or more tangible assets in which the investor acquires a share of ownership. For this reason, further differences emerge: the coupon payment in conventional bonds is fixed and predetermined, while in sukuk it is tied to the market value of

the underlying assets. The relationship between the issuing company and the investor is also different, as it is not a credit-debt relationship arising from the traditional financing model but rather depends on the type of contract used: the most commonly used contracts are the *ījāra*, *musharāka*, and *mudāraba*²⁵.

The AAOIFI Sharia Standard No. (17) - *Investment Sukuk*, at §2, defines the sukuk as follows:

“Investment Sukuk are certificates of equal value representing undivided shares in ownership of tangible assets, usufruct, and services or (in the ownership of) the assets of particular projects or special investment activity. However, this is true after receipt of the value of the Sukuk, the closing of subscription and the employment of funds received for the purpose for which the Sukuk were issued”²⁶.

²⁶<https://aaoifi.com/ss-17-investment-sukuk/?lang=en>.

Since Sharia law prohibits the sale of debt, sukuk do not represent third-party capital, but rather a co-ownership share in the underlying assets, which are therefore jointly owned by the various sukuk holders. For example, the AAOIFI Sharia Standard No. (10) - *Salam and Parallel Salam*, at §7 titled “Salam Sukuk Issues”, provides: “It is not permitted to issue tradable Sukuk based on the debt from a Salam contract” and “The basis for the impermissibility of tradable Salam Sukuk is because trading with such Sukuk is a form of sale of debt which is prohibited”²⁶.

It has been highlighted that, in practice, the sukuk is similar to a securitization transaction, due to the creation of a corporate vehicle (special purpose vehicle, SPV) to which the originator of the transaction (i.e. the entity requiring the financing) transfers certain assets, even heterogeneous ones, against which the SPV issues certificates (sukuk notes) that the investors will subscribe²⁷. The funds thus raised will serve as consideration for the assets transferred by the originator, and must be used to finance Sharia-compliant activities. The investors will then become co-owners of the assets transferred to the SPV, and the latter, on their behalf, will enter into an agreement with the originator to regulate the use of the assets²⁸.

As mentioned above, such an agreement could take the form of an *ījāra*, *musharāka*, or *mudāraba*. An *ījāra* is a lease agreement that grants one party the right to use a movable or immovable asset in exchange for periodic consideration, with the option to purchase the asset at the end of the contract. In more advanced forms, which combine elements of a lease and a sales contract and involve three distinct parties (the manufacturer/seller, the financier/lessor, and the user/lessee), this latter contract is considered equivalent to a conventional lease. This arrangement is widely used in sukuk issuances²⁹. A *musharaka* contract is a type of corporate joint venture in which two or more partners share the same rights and obligations and bear both profits and losses. All partners, therefore, have the right to participate in the management of the business, unless they have delegated this to a third party. Any profits will be distributed as dividends. In this case, the practical outcome of this arrangement can be considered equivalent to that of a Western bank earning a profit through an interest rate. In contrast, an Islamic bank or financial institution earns an economic benefit in the form of a dividend, with the difference that it directly assumes the risk of

¹⁹S. SURIANI ET AL., *Do Global Green Sukuk Affect on Climate Change? Evidence in Issuing Countries*, in *International Journal of Energy Economics and Policy*, 2024, 14(1), p. 98 ss.; D. DEV ET AL., *Sustainability-linked Sukuk: A New Opportunity for the Islamic Finance Market*, in *JIBFL*, 2020, 10, p. 680 ff.

Sharia literally means “the right path” and is otherwise translated as “divine law”: this expression refers to the set of duties and tasks that every Muslim, man or woman, is required to observe. W.B. HALLAQ, *An Introduction to Islamic Law*, cit., 2009, pp. 163-170. Even more precise is F. Castro, according to whom the term sharia can be understood in three meanings: “in a very broad sense it indicates: the ‘way’, that is, the ‘religious law’, including dogmas, rites, moral and legal precepts, revealed to Jews, Christians, and Muslims; [...]. In a broad sense, it is the way revealed to Muslims alone and therefore concerns both the internal and external forum. [...] In a narrow sense, it then indicates the way or ‘religious law’ revealed to Muslims alone (*sharī‘a islāmiyya*) to regulate the external forum only. Id., *Diritto musulmano*, in *Digesto disc. priv. Sez. civ.*, Torino, 1990, §4.

Sharia is one of those terms, like *soviet* and *trust*, that circulate globally while maintaining their original terminology and carrying with them the entire conceptual framework that defines them. For these terms, therefore, the option of refraining from translation is valid. The other legal translation options identified by comparative scholarship are: (i) creating a neologism; (ii) rendering the foreign term with a periphrasis or phrase that explains its salient features; (iii) resorting to literal translation only when one is certain of the correspondence between the original term and the term proper to the language of the target legal system. R. SACCO, *Traduzione giuridica*, in *Digesto delle discipline privatistiche - Sez. civ.*, Aggiornamento, I, Torino, 2000, p. 722 ss., in particular §§ 5 and 7.

²⁰For example, the *International Islamic Fiqh Academy* based in Jeddah, Saudi Arabia: <https://iifa-aifi.org/en>.

²¹<http://aaoifi.com/adoption-of-aaoifi-standards/?lang=en>.

²²<http://aaoifi.com/adoption-of-aaoifi-standards/?lang=en>.

²³M. SAFARI, *Are Sukuk Securities the Same as Conventional Bonds?*, Working paper 2011, <http://ssrn.com/abstract=1783551>, describing the differences in economic terms and in the performance of the two instruments.

²⁴F. MIGLIETTA, *Bond islamici alla conquista dei mercati. Opportunità, rischi e sfide dei sukuk*, Milano, 2012.

²⁵*Ibidem*, *passim*.

²⁶*Ibidem*.

²⁷S. ALVARO, *La finanza islamica nel contesto giuridico ed economico italiano*, cit., p.22.

²⁸*Ibidem*.

²⁹H. ELAHI, *The Islamic Leasing System (Ijarah): Principles, Practices, and Modern Applications*, in *IJFMR*, 2025, 7, 2, p. 1 ff.

losses³⁰. The *mudāraba* contract is an agreement whereby an investor (*rab-al-māl*) makes capital available to an entrepreneur (*mudārib*) to enable the development of a business activity, which will be carried out and managed by the entrepreneur thanks to his expertise and know-how, with profits and losses shared between both parties or, more precisely, with profits split between both parties and the financier bearing all of any losses³¹.

Accordingly, the main difference between a conventional bond and a sukuk is that, in the former, the investor holds a credit interest, while in the latter, a real interest. This, however, is theoretical: in practice, there have been several sukuk cases in which investors were granted only leasehold interests (i.e., rights deriving from an “estate for years” or “term of years”)³².

3 Green sukuk and experiences of sustainable finance in the oic context

Climate change presents a major global challenge with profound effects on economic growth, especially in highly exposed and poorly prepared regions. The 57-member countries of the Organization of Islamic Cooperation (OIC) are particularly vulnerable due to their high exposure and limited adaptive capacity to climate change³³. The OIC is enhancing efforts to meet climate and development goals, with 54 OIC member countries having ratified the Paris Agreement, and 35 committed to achieving net-zero targets.

Sustainable finance raised grew from US\$17.8 billion in 2017 to US\$82.3 billion in 2024 – a compound annual growth rate of 24.4%. Islamic instruments accounted for 16% (US\$53.9 billion) of total sustainable finance raised between 2017 and 2024. Between 2017 and 2024, 19 OIC countries issued sustainable bonds, and 5 issued sustainable sukuk. Sustainable sukuk have been a major channel of Islamic climate finance, accounting for 35% of total sustainable bond/sukuk issuances. Within the OIC, a substantial share of green sukuk (58%) was directed toward the energy sector³⁴. This suggests growth opportunities, especially given the potential alignment of sukuk structures with infrastructure and climate projects. About one-third of sustainable sukuk were labeled “green,” whereas nearly two-thirds of sustainable bonds carry a green label. This implies that sukuk are currently used across a broad range of sustainability objectives, rather than specifically for climate mitigation or adaptation. Hence, targeted initiatives for green sukuk can help channel more capital to climate-specific outcomes³⁵.

As anticipated, Malaysia and Indonesia in Southeast Asia, Saudi Arabia and the United Arab Emirates in the Gulf Cooperation Council (GCC) are making remarkable progress toward issuing green and sustainable sukuk.

In line with Malaysia’s transition to a low-carbon economy, the Securities Commission released the SRI-linked Sukuk Framework in June 2022. The SRI-linked Sukuk is an innovative product that allows companies, including those in hard-to-abate sectors, to tap the

capital market to meet their transition finance needs. The Securities Commission also expanded its SRI Sukuk and Bond Grant Scheme, which assists issuers in defraying up to 90% of external review costs, to include SRI-linked Sukuk Framework issuances. In the 2021 Budget, MYR 2 billion was allocated for the issuance of SRI Sukuk and green bonds (until 31 December 2021) under the Green Technology Financing Scheme 3.0³⁶.

The UAE, specifically the Dubai Electricity and Water Authority (DEWA), issued the region’s first sovereign-backed Green Sukuk in 2020 to fund a solar power project. This issuance has played a pioneering role in the emergence of the Green Sukuk market in the country. In 2023, further Green Sukuk issuance came from Abu Dhabi Islamic Bank, Aldar Property, Dubai DP World, and Majid Al Futtaim, with issuance amounts of US\$500 million, US\$500 million, US\$1,500 million, and US\$500 million, respectively³⁷. Qatar followed suit by issuing a US\$500 million sustainable Sukuk, the Green Corporate Sukuk, by Qatar International Islamic Bank in 2024³⁸.

The emergence of Islamic finance instruments, such as green and sustainability-linked sukuk, has been instrumental in advancing Islamic climate finance. According to a joint report of the World Bank and the Islamic Development Bank:

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“to further enhance the efficacy of these endeavors, it remains imperative to continue nurturing the growth of the Islamic financial sector, thereby facilitating access to essential funds for climate and broader sustainability projects. The potential for Islamic finance to support the climate agenda and tackle climate change is noteworthy, and promoting ongoing growth and innovation in this area will be key to achieving the OIC collective sustainability goals”^a.

^aWORLD BANK & ISLAMIC DEVELOPMENT BANK, *Islamic Finance and Climate Agenda: From Green Sukuk Innovation to Greener Halal Value Chains*, cit., p. 16.

For example, in 2024, the Asean Development Bank approved a US\$500 million policy-based loan to Pakistan, supporting climate finance mobilization from public and private sources, including the issuance of a domestic green sukuk³⁹. Moreover, the Securities and Exchange Commission of Pakistan published updated guidelines for the issuance of green bonds in June 2024. These provide detailed criteria for eligible green projects, focusing on renewable energy, water management, and pollution control. The aim is to create a more robust framework for financing environmentally sustainable projects that aligns with international standards. The initiative is part of Pakistan’s broader efforts to enhance its sustainable finance landscape and attract green investments⁴⁰.

Pursuant to a recent study, sukuk and Sharia financing have a positive but not significant impact on short-term green economic growth, but they become essential in the long term. Sukuk appears more effective in developed economies, while Islamic bank financing seems

³⁰M.T. USMANI, *An Introduction to Islamic Finance*, The Hague, 2002, pp. 20-21.

³¹K. JOUABER-SNOUSSI, *La finanza islamica, Un modello finanziario alternativo e complementare*, Milano, 2013, p. 30.

³²About this concept, and more in general, the law of property in common law, see specifically: A. GAMBARD, *Proprietà in diritto comparato*, in *Digesto*, disc. priv., sez. civ., IV, Torino, 1997, p. 502.

³³According to the Notre Dame Global Adaptation Initiative (ND-GAIN)3 Index 2022, the OIC, on average, was estimated to have a vulnerability score of 0.46 and readiness of 0.36, while the world’s average levels of vulnerability and readiness were 0.43, respectively.

³⁴M. HAZIK, *Sukuk and Sustainability: Exploring Green Financial Instruments and the Transition to Low- Carbon Economies*, in AA.VV. (ed by), *Islamic Finance and Sustainability – A Research Companion*, Milton Park, Abingdon-on-Thames, 2025, p. 465 ff.

³⁵WORLD BANK & ISLAMIC DEVELOPMENT BANK, *Islamic Finance and Climate Agenda: From Green Sukuk Innovation to Greener Halal Value Chains*, 20 November 2025: <https://www.worldbank.org/en/country/malaysia/publication/islamic-finance-and-climate-agenda>.

³⁶International Platform on Sustainable Finance - Annual Report 2022: https://finance.ec.europa.eu/document/download/9db9aca1-9044-4112-8fd6-c3d71f3d5a63_en?filename=e=221109-ipsf-annual-report_en.pdf.

³⁷UNITED NATIONS DEVELOPMENT PROGRAMME (UNDP), *The Potential Growth and Future of Green Sukuk as a Tool for Sustainable Financing*, 2024, p. 53: <https://www.undp.org/publications/potential-growth-and-future-trends-green-sukuk-tool-sustainable-financing>.

³⁸*Ibidem*.

³⁹<https://www.arabnews.pk/node/2579918/pakistan>.

⁴⁰LONDON STOCK EXCHANGE GROUP, *Green and Sustainability Sukuk Update 2024*, cit., p. 22.

to have a negative impact in weak economies⁴¹. Furthermore, the role of institutional quality moderation mitigates the adverse effects of fiscal policy and strengthens natural resource management, although it remains limited to low-income countries; for this purpose, an adequate fiscal policy is required⁴².

4 Green sukuk and experiences of sustainable finance in the eu context

The European Union (EU) has emerged as a global leader in promoting sustainability and green finance, exemplified by its ambitious policy initiatives such as the European Green Deal⁴³. Introduced in December 2019, the European Green Deal outlines a comprehensive framework for achieving climate neutrality by 2050. At its core, this initiative is designed to transform the EU into a more sustainable, resource-efficient, and resilient economy⁴⁴. The European Green Deal encompasses a broad range of policies and measures to mitigate climate change, preserve biodiversity, and foster a green and circular economy. One of the key pillars of the European Green Deal is the commitment to sustainable finance, in which the EU recognizes the primary role that financial markets play in driving sustainable development and has undertaken significant efforts to align capital flows with environmentally sustainable investments. The Sustainable Finance Action Plan⁴⁵, introduced by the European Commission, is a pivotal component of this strategy, which seeks to integrate ESG considerations into financial decision-making and to encourage investments that advance long-term sustainability goals. Within this framework, renewable energy is a priority in the framework activities of the European Union (EU) energy policy strategies. Both in the 2020 strategy and in the 2050 objectives, renewables play a crucial role in achieving the greenhouse gas (GHG) emission reduction of 80-95% below 1990 levels by 2050⁴⁶.

France and Germany are the top issuers and holders of green debt securities in the euro area, accounting for more than half of the market. The Netherlands is the third-largest issuer and Luxembourg the third-largest holder. The remaining euro area countries account for a small share of both green bond issuances and holdings, with some countries having only recently entered the market or yet to enter. Governments, monetary financial institutions, and non-financial corporations lead the issuance of green debt securities in the euro area⁴⁷. With regard to holdings of green debt securities by euro area residents, investment funds are the main market participants, followed by insurance corporations and pension funds, as well as central banks. The remaining sectors play a very residual role, with households entering the green debt market only indirectly, through investment funds⁴⁸.

In Europe, the EU Green Bond Standards closely align with the EU Taxonomy, fostering a consistent regulatory environment for green bond and sukuk markets, strengthening investor confidence, and ensuring that finance is directed toward genuine sustainability projects⁴⁹.

However, while there is growing interest among institutional investors in responsible investment practices, there remains a scarcity of ESG investment opportunities globally, and green and sustainability sukuk can help address this shortfall, particularly for Shariah-compliant investors. It has been observed that the growth of Islamic finance in Europe is influenced by the presence of a substantial Muslim population within the region and the global demand for Sharia-compliant financial products. Europe is home to a diverse and sizable Muslim community, and their financial preferences and values play a significant role in shaping the financial landscape⁵⁰. Financial institutions have responded by developing a range of Sharia-compliant products, including Islamic banking services, investment funds, and insurance products⁵¹. Europe has therefore shown growing interest in sukuk, primarily driven by the UK and Luxembourg⁵². These countries have facilitated sukuk issuances through enabling regulatory frameworks and strategic positioning as gateways for Islamic finance into Europe. The UK was the first Western country to issue a sovereign Sukuk in 2014, with a second issuance planned for 2024. The City of London's financial ecosystem supports numerous sukuk listings and transactions, catering to institutional investors⁵³.

In particular, according to a recent study:

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“empirical pairwise analyses in this study underscore the pivotal role played by Islamic and green financial instruments. The Time-Varying Parameter Vector Autoregressive (TVP-VAR) results highlight the potential of both Islamic and green financial instruments during market crises. Islamic instruments, in particular, emerge as potential avenues for investors seeking stability amidst turbulent market conditions, acting as recipients of spillovers from the broader European stock market and refuting the notion of decoupling”.^a

^aA. HUSAIN ET AL., *Financial fusion: Bridging Islamic and Green investments in the European stock market*, cit., p. 3.

Notably, interest from Western investors in regions like the US and Europe, where ESG principles are increasingly embraced, is set to diversify the investor base for green sukuk⁵⁴. The Luxembourg Stock Exchange (LuxSE) was the first European exchange to list a Sukuk in 2002, setting the benchmark for Islamic finance in Europe⁵⁵. LuxSE developed LGX, the world's first platform exclusively dedicated to sustainable finance. Recognized by the United Nations for its leading role in advancing the sustainable finance agenda, LGX has been at the forefront of facilitating sustainable investment since its launch – including through sustainable Sukuk structures⁵⁶.

The market for green sukuk is part of a broader trend where Islamic finance is increasingly used for green infrastructure projects and sustainability initiatives in line with the European Green Deal⁵⁷.

Based on a select sample of sukuk issued in the first nine months of 2024, green and sustainability sukuk were subscribed at 4.3 times

⁴¹AA.VV., *Fiscal policy, natural resources and Islamic finance on green growth in OIC countries: the moderating role of institutional quality*, in *International Journal of Islamic and Middle Eastern Finance and Management*, 2026, pp. 1-21.

⁴²*Ibidem*.

⁴³https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_en.

⁴⁴*Ibidem*.

⁴⁵https://finance.ec.europa.eu/publications/renewed-sustainable-finance-strategy-and-implementation-action-plan-financing-sustainable-growth_en.

⁴⁶European Commission, *Renewables Make the Difference*, 2011, Luxembourg: Publications Office of the European Union: <https://op.europa.eu/en/publication-detail/-/publication/72f9f2bd-0a5b-423b-b66c-96ae6f8f014b/language-en/>.

⁴⁷https://www.ecb.europa.eu/stats/all-key-statistics/horizontal-indicators/sustainability-indicators/data/html/ecb.climate_indicators_sustainable_finance_en.html.

⁴⁸*Ibidem*.

⁴⁹UNDP, *The Potential Growth and Future of Green Sukuk as a Tool for Sustainable Financing*, cit., p. 16.

⁵⁰<https://inclusivemoney.com/values/islamic-bank-in-europe>.

⁵¹A. HUSAIN ET AL., *Financial fusion: Bridging Islamic and Green investments in the European stock market*, *International Review of Financial Analysis*, 2024, vol. 94, 103341, p. 2.

⁵²See also *infra*, in the text.

⁵³Z. MUGHAL, *The Sukuk: Market Potential, Emerging Trends, and Opportunities for Growth*, 2024: <https://financialit.net/blog/islamicfinance-markettrends/sukuk-market-potential-emerging-trends-and-opportunities-growth>.

⁵⁴UNDP, *The Potential Growth and Future of Green Sukuk as a Tool for Sustainable Financing*, cit., p. 19.

⁵⁵<https://www.luxse.com/gateway-to-the-eu/islamic-finance>.

⁵⁶*Ibidem*.

⁵⁷<https://www.clustercollaboration.eu/in-focus/green/european-green-deal>

issuance values on average, compared with 3.1 times for traditional sukuk. This is a direct result of their green and sustainability labels, which were issued by the majority of them, including European investors⁵⁸. Thus, it has been proposed to resort to green sukuk as an alternative financing tool for the wind-energy sector, with the specific aim of avoiding financial dependence on governmental incentive policies⁵⁹.

In addition, the Islamic Development Bank issued a successful Green Sukuk under the enhanced 2025 Sustainable Finance Framework, raising EUR 500 million. The enhanced Framework aligns with the latest editions of the ICMA Principles and Guidelines, including the 2025 Green Bond Principles, the 2025 Social Bond Principles, and the 2021 Sustainability Bond Guidelines. The Framework introduces more stringent eligibility criteria for green project categories and detailed criteria for social project categories. The Bank also added two new eligible categories in the Framework, namely (a) Climate Change Adaptation and (b) Food Security and Sustainable Food Systems, reinforcing their role in its overall operations strategy and reflecting the increasing project approvals in these sectors in recent years⁶⁰. The Joint Lead Managers (JLMs) for this issuance were Barclays, BNP Paribas, Commerzbank, Crédit Agricole CIB, HSBC Bank plc, ING, and Nomura. The transaction is the Bank's first EUR benchmark issuance in 2025. This followed its two other successful public USD benchmark transactions, which raised a total of ~USD 3.5 billion from global capital markets. The latest Green Sukuk issuance, the Bank's second overall, represents an important milestone for the Islamic Development Bank in the EUR markets⁶¹.

Therefore, the resilience and stability of both Islamic and green bonds, when coupled with the European stock market, underscore their significance⁶².

5 The role of the doctrinal formant

It has been observed that the *Islamic Finance Law* constitutes - due to its peculiarities, its transversal nature to the various state systems, the heterogeneity of the sources, the role of tradition, and, at the same time, the standards of authoritative international institutions - a legal system in itself, of particular interest for the comparatist⁶³. As highlighted, the doctrinal formant plays a leading role in the Islamic context⁶⁴.

This aspect is particularly significant in Islamic finance, thanks to the work of organizations such as AAOIFI and the Islamic Fiqh Academy, which set standards and guidelines for the creation and management of Sharia-compliant financial instruments. This activity is

also particularly helpful in guiding the work of Sharia Boards, which, as mentioned, are required to issue legal opinions (*fatawa*) on the permissibility of investments or financial transactions in accordance with Sharia principles. It is interesting to note that this intellectual effort of interpretation (*ijtihad*)⁶⁵ is constantly evolving and takes into account the dynamics of financial markets.

Recently, during a September 2023 meeting of the AAOIFI Sharia Board, the Board announced its decision to publish the new draft standard on sukuk (Standard No. 62), marking a significant step in the regulation of Islamic finance instruments. Sukuk are defined as follows: “[*Certificates of*] Sukuk are investment securities of equal value for common share that establish ownership of assets (tangible assets, usufructs, rights, debts, cash, or a mix of [all of] them or some of them) that are already in existence or that will be acquired or created, and it will implicate rights for the certificate holder arising from its interest in ownership of those underlying assets and obligations on [the certificate-holder] to the extent of its share in them”⁶⁶.

In particular, AAOIFI Standard No. 62 highlights that sukuk have characteristics that distinguish them from conventional bonds, the most important of which are: (i) sukuk are not based on interest-bearing loans; (ii) the principal amount and profit amount of sukuk will not be automatically recognized as an obligation owed by the originator once the sukuk certificates have been subscribed for and the principal amount paid; (iii) sukuk are an investment instrument in which their owners share the return (*ghunm*) as well as the liability (*ghurm*) of the assets underlying the sukuk, which are jointly owned by the certificate holder with other holders of sukuk certificates of the same issue. Furthermore, they are usually a financial instrument for the originator; (iv) sukuk are issued pursuant to one or more Islamic contracts in accordance with Sharia rules governing the issuance, trading, and maturity of sukuk; (v) the risks of the sukuk are not limited to the credit risks of the originator; and (vi) the credit rating of the sukuk is not limited to the financial strength of that entity⁶⁷.

The new standard governs the fundamental principles and definition of sukuk, outlining their characteristics, including dynamic aspects such as issuance, securities-related risks, structural types, and trading and cancellation. This is a more sophisticated approach than Sharia Standard No. 17, which considers the rapidly evolving sukuk market and its progress, drawing on past experience in product quality and diversity, especially in structural engineering. One of the main innovations concerns the ownership criteria: there must be an effective transfer of ownership of the assets from the originator to the sukuk holders. In short, the new standard requires sukuk to be asset-backed rather than asset-based⁶⁸.

This new approach has raised several concerns about the impact the new rules could have on newly issued sukuk: pursuant to Fitch Ratings, some of the parameters indicated would not be assessable according to the sukuk valuation criteria currently adopted; for its part, Standard & Poor's has emphasized that these considerations have resulted in an extension of the timeframe for the official adoption of the draft standards in question⁶⁹.

⁵⁸LONDON STOCK EXCHANGE GROUP, *Green and Sustainability Sukuk Update 2024*, cit., p. 6.

⁵⁹See in particular D. MOREA, L.A. POGGI, *An Innovative Model for the Sustainability of Investments in the Wind Energy Sector: The Use of Green Sukuk in an Italian Case Study*, in *International Journal of Energy Economics and Policy*, 2017, 7(2), pp. 53-60.

⁶⁰<https://www.isdb.org/news/isdb-issues-another-successful-green-sukuk-under-enhanced-sustainable-finance-framework>.

⁶¹*Ibidem*.

⁶²A. HUSAIN ET AL., *Financial fusion: Bridging Islamic and Green investments in the European stock market*, cit., p. 3.

⁶³See S. FERRERI, L.A. DI MATTEO, *Terminology Matters: Dangers of Superficial Transplantation*, in *B.U. Int'l L.J.*, 2019, 37, p. 35 ss., in particular p. 40; J. ERCANBRACK, *The Standardization of Islamic Financial Law: Lawmaking in Modern Financial Markets*, in *Am. J. Comp. L.*, 2019, 67, p. 825 ss., in particular pp. 826-827: “The reintroduction of sharia-compliant transactions in mostly secular legal systems has resulted in an emergent legal system, which is now commonly referred to as Islamic Financial Law (IFL). IFL is a hybrid legal transplant, which, with modification for municipal regulatory law, can be transplanted across the globe in jurisdictions wishing to facilitate Islamic finance. However, considerable legal and regulatory reform is necessary to do so and legal aspects of Islamic finance differ markedly from conventional finance”.

⁶⁴From a general perspective: E. IORIATTI, *Comparative Law Method and the Legal Formants as Catalysts of Normative Realities*, in L. SILIQUINI-CINELLI, D. GIANTI, M. BALESTRIERI, (a cura di), *The Grand Strategy of Comparative Law: Themes, Methods, Developments*, Milton Park, Abingdon-on-Thames, 2024, pp. 250-275.

⁶⁵F. CASTRO, *Il modello islamico*, ed. by G.M. PICCINELLI, Turin, 2007, pp. 22-23.

⁶⁶AAOIFI 2023.

⁶⁷*Ibidem*.

⁶⁸For further remarks about the difference between asset-based and asset-backed financial products, see for example R. PAHLAVI ET AL., *Equity-Based, Asset-Based and Asset-Backed Transactional Structures in Shari'a-Compliant Financing: Reflections on the Current Financial Crisis*, in *The Economic Papers - Economic Society of Australia*, 2009, vol. 28, p. 270 ff.

⁶⁹S&P GLOBAL, *Sukuk Brief: More Time To Adopt AAOIFI Standard 62*, 4 February 2025: <https://www.spglobal.com/ratings/en/regulatory/article/250205-sukuk-brief-more-time-to-adopt-aaofi-standard-62-s13405446>.

6 Conclusions

It has been observed that the 2008 global financial crisis solidified the Islamic financial system's credentials as a sustainable financial system, capable of safeguarding the long-term interests of citizens worldwide and generating value for the real economy. According to this view, the Islamic financial system's inherent ethical principles would make it better suited to address the economic consequences of a pandemic like COVID-19, as its core principles are closely tied to financial stability and corporate social responsibility⁷⁰. In this context, sukuk represent the Islamic finance instrument par excellence, especially in pursuit of the Sustainable Development Goals (SDGs).

However, despite the evolution of the rules governing their structure, operation, and Sharia-compliant characteristics, it is widely believed that there are still critical issues, mainly due to: (i) the concurrence of different governing laws, given the almost always transnational nature of the agreements that contribute to constituting a complex investment operation, such as sukuk⁷¹; (ii) the concurrent jurisdiction of judges of Islamic countries and other countries, especially common law countries, which raises problems of recognition and enforcement of their respective decisions; (iii) the lack of uniform regulatory and taxonomic standards among the various countries and institutions⁷²; (iv) the need to increase the transparency of such investment operations, to increase the confidence of a wider audience of investors; (v) the need to develop a secondary sukuk market; (vi) the lack of clear rules to address the risks of defaulted sukuk, in particular their restructuring⁷³. It has been observed that improving these factors would enable the inclusion of green sukuk within the World Bank's Environmental and Social Framework (ESF), which is deemed the most influential safeguard system for multilateral development bank financing⁷⁴. According to the World Bank:

“

“To realize this potential, policymakers, regulators, multilateral development banks (MDBs), and other development partners must act decisively across three strategic priorities: (1) mainstreaming Islamic climate finance instruments by preparing bankable projects, designing targeted incentives to facilitate green sukuk and sustainability-linked issuances, and harnessing the technical collaboration with MDBs to support market development; (2) Accelerating capacity building and technical exchanges among OIC member countries by developing practical knowledge tools and improving data systems for better tracking and reporting; (3) Enhancing Islamic climate financial innovation, such as blended finance solutions, by developing innovation platforms and scaling Islamic social finance tools

⁷⁰M. RAZA RABBANI ET AL., *Exploring the Role of Islamic Fintech in Combating the Aftershocks of COVID-19: The Open Social Innovation of the Islamic Financial System*, in *J. Open Innov. Technol. Mark. Complex*, 2021, 7, p. 136; R. MOOSA, *Corporate Social Responsibility from an Islamic Perspective: An Overview*, in *IJRB*, 2023, 12, 7, pp. 303-311.

⁷¹In the regulation of financial markets, this dialectic is even more evident and takes on particular relevance because, alongside state legislation (for example, that of Egypt or Kuwait), institutions and rules specific to other legal systems, especially common law (in particular, English law, Maltese law or that of the State of New York) concur: E. GIUSTINIANI, *Elementi di finanza islamica*, Torino, 2006, p. 45.

⁷²See in particular, A. GUARNERI, *Lineamenti di diritto comparato*, Padova, 2022, pp. 534-547.

⁷³On points (iii) to (vi), see *ex multis*: R.M. RADZI, *Different Structure, Neither Debt Nor Equity*, in *Arab Law Quarterly*, 2021, vol. 35, n. 1-2, *Special Issue: Islamic Finance and Contemporary Challenges*, pp. 190-211; AA.VV., *Dynamics of Growth and Stability in the Islamic Financial Service Industry on ECA, GCC, MENA, SSA and EAP*, in *International Journal of Economics and Financial Issues*, 2025, vol. 15(3), pp. 448-456.

⁷⁴See for example, Z. WAN MOHD, Z. WAN, *Operationalising Green Sukuk within the World Bank environmental and social framework*, 2025, vol. 3, n. 288.

to support community resilience and measurable climate outcomes”^a.

^aWORLD BANK, *Islamic Finance and Climate Agenda*, cit.: <https://www.worldbank.org/en/country/malaysia/publication/islamic-finance-and-climate-agenda>.

A further aspect worthy of consideration is the perceived need not only for an appropriate legal framework but also for jurists and technical operators equipped with the necessary transnational skills, that is, what could be defined as an adequate “technostructure”⁷⁵.

All this gives rise to a persuasive right of non-statual origin, of ‘unbounded’ and atterritorial value, of a standardizing nature and suitable for drawing new boundaries⁷⁶, with respect to which the comparatist and the methods of this science can provide a decisive contribution.

⁷⁵A. GAMBARO, R. SACCO, *Sistemi giuridici comparati*, in *Trattato di diritto comparato* directed by R. SACCO, Torino, 2018, p. 48.

⁷⁶Among the many authoritative contributions on the subject: S. CASSESE (ed. by), *Research Handbook on Global Administrative Law*, Cheltenham, 2017.

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A Review of the Strategic Approaches for Financial Performance Evaluation and Financial Distress Prediction Models of the Oil and Gas Companies in India and Oman

CORRESPONDENCE → +



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ABSTRACT

One of the most prominent industries in the world is oil and gas which plays a major role in influencing the global economic scenario. The primary source of fuel all around the world is delivered by these industries. In general, financial statement analysis focuses on evaluating the performance of organizations that contribute to developing the economy or thriving in a highly competitive environment. The objective of the research is to examine the various approaches adopted by the researchers of recent times towards predicting the Financial Performance and Financial Distress of Oil and Gas Companies. An attempt is made by the researcher to identify the techniques through which financial distress and performance of the Oil and Gas Companies belonging to India and Oman are predicted. The research also has identified and proposed a few strategies that are to be adopted by the Oil and Gas Sector to improve their financial performance and stay sustainable in the market in the long run.

Index Terms: Oil and Gas Companies • India • Omana • Prediction of Financial Distress • Financial Performance

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REVIEW

A Review of the Strategic Approaches for Financial Performance Evaluation and Financial Distress Prediction Models of the Oil and Gas Companies in India and Oman

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Abstract

One of the most prominent industries in the world is oil and gas which plays a major role in influencing the global economic scenario. The primary source of fuel all around the world is delivered by these industries. In general, financial statement analysis focuses on evaluating the performance of organizations that contribute to developing the economy or thriving in a highly competitive environment. The objective of the research is to examine the various approaches adopted by the researchers of recent times towards predicting the Financial Performance and Financial Distress of Oil and Gas Companies. An attempt is made by the researcher to identify the techniques through which financial distress and performance of the Oil and Gas Companies belonging to India and Oman are predicted. The research also has identified and proposed a few strategies that are to be adopted by the Oil and Gas Sector to improve their financial performance and stay sustainable in the market in the long run.

Keywords: Oil and Gas Companies, India, Omana, Prediction of Financial Distress, Financial Performance

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1 Introduction

Prediction of financial distress has gained importance among the researchers because of its significance to the organizations, stakeholders, lenders, and investors. If the level of financial distress is high then it may lead to the closure of a business. Financial distress is a situation where an individual or firm cannot produce enough income or revenue. It is a situation in which an organization or an individual is not able to pay or meet its financial duty. This occurs because of nonperforming assets, revenue sensitivity, higher fixed costs that result in economic downturns. Signs of financial distress are cash flows, poor profits, falling margins, extended payment days, poor growth of sales or decline in revenues, bank relationships, problems in raising capital, and an increase in internet payments. Firms with a low concentration of ownership and low independence degree face financial distress. Factors that influence financial distress are the size of the firm, liquidity, solvency, risk and growth, and profitability [1]. Financial performance is an assessment of how well a company could adopt its resources and produce revenues. In general, the assessment of the overall financial performance of a company over a given period [2]. This paper has reviewed the various approaches adopted by the recent researchers for the prediction of financial distress and their performance focusing on Oil and Gas companies in India and Oman.

1.1 An overview of the Oil and Gas Sector in India

One of the essential sources of energy in an economy is the oil and gas (O&G) sector. In India, 40 percent of the source of energy is obtained from the O & G sector. India is the ninth biggest importer of crude oil and the fifth-biggest consumer of petrol. The petroleum sector in India plays a vital part in developing the rapid growth of the economy by contributing nearly 15 percent of the gross domestic product. As a result, the Oil and gas sector in India plays a vital role in impacting the economic decisions of the nation [3]. India is the 4th country that imports oil and petroleum after China, Japan, and the US. India has planned to spend \$58 billion towards the upstream growth of oil and natural gas by 2023 [4]. Further India is also taking various measures to combat its energy requirement by evolving to different sources of renewable energy [5]. The economic and political scenario of any nation is influenced by the growth of its Oil and Gas sector.

1.2 An Overview of the Oil and gas sector in Oman

The largest Oil and Gas producer among the Middle Eastern countries is Oman. The Sultanate of Oman contains five billion oil reserves with a daily average production of around 970,000 barrels of crude oil as of 2015 [6] and at present, it has reached 110,00 barrels. In Oman, a major part of natural gas production is utilized for the extraction of oil. The economy of Oman highly relies upon the Oil and Gas sector as it contributes around 79 percent towards government revenues. Since the inception of the Oil and Gas sector, it acts as a pushing force for sustainable

elements for the growth of the Omani economy. O&G sector has also contributed generously towards national development by supporting the enhancement of infrastructure, education, healthcare services, and other areas of economic progress [7]. Oman for the past 50 years had witnessed remarkable growth in the economy. Especially, from the year 1999, the economy has seen tremendous growth due to the rise of oil prices. The maximum amount of income in Oman is obtained through its Oil and Gas companies. They contribute around 80% of the total income of the nation [8]. In Oman, local as well as international oil and gas companies extract and produce allied products of O&G where proper safety procedures are followed during the production activities. In recent times Oman is focussing on improving production to meet the growing demands in the future and also to invest in alternative business activities to increase other sources of income. At present Oman has invested around 4 billion dollars in projects related to gas development. A project named Liquefied Natural Gas, an alternative source of energy has been planned to be established in the year 2026 [9].

1.3 Definition of Financial Performance and Financial Distress

Financial Performance is the ability of assets belonging to the organization to in generating profits & returns with minimum debt and tax burden [10]. Financial Performance is measured as Return on Asset (ROA) which represents the financial performance in the short turn. The financial performance of an organization is essential for shareholders, investors, customers other stakeholders [11]. Financial distress is referred to as a circumstance when an organization is not able to meet its financial obligations. In case the organization is not able to meet its liabilities will negatively influence its stakeholders, which in turn will create a negative impact on a nation's economy. Financial distress leads an organization to bankruptcy when not managed properly. The identification of financial distress is significant for the survival of any business in the longrun [12].

2 Methodology

2.1 Data Collection

Data plays an important role in conducting research. The data can be collected from primary and secondary sources [13]. In this study, an extensive search of the literature is carried out to collect secondary data from numerous research articles that are peer-reviewed and that are published in high-quality indexed journals with good impact factors.

2.2 Quality Assessment

The collected research articles were assessed by two researchers who checked and verified the articles whether they could be utilized for literature review or not. A discussion was made to sort out the journals. Quality appraisal was carried out by the researchers to analyse the design of research, conceptual model, the variables used, methods used for measuring the variables, type of analysis carried out, and overall relevance to the study. The articles were categorized based on types like "yes, no, maybe, or can't decide". Then these articles were listed into ratings such as highly relevant, moderately relevant, and not relevant. The articles that are were found to be highly relevant and moderately relevant were selected for the study and others were not used in this study.

2.3 Search Strategy

Databases used for this search were high indexed journals like Springer, Elsevier, Sage, Inderscience, and Wiley. Keywords used in this research were financial distress, bankruptcy, financial performance, financial analysis, prediction of financial performance, prediction of financial

analysis, Oil and Gas companies, India, Oman. The articles that have been published in the recent ten years alone were shortlisted in this research. Records searched through the database were in total 250. Duplicates removed were 128. Records screened were 122. Records excluded, based on abstract and titles were 34. Full-text articles excluded, with reasons were 36. Full-text articles included in this research are 26.

2.4 Criteria for Inclusions

“

The inclusion criteria used to select the research articles are as follows:

1. Studies in which Financial Performance and Financial Distress were used as a variable.
2. Research articles with empirical studies were chosen.

“

The studies which were carried out either in Oman or India was selected for the study

2.5 Exclusion Criteria

1. Research articles in which Financial Performance and Financial Distress of sectors other than Oil and Gas companies had been done were not chosen for this study.
2. The research was about the companies belonging to countries other than that India and Oman.

3 Results

3.1 Approaches for the Prediction of Financial Performance of Oil and Gas Companies in India

Ravindra and Rao [14] analyzed the financial performance of ONGC (Oil and Natural Gas Corporation) Videsh Ltd. (OVL), is a subsidiary of ONGC Ltd. In this study trend analysis and ratio analysis were utilized. A trend analysis was made keeping both short and long-term trends. In ratio analysis, structural ratios namely Debt-Equity ratio, total debt to assets ratio, and proprietary ratios were calculated.

Deepika and Dhivya [15] evaluated the financial performance using ratio analysis. The various ratios used in this study were profitability and solvency ratio. The author concluded that from the year 2012 to 2016 performance of oil and natural gas companies was satisfactory and their growth was found to be fluctuating.

Sharma and Agarwal [16] measured and compared the public sector and private sector in terms of their financial performance. The authors had adopted ratio analysis for the measurement of financial performance. It is found that the expense ratio and profitability ratio were given more importance in their research. Both the public sector and private sector were found to be performing in an equal manner without any significant difference in their performance.

Annnavarpu and Arava [17] have explored the financial performance of Bharat Petroleum Corporation Limited using financial ratios. The authors had analysed the financial performance using Profitability ratios in terms of gross and net profit margins, capital turnover, and solvency capacity by collecting the annual reports of Bharat Petroleum Corporation Limited.

A study was carried out by Agrawal and Upadhyay [18] to analyze the financial performance during post and pre deregulation of Indian Oil Corporation (IOC). This research analyzed factors impacting deregulation on liquidity, solvency, and profitability of the firm and it is verified

by using ratio analysis. Before deregulation, IOC was tolerating losses often since prices were legalized by the Indian government. It provided financial support for Oil and Gas with high prices. After deregulation firms prevail over such circumstances gradually and short-term solvency and profitability of the firms are enhanced.

Ramya et al. [2] predicted the companies' financial position, solvency, and liquidity using ratio analysis. Different ratios like liquidity ratio, current ratio, turnover ratios, and absolute liquid ratio were used for measuring and evaluating financial performance. From the findings of their study, it was obvious that the firm had been performed well. At the same time, the firm has to concentrate on fulfilling its current liabilities. Therefore, firms have to concentrate on acquiring profits in the future by considering external and internal factors. When considering resources, the firm is suggested to adopt its assets appropriately.

Financial performance is ranked on Oil and Gas firms in India using the TOPSIS (*Technique for order of preference by similarity to ideal solution*) method. The computed ratio was changed to indicate the ranking performance of Oil and Gas firms by using TOPSIS and entropy method. In 2011, the highest-ranking firm is Hindustan Ltd, BPCL (2012), Gail (2013), and Petronet (2014, 2015). The lowest ranking was not the same every year [19].

Bansal et al. [20] compared the financial performance of global and Indian oil companies. Different ratios such as Earnings Ratio, Debt Equity ratios, Current and Acid Test Ratio, market value ratios, and activity ratios were used for measuring the financial performance of Global and Indian oil companies. When comparing liquidity ratios of selected firms, it was noticed that Cairn India and IOCL had perfect current ratios. It was observed that Cairn India had a maximum ratio in the acid test than other firms during 2010 to 2014 and it indicates the best liquidity positions of the firm.

Ahmad [21] in his study analysed the financial performance of HP (Hindustan Petroleum). This research collected secondary information. From the findings of the study, it was suggested that company management have to concentrate on profitability and liquidity position. Quick and current ratios do not have standard norms in the ratio of liquidity. The firm either minimizes current liabilities or maximizes its current assets. The research was conducted by Sheik and Scott [22] to study financial performance and analysis and Oil and Natural Gas Corporation (ONGC) from 2007 to 2012. One powerful and important tool for analyzing finance is trend analysis. Secondary data was used in this study. Financial analysis assists the firm to identify its financial soundness and profitability.

Das and Dey [23] analyzed the capital structure of Indian petroleum companies using a fund of shareholders to capital employed ratio, debt-equity ratio, and financial leverage. It was noticed that Indian petroleum industries are performing with minimal debt funds, particularly in ONGC, Oil India Limited, Numaligarh Refinery Limited. Thus, these companies have to raise costs it acquires the profits of capital at a low cost.

Lanjewar and Bansal [24] compared the financial performance of selected Oil and Gas companies in India. Ratios like profitability ratio, leverage ratio, liquidity ratio, and turnover ratio were adopted for measuring financial performance among selected Oil and Gas companies. When comparing financial ratios, SWPE (South West Pinnacle Exploration) indicates the average return on assets and average turnover and the high current ratio enhances the firm's financial strength. Hindustan oil exploration indicates the maximum inventory turnover ratio. Jindal exploration Industries Ltd explored the maximum ratio at profit earning.

In an interesting study conducted by Yogesh and Mahadevappa [25] to analyze the value-added ratios (VAR) of IOC. VAR is estimated by using value-added statements and ratio analysis. VAR is helpful to firms for measuring efficiency and productivity. Yasodha et al. [26] analyzed the financial position of IOC. Ratio analysis is used in this research. Different ratios like quick ratio, current ratio, profit ratios, basic earnings per share, debt ratio, absolute liquid ratio, return on equity, debt-equity ratio, and proprietary ratio. It was suggested that the firm has to minimize its expenses for achieving higher heights.

Sugumar and Prema [27] identified the financial position and liquidity of the IOC. It was carried out using statistical tools and ratio analysis. Long-term solvency and profitability were satisfactory. At the same time, the position of liquidity was weak and it is important to focus on solving its short-term solvency. Likewise, Bharathi and Ramya [28] studied profitability, liquidity for evaluating the position of IOC. The current ratio is enhanced, steps are to be carried out for enhancing the liquidity level. A firm's financial performance has to be monitored by taking appropriate decisions.

Table 1 illustrates approaches for the prediction of the financial performance of Oil and Gas companies in India.

3.2 Approaches for the Prediction of Financial Distress of Oil and Gas Companies in India

Sanesh [29] evaluated the financial position of NIFTY 50 companies that included Oil and Gas companies such as Bharat Petroleum, GAIL, ONGS, and reliance industries. The model used to predict was the Altman Z score. It is found that the Oil and Gas sector was not thriving at the time of this study when compared with other sectors.

Nandi et al. [30] analysed the financial distress to identify the probability of bankruptcy for 12 oil industries for 5 years. This study was based on the Altman Z score model that was used to determine the prediction of bankruptcy. In this model certain activity ratio that includes working capital, total asset turnover, retained earnings to total asset, EBT, to total assets were considered for calculation. The outcome of the model is verified by discriminant analysis. It is found that almost 75 percent of the industries are performing well and do not fall under the category of bankruptcy.

Ramshesh and Sreenivas [1] examined and compared the financial distress of Bharat Petroleum Corporation, Indian Oil Corporation, and Hindustan petroleum. In this study Z score was analysed with important turnover ratios that included working capital, asset turnover ratios, Earnings per share ratios, etc. The results showed that Bharat Petroleum Corporation had scored better than the other two companies chosen for this study.

Tamilselvi [31] evaluated the financial health of Hindustan Petroleum Corporation Limited from 2015 to 2019 using the Z score model developed by Altman. It is found that the score was greater than 5 thus signifying that there is a low probability of bankruptcy for Hindustan Petroleum Corporation Limited.

Rahul et al. [32] investigated the financial distress of Oil and Gas companies listed in the S&P BSE Oil and Gas Index. In this study, the Altman Z score and Springate S score are calculated and the precision is compared. The companies were classified based upon the score into two types, non-distress, and distress. But the results varied between the models. The authors recommend employing both methods to get accurate results.

Kumar et al. [33] examined the outer performance of main firms listed in SandP BSE Oil and Gas index using Springate S score and Altman Z score. Binary logistic regression was developed for the Altman Z score and Springate S score model. It was found that Springate S score model and Altman Z score had a high accuracy rate for predicting

Table 1. Approaches for the Prediction of Financial Performance of Oil and Gas Companies in India

S.No	Author and Year	Approaches	Outcomes of the research
1	Deepika and Dhivya, 2017	Ratio Analysis, Solvency Ratio, and Profitability Ratio	The performance of oil and natural gas companies was satisfactory and their growth was found to be fluctuating
2	Sharma and Agarwal, 2019	Ratio Analysis, Expenses Ratio, and Profitability Ratio	The public sector and private sector were found to be performing in an equal manner without any significant difference in their performance.
3	Agrawal and Upadhyay, 2017	Ratio analysis	Before deregulation IOC was tolerating losses often since prices were legalized by the central government. After deregulation firms overcame that situation gradually and the short-term solvency and profitability of the firms enhanced.
4	Ramya et al., 2018	Ratio analysis, liquid ratio, current ratio, turnover ratios, and absolute liquid ratio	Firms had to concentrate on acquiring profits in the future by considering external and internal factors
5	Yadav et al., 2016	TOPSIS method	The ranking was given to selected companies based on performance. The highest-ranking was given to Hindustan Ltd in 2011, BPCL in 2012, Gail in 2013, and Petronet in 2014 and 2015.
6	Bansal et al., 2016	Gross & Net Profit ratios, leverage ratios, liquidity ratios, market value ratios, and activity ratios	When comparing liquidity ratios of selected firms, it was noticed that Cairn India and IOCL had perfect current ratios
7	Das and Dey, 2013	Fund of shareholders to capital employed ratio, debt-equity ratio, and financial leverage.	Selected companies had to raise costs they acquired the profits of capital at low cost.
8	Lanjewar and Bansal, 2021	Profitability ratio, leverage ratio, liquidity ratio, and turnover ratio	Hindustan oil exploration indicated the maximum inventory turnover ratio. Jindal exploration Industries Ltd obtained the maximum ratio at profit earning.
9	Sugumar and Prema, 2019	Statistical tools and ratio analysis	Long-term solvency and profitability were satisfactory.
10	Bharathi and Ramya, 2020	Ratio analysis	A firm's financial performance has to be monitored by taking appropriate decisions.

Table 2. Approaches for the Prediction of Financial Distress of Oil and Gas Companies in India

S.no	Author and Year	Approaches	Outcomes of the research
1	Sanesh, 2016, Nandi et al., 2019 Ramshesh and Sreenivas, 2019 Tamilselvi, 2019	Altman Z Score	Altman Z score had a high accuracy rate
2	Rahul et al., 2020	Altman Z score and Springate S score	It was found that employing both approaches resulted in the best accuracy rate
3	Kumar et al., 2021	Altman Z score and Springate S score, Binary logistic regression	Altman Z score has the most influential characteristics to determine the bankruptcy
4	Vikas and Bansal (2019)	DEA	It was measured based on risk with possibility percentage or risk value.

financial stress. In addition to that, the Altman Z score has the most influential characteristics to determine bankruptcy, especially in the Oil and Gas sector [34]. Further, it was noticed that logistic regression could be adopted by a financial manager, investment companies, researchers, and investors for policy implications and investment. Similar to that Singh and Mishra [35] adopted a logistic and discriminate model for predicting bankruptcy and financial distress for Indian firms. Vikas and Bansal [36] stated that the 4th industrial revolution leads to disruption because of uncertainty factors. Risk theory was adopted by integrating DEA (Date envelopment analysis) was estimated based on risk with possibility percentage or risk value. Table 2 describes approaches for the prediction of financial distress of Oil and Gas companies in India.

3.3 Approaches for the Prediction of Financial Performance of Oil and Gas Companies in Oman

In Oman, only a few studies have been performed related to financial performance and financial distress concerning the Oil and Gas Companies. The recent studies have been reviewed here. Singh et al. [37] had evaluated the financial performance of Oman oil marketing company, and Oil and Gas industry in Oman using financial analysis and compared it with the competitors. The authors calculated the performance using Liquidity Analysis: Short term solvency, Leverage Analysis: Long term solvency, Profitability analysis: Profit Margin, Return on Assets and Return on equity and Marketability ratios: Earnings Per Share and Dividend per share. Oman's government attempting to reduce oil dependence by expanding the economy

Nooney et al. [38] measured and compared the performance of Shell Oman Marketing and Oman Oil Marketing using liquidity, solvency, and profitability position by the data collected from 2013 to 2017. The data

was analysed using current ratio, acid test ratio, profit ratios including gross and net margin, return on equity ratio, return on capital ratio, return on asset ratio, debt ratio, and debt to equity ratio. Fluctuations of oil prices have a high effect on the movements of the stock index. Ahmed et al. [9] had analyzed the performance of Oil and Gas companies using return on asset and return on equity. The findings showed that Oman Oil Marketing, Muscat gases, and Shell Oman Marketing were performing well when compared with that of the other Oil and Gas companies.

On the other hand, Echchabi and Azouzi [39] studied fluctuations in oil prices and movements in the stock market. It was found that fluctuations in oil price affect movements of the stock index. On the other hand, movements of stock price do not affect the prices of oil in Oman. Al-Mawali et al. [40] analyzed a macroeconomic model that is designed for studying the impact of Oil and Gas companies in Oman. It forecasted the effect of oil on other sectors in the economy of Oman.

Table 3. Approaches for the Prediction of Financial Performance and Financial Distress of Oil and Gas Companies in Oman

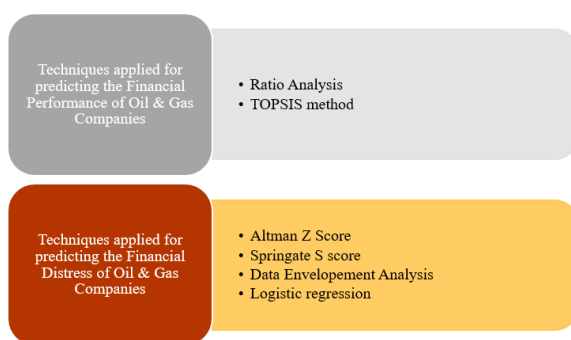
S.no	Author and Year	Approaches	Outcomes of the research
1	Singh et al., 2018	Liquidity Analysis, Leverage Analysis, Profitability analysis Marketability ratios	Oman's government was attempting to reduce oil dependence by expanding the economy
2	Nooney et al., 2019	Liquidity, Solvency and profitability	Fluctuations of oil price had a high effect on movements of the stock index
3	Ahmed et al., 2021	Return on Asset and Return on Equity	Oman Oil Marketing, Muscat Gases, and Shell Oman Marketing were performing well when compared with that of the other Oil and Gas companies.

4 Findings and Suggestions

4.1 Major Findings

The important findings of the study are:

In India financial performance of the Oil and Gas industry has been analyzed through ratio analysis. Primary data has not been collected in these researches. All the previous research had adopted secondary data. Data was found to have been gathered from various sources such as research papers, books, articles, company publications, and journals. Methods followed for analyzing financial performance in the Oil and Gas Companies were gross profit ratio, absolute liquid ratio, net profit ratio, profitability, solvency ratios, turnover ratios, trend analysis, liquid ratio, TOPSIS method, activity ratios, return on investment ratio, expenses ratio, capital turnover, current ratio, and market value ratios. It was clear from the collected data that ratio analysis has been adopted for analyzing financial performance in Indian Oil and gas companies. Financial distress has been predicted using techniques like Altman Z score, Springate S score, DEA, binary logistic regression, logistic model. It was noticed from the above findings that the Altman Z score is mostly adopted for predicting financial distress in Oil and gas companies. When compared to India only a few studies are performed in Oman. In Oman financial performance was computed by ratio analysis similar to India. However, there has not been even single research on financial distress concerning the Oil and Gas Companies in Oman. The major findings have been graphically presented in Figure 1:

**Figure 1.** Findings of the review

4.2 Strategies to be adapted by Oil and Gas companies to enhance their financial performance

- Business leaders in Oil and Gas companies and corporations need strong strategies to stay competitive. Strategies entail new drives which could minimize uncertainties in policy and improve earnings between the regimes of volatility. Understanding exogenous and endogenous factors are the main things to characterize trends of the market with certainty [41]

- When considering trends of minimal prices of oil, key measures are followed to reduce the effect on the organization. Along with managing prices, it is important to monitor the non-operated assets and at the same time proposed proactive and effective substitute resolution to operational issues together with partners are considered for managing the asset [42].
- Fluctuations of price in the global market have an impact on oil marketing organizations or oil corporations. There is a requirement for firms to follow strong measures which entail an exact mechanism of restructuring. The restructuring includes many actions and it is the best way for reducing pressure on expenses of the firm. By reducing the pressure, most of the problems are dismissed [43].
- Flows of cash in oil firms without diversification of portfolio are associated with oil prices volatility. The difference in the entity of business is away from its main portfolio minimizes the risk of the portfolio on investment of capital market [44].

4.3 Strategies to be adapted by Oil and Gas Companies to enhance overcome financial distress

- It is important to focus on a range of external and internal data when assessing and monitoring the stability of finance across a portfolio of customers, vendors, and firms. Approaches to be included are publicly available assessment of data, proprietary tools to assess firms, continuous outcomes, risk-rating methodologies, ranking the strategic customer and suppliers [32].
- Companies that struggle with liquidity problems would focus on necessary actions to be taken for avoiding bankruptcy or distress. Such decisions could pose a greater reputational or financial risk to partners of the business. The main thing to reducing risk is identifying where does risk lies. Distress risk is identified by collecting public insight like executive speeches, public sentiment in real-time, presentations, and changes in analyst rating [45].
- Oil and Gas companies could deploy new working ways with their contractors for reducing financial distress and at the same time by constructing resilience of supply chain and long-term procurement thus bad impacts of the crisis are avoided. Suppliers and operators have to focus on strategic partnership and novel technologies for reducing costs as well as enduring in the oil market [36].
- Measures for reducing financial pressures on dealers encompass enhanced access to finance, expanding preferential rates, direct lending to dealers, bank guarantees, and measures for protecting against default like the choice to sell-off, recover, or buy input materials. Cross-operator levers entail packages from the support of the government for equipment suppliers in the Oil and gas Company that entails exemptions in tax, structural guarantees for main fields, coordinated bail-out efforts by the cross operator, and high transparency on-demand pipeline [33].

5 Conclusion

The Oil and Gas sector is one of the most important sectors in creating an influence in the economic and political environment of any nation. The financial performance of companies is significant to shareholders, creditors, potential investors, and bankers. As an emerging nation, the Oil and Gas sector in India is one of the main industries which contributes towards the growth of the economy and plays a main role in decision making. When deeply focusing on corporate competition, firms have to enhance the efficiency and effectiveness of management and have to perform well by analyzing the strategy and policy of the firm. Financial performance and health of firm maintains competition, maximizes profits, economic growth, the efficiency of cost, and develops the economic value of the firm. Firm management can carry out a few actions and decisions are made for improving the financial condition of the firm. If the distressed state of the firm is identified earlier, it would help in minimizing or overcoming the happening of distress. Thus, management has to supervise the financial condition of the firm by analyzing the firm's financial statements often. The profitability position of any Oil and Gas company will be high when its operating efficiency is good. It is recommended that the Oil and Gas companies must try to raise the availability of liquid cash which in turn will enhance their profitability. Alternatively, they must also consider spending a certain amount on different types of debt instruments in such a way that the funds are distributed equally.

5.1 Future Scope

This research has reviewed various techniques adopted for the prediction of the financial performance and financial distress in Oil and Gas companies in India and Oman. The current paper is limited to reviewing literature through a collection of secondary data. In the future, this work can be extended by analyzing the actual data, to compare the financial performance and financial distress of Oil and Gas companies of Oman and India. Further advanced techniques like machine learning can be employed in the future to predict financial distress and financial performance.

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Popular Justice: Erosion of the State and Parallel Governance in the DRC, Mali, Nigeria, Cameroon and the CAR

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AUTHORS & AFFILIATIONS

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ABSTRACT

This study, conducted in five fragile African states (DRC, Nigeria, Mali, Cameroon, CAR), shows that in several fragile African states, the weakening of state authority stems from precarious governance, corruption, extractive institutions, and resource-related conflicts. Faced with the state's inability to ensure security and justice, parallel customary, religious, militia, or popular systems develop, sometimes gaining more legitimacy than official institutions. These alternatives address immediate needs but generate violence, territorial fragmentation, and the erosion of the rule of law. Popular justice arises from distrust of the state, judicial inefficiency, and the influence of community norms. Mixed-methods, multi-site approach combines local qualitative analysis with quantitative generalization, reinforced by triangulation and tools such as NVivo. The results show that popular justice emerges as a response to state dysfunction characterized by insecurity, corruption, judicial absence or delays, poverty, and territorial fragmentation, with specific forms depending on local contexts (witchcraft in the DRC, security struggles in Nigeria, the role of the Dozos in Mali and the CAR). The multi-site model reveals common factors (state weakness, breakdown of trust, parallel governance) and contextual variations, shedding light on the development of alternative justice system. The study proposes a polycentric governance model integrating the state, local actors, and traditional mechanisms to restore state authority and reduce vigilante justice. The proposed solutions are based on inclusive governance, combating corruption, institutional strengthening, and integrating traditional mechanisms within a reformed legal framework.

Index Terms: Justice and Society • Governance and State • Geopolitical Context • Conflict Dynamics

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Abstract

This study, conducted in five fragile African states (DRC, Nigeria, Mali, Cameroon, CAR), shows that in several fragile African states, the weakening of state authority stems from precarious governance, corruption, extractive institutions, and resource-related conflicts. Faced with the state's inability to ensure security and justice, parallel customary, religious, militia, or popular systems develop, sometimes gaining more legitimacy than official institutions. These alternatives address immediate needs but generate violence, territorial fragmentation, and the erosion of the rule of law. Popular justice arises from distrust of the state, judicial inefficiency, and the influence of community norms. Mixed-methods, multi-site approach combines local qualitative analysis with quantitative generalization, reinforced by triangulation and tools such as NVivo. The results show that popular justice emerges as a response to state dysfunction characterized by insecurity, corruption, judicial absence or delays, poverty, and territorial fragmentation, with specific forms depending on local contexts (witchcraft in the DRC, security struggles in Nigeria, the role of the Dozos in Mali and the CAR). The multi-site model reveals common factors (state weakness, breakdown of trust, parallel governance) and contextual variations, shedding light on the development of alternative justice system. The study proposes a polycentric governance model integrating the state, local actors, and traditional mechanisms to restore state authority and reduce vigilante justice. The proposed solutions are based on inclusive governance, combating corruption, institutional strengthening, and integrating traditional mechanisms within a reformed legal framework.

Keywords: *Justice and Society, Governance and State, Geopolitical Context, Conflict Dynamics*

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1 Introduction

In countries like the DRC, Mali, Nigeria, Cameroon, and the CAR, state authority is weakening in remote areas due to poor governance, corruption, ethnic divisions, and the exploitation of natural resources. This leads to conflict, the emergence of violent non-state groups, and humanitarian emergencies. States remain deficient in terms of security and the provision of public services. Some authors argue that this situation, coupled with the inadequacy of postcolonial institutions, stems from the self-interest of elites. According to Claude Ake (1996), published by Brookings Institution Press (p. 45), African states often suffer from weak governance. Predatory in nature, elites use state power for their personal enrichment (clientelism, neo-patrimonialism) rather than for the public good, thus hindering the delivery of services. While this situation could be rectified through inclusive governance, a reorganization of resource management, and a fight against corruption, it is complicated by foreign intervention and shortcomings in leadership. For Ake, the culture of repression, alienation, harassment and intimidation that prevailed during the colonial era has continued in most African countries after their independence.

The aim of this article is to study the different forms of parallel justice, their origins (state failures, grievances), their repercussions (influence on the population, balance), and the paths forward (measures, public policies). The main objectives include examining key elements

(insecurity, corruption), describing alternative systems (neighborhood courts, self-defense groups, Sharia law), assessing their effects (service provision and human rights violations), and proposing reforms to restore governmental legitimacy and public trust, while offering practical guidance for leadership.

The problems of legitimacy in the DRC, Mali, Nigeria, Cameroon, and CAR are manifested by a weak state presence in the territories, particularly border areas. "The elites in these African states are more interested in their political survival than in the development of their countries' regions, in relation to structural adjustment programs (SAPs) imposed on them from the outside, and the conditions of their survival have generally been incompatible with the latter," Ake (2003: 96). Competition for resources such as cobalt and gold generates conflicts, fueled by armed groups and elites involved in illicit mining. Corruption, a lack of accountability, and inefficient public services erode citizens' trust. The abundance of natural resources (such as minerals) has become a "curse" for these countries, sometimes driving conflict, corruption, and poor governance by creating lucrative opportunities for elites and armed groups to control revenues, often through illegal extraction, rather than fostering inclusive development.

According to Philippe Le Billon (2005), ethnic and regional tensions are worsening due to the priorities of the elites, leading to rebellions. But also the "rich economies" resources fuel conflict by inciting rebellion (rebels can finance themselves with minerals) and state predation (elites

use resources to buy loyalty and suppress dissent), which leads to weak institutions and a lack of public trust (Paul Collier, 2002/2004). One example is the recent agreements between the United States and the DRC, focused on a strategic partnership in the mining sector. The objective is to ensure the American supply of essential minerals (cobalt, copper), while supporting local processing and the development of Congolese infrastructure (Lobito Corridor, Grand Inga).

Ukwandu and Jarbandhan (2016) highlight and emphasize how elites manipulate institutions and public services for their own enrichment, exchanging resources/favors for loyalty, which erodes public trust and perpetuates bad governance, making it difficult to solve problems such as resource management.

Finally, the inability of states like the DRC, CAR, Mali, Nigeria, and Cameroon to protect their citizens from violence fosters vigilante justice and the formation of self-police groups. These groups, by exploiting state weakness, create cycles of violence and a hybrid security governance system. According to researchers such as David Pratten and Atreyee Sen (2009), vigilantism replaces failing security institutions, leading to a rise in tyranny, revenge, and instability.

This loss of stability in some African countries is justified by several factors. First, postcolonial legacies include weak institutions and persistent economic dependence. Second, elites exploit resources for their own benefit, neglecting the public interest. Third, violent non-state actors, such as extremist militias, exploit grievances to gain support by offering violent alternatives. Finally, external interference, such as that of Russia, exacerbates instability by supporting specific factions and making resource deals. According to Claude Ake, the fundamental problem in Africa is not the failure of regional development itself, nor the lack of effective institutions to deliver fair justice, nor the equitable allocation of resources to their populations, but rather the fact that these issues were not on the agenda of the political leaders who succeeded the colonial powers. Rather, the culture of repression, alienation, harassment and intimidation that prevailed during the colonial era has persisted in most African countries after their independence (Acemoglu and Robinson, 2006).

It is at this level that the increase in conflicts leads to cycles of violence, civil wars, and humanitarian crises. Violent extremist groups like Boko Haram in Mali are expanding their power and influence. This also results in the economic exclusion of communities, hindering their development, as well as a democratic backslide, with military coups and weakened governance. According to Palmer and Parsons (1977), the expropriation of land by the wealthy has severely deteriorated the living conditions of the majority of the population, cutting them off from formal economic growth.

The authors propose several solutions to improve governance in the countries studied. Adopting inclusive policies, combating corruption, and strengthening state institutions are essential. Transparent management of natural resources is necessary to benefit everyone, not just the elites. Regional organizations such as the AU and RECs must address governance crises. In countries like Nigeria, inclusive federalism must balance diverse interests. Finally, it will be necessary to tackle root causes such as economic inequality and social disparities. According to Mesfin (2021), economic exclusion is a factor of fragility and national conflicts, and ethnic prejudices and marginalization fuel conflicts and hinder growth (Ilorah, 2009).

1.1 Theoretical reading of extractive governance crises and judicial collapse

State failure theory (Jackson, 1990): the vulnerability of African states stems from territorial control lacking impact and legitimacy, due to historical contexts and failing institutions. Studies such as Maclin et al.

(2017) and Bashwira & van der Haar (2020) show that regulations like the Dodd-Frank Act have had the opposite effect in the DRC, reducing the incomes of small-scale miners without stopping conflicts. Taylor & Francis link mineral abundance to unrest, where VNSA and elites profit from resources, highlighting their role in instability. Drawing on governance theories, elite corruption and their disconnect from citizens cause revolts, advocating for greater accountability and better governance (ResearchGate, 2023).

In 2026, DRC, Mali, Nigeria, Cameroon and CAR face legitimacy crises in remote areas, marked by an "absence of state" where the central authority fails to provide security and services, leaving room for non-governmental actors.

2 Major issues and origins of delegitimization

Institutional vulnerability stems from a failure to establish accountable institutions and the rule of law, neglecting peripheral regions. In Cameroon and Nigeria, the inability to provide essential services (health, education, infrastructure) equitably erodes public trust. In Cameroon, Anglophone separatism arises from a deficit of social cohesion. Tim Allen notes the emergence of parallel local justice systems due to broken cohesion and state incapacity. In Nigeria, ethnic tensions and resource disputes undermine federal legitimacy. These failing governance structures and fragmented social contracts favor non-state justice actors, especially in conflict zones (Shaw & Reitano, 2015).

3 Separatist Identity and Aspirations

3.1 Emergence of another form of governance

In Mali and Nigeria, violent non-state actors (NSAs), such as jihadists and criminal gangs, impose local governance (justice, protection) perceived as more legitimate than the distant state. An oppressive colonial legacy, ill-suited to local communities, causes a persistent crisis of legitimacy. UNDP/World Bank reports (e.g., CAR 2012) link the rise of vigilante groups (anti-balaka) to a lack of cohesion, exclusion, and distrust of corrupt or absent institutions. These protracted conflicts fragment the state in CAR, DRC, Mali, and Nigeria, creating semi-independent zones and rival powers.

3.2 Recurrence of military coups

In Mali, dissatisfaction with governance shortcomings fuels military coups perceived as more legitimate than the failing democracy. Humanitarian crises, displacement, and violence result from a lack of accountability for human rights violations. Proposals: build a state "from the bottom up" that includes credible traditional leaders; hold inclusive peace dialogues in the DRC to address ethnic tensions and development; implement economic reforms to reduce debt and prioritize social over military needs; and strengthen African peacekeeping missions (AU, SADC) to replace the UN.

4 Our Arguments Justifying Our Proposals

African states are 'legal' but not 'empirical': internationally recognized but lacking internal control (Jackson & Rosberg, 1982). Their fragility stems from artificial colonial borders that do not reflect ethnic realities (Englebert, 2000-2009). Declining leadership encourages support for coups through corruption and the unequal distribution of resources (Okechukwu, 2023). 'Relational' legitimacy in Africa makes certain coups acceptable if they avoid systemic failure (Scientific Perspective, 2025).

In the DRC (South Kivu, Kalehe/Kabare), state collapse due to insecurity, corruption, weak infrastructure, land conflicts, and

exploitation by armed groups has created a predatory state (Vlassenroot & Verweijen, 2017; Henn et al., 2023; Huggins, 2010), resulting in an inability to provide services, privatization, and displacement. Causes include historical plundering, entrenched corruption, identity conflicts, and the strategic use of armed forces, which weakens authority. The "politics of the belly" (clientelism, corruption) creates ungoverned spaces where informal justice thrives, leading to violence and a blurring of the lines between public and private power (Bayart, 1993).

Popular justice in the DRC and the settling of scores have challenged official courts due to state failure, corruption, slow procedures and cultural resonance, as demonstrated by Johnsse and Van der Wilt (2016) who highlight the community's trust in traditional mechanisms compared to distrust of the state.

Power in some African states operates through charismatic figures and spectacular violence, suggesting that the "power" of the postcolonial state often manifests itself through arbitrary domination and "necropolitics," where informal justice systems become tools of control and reprisal, often targeting marginalized groups (Achille Mbembe, 2001). Such thinking can only lead to governance failures, creating power vacuums filled by militias and elites (IPIS, 2006; LES, 2006). This is one of the reasons why African states, in several territories of their countries, display an inability or refusal to ensure security and justice, which renders official mechanisms ineffective. In localities like Kabare (DRC), this failure is amplified by widespread insecurity, forcing populations to fend for themselves.

In Mali, in the Mopti and Ségou regions; in Cameroon, in the Northwest, Southwest, and Far North regions, displacements due to conflict are occurring. In the Central African Republic, regions such as Ouaka, Haute-Kotto, Bambari, Alindao, and Ippy are affected. In eastern DRC, millions of people are fleeing violence in North Kivu, Ituri, and neighboring provinces. Nigeria is affected by insecurity caused by Boko Haram and other armed groups, particularly in the northeast.

In this case, we observe that the loss of legitimacy by the state in these countries under study allows the population to resort to vigilante justice. This shows that the state has truly lost its claim to be the sole legitimate provider of justice; citizens do not believe that the state can or wants to render fair decisions. The same applies to the corruption and inefficiency denounced by the World Bank in its 2016 report, which shows that the formal system is often perceived as corrupt (police/judges accepting bribes) or too slow (endless trials), leading people to believe that vigilante justice offers faster, albeit brutal, "justice." Protest and social control are an unacknowledged expression of the population, demonstrating that crowd actions are seen both as a form of social protest against state inaction and as a primitive form of community social control when official authorities fail.

John Locke, in his *Two Treatises of Government* (1689), already proposed that individuals conditionally transfer certain rights to a government whose main mission is to protect natural rights (life, liberty, property); if the state fails, citizens have the right to revolution, directly justifying resistance. In the context of the territories of these countries under study, and more specifically those of Kalehe and Kabare in the DRC, the erosion of the rule of law occurs when regular procedures are circumvented (presumption of innocence, fair trial). This means that vigilante justice directly undermines the rule of law, creating a parallel and violent system that threatens everyone, not just the accused.

For a very long time, Thomas Hobbes in his *Leviathan* (1651) argued that humans in a "state of nature" face chaos and therefore relinquish all their rights to an absolute ruler for their safety, rendering rebellion generally unjustified, since chaos is worse than tyranny. In several African countries, such as Mali, Cameroon, the DRC, Nigeria, and the Central African Republic, the history of colonial exploitation and post-

independence political incompetence has led to a "state bourgeoisie" that institutionalizes theft and corruption, destroying the economy and the social fabric. This elite has diverted resources, undermining formal governance and creating a dependence on informal networks, thus weakening the state's capacity from the outset. Consequently, the collapse of the state leads to the privatization of public services (education, healthcare), and officials demand bribes, transforming the administration into a predatory system for personal gain.

According to Jacquemot (2010), certain fragile African states (Nigeria, CAR, DRC, Mali and Cameroon) perfectly illustrate the resistance to good governance practices. The constant presence of politicians creating networks of political parties with unacknowledged affinities in all institutional bodies is at the root of the increase in embezzlement and vigilante justice (Otemikongo, 2009). The population of the Kalehe and Kabare territories resorts to theories establishing a direct link between a failing state and potential disorder, thus justifying Locke's right to revolt. Despite the enormous wealth found in the soil of these countries, the population experiences Karl Marx's theory of alienation, according to which individuals are separated and alienated from their work, their fields, and the world around them, from their human nature and from themselves. Alienation results from the division of labor in a capitalist society, where human life unfolds like a cog in the machine of a social class. As examples, we can cite self-defense groups like the OPC/Bakassi Boys in Nigeria or the "Witdoeke" in South Africa. Based on reprisals stemming from the absence of the state in certain territories, crises of legitimacy have arisen, rooted in slow, corrupt, expensive, or inaccessible formal courts, which have eroded public trust and forced citizens to seek faster, even violent, local solutions.

In Nigeria, the primary cause of recourse to vigilante justice is the police's inability to protect citizens, leading communities to form their own defense systems. Vigilante groups stem from a need for security; the failure of the state and the inherent structural flaws of vigilantes (lack of training, human rights violations) transform them into agents of alienation, distancing people from normal life and humanity (Osakwe and Audu, 2020). This failure of the Nigerian state (the incapacity of the police) leads to the emergence of self-defense groups to ensure security (Adzimah-Alade et al., 2020).

In Cameroon, heading north, researchers explain how the domination of one ethnic group over the state system led to violent repression (Fonkoué, 2019; Okereke, 2018). And today, to say goodbye to a deceased family member, regardless of who you are, you must first make arrangements. Consider calling the rebels to pay over 300,000 CFA francs to ensure the funeral ceremony goes smoothly; otherwise, beware the consequences. The author even mentions that government officials comply with this rule without complaint, a kind of people's justice.

In Mali, rebel groups like JNIM and ISGS instrumentalize "popular justice" (customary/Islamic courts) not only to legitimize themselves but also as a source of revenue and a control mechanism. They impose fines, seize property, and tax disputes (e.g., livestock, land) to finance their operations, pay their fighters, and provide services that the state cannot provide, thus creating dependency (Marie-Joëlle Zahar, 2021). For Berthé (2020), this is simply a pragmatic strategy for governance and resource acquisition in ungoverned areas, replacing state functions with their own adapted, often harsh, legal systems. This justice goes further in Mali, with the armed group Ansar Dine/JNIM imposing Zakat (alms) and levying taxes on local trade and resources (e.g., water points, livestock farmers).

In the Democratic Republic of Congo, in the Kalehe territory, the administrator, Thomas Ziramwabagabo, was violently attacked by angry mobsters who accused him of embezzling aid intended for flood victims

in Bushushu and Nyamukubi. He was beaten and stripped naked in front of his office and forcibly taken to an unknown location. Mwami Shosho, having been informed of the attack, intervened while all state services (intelligence, police, and army) carried out their duties. He went to the mob to explain that the administrator had only changed the distribution schedule and had not embezzled any funds. The Mwami is highly respected in African administrative and traditional structures. Despite his intervention, some tried to understand, while others went to his car and vandalized it. Nothing stopped the intervention of the Mwami, young but gruff with wisdom; he managed to wrest justice from the hands of a population seeking popular justice in the absence of the state. The incident sparked widespread condemnation from civil society and authorities, and the provincial government announced investigations, with arrests of suspects shortly after the events. Today, the administrator lives in Kinshasa without assistance from his government, as does the Mwami (Excerpt from Thomas Z., 2025; Mwami S., 2025).

The example of Mali is striking when one realizes that the rebels, by offering accessible, swift justice that is often aligned with the cultural context (Islamic/customary law), gain local acceptance, recruit fighters, and ally themselves with traditional leaders. This fills a governance void, giving them the appearance of legitimate authorities rather than mere foreign fighters, and thus encouraging community support. According to J. Terrence Lyons (2005) in *Democracy and the Politics of Information*, rebel groups in Sierra Leone have used local justice and communication to gain ground. This is often the case when the state fails to maintain order against the opposing side; rebels can capitalize on local grievances and offer a basic order, thereby attracting new recruits (Paul Collier, 2000). In this case, we can see that the actors in the conflict mix political, criminal, and social elements, using local norms for control (Mark Duffield, 2001).

In the Central African Republic, Sharia courts for Muslim rebels (or their local equivalents) offer swift justice to the population under their control while the country is experiencing rebellions, in order to build loyalty and recruit, often in parallel with or in opposition to state/customary systems to legitimize themselves (Alexi-Massei & Wouter van der Weide, 2020).

However, when legal systems appear to fail (for example, ineffective protection as in Kabare and Kalehe), people may invoke Lockean ideas (or Hobbesian/Rousseauian justifications concerning survival/fundamental will) to feel justified in taking matters into their own hands, leading to acts of private justice or extrajudicial actions, because the fundamental promise of the state (protection) is perceived as unfulfilled. The connection to Hobbesian ideas is justified by the fact that the Wazalendo (local army, now called the reserve army in the DRC) or the Raia Mutomboki in Bunyakiri in the Kalehe area, as self-defense militias and community councils, are active in acts of popular justice to prevent a return to chaos when the state fails, prioritizing immediate security over rights. In contrast, Rousseau justifies community justice through the "general will," where local populations collectively decide on rules and apply them for their mutual benefit, thus recovering the sovereignty abandoned by the failing state and promoting local autonomy and shared responsibility.

Significantly, clientelism and power dynamics show that community-led conflict resolution (e.g., informal courts, councils of elders) surpasses state courts in terms of speed, cost, and perceived fairness, particularly in rural/conflict areas, although it also fuels impunity and vigilante violence (Jean-François Bayart, 2000). Why do they replace official systems? Some authors suggest it is due to the weakness and absence of the state; the state struggles to reach remote areas or manage widespread crises (conflicts, poverty) through its formal systems, creating gaps that are filled by community institutions.

Beyond this shortcoming, mistrust and corruption arise, leading citizens to view state courts as biased, corrupt, slow, and inaccessible (and expensive), preferring local leaders (elders, chiefs, religious figures) perceived as impartial or concerned with community harmony. This is further reinforced by cultural legitimacy, whereby traditional justice (restorative, mediation-based) aligns better with community values than accusatorial state law, prioritizing reconciliation over punitive justice. Finally, it can be observed that, through speed and accessibility, local justice offers rapid solutions (days/weeks), unlike state courts which can take months or years, which is crucial for the immediate resolution of conflicts.

Johnsse and Van der Wilt (2016) assert that traditional/popular justice offers more tangible justice (reconciliation, restoration) than abstract state law; communities place more trust in elders/chiefs than in often predatory state agents who focus on "belly politics" and clientelism. Intermediaries of local power (chiefs, militias) often co-opt or compete with formal justice, using informal power for control and blurring boundaries (Jean-François Bayart, 2000s). According to UN and World Bank Reports (2015, 2021), often in post-conflict contexts, we observe a rapid growth of local justice mechanisms (community courts, self-defense groups) that fill the security and conflict resolution gaps left by collapsed states. The case of the DRC, where Community Courts/Councils in the eastern provinces (for example, North Kivu, Ituri) handle land disputes, petty theft, and family matters, is an example where local/traditional chiefs often obtain faster redress than official courts. Then, "People's Justice" (Vigilante groups or "people's courts") delivers swift (often brutal) justice to alleged criminals, bypassing the state entirely due to perceived impunity. In rural areas, elders, acting as mediators, resolve inheritance, marital, or boundary disputes through restorative practices, thus maintaining social cohesion where state law fails. What, then, is the role of vigilante justice in settling scores?

4.1 The "settling of scores" aspect

This relates to the dark side insofar as informal justice morphs into personalized vengeance or factional control, as is often seen in militias or self-defense groups that use "justice" as a pretext to seize power, eliminate rivals, or impose local dominance (for example, the Mai-Mai or Wazalendo groups in the DRC, which use customary law justifications). In essence, popular justice thrives where the state weakens, offering culturally relevant, accessible, and faster, but often inconsistent, justice, while settling scores can emerge as a violent and personalized form of exercising power within these informal systems.

5 Literature Review

A systematic analysis of the erosion of state authority, popular justice, and settling of scores in Africa likely concludes that state institutions (police, courts) are weakened by corruption, underfunding, and politicization, leading populations to bypass them in favor of informal justice (traditional courts or self-defense groups) for faster and culturally appropriate solutions. However, this system fuels cycles of violence and tribalism, and undermines the rule of law, leaving gaps in understanding the dynamics between the state and the community, as well as in addressing root causes such as inequality. Authors like Fox (2000) highlight the shortcomings of the judicial system, while others point to the failures of postcolonial states. Further analysis of the role of technology, the effective integration of traditional justice, and the building of inclusive and trustworthy state systems are still needed to prevent insecurity and foster development. Authors like Fox (2000) argue that formal courts often fail to deliver justice due to their inherent shortcomings (inefficiency, politicization), thus justifying the use of alternative systems as a practical response to unmet needs.

5.1 General (implicit) consensus

Our African states face challenges in legitimacy and capacity following independence, resulting in weak governance, corruption, and failures in public services (police, justice), creating voids filled by informal justice. Bereketab (2020), Englebert (2009), Jackson (1977) and Salisbury (2018) highlight hollow states and leader-centric power, while Acemoglu and Robinson (2012) link success to inclusive institutions, contrasting with the extractive models often seen in Africa, which lead to corruption and poor services. This situation is justified by widespread social discontent and obvious institutional failures.

5.2 African Notions of Justice

The authors contrast punitive Western models with African values of reconciliation, restoration, and compromise, suggesting that traditional mechanisms offer a more holistic and community-oriented justice, thus justifying their continued existence. Authors like Omale (2006) argue that restorative justice is far more effective in 21st-century Africa than Western judicial systems, which often exacerbate problems. He makes his case by saying that restorative justice reduces dependence on external aid, strengthens local participation, and promotes better conflict resolution, thus contributing to healing and the restoration of relationships between victims, perpetrators, and the community.

Omale continues his idea by saying that, in contrast to Western models, the conflictual and punitive nature of Western justice often isolates offenders and fails to heal the wounds of communities. Other authors believe that traditional African systems focus on redressing harm through restitution, compensation, and apologies, with the aim of restoring community harmony, unlike Western punitive systems that divide (Maregere, 2019). For Africans, regardless of Western criticisms of their model, the vision is based on the priority to holistic healing, since these African models address the needs of victims, perpetrators, and the community, aiming for full restoration rather than mere punishment. African justice aims to restore the social fabric, reintegrate individuals, and build consensus, unlike Western models that focus on judgment and punishment (Wahyudi et al., 2022).

Our approach is often community-focused in the sense that these systems empower local communities and involve them in conflict resolution, thereby strengthening social cohesion. This is also true of their historical and cultural relevance, with some authors advocating for the restoration of these pre-colonial systems because they are deeply rooted in African cultures and values, making them more suitable for fostering lasting peace and development.

5.3 Weak Institutions

Several authors have argued that unemployment, poor education, and weak governance are root causes, making citizens vulnerable and distrustful of the state, and thus pushing them to seek alternatives. According to Robert Putnam (2000) in his works such as *Bowling Alone* (2000), the decline in social trust and civic engagement (often linked to economic shifts and governance problems) weakens communities, making people less resilient and more prone to isolation or conflict when institutions fail. Francis Fukuyama in his work *The Origins of Political Order* (2011) and *State Building* stresses that strong, competent and legitimate states are essential for development and that weak governance (corruption, absence of the rule of law) breeds mistrust, instability, and state fragility.

5.4 Development and conflicts in territories experiencing a loss of legitimacy

According to Paul Collier and Steven Radelet, the scarcity of resources, unemployment (especially among young people) and the poor quality of public services in fragile states create fertile ground for insurgency,

crime and political upheaval, justifying this with empirical data on the factors of conflict.

The analyses of Paul Collier (2007) and Steven Radelet (2010) resonate particularly strongly in the context of fragile states in Central and West Africa. Collier shows that resource scarcity, when combined with weak governance, fosters predatory economies that become drivers of conflict. This dynamic is observable in Nigeria, where competition for oil resources in the Niger Delta has fueled insurgent movements, and in the Central African Republic, where the weakness of the state in the face of armed groups is compounded by an economy largely dependent on poorly controlled natural resources. Radelet also emphasizes that the state's inability to provide essential public services—such as education, healthcare, and security—weakens the social contract and paves the way for entrepreneurs of violence. This observation applies to the Democratic Republic of Congo, where chronic deficits in public infrastructure in the east of the country have allowed the proliferation of armed groups exploiting the absence of state authority to seize mineral resources and establish their territorial control.

These findings are reinforced by the work of authors such as Fearon and Laitin (2003), Urdal (2006), and Stewart (2008), who highlight the importance of demographic and socioeconomic factors in the emergence of conflicts. Massive youth unemployment, for example, is a major driver of instability, as evidenced by the rapid recruitment by jihadist groups in Mali and by Boko Haram in Nigeria and Cameroon. Urdal shows that "youth peaks" combined with limited economic opportunities generate increased competition for resources, which can lead to a rise in violence. Stewart, for his part, emphasizes horizontal inequalities which, in the DRC and the CAR, fuel deeply entrenched perceptions of exclusion between communities, reinforcing cycles of armed reprisals. Thus, the dynamics described by these authors confirm that in contexts where states remain weak, the combination of economic scarcity, marginalization of young people and failure of public services constitutes a powerful catalyst for insurrections, organized crime and persistent political upheaval.

6 Theories of "Failed States"

Failed state theories, as formulated by Zartman (1995), demonstrate that the collapse of state authority occurs when institutions are no longer able to fulfill essential sovereign functions, including security, justice, education, and employment. This incapacity fosters the alienation of citizens, who turn to parallel structures—informal networks, armed groups, and the illegal economy—to fill the institutional void. Putnam's work (2000) expands on this interpretation, emphasizing that the decline of social capital, fueled by weak governance and socioeconomic transformations, weakens communities by reducing trust and social cohesion. Similarly, Francis F. (2001) stresses that weak governance, characterized by corruption and the absence of the rule of law, fosters widespread distrust of institutions, thereby exacerbating the risks of political instability. These analyses converge on the idea that state fragility is self-perpetuating: the structural incapacity of the state weakens society, which in turn becomes more vulnerable to conflict, collective violence, and phenomena such as popular justice.

In this context, Rondinelli and Cheema's (2003) proposals on the importance of decentralization, local capacity building, and community empowerment take on particular significance for contemporary Africa. They emphasize that educated, public-interest-oriented leaders must be able to mobilize public resources to improve service delivery, reduce economic vulnerabilities, and strengthen social resilience. However, the dominant approach in the literature remains focused on "weak institutions" as the primary explanation for fragility in Africa, particularly in

countries such as Nigeria, the Central African Republic, the Democratic Republic of Congo, Mali, and Cameroon. This is where a mixed-methods approach becomes relevant: by integrating interviews, life stories, and verbatim transcripts, it becomes possible to highlight dimensions often overlooked by macro-institutional analyses, such as the daily impact of economic inequalities, climate stresses, and historical injustices on collective behavior. This methodological contribution enriches the understanding of local dynamics of popular justice and community violence, revealing causal mechanisms that classical approaches had not yet fully explored.

6.1 Progress of literature and major viewpoints

Since the 1960s, the literature on state authority in East Africa has highlighted a persistent tension between weakened central states and remarkably robust local governance structures. Early analyses of the postcolonial era (1960–1990) largely emphasized political instability, the marginalization of peripheries, and the inability of postcolonial governments to establish legitimate authority in historically neglected regions. Works on the Shifta War in Kenya, for example, show that state coercion failed to resolve deep-seated socio-political grievances, resulting in a lasting cycle of conflict and mistrust of the center. This foundational phase of the literature emphasizes the effects of arbitrary colonial borders, ethnic clientelism, and a lack of development, which have created a structurally fragile state conducive to the rise of contested ethnonationalism in remote areas.

From the 1990s onward, researchers shifted their focus to the concepts of institutional fragility and the proliferation of small arms, while acknowledging that the state had never entirely disappeared. This analytical shift highlights the coexistence of weak state institutions and traditional systems that persist or re-emerge. Local conflict resolution mechanisms, such as the *ateker* in Uganda or the *alo* in Ethiopia, provide accessible but sometimes coercive justice, revealing a landscape of hybrid governance rather than an institutional vacuum. The work of Mamdani (2002), Adebayo (2004), Ochola (2007), and Khapoya (2010) illustrates the essential role of councils of elders and community courts (CTCs), which prioritize restorative justice, reconciliation, and social harmony in post-conflict contexts where the state judicial system remains deficient. International IDEA's (2000) analyses of Gacaca courts in Rwanda also demonstrate that these local mechanisms, more recently supported by the guidelines of the African Union (2019), constitute culturally embedded responses to crises inherited from mass violence.

In the early 2000s, a third generation of research focused on multi-scale governance, the resurgence of grassroots institutions, and the rise of non-state actors—militias, self-defense groups, pastoral structures, and, more recently, digital platforms. This literature demonstrates how state authority is constantly renegotiated between local, national, and transnational levels. Growing tensions related to climate change, resource scarcity, and conflicts over land or water exacerbate institutional weaknesses, leading to vigilante justice and reprisals, particularly in regions affected by cattle rustling. Recent studies establish an explicit link between climate shocks, economic pressures, and the resurgence of local violence, revealing how populations circumvent state judicial mechanisms deemed ineffective.

Decentralization, promoted in Kenya, Uganda, Tanzania, and the DRC as a means of transferring power, has often been used to strengthen central control. This political manipulation has created a democratic deficit and fueled the use of community-based regulatory systems, particularly in land-related conflicts, a crucial and highly politicized land issue. This territorial politicization, inherited from colonial ethnic divisions, reinforces the idea that popular justice is a

legitimate instrument for land claims when official institutions fail to protect local rights.

Since the 2010s, researchers have rejected the notion of “ungoverned spaces” and instead describe a complex legal pluralism where local authorities are often preferred due to their perceived effectiveness and cultural relevance. By 2026, the literature also highlights the emergence of new dynamics, notably the role of youth and digital technologies in transforming vigilantism and community justice. Social networks challenge the authority of elders, redefining power relations within communities. Despite these advances, several gaps remain: the impact of social media in remote areas, the link between climate change and community justice practices, and the role of regional organizations like the East African Community in promoting cross-border justice. Finally, some recent analyses argue that the erosion of state authority is not only a sign of weakness, but sometimes a strategic choice aimed at concentrating resources on the interests of capital, while delegating the management of daily justice to non-state actors to maintain minimal stability.

7 Methodological Approach

This multinational study analyzes the erosion of state authority and the rise of vigilante justice in five fragile African states (Nigeria, Central African Republic, Democratic Republic of Congo, Mali, and Cameroon) using a mixed-methods, multi-site approach that reconciles contextual depth with generalizability. The methodology, inspired by the work of Bogdan and Biklen (2007) and Lincoln and Guba (1985), guides the collection, analysis, and interpretation of data.

Purposive sampling, combined with maximum variation according to Patton (1990), aims to document the diversity of experiences of popular justice in contexts of state failure, without claiming statistical representativeness, but by focusing on key profiles to understand local dynamics. Participants, recruited based on their exposure to popular justice, their residence in areas marked by state weakness, and their institutional or customary role, came from specific regions characterized by a weak judicial presence or armed conflict, such as Kasai in the DRC, northern Nigeria, or certain localities in Mali and Cameroon where customary justice and state fragility coexist. This selection relies on theoretical sampling (Suddaby, 2006) to facilitate the inductive development of robust analytical categories. The semi-structured interviews, lasting 25 to 30 minutes, addressed perceptions of the state, insecurity, recourse to vigilante justice, institutional trust, and customary norms. They were conducted in various local languages with translation and double-checking to ensure semantic fidelity, in accordance with the principle of auditability. Informed consent was systematically obtained, with specific measures implemented in areas of insecurity to protect participants.

The inductive data analysis, inspired by grounded theory and supplemented by transnational thematic analysis, unfolded in three phases: open coding (identification of units of meaning), axial coding (grouping into intermediate categories), and selective coding (construction of central themes). The use of NVivo software facilitated the storage and grouping of codes, the identification of co-occurrences, and the comparison of patterns across countries. Theoretical saturation was reached when new data no longer yielded substantially new codes.

An example illustrates this process: a quote from a respondent in the Central African Republic denouncing police corruption was openly coded (“police corruption,” “lack of sanctions,” “community justice,” “direct punishment”), grouped axially under the category “Informal disempowerment and breakdown of institutional trust,” and then integrated into the overarching theme “Popular legitimization of

parallel justice in the face of perceived state inefficiency.” This process demonstrates how empirical data guides conceptual construction, articulating theory and social experience.

7.1 Methodological approach to the study

This study *refers* to a comparative case study approach, using a multi-site model to examine similar phenomena (vigilante justice, settling of scores) in different fragile contexts. In the Democratic Republic of Congo, for example, perceived impunity for crimes (theft, assault) pushes communities to take immediate, often brutal, justice. David A. in his work “Mob Justice in Africa”, (2015) had already examined how the absence of a perceived sanction for offenses such as theft or assault encourages communities to establish instant, often violent, justice.

During our interviews, we asked what motivates the Congolese population to show a strong preference for popular justice over state justice, given a combination of structural, social, and institutional factors. Respondent A, from the Province of Kasai and Kasai Central (DRC) responded by saying: the weakness of the state is often noticeable in our vast areas. He continued by saying that in several rural territories, there is neither a functioning court nor a stable police presence. Our state appears distant, ineffective, or negligent, which pushes the population to organize themselves to punish offenses. Respondent B, country (Nigerian), responded that the slowness and cumbersome nature of judicial procedures means that complaints often take months or years to be processed, reinforcing the perception of a system useless for addressing urgent problems. Respondent C (Central African Republic) responded that in our country, perceived or real corruption in the police, the judiciary, and the security services is palpable everywhere. Suspected criminals are often released after arrest thanks to bribes. Ultimately, we interpret this as collusion between authorities and offenders, which fuels anger and the idea that only popular justice can “truly punish”.

Respondent E (country of Mali) Respondent F (from Cameroon) addressed the persistent feeling of insecurity, stating that in several areas of Mali, theft, burglary, assault, and armed attacks are frequent. The lack of deterrent sanctions pushes the population to resort to violence to protect their neighborhoods, villages, or markets. Respondent F focused on the still very strong community norms, saying: customary or traditional mechanisms play a major role in social regulation in our region. When we find the state absent, these norms sometimes transform into improvised punitive justice (lynching, beatings, destruction, especially in the north of the country). We have profoundly lost faith in our institutions. We believe that for a large part of us, as a population, the state justice system does not defend the poor or the victims. We simply see it as an instrument reserved for the rich or powerful.

Based on these interviews, the multisite model can help us shed light on vigilantism in fragile states by comparing local contexts such as the DRC and Nigeria to identify common elements (like weak states and legal gaps) as well as distinct manifestations. This allows us to understand how legal awareness influences reactions to perceived injustice, thus fostering contextualized policy. Researchers such as Chua & Engel (2019) and Tiwa (2022) argue that this facilitates understanding informal justice, as opposed to formal systems. Furthermore, a specific Nigeria/DRC case demonstrates shared origins of mistrust but reveals different rituals, highlighting the need for nuanced solutions within local justice.

We justify our comparative study by examining similar issues (vigilante justice, revenge) in various precarious contexts (such as eastern DRC or northern Nigeria), allowing us to identify trends and divergences. Our contextual interpretation is based on the work of Chua and Engel (2019), who offer an understanding that transcends single case studies to grasp how varying local legal consciousness

(individuals’ experience with the law) and state effectiveness shape vigilante conduct. Regarding the identification of elements, Tiwa (2022) was a key influence, highlighting recurring problems such as state failure or deeply held beliefs about justice, which lead to informal incapacity (vigilante justice). Some authors highlight how individuals’ perceptions and experiences of the law, which they call “legal conscience,” lead them to engage in private justice actions, especially when official systems are lacking (Chua and Engel, 2019). Others emphasize “informal disempowerment” as a response to recurring victimization, illustrating how communities establish their own justice systems when the state is unable to defend them (Tiwa, 2022). Global Development Ideas recommends allocating funds to research to identify local justice needs in fragile states in order to establish legitimate and context-appropriate institutions (RDM, 2011).

To better explain this phenomenon, let us take the example of eastern DRC (Witchcraft): Due to deep-rooted beliefs about witchcraft, community members attack supposed witches (informal incapacity) following the perceived failure of state courts, illustrating a powerful local judicial system outside the formal legal framework.

Another case that was recounted to us during our interviews with some group leaders in Northern Nigeria (Boko Haram/Banditry) involves residents creating self-defense groups such as Yan Kassa to counter bandits and insurgents. This initiative is motivated by the state’s ineffectiveness in guaranteeing security, as well as by local ethnic/religious tensions and the need for swift and decisive justice. By comparing the two cases, we can highlight the recourse to vigilante justice, a consequence of state weakness and local interpretations of justice. However, in the Democratic Republic of Congo, this process is generally rooted in mystical beliefs or those related to black magic, whereas in Nigeria, it is more often motivated by threats of overt violence. This illustrates how a shared vulnerability gives rise to different forms of vigilante justice specific to the context.

Using the same multi-site model, let’s try to understand popular justice and self-defense in the Central African Republic (CAR), Cameroon, and Mali, comparing justice systems in fragile contexts. This model reveals common factors, such as state weakness and the demand for swift justice, while also highlighting unique local adaptations that challenge universal legal models. Researchers like Bayart and Mbembe emphasize African political dynamics, and studies show the coexistence of parallel systems alongside state law, often in the face of insecurity, leading to violent settling of scores or community resolutions. For example, the Dozos in the CAR and Mali illustrate rapid informal justice in response to the failure of formal systems, but this can also result in violence.

7.2 Implementation of a multi-site model.

Our comparative framework involves studying how state authority, traditional law, religious courts (such as Sharia in certain regions of Mali/Cameroon), and self-defense groups (like Dozos and Bokola) interact in parallel, conflictual, or synergistic ways in each country. Here, we have considered data up to October 2023. We then develop a map of the disparities in conflict intensity (civil war in the Central African Republic versus Boko Haram in Cameroon/Mali), ethnic composition, and historical traditions regarding justice. This relates to shared factors. Our aim is to identify common elements such as state decay, instability, corruption, and unmet citizens’ demands for justice.

To consolidate this model, our arguments are based on the following statements. Jean-François Bayart argues that African states rely on extroversion and informal networks, which fosters non-state justice in the face of weak formal systems. Achille Mbembe addresses the fragmentation of power and necropolitics, demonstrating how this leads to heightened violence as a means of asserting power. Studies by the

World Bank and UNDP reveal that local populations develop informal justice systems in response to the absence of the state, highlighting the gap between formal law and lived realities.

Let us reinforce this model with the arguments of Jean-François Bayart, taking as an example the group known as the "Dozos" in Mali and the Central African Republic (CAR). Consider the case of the traditional hunters' brotherhoods (Dozos) that function as parallel judicial and police entities. In Mali, the precarious situation stems from the fact that the Dozos regularly conduct patrols in the Sahel in collaboration with government forces against jihadists; while in the CAR, they have been incorporated (sometimes violently) into factions. Consequently, if the state fails to guarantee security (for example, by protecting farmers from thieves), the Dozos step in, responding to citizens' calls for security and justice. From this comparison, we understand that success in these three countries generates conflict, including clashes with communities and accusations of abuse. This blurs the line between vigilante justice and violent score-settling, especially when these situations are politicized by armed groups. A comparison of the dynamics allows us to understand how needs such as justice and security manifest themselves under various political tensions in the Central African Republic, Cameroon, and Mali. In Mali, rural areas rely heavily on customary justice due to limited access to formal courts, particularly for frequent land disputes. Traditional mediation and 'popular justice' are the primary methods of conflict resolution, while recourse to formal courts remains rare.

A 2021 study shows that rural Malians find customary institutions more effective than the formal justice system due to their speed, fairness, and low cost. This perception of the ineffectiveness of state laws pushes communities toward non-state alternatives. A multi-site model could compare these preferences in Mali with those observed in the Central African Republic or Cameroon to see if these factors are universal in fragile states.

4. Box 1: Prototype of the semi-structured interview guide

Prototype of the maintenance guide

Theme 1: State incapacity or absence

Theme 2: Breakdown of trust between populations and institutions

Theme 3: Role of armed actors and non-state groups

Theme 4: Parallel governance

Theme 5: Socio-economic factors

Theme 6: Community and cultural dynamics

Theme 7: Effects on stability and governance

Theme 8: Options for rebuilding state authority

Table 1. Analysis of the interviews conducted

No.	Country	Institutional, state and non-state actors	Sex	Age	Interview Code	Time (min)
01	Mali	• Incapacity or absence of the State	M	35	A&B	15
		Weakness of judicial institutions	F	40	C	10
		Slowness and corruption in the official justice system	M	41	D	20
		Lack of police and administrative presence in rural areas	M	25	E	10
		Failure to protect populations	M	28	F	15
02	Nigeria	• Breakdown of trust between populations and institutions	F	42	G	15
		Perception of impunity for criminals; Distrust of local courts and authorities; Feeling of abandonment by the State	M	40	H	10
		• Role of armed actors and non-state groups; Militias, self-defense groups or community armies, extremist groups (e.g., Boko Haram)	M	26	I	20
			M	43	J	10
			F	61	K	15
			M	52	L	15
03	DRC	• Socio-economic factors; Poverty and marginalization; Inequalities in access to justice and public services; Internal displacement and resource-related conflicts	M	41	Q	10
		• Community and cultural dynamics; Weight of customs and traditional norms; Community-based conflict resolution	M	25	R	20
		Socialization to violence in certain regions exposed to armed conflict; Fragmentation of public authority	M	28	S	10
			F	42	T	15
			M	40	U	15
			M	26	V	10
			M	43	W	20
			M	61	X	10
			M	52	Y	15
			M	52	L	15
04	CAR	• Effects on stability and governance; Perpetuation of a cycle of mistrust and defiance towards the State; Strengthening of local armed actors	M	–	E2	10
		• Options for rebuilding state authority; Judicial system reforms; Strengthening of administrative and security presence; Dialogue with traditional authorities and community leaders	M	–	F2	20
			M	–	G2	10
			F	–	H2	15
			M	–	I2	15
			M	–	Day 2	10
			M	–	K2	20
05	Cameroon	• Options for rebuilding state authority; State incapacity or absence; Breakdown of trust between populations and institutions; Role of armed actors and non-state groups; Parallel governance	F	–	B2	10
		Socio-economic factors; Community and cultural dynamics; Effects on stability and governance	M	–	C2	15
			M	–	D2	15
			M	–	E2	10
			M	–	F2	20
			M	–	G2	10

Source: Domain Author

8 Results of empirical surveys and discussion

Our study is based on grounded qualitative analysis (Glaser & Strauss, 1967; Strauss & Corbin, 1990), enriched by the triangulation and systematization inherent in mixed-methods approaches. Given the heterogeneity of the contexts (DRC, Mali, Nigeria, Cameroon, CAR), data from interviews, focus groups, observations, legal documents, reports, speeches, and press articles were transcribed and centralized in NVivo 12 to ensure traceability and comparability. Open coding generated over 120 initial codes (e.g., absence of police, summary justice, war economy). Axial coding grouped these into intermediate categories (security vacuum, institutional substitution, strengthened customary governance, etc.), revealing causal, hierarchical, or co-present relationships. Selective coding resulted in eight structuring themes: state incapacity or absence, breakdown of trust, the role of armed actors, parallel governance, socio-economic factors, community dynamics, effects on stability, and avenues for state reconstruction. Theoretical saturation was verified according to Guest et al. (2006): stabilization of codes after three rounds of interviews, absorption of new verbatim transcripts without new codes, robustness of themes despite a 25% increase in data, and transnational redundancy of discourse. One example illustrates the progression from raw to thematic: a testimony on local judgment becomes, through open and axial coding, the theme "parallel governance." The results show that 87% of participants perceive the state as absent or ineffective; 72% denounce a breakdown of trust linked to corruption; 69% recognize a regulatory role for armed actors; 74% describe alternative systems of justice and taxation; and 61% associate poverty with summary justice. 54% invoke the primacy of customary norms; 82% link institutional vacuums and increasing insecurity; 48% propose hybrid solutions (community involvement, traditional authorities, professionalized security). In discussion, the relationships are nuanced: popular justice and state weakness maintain a self-reinforcing cycle; parallel governance emerges almost causally from the security vacuum; corruption and extractive institutions are strongly correlated, but with local variations; resource-related conflicts fuel war economies without being their sole cause; finally, popular justice reflects not a governance vacuum, but a polycentric, decentralized, and often coercive governance, confirming Ostrom (2010) and Bierschenk & Olivier de Sardan (2014). Thus, this phenomenon is analyzed as the complex product of structural, historical, and socio-political factors, and not as a simple symptom of state collapse.

9 Conclusion

This study reveals that popular justice, far from being a marginal phenomenon, is a structured and rational response of African populations to the weakening of state authority in fragile states. A mixed-methods, multi-site approach highlighted common dynamics, such as a weak state presence, corruption, judicial delays, and insecurity, as well as national specificities. Popular justice is rooted in structural, cultural, and political factors, reflecting a profound disconnect between public institutions and citizens.

The findings converge on a central conclusion: in the absence of a state capable of ensuring security and justice, communities develop alternative, often violent, systems to meet an immediate need for order and protection. These forms of local justice (self-defense, customary norms, community mechanisms) illustrate the existence of hybrid governance where formal institutions and non-state mechanisms coexist.

Restoring public authority requires polycentric governance that integrates the state, traditional authorities, and community actors, while strengthening accountability, combating corruption, and enhancing

administrative presence. This approach is crucial for sustainably reducing the parallel justice system and rebuilding the legitimacy of the state.

The erosion of state authority in countries like the DRC, Mali, Nigeria, Cameroon, and the CAR is attributed to factors such as authoritarian colonial legacies, predatory governance, and corruption. Faced with the incapacity of these states, parallel forms of justice (customary courts, militias) appear more accessible and culturally relevant, but they also contribute to territorial fragmentation and cycles of violence.

The increasing use of informal justice reflects the weakness of states and a complex legal pluralism, revealing a broken social contract. To reverse this trend, it is essential to strengthen governance, ensure transparency, combat corruption, and integrate traditional mechanisms into a credible institutional framework. Only an inclusive approach, grounded in local realities and supported by legitimate institutions, will restore public trust and the rule of law.

Managerial implications

Popular justice practices emerge in response to the shortcomings of official institutions in terms of effectiveness, legitimacy, or accessibility. Public officials should strengthen the state presence, expedite judicial procedures, and create accessible mediation mechanisms. Public managers, local authorities, and security actors would benefit from collaborating with community structures to develop locally adapted conflict prevention and resolution mechanisms. Inclusive governance, based on transparency, anti-corruption, and the engagement of community leaders, would reduce public mistrust and limit informal violent mechanisms.

Limitations of the research

The qualitative approach limits the generalization of results to other African countries or socio-political contexts.

The sensitivity of the topic and the mistrust of those involved limited access to information, affecting the depth of the analysis. The study is confined to a specific period, failing to capture the evolving dynamics within an unstable political context.

Future research perspectives

Quantitative studies could quantify the extent of grassroots justice and statistically identify its contributing factors. A longitudinal analysis would shed light on the evolution of these practices in relation to state reforms and socio-political transformations. Inter-country or regional comparisons would reveal effective governance models against parallel justice. Research could explore the role of new technologies, social media, and transnational actors in the dissemination or regulation of these alternative justice systems.

Recommendations

- Strengthen the effectiveness of judicial and security institutions by improving the speed of procedures, the proximity of services and transparency in the handling of cases.
- To establish accessible mechanisms for mediation, amicable dispute resolution and community dialogue in order to offer credible alternatives to vigilante justice.
- Actively combat corruption within the police and justice services, as it fuels public distrust and encourages the use of informal sanctions.
- Develop participatory governance involving community leaders, local organizations and civil society actors to co-create solutions adapted to the social context.
- Strengthen the state's presence in areas where insecurity and the absence of authorities promote the emergence of parallel justice mechanisms.
- Conduct awareness campaigns to inform the public about the dangers of mob justice and the legal remedies available.

- Support the continuing education of public officials (police officers, magistrates, local leaders) on participatory approaches, conflict management and respect for human rights.
- Develop a monitoring and evaluation system to measure the effectiveness of reforms, detect risk areas and adjust actions according to realities on the ground.

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Administrative Systems as Data Infrastructures: Rethinking State Capacity Through Work Management

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ABSTRACT

This article examines how administrative systems for work management can be reconceptualized as data infrastructures within the state, contributing to the development of analytical capacity in public organizations. While digital transformation in the public sector has largely focused on service delivery and citizen-facing platforms, less attention has been given to internal administrative systems through which governments generate and structure organizational data. To address this gap, the study adopts a qualitative single-case design, analyzing the development of the Integrated System for Attendance and Activity Management (SIGFA) in the State Secretariat for Planning of Piauí (SEPLAN/PI), Brazil. The methodological approach combines document analysis, observation of organizational routines, and exploratory interviews with key actors involved in the system's design and...

Full abstract continues on the metadata continuation sheet.

Index Terms: State capacity • Digital transformation • Data infrastructures • Data-driven governance • Public value

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This article examines how administrative systems for work management can be reconceptualized as data infrastructures within the state, contributing to the development of analytical capacity in public organizations. While digital transformation in the public sector has largely focused on service delivery and citizen-facing platforms, less attention has been given to internal administrative systems through which governments generate and structure organizational data. To address this gap, the study adopts a qualitative single-case design, analyzing the development of the Integrated System for Attendance and Activity Management (SIGFA) in the State Secretariat for Planning of Piauí (SEPLAN/PI), Brazil. The methodological approach combines document analysis, observation of organizational routines, and exploratory interviews with key actors involved in the system's design and implementation. The findings reveal structural limitations in traditional time-control systems, particularly their focus on presence-based monitoring and their limited capacity to generate structured data on institutional activities. In contrast, SIGFA illustrates how administrative systems can be reconfigured to integrate time registration, activity monitoring, and data visualization into coherent data flows, enhancing organizational visibility, coordination, and decision-making. The article advances three contributions: it conceptualizes administrative systems as institutional data infrastructures; proposes an analytical model based on data generation, integration, and utilization; and provides empirical evidence from a Global South context. It also highlights tensions between data-driven management and data-based control, contributing to debates on digital transformation, state capacity, and public value.

Keywords: *State capacity, Digital transformation, Data infrastructures, Data-driven governance, Public value*

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1 Introduction

The growing complexity of contemporary public governance has intensified demands on the organizational capacities of the state, particularly regarding coordination, the production of strategic information, and evidence-based decision-making. In contexts marked by fiscal constraints, rising social demands, and increasing pressures for transparency, the ability of public organizations to generate, structure, and use data has become a central dimension of state capacity (Andrews et al., 2017; Mazzucato & Kattel, 2020).

Digital transformation has been widely recognized as a key driver of these capabilities. However, most of the literature has focused on external-facing dimensions of digital government, such as service delivery, citizen interaction, and platform governance (Dunleavy et al., 2022; Margetts & Dunleavy, 2023). Less attention has been paid to the internal administrative systems through which governments organize work, coordinate activities, and produce operational data.

This omission is analytically significant. Recent scholarship on data infrastructures and datafication suggests that organizational realities are increasingly shaped by the systems that structure how data is generated, classified, and mobilized (Bowker & Star, 1999; Plantin et al., 2018; Kitchin, 2014). In this perspective, information systems are not merely technical tools but socio-technical infrastructures that embed classifi-

cations, shape organizational behavior, and influence decision-making processes. Despite this growing body of research, public administration studies have not sufficiently explored how routine administrative systems—particularly those related to work management—function as data infrastructures within the state.

In practice, this gap is reflected in the persistence of fragmented and low-informational administrative tools for managing work in public organizations. Traditional time-control systems are typically designed to verify attendance rather than to generate structured information about institutional activities, workflows, and outputs. As a result, they provide limited support for understanding how daily work relates to organizational priorities and policy outcomes.

This article addresses this gap by advancing the analytical proposition that administrative systems for work management can be understood as institutional data infrastructures. In contrast to conventional information systems—which are often designed for registration, compliance, or operational support—data infrastructures are defined here as integrated socio-technical arrangements that systematically produce, structure, and circulate organizational data, enabling monitoring, coordination, and learning processes within the state.

Building on this perspective, the article analyzes the design of the Integrated System for Attendance and Activity Management (SIGFA), developed at the State Secretariat for Planning of Piauí (SEPLAN/PI),

Brazil. The case provides an empirical basis to examine how an internal administrative system can be intentionally designed to move beyond attendance control and operate as a data-generating infrastructure for organizational analysis and decision-making.

This article makes three main contributions to the literature.

First, it introduces a conceptual distinction between administrative information systems and administrative data infrastructures, clarifying how systems oriented toward data production differ from those focused on control or registration. Second, it proposes an analytical framework that integrates people management, digital systems, and data governance, showing how routine administrative processes can be transformed into structured data flows that support state analytical capacity. Third, it provides empirical insights from a subnational context in the Global South, contributing to the international debate on digital transformation by illustrating how internal administrative systems can shape data-driven governance beyond service delivery platforms.

Methodologically, the study adopts a qualitative single-case design with an analytical-prospective approach. It combines document analysis, observation of organizational routines, and exploratory interviews with key actors involved in the system's design and implementation. Although the system is still in the pilot phase, the analysis draws on empirical evidence regarding its development process and institutional design, complemented by theoretically informed inferences about its potential effects.

The findings suggest that reconfiguring administrative systems as data infrastructures may enhance organizational visibility, strengthen coordination, and support evidence-based decision-making. At the same time, this transformation introduces new tensions related to control, surveillance, and the governance of organizational data. By highlighting these dynamics, the article contributes to a more nuanced understanding of digital transformation in public administration, emphasizing that internal administrative systems are not merely operational tools but central components in the construction of state capacity.

2 Theoretical Framework

This study develops an analytical framework to examine how administrative systems for work management can operate as data infrastructures within the state. To do so, it integrates and extends three strands of literature: state capacity, digital transformation in the public sector, and datafication/data infrastructures.

Rather than treating these dimensions as parallel perspectives, the article articulates them into a unified analytical proposition: that the production, structuring, and use of organizational data within administrative routines constitutes a central mechanism through which state capacity is built and exercised.

2.1 State capacity and the role of organizational data

The literature on state capacity has traditionally emphasized the role of institutional arrangements, bureaucratic quality, and policy implementation capabilities (Andrews et al., 2017; Pires & Gomide, 2016). More recent contributions have expanded this perspective by highlighting the importance of analytical capacity, understood as the ability of public organizations to generate, interpret, and use information to guide decision-making (Mazzucato & Kattel, 2020).

Within this view, organizational data is not merely a byproduct of administrative activity but a strategic resource that enables coordination, learning, and policy monitoring. The capacity to systematically produce and mobilize such data becomes a key dimension of state effectiveness, particularly in complex governance environments.

However, despite this recognition, the literature has paid limited attention to the concrete mechanisms through which such data is

generated within organizations. In particular, the role of internal administrative systems as infrastructures for data production remains underexplored.

2.2 Digital transformation beyond service delivery

Research on digital transformation in the public sector has predominantly focused on external-facing systems, such as digital services, platforms, and citizen interaction (Dunleavy et al., 2022; Margetts & Dunleavy, 2023). These studies emphasize integration, interoperability, and the use of data to improve service delivery and policy outcomes.

While this literature has advanced the understanding of digital government, it tends to overlook the internal administrative systems that structure everyday organizational processes. Yet, it is precisely within these systems that large volumes of operational data are generated, often in fragmented and underutilized forms.

This omission limits the analytical scope of digital transformation studies. If digital government is understood as the reconfiguration of how the state produces and uses information, then internal administrative systems—particularly those related to work management—must be considered central components of this transformation.

2.3 Data infrastructures and the process of datafication

To address this gap, this study draws on the literature on data infrastructures and datafication. Foundational works in this field argue that data is not simply collected but actively constructed through socio-technical systems that classify, standardize, and organize information (Bowker & Star, 1999; Kitchin, 2014; Edwards et al., 2009). From this perspective, infrastructures are not static technical backbones, but evolving relational systems that shape how data is produced, shared, and made meaningful across organizational contexts. Data infrastructures are thus understood as relational and institutional arrangements that enable the continuous production and circulation of data across organizational contexts (Plantin et al., 2018; Edwards et al., 2009), emphasizing their embeddedness in organizational routines and their role in structuring knowledge production.

From this perspective, information systems do more than support administrative processes; they shape what can be known, how it is measured, and how decisions are made. The process of datafication—the transformation of social and organizational practices into quantifiable data—reconfigures not only information flows but also power relations, as visibility, monitoring, and evaluation become increasingly mediated by data systems.

In public administration, this implies that the adoption of digital systems is not a neutral technical process but a transformation that affects how work is organized, how performance is interpreted, and how control is exercised. In particular, systems that generate granular data on activities and outputs may simultaneously enhance analytical capacity and intensify mechanisms of surveillance and standardization.

2.4 From administrative information systems to data infrastructures

Building on these insights, this study proposes a conceptual distinction between **administrative information systems** and **administrative data infrastructures**.

Administrative information systems are typically designed to:

- register events (e.g., attendance, transactions)
- ensure compliance with formal rules
- support routine administrative operations

In contrast, administrative data infrastructures are characterized by their capacity to:

- systematically generate structured data from routine activities
- integrate multiple dimensions of organizational processes
- enable the production of analytical indicators and visualizations
- support coordination, learning, and decision-making across units

This distinction shifts the analytical focus from systems as tools of registration to systems as infrastructures that shape organizational knowledge and action.

2.5 Analytical model: administrative systems as data infrastructures

Based on this conceptual differentiation, the study advances the following analytical proposition:

Administrative systems for work management can evolve into data infrastructures when they integrate time registration, activity monitoring, and data visualization into structured and interoperable data flows that support organizational analysis and decision-making.

This proposition can be analytically decomposed into three interrelated dimensions:

1. **Data generation** – the systematic recording of both time and activities as structured data inputs
2. **Data integration** – the linkage of different data sources into coherent and interoperable datasets
3. **Data utilization** – the transformation of data into indicators, dashboards, and analytical outputs that inform managerial action

Together, these dimensions define a process through which routine administrative practices are converted into organizational data infrastructures capable of enhancing state analytical capacity.

2.6 Tensions: data-driven management versus data-based control

While such systems may strengthen coordination and evidence-based decision-making, they also introduce important tensions. The same infrastructures that enable learning and analysis may be used to intensify monitoring and control over work.

This distinction between data-driven management and data-based control is analytically relevant. The former refers to the use of data to support organizational learning and improve decision-making, while the latter emphasizes the use of data as a mechanism for surveillance, standardization, and performance enforcement.

These dynamics are particularly salient in the field of people management, where the transition from presence-based control to activity-based monitoring may redefine professional autonomy and reshape internal power relations.

2.7 Public value, data governance, and institutional conditions

Finally, the literature on public value highlights that the effectiveness of administrative innovations depends on their alignment with broader societal objectives (OECD, 2020). In this sense, the transformation of administrative systems into data infrastructures is not inherently beneficial; its value depends on how data is governed, interpreted, and used.

Robust data governance arrangements—including clear rules on data access, transparency, and purpose limitation—are essential to ensure that such systems contribute to coordination and learning rather than reinforcing opaque or punitive forms of control.

2.8 Synthesis

By integrating these perspectives, this study positions administrative systems for work management as a critical but underexplored site of digital transformation. Rather than treating them as peripheral tools of bureaucratic control, it conceptualizes them as infrastructures through which the state produces knowledge about its own functioning.

In doing so, the framework provides a basis for analyzing how the design of such systems may shape not only administrative processes but also the development of state capacity, the configuration of organizational power, and the emergence of data-driven governance.

3 Methodology

This study adopts a qualitative research design, structured as an analytical-prospective single case study of a digital transformation initiative in the field of work management in the public sector. Qualitative approaches are particularly appropriate for examining complex, context-dependent organizational phenomena, as they enable an in-depth understanding of institutional practices, decision-making processes, and dynamics of change (Denzin & Lincoln, 2018; Flick, 2009).

3.1 Research design and case selection

The research strategy is based on a single case study, with the State Secretariat for Planning of Piauí (SEPLAN/PI), Brazil, as the unit of analysis. Case study research is widely used in public administration to investigate contemporary phenomena embedded in real-world contexts, particularly when the boundaries between the phenomenon and its institutional environment are not clearly defined (Yin, 2018).

The case was selected based on its analytical relevance rather than statistical representativeness. SEPLAN/PI plays a strategic role in governmental planning, policy monitoring, and budget coordination at the subnational level, making it a suitable setting for examining how internal administrative systems may contribute to state capacity. Additionally, the development of the Integrated System for Attendance and Activity Management (SIGFA) provides a unique opportunity to analyze the intentional design of an administrative system as a data infrastructure.

3.2 Empirical focus and analytical orientation

The empirical focus of the study is the design and early-stage implementation of SIGFA. Rather than evaluating consolidated outcomes, the study adopts an analytical-prospective orientation, examining how the system is conceived, structured, and expected to operate as a data infrastructure within the organization.

This approach allows the identification of causal mechanisms embedded in the system's design, even in the absence of long-term implementation data. In line with process-oriented qualitative research, the emphasis is placed on understanding how decisions are made, how organizational problems are framed, and how institutional solutions are constructed.

3.3 Data sources and collection

The analysis draws on multiple sources of qualitative evidence, enabling triangulation and enhancing the robustness of the findings. Four main sources of data were used:

(i) **Document analysis:** Institutional documents, including administrative regulations, normative instructions, internal reports, and technical materials related to attendance control and system development, were analyzed to reconstruct the formal structure of work management practices.

(ii) **Direct observation of organizational routines:** Observational data were collected through the monitoring of administrative

processes related to attendance management, activity reporting, and internal coordination. These observations provided insights into how work is effectively organized and recorded in practice.

(iii) Exploratory semi-structured interviews: To complement documentary and observational data, exploratory interviews were conducted with key actors involved in the design and implementation of the system, including managers, technical staff, and users from administrative units. The interviews focused on three dimensions: (a) perceived limitations of existing systems, (b) decision-making processes in the design of SIGFA, and (c) expectations and concerns regarding its implementation.

These interviews provided critical insights into how the system was conceptually framed and how organizational actors interpret its purposes. For example, one manager emphasized that *“the main problem was not controlling attendance, but understanding what people actually do during the workday”*, highlighting the shift from presence-based control to activity-based data generation.

(iv) Technical and design records: Materials produced during the system design process—including functional specifications, internal presentations, and workflow models—were analyzed to reconstruct the system’s architecture and underlying assumptions.

3.4 Analytical strategy

The analysis was conducted through an iterative and interpretive process, combining inductive and deductive approaches.

First, empirical data were coded to identify recurrent patterns related to work management practices and system limitations. This process resulted in three analytical categories: (a) fragmentation of time-control instruments, (b) absence of structured activity data, and (c) limited availability of managerial information.

Second, these categories were interpreted in light of the theoretical framework developed in the previous section, particularly the concepts of data infrastructures and datafication. This step enabled the articulation between empirical observations and broader analytical propositions.

Third, the design of SIGFA was examined as an institutional response to the identified problems, allowing the identification of underlying mechanisms related to data generation, integration, and utilization.

3.5 Ensuring rigor and validity

To enhance methodological rigor, the study follows established criteria in qualitative research, including credibility, transferability, and dependability.

- **Credibility** was strengthened through data triangulation, combining documentary analysis, observation, interviews, and technical records.
- **Transferability** was addressed by providing a detail account of the institutional context and system design, enabling analytical generalization to similar settings.
- **Dependability** was ensured through transparent documentation of data sources, analytical procedures, and category construction.

Additionally, the use of multiple data sources allowed for the convergence of evidence, reducing the risk of biased interpretations.

3.6 Positionality and limitations

The study acknowledges the potential for insider bias, given the proximity of the researcher to the institutional context. Rather than treating this as a limitation to be eliminated, the study adopts a reflexive stance, recognizing that insider access also enables a deeper

understanding of organizational processes that would be difficult to capture through external observation alone.

To mitigate potential biases, three strategies were employed: (i) triangulation of multiple data sources, (ii) inclusion of perspectives from different organizational actors through interviews, and (iii) explicit separation between empirical evidence and analytical inference.

Nonetheless, important limitations remain. The study focuses on a single case and relies on early-stage evidence, which limits the possibility of evaluating long-term effects. Furthermore, the absence of comparative cases constrains the generalizability of the findings. Accordingly, the results should be interpreted as analytically informative rather than statistically representative.

4 RESULTS

This section presents the findings in two analytically integrated parts: (i) empirical evidence derived from the organizational diagnosis conducted at SEPLAN/PI, and (ii) the analysis of SIGFA’s institutional design as an emerging data infrastructure. While analytically distinct, these dimensions are closely connected, as the system’s design directly responds to the limitations identified in existing work management practices.

4.1 Fragmented systems and the absence of organizational data

The organizational diagnosis reveals that traditional time-control systems in SEPLAN/PI are structured primarily around the registration of physical presence, with limited capacity to generate meaningful data about institutional activities.

Empirically, the system operates through a fragmented set of spreadsheets and manual records submitted by different administrative units. These records are not standardized, lack interoperability, and are primarily oriented toward compliance rather than analysis. As one administrative technician noted: *“Each unit sends its own spreadsheet, but there is no pattern. In the end, we know who showed up, but we don’t know what was actually done.”*

This fragmentation directly affects the data generation dimension identified in the analytical framework. While time is recorded, activities are not systematically captured, resulting in a dataset that is structurally incomplete and analytically limited.

A second critical limitation concerns activities performed outside the workplace. Fieldwork, interinstitutional meetings, and technical visits are often recorded informally or not recorded at all. As a manager explained: *“If someone spends the whole day in a technical meeting outside, the system may register it as absence. There is no way to show that work actually happened.”*

This gap introduces ambiguity into the data, undermining its reliability and reducing its usefulness for managerial purposes. From a data infrastructure perspective, this reflects a failure not only of data generation but also of data classification, as relevant categories of work are not adequately represented.

A third limitation relates to the absence of integration across administrative tools. Data on attendance, activities, and outputs are stored in separate and non-communicating systems. This prevents the construction of coherent datasets that could support organizational analysis. As a result, the data integration dimension is largely absent.

Taken together, these findings indicate that existing systems function as administrative information systems oriented toward registration and compliance, rather than as data infrastructures capable of supporting coordination and decision-making.

4.2 Analytical implications: low visibility and constrained state capacity

The limitations identified have direct implications for organizational performance and state capacity.

First, the lack of structured activity data reduces organizational visibility. Managers are unable to systematically assess how work is distributed, which activities consume the most time, or how tasks relate to institutional priorities. Decision-making thus relies on fragmented information or informal knowledge.

Second, the absence of integrated data constrains coordination across units. Without shared information on activities and workloads, it becomes difficult to align processes, identify bottlenecks, or redistribute resources effectively.

Third, the system limits organizational learning. As data is not systematically produced or analyzed, opportunities to identify patterns, evaluate performance, and improve processes remain largely unexplored.

These findings reinforce the argument that the capacity to generate and use organizational data is a critical component of state capacity. In the absence of such data infrastructures, administrative systems remain confined to procedural control, with limited contribution to analytical governance.

4.3 SIGFA as an emerging administrative data infrastructure

The development of SIGFA can be interpreted as an institutional response to the limitations identified, aiming to transform fragmented administrative practices into an integrated data infrastructure.

Unlike existing systems, SIGFA is designed to operate simultaneously across the three analytical dimensions proposed in this study: data generation, data integration, and data utilization.

4.3.1 Data generation: from presence to activity-based recording. A central innovation of SIGFA lies in the expansion of data generation mechanisms. In addition to recording working time, the system requires the structured registration of institutional activities.

This shift reflects a deliberate move from presence-based control toward activity-based data production. As one system designer explained: *“The goal is not just to know if the person was there, but what was produced during that time.”*

By linking time records to specific activities, the system enables the creation of datasets that reflect work processes rather than mere attendance. This enhances the granularity and relevance of organizational data.

4.3.2 Data integration: building coherent data flows. SIGFA also addresses the fragmentation of existing systems by integrating multiple dimensions of work management into a unified platform.

Attendance data, activity records, and organizational information are structured within a single system, enabling the construction of interoperable datasets. This integration allows for the analysis of relationships between time allocation, task execution, and organizational outputs.

From an analytical perspective, this represents a transition from isolated data points to structured data flows, which are essential for the functioning of data infrastructures.

4.3.3 Data utilization: dashboards and managerial analytics. A third key dimension of the system is its capacity for data utilization. SIGFA incorporates visualization tools, such as dashboards, that translate raw data into analytical outputs.

These tools enable managers to monitor indicators related to workload distribution, activity patterns, and organizational performance. As noted by a senior manager: *“For the first time, we will be able to see*

where time is actually being spent and how activities are distributed across teams.”

This capacity transforms administrative data into actionable information, supporting evidence-based decision-making and enhancing organizational coordination.

4.4 Organizational implications and emerging tensions

While SIGFA expands analytical capacity, it also introduces new organizational dynamics.

On the one hand, increased data availability enhances transparency and supports more informed decision-making. On the other hand, it raises concerns about monitoring and control. As one interviewee observed: *“It can help a lot with management, but people are also worried about how this information might be used.”*

This reflects the tension identified in the theoretical framework between data-driven management and data-based control. The same system that enables learning and coordination may also be perceived as a mechanism of surveillance.

These findings suggest that the transformation of administrative systems into data infrastructures is not purely technical but deeply institutional, involving changes in organizational culture, power relations, and governance practices.

4.5 Synthesis of findings

The empirical analysis demonstrates that the transition from traditional administrative systems to data infrastructures involves three interrelated transformations:

1. From fragmented records to structured data generation
2. From isolated systems to integrated data flows
3. From administrative registration to analytical utilization

These transformations illustrate how internal administrative systems can evolve into infrastructures that shape organizational knowledge and action. At the same time, they highlight that such evolution is contingent upon institutional design choices and governance arrangements.

5 Discussion

This section interprets the findings in light of the analytical framework developed in this study, focusing on how the case of SIGFA contributes to a broader understanding of administrative systems as data infrastructures. Rather than reiterating empirical results, the discussion situates the case within ongoing debates on state capacity, digital transformation, and datafication in the public sector.

5.1 From administrative systems to data infrastructures

The findings suggest that the transformation observed in SIGFA is not merely technological but conceptual. The system illustrates a shift from administrative information systems—primarily oriented toward registration and compliance—to administrative data infrastructures capable of generating, integrating, and mobilizing organizational data.

This transformation can be analytically understood through the three dimensions proposed in this study.

First, at the level of data generation, the transition from presence-based recording to activity-based registration expands what is made visible within the organization. In line with the literature on datafication (Kitchin, 2014; Beer, 2019), this shift does not simply increase the volume of data but redefines what counts as work, as activities become formally classified, quantified, and rendered visible through data systems.

Second, the data integration enabled by SIGFA addresses the fragmentation identified in traditional systems. By linking time, activities, and organizational information within a unified structure, the system creates relational datasets that allow for more complex forms of analysis. This aligns with studies on data infrastructures, which emphasize the importance of interoperability and standardization in enabling data circulation and reuse (Plantin et al., 2018).

Third, the dimension of data utilization is operationalized through dashboards and analytical tools that translate raw data into actionable information. This reinforces the role of administrative systems not only as repositories of information but as mechanisms that shape decision-making processes and organizational learning.

Taken together, these dimensions support the central proposition of this article: that administrative systems for work management can evolve into infrastructures that actively produce organizational knowledge, thereby contributing to the development of state analytical capacity.

5.2 Implications for state capacity and digital transformation

By conceptualizing administrative systems as data infrastructures, this study contributes to a shift in how digital transformation is understood in public administration.

Rather than focusing exclusively on service delivery and citizen-facing platforms, the findings highlight the importance of internal administrative systems as foundational components of digital government. This perspective extends existing literature by showing that state capacity is not only enhanced through external digitalization, but also through the internal reconfiguration of how data is produced and used within organizations.

In this sense, the case of SIGFA illustrates that analytical capacity is not an abstract attribute, but an emergent property of socio-technical systems embedded in everyday administrative routines. The ability to monitor, coordinate, and learn depends on the existence of infrastructures that systematically generate and organize data about institutional functioning.

Moreover, the findings suggest that digital transformation in the public sector involves a reconfiguration of organizational knowledge itself. By structuring how activities are recorded and analyzed, administrative data infrastructures shape not only decision-making processes but also how organizations interpret their own performance and priorities.

5.3 Organizational dynamics: coordination, learning, and cultural change

The implementation of SIGFA also reveals important organizational implications that extend beyond its technical design.

First, the system enhances coordination by reducing informational asymmetries across units. The availability of shared and structured data enables more consistent alignment between organizational processes, supporting horizontal integration and more coherent decision-making.

Second, the system creates conditions for organizational learning. The continuous production of data allows managers to identify patterns, evaluate processes, and adjust practices over time. This reinforces the idea that data infrastructures are not static systems, but evolving environments that support iterative learning.

Third, the findings point to processes of cultural change. By shifting the focus from presence to activities and outputs, the system challenges established norms of control and accountability in public administration. However, this transition is contingent upon how the system is interpreted and used.

Importantly, the evidence suggests that increased visibility may be perceived ambivalently by organizational actors. While it enables more informed management, it may also generate concerns about surveillance

and loss of autonomy. This reinforces the argument that technological change is inseparable from institutional and cultural dynamics.

5.4 Replicability and institutional conditions

Although the case of SIGFA is context-specific, it provides insights into the conditions under which administrative systems may function as data infrastructures in other public sector settings.

Three conditions appear particularly relevant.

First, digital infrastructure is a necessary but insufficient condition. Beyond technical capacity, systems must be designed to capture meaningful data about organizational processes.

Second, data governance arrangements are critical to ensure data quality, integrity, and appropriate use. Without clear rules and standards, the expansion of data generation may lead to fragmentation or misuse, undermining the system's effectiveness.

Third, the integration between people management and strategic management emerges as a key enabling factor. The value of workforce-related data depends on its connection to broader organizational objectives, rather than its isolation within administrative routines.

These conditions suggest that replicability is not a matter of technological transfer, but of institutional alignment. The effectiveness of such systems depends on how they are embedded within broader governance structures and organizational practices.

5.5 Tensions, risks, and the governance of data

A central contribution of this study lies in highlighting the tensions inherent in the transformation of administrative systems into data infrastructures. While such systems enhance analytical capacity, they also expand the scope of monitoring and control. As highlighted in the literature on data and power, data infrastructures are not neutral, but actively shape visibility, evaluation, and organizational behavior (Beer, 2019). This creates a risk of what can be described as functional drift, in which data initially intended for learning and coordination is repurposed for evaluation and sanctioning.

This dynamic reflects the broader tension between data-driven management and data-based control, in which the same data systems that enable learning and coordination may also function as instruments of standardization, surveillance, and performance enforcement (Beer, 2019). The distinction is not merely conceptual but depends on how data is governed, interpreted, and used within organizations.

From a technical perspective, challenges related to interoperability, data quality, and information security may compromise the reliability of the system. From an organizational perspective, perceptions of surveillance may undermine trust and generate resistance. From an ethical perspective, the use of data for punitive purposes may distort the original objectives of the system.

In this context, institutional safeguards play a critical role in mitigating the risks associated with functional drift. The Brazilian General Data Protection Law (LGPD) establishes key principles—such as purpose limitation, necessity, transparency, and accountability—that are directly relevant to the governance of administrative data. In particular, the principle of purpose limitation constrains the use of data to explicitly defined objectives, reducing the likelihood that data collected for managerial coordination will be repurposed for disciplinary or punitive ends without proper justification.

Similarly, requirements related to transparency and data subject rights contribute to strengthening trust and legitimacy, while accountability mechanisms reinforce the need for clear governance structures regarding data access, interpretation, and use. When effectively implemented, these safeguards can help align data infrastructures with public value, preventing their drift toward opaque or coercive forms of control.

These risks underscore the importance of robust data governance frameworks that define the purposes, limits, and acceptable uses of organizational data. Ensuring transparency, accountability, and proportionality in data use is essential not only to sustain the legitimacy of such systems, but also to preserve their capacity to function as instruments of coordination, learning, and evidence-based decision-making.

5.6 Synthesis: rethinking administrative systems in the digital state

The case analyzed in this study suggests that administrative systems occupy a central but underexamined position in contemporary processes of state transformation.

By functioning as infrastructures for data production and use, these systems shape how organizations generate knowledge about themselves, coordinate their activities, and make decisions. In this sense, they are not peripheral tools of bureaucratic control, but core components of digital governance.

Reframing administrative systems as data infrastructures thus provides a new analytical lens for understanding the relationship between digital transformation and state capacity. It shifts attention from technological adoption to the socio-technical processes through which data is produced, structured, and mobilized within public organizations.

6 Conclusion

The increasing complexity of contemporary public governance has intensified the need for administrative systems capable of supporting coordination, transparency, and evidence-based decision-making. Within this context, digital transformation should be understood not merely as a technological shift, but as a structural reconfiguration of how public organizations generate, structure, and use information.

This study examined the design of an integrated system for attendance and activity management (SIGFA) in the State Secretariat for Planning of Piauí (SEPLAN/PI), adopting a qualitative and analytical-prospective case study approach. The findings demonstrate that traditional time-control systems remain predominantly oriented toward the registration of formal presence, offering limited capacity to generate structured and meaningful data about institutional activities and organizational performance. As a result, they contribute only marginally to analytical capacity and organizational coordination.

In contrast, the design of SIGFA illustrates how administrative systems can be reconfigured to operate as integrated data infrastructures. By combining time registration, activity monitoring, and data visualization, the system enables the production of structured data flows that enhance organizational visibility and support more informed decision-making processes.

Building on these findings, this article advances three main contributions.

First, it conceptualizes administrative systems for work management as institutional data infrastructures, distinguishing them from conventional information systems focused on registration and compliance. Second, it proposes an analytical model based on three interrelated dimensions—data generation, data integration, and data utilization—through which routine administrative practices can be transformed into structured sources of organizational knowledge. Third, it provides empirical evidence from a subnational context in the Global South, demonstrating how internal administrative systems can play a central role in shaping data-driven governance beyond service delivery platforms.

Beyond these contributions, the study highlights a fundamental tension in the digital transformation of public administration. While data infrastructures expand the capacity for coordination, monitoring, and learning, they simultaneously extend the scope of visibility and control over work, reinforcing the role of data as a mechanism through which organizational behavior is shaped and governed (Beer, 2019). The distinction between data-driven management and data-based **control** thus emerges as a key analytical lens for understanding how data is mobilized within public organizations.

From a practical perspective, the findings suggest that the effectiveness of such systems depends on specific institutional conditions. Digital infrastructure, data governance arrangements, and the integration between people management and strategic management are critical enabling factors. Equally important are change management strategies that ensure user engagement, transparency in data use, and alignment with organizational culture.

At the same time, the study underscores that the transformation of administrative systems into data infrastructures is not inherently beneficial. Its outcomes depend on how data is governed, interpreted, and used. Without clear institutional safeguards, such systems may reinforce surveillance dynamics, undermine trust, and limit their potential contribution to public value.

This study presents important limitations. The analysis is based on a single case and relies on early-stage evidence, which constrains the assessment of long-term effects. In addition, the proximity of the researcher to the institutional context introduces potential bias, although this was mitigated through data triangulation and the inclusion of multiple perspectives. Accordingly, the findings should be interpreted as analytically informative rather than statistically generalizable.

Future research should advance empirical investigations into the implementation and effects of administrative data infrastructures, particularly through comparative and longitudinal designs. Further studies could examine how such systems are appropriated by organizational actors, how they evolve over time, and how tensions between analytical capacity and control are negotiated in different institutional contexts.

Ultimately, this article argues that internal administrative systems are not peripheral tools of bureaucratic control, but central components in the construction of state capacity. By shaping how data is produced, structured, and mobilized, these systems influence not only how public organizations operate, but also how they understand and govern themselves. In this sense, placing public servants at the center of digital transformation is not simply a managerial strategy, but a necessary condition for building data infrastructures that balance innovation, institutional capacity, and public value.

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Globalizing Indian Management Education: A Qualitative Study of Stakeholder Perspectives on the Integration of Global Business Practices

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ABSTRACT

Globalization has significantly influenced the evolution of management education worldwide, requiring business schools to integrate international business practices while maintaining relevance to local socio-economic contexts. In India, this transformation has created both opportunities and challenges for business schools attempting to balance global competencies with domestic institutional realities. This study examines how global business practices are perceived and incorporated within Indian management education from the perspectives of key stakeholders. A qualitative interpretive research design was adopted, and data were collected through semi-structured interviews conducted during the Spring and Autumn semesters of 2024. The study involved 44 participants, including 12 subject matter experts engaged in curriculum development, 19 management students enrolled in globally oriented...

Full abstract continues on the metadata continuation sheet.

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FULL ABSTRACT

Globalization has significantly influenced the evolution of management education worldwide, requiring business schools to integrate international business practices while maintaining relevance to local socio-economic contexts. In India, this transformation has created both opportunities and challenges for business schools attempting to balance global competencies with domestic institutional realities. This study examines how global business practices are perceived and incorporated within Indian management education from the perspectives of key stakeholders. A qualitative interpretive research design was adopted, and data were collected through semi-structured interviews conducted during the Spring and Autumn semesters of 2024. The study involved 44 participants, including 12 subject matter experts engaged in curriculum development, 19 management students enrolled in globally oriented programs, and 13 industry professionals working in internationally active organizations. Participants were selected using purposive sampling to ensure relevant expertise and contextual knowledge. Interview data were transcribed and analyzed using thematic analysis, and methodological triangulation across stakeholder groups was employed to enhance the credibility of the findings. The results indicate an increasing emphasis on experiential learning, industry collaboration, and digital competencies in management education. However, participants also highlighted persistent challenges, including overly theoretical curricula, limited global exposure for students, and structural constraints such as rigid regulatory frameworks and infrastructural limitations. The study suggests that strengthening industry-academia collaboration, updating curricula to reflect evolving global business practices, and incorporating technology-enabled learning tools such as AI-driven business simulations can enhance the global competitiveness of Indian management education. These findings provide insights for policymakers, educators, and institutional leaders seeking to better align management education with the demands of an increasingly globalized business environment.

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Globalizing Indian Management Education: A Qualitative Study of Stakeholder Perspectives on the Integration of Global Business Practices

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Abstract

Globalization has significantly influenced the evolution of management education worldwide, requiring business schools to integrate international business practices while maintaining relevance to local socio-economic contexts. In India, this transformation has created both opportunities and challenges for business schools attempting to balance global competencies with domestic institutional realities. This study examines how global business practices are perceived and incorporated within Indian management education from the perspectives of key stakeholders. A qualitative interpretive research design was adopted, and data were collected through semi-structured interviews conducted during the Spring and Autumn semesters of 2024. The study involved 44 participants, including 12 subject matter experts engaged in curriculum development, 19 management students enrolled in globally oriented programs, and 13 industry professionals working in internationally active organizations. Participants were selected using purposive sampling to ensure relevant expertise and contextual knowledge. Interview data were transcribed and analyzed using thematic analysis, and methodological triangulation across stakeholder groups was employed to enhance the credibility of the findings. The results indicate an increasing emphasis on experiential learning, industry collaboration, and digital competencies in management education. However, participants also highlighted persistent challenges, including overly theoretical curricula, limited global exposure for students, and structural constraints such as rigid regulatory frameworks and infrastructural limitations. The study suggests that strengthening industry-academia collaboration, updating curricula to reflect evolving global business practices, and incorporating technology-enabled learning tools such as AI-driven business simulations can enhance the global competitiveness of Indian management education. These findings provide insights for policymakers, educators, and institutional leaders seeking to better align management education with the demands of an increasingly globalized business environment.

Keywords: *Global Business Practices, Management Education, Curriculum Reform, Industry–Academia Collaboration, Experiential Learning, Digital Transformation*

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1 Background and Introduction

India's industries and markets have been evolving rapidly, bringing significant changes to global trade. With breakthroughs in communication and technology, the world has become more tightly connected—linking educators, businesses, and organizations across countries in complex systems of collaboration and dependence (Bhatia & Panneer, 2019). The economic liberalization policies introduced in the early 1990s opened India's doors to unprecedented levels of foreign direct investment. This shift allowed international companies to establish their presence in the country and created a strong need for professionals capable of adapting to the complexities of a global business environment (Ranjan, 2008). As a result, management education in India experienced a major transformation. Educational institutions had to redesign their curricula to align with global standards while staying relevant to India's social, cultural, and economic context (Bhatia & Panneer, 2019). Since

then, management education in the country has continued to evolve, striving to balance international business practices with the unique values and perspectives that define India's identity in a globalized world.

The global practices have relevance for management schools in India. Increased importance is given to global business practices, including digital transformation, sustainable business practices, and cross-cultural leadership, in turn necessitating social competencies on the part of the students and compelling business educational institutions to very urgently revise their business curricula. Explicitly, therefore, significant efforts have been made by many eminent Indian business schools, including the Indian Institutes of Management (IIMs), in putting these global trends in the curricula (Joshi, 2024; Ranjan, 2008). Furthermore, the entry of global business schools into the Indian market, particularly with UK universities establishing campuses in India, will only increase the pressures on the local Indian institutions to upgrade their standards of teaching in a competent manner and to work

alongside the globalized market. The University of Southampton, UK, has now emerged as a first-of-its-kind foreign university to launch an offshore campus in India under the newly framed National Education Policy, aiming to start its programs in July 2025 (The Guardian, 2025). Now, with such developments, the challenges still do persist. Indian management institutions, really all the management institutions, are constricted by human and material resources, fixed curriculum, and the impasse between theoretical learning and its practical implementation in real-world global business settings (Joshi, 2024; Balancing Theory and Application in Business School Research, 2024).

There is another vast discourse on how much of the global business methods should be fused into existing practice while remaining within the confines of Indian cultural and organisational frameworks (Joshi, 2024; Bhatia & Panneer, 2019). Due to increasing global business activities in India, management education has been influenced to a sizable extent in our country. India's growing role in the world economy makes it important to understand just how much the country contributes globally. As India becomes more connected through international trade, its educational institutions need to adapt to these global shifts in business and commerce. This means reworking management programs to include up-to-date business practices, refreshing teaching methods to keep students engaged and informed, and adopting internationally accepted learning approaches that prepare students with practical, real-world skills for global trade.

India's emergence as a key global trade hub makes it essential for the country's educational system to grow in step with this new role. As India becomes more deeply connected with international markets, its schools and universities must evolve to equip students with a truly global outlook. This means redesigning their curricula to reflect worldwide business trends, not just those relevant to the Indian context. Teaching methods also need to adapt—moving toward innovative, globally recognized approaches that can attract international learners as well. For management schools in particular, cultivating a global mindset is now indispensable for preparing students to lead in multinational companies, government bodies, and international organizations. By embracing these changes, Indian business schools can help shape future leaders with the knowledge, adaptability, and digital competence required to thrive in an increasingly interconnected world.

Globalization has encouraged management schools in India to redesign their programs by including more international examples, global leadership principles, and technology-driven business strategies as part of their teaching methods (Joshi et al., 2023). This development could also be reflected in the greater emphasis laid on international exchange programs and collaborations with foreign universities, as well as on global benchmarking to evaluate quality in education. A clear discrepancy is experienced among various business schools concerning their ability to integrate global business principles in their curricula (Bhatia & Panneer, 2019) despite the considerable development of many world-renowned business schools. There lies the need to unify these standards and also globalize business education so that students acquire appropriate skills and knowledge deemed acceptable in the international marketplace.

In recent years, there has been growing interest in how international universities are establishing their presence in India. This development has intensified competition for Indian management schools, pushing them to strengthen their academic foundations to stay relevant and competitive (The Guardian, 2025). As business education becomes increasingly global, schools around the world now recognise the importance of ensuring that students develop a genuinely international outlook. Yet, they also face the challenge of maintaining programs that

remain valuable and responsive to local realities. To remain ahead, universities must find the right balance between global integration and local relevance. Consequently, business curricula should equip graduates with strong knowledge of international business practices while fostering a deep understanding of their domestic markets.

2 Problem Statement and Research Questions

Management education in India is experiencing a significant shift as globalization reshapes the way businesses operate worldwide. To help students succeed in an increasingly international environment, colleges must focus on developing a global outlook and preparing learners for cross-border challenges. While a few forward-thinking institutions have already adapted to this new reality, many others are still in the process of realigning their programs to meet global standards. Many of them are still stuck with problems of an under-resourced and rigid curriculum with that constant gap between theory and world of practice, thereby greatly slowing down the pace of change. Indeed, we know very little about how these changes are being perceived by stakeholders (faculty, administration, students, industry representatives), and whether they consider these changes to be productive. This qualitative study intends to look into the factors driving global business practices in Indian management education.

Keeping in view various global business practices being imposed on the Indian management education system and the attendant challenges that management institutions face with the incorporation of such practices, the following research questions are laid down:

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RQ1. Have contemporary business practices been incorporated into management education in India, and do educators and students perceive that the changing environment impacts teaching and learning?

RQ2. What are the obstacles faced by Indian management schools in integrating global business practices, and how do these challenges hinder the program's efficacy in management education?

3 Literature Review

Certain past investigations emphasized how globalization affected customs in business, instructing management, and creating global skills. The studies also put forward how multinational companies have been increasingly altered in their methods due to changing levels of complexities found in international markets and have turned to knowledge flows and digital business strategies as competing advantages (Gupta & Govindarajan, 2000; Uzunbacak et al., 2024). During the 1980s, management development programs began transforming as businesses grew more global, relying on practical, hands-on training methods and fostering cooperation across countries. These changes became especially relevant when management education started expanding into developing nations such as India (Bhatia & Panneer, 2019; Thakur & Babu, 2016). In recent years, many academic institutions have responded to this shift by updating their curricula to include elements like cultural sensitivity, cross-cultural communication skills, and opportunities for international learning experiences. Students are thus provided with the mindset and pragmatic skills necessary to carry on a business internationally with increasing interconnectivity (Boix Mansilla & Jackson, 2011; Jiaxin et al., 2024). All of these studies basically show and track how globalization is the nucleus for corporate orientations and, hence, changed management

education with the very skills that companies sought to succeed in this revolving global economy.

3.1 Globalization and Business Practices

Multinational companies are normally established to optimize production potential, make markets wider for a wider scope, and allow for a smoother transit of new ideas across borders. According to Gupta and Govindarajan (2000), the transfer of knowledge across multinational organizations is of vital importance in maintaining competitiveness. They argued that the sharing of knowledge inside a firm depends on many variables, including the type of experience the person sharing it might have, the presence or absence of formal motivation or reward systems, channels of communication, and possibly their effectiveness. Multinational companies usually look to exploit their production resources to the fullest, attain larger markets, and finance the transmission of new ideas across national borders. According to Gupta and Govindarajan (2000), the transfer of knowledge in multinational organizations is the essence for keeping a competitive status. They commented that knowledge sharing inside a company depends on and varies with several factors—the expertise level of the individual sharing the knowledge, the presence of the motivation or reward systems that reasonably interpret the value of such sharing, and the communication channels that convey the knowledge.

Globalization has heavily influenced how MNCs operate, much more so with respect to growth and innovation. Castellani and Zanfei (2006) looked into the strategic decisions that such firms make with regard to their R&D activities in different countries. In today's interdependent world, the real issues for these organizations concern the application of knowledge-sharing to increase innovative work and long-term survival (Gupta & Govindarajan, 2000; Castellani & Zanfei, 2006). Hence, globalization stands as the biggest factor that drives MNCs to modify their strategies and hence their decisions to promote innovation and better management of knowledge. When businesses look to interact across borders, there are realities which must be weighed concerning new-market entry, and among them is how much adaptation should be done for local needs vis-à-vis keeping what the product is worldwide. Global strategy development, as Gandhi et al. (2024) explain, comes down to making thoughtful choices that balance creativity, local needs, and long-term sustainability. Companies like Apple, Unilever, and Toyota show how crucial it is for global brands to genuinely understand and respect what customers in different regions expect. Their success highlights that staying in tune with local markets remains a key ingredient for effective international growth.

In today's digital age, many new challenges have emerged as businesses increasingly focus on building digital strategies that support their global growth objectives. As Uzunbacak and colleagues (2024) point out, digital business practices are strongly linked with efforts to expand internationally, and these strategies need to be thoughtfully tailored to the unique context and conditions of each country. Marketing ideas often need to be refreshed and reimaged to keep up with shifting social environments and emerging trends. Businesses must continuously adapt their strategies to stay relevant and connect with people's changing preferences and lifestyles. When an environment is considered, the company remains fluid and maintains its international relevance and competitiveness (Uzunbacak et al., 2024). International markets are changing every day faster as the changing market does, so companies must remain flexible and adequately ready to adjust their approaches if they must signal and survive in such an ever-changing environment.

3.2 The Evolution of Management Education

The basis of the growth of management education in India was that a foreign economic and business influence accounts. It had scant exposure to international business practices and rather largely focused on local industrial needs and governmental objectives. However, the paradigmatic shifts were massive during the 1990s due to the liberalization of the Indian Economy. Bhatia and Panneer maintain that globalization has chiefly created pressure on the evolution of management experts capable of working through markets operating on a global scale. The Indian Institutes of Management (IIMs) were formed as distinguished business schools with the incorporation of international business concepts into their curriculum. Later research, such as Sawhney, Kumar, and Gupta (2019), supported the idea that Indian business education had incorporated global management methodologies, particularly those related to strategic management, marketing, and finance, reflecting the Western paradigm. It was an example of international business concepts being brought into management education through the use of case studies, global market simulations, and international internships, as detailed by Thakur and Babu (2016). Other than this, which widened the field of management education in India, it also helped Indian institutions compete internationally while preparing students for an interconnected world of trade and business.

While globalization appears to be the factor that leads to breakthroughs in management education, internal barriers in institutions, such as workplace politics and exclusionary practices, continue to obstruct faculty development and curriculum-related innovations (Joshi, 2025).

Continuing to grow its share in the global economy, India further expanded the scope and nature of management education. According to Thakur and Babu (2016), the focus shifted gradually from being purely academic to being more on experience-based learning with international best practices. Indian management education began embracing a more global outlook through dual-degree programs and international collaborations, giving students opportunities to experience business environments around the world. Such partnerships significantly boosted the global competitiveness of Indian management graduates (Philip, 1992). At the same time, the growing presence of foreign universities and multinational companies in India greatly influenced how management education evolved. These organizations emphasized the need for managers who could understand local markets while also navigating the complexities of global business operations. As Sriramulu (2018) highlights, management education needs to continually adapt to changing global business contexts by equipping students with the necessary skills, insights, and adaptability to succeed in an interconnected world. This ongoing transformation underscores the importance of integrating global perspectives into Indian management programs, ensuring that Indian professionals develop competencies aligned with international standards.

3.3 Global Competency in Management Education

In today's highly interconnected global economy, management training must prepare students with a diverse set of abilities for navigating complex international business situations. Key among these are cultural awareness, effective cross-cultural communication, adaptability, and the capacity to work collaboratively. Cultural awareness involves recognising, respecting, and valuing different cultural traditions and perspectives—an essential element in engaging successfully in global markets. Strong intercultural communication skills ensure that ideas, proposals, and negotiations are conveyed clearly across cultural boundaries, fostering mutual understanding and consent. Adaptability enables professionals to remain flexible and responsive to the demands of a

constantly evolving marketplace. Likewise, teamwork depends on the ability to contribute productively within groups made up of individuals with varied backgrounds and viewpoints, all working toward shared objectives. These capabilities are widely recognised as critical for achieving success in international business (Boix Mansilla & Jackson, 2011). Beyond simply mastering these skills, future business leaders can turn cultural challenges into opportunities that drive creativity, synergy, and innovative competitive strategies in a global environment that is always changing. Recent crises have underscored the importance of flexibility and resilience in leadership, highlighting that management education should place greater emphasis on training for crisis situations (Joshi et al., 2023). By developing expertise in decision-making under uncertainty, practicing good governance, and cultivating strategic foresight, tomorrow's global leaders will be better equipped to anticipate and respond to the dynamic shifts that shape the world economy.

Educational institutions are increasingly recognizing the importance of preparing students for a connected world. To meet the needs of a global population, they aim to weave international perspectives into their teaching. This means introducing courses that explore worldwide issues, encouraging students to take part in study trips abroad, and forming collaborative partnerships with institutions from different regions. For example, according to a systematic literature review by Jiaxin, Huijuan, and Hasan (2024), there is a huge need to understand global competence within the umbrella of higher education and how the understanding and implementation of this would mold both learners and instructors. As a consequence of the conducted analyses, it has been clarified that longitudinal studies are to be carried out next, and a global competency measurement instrument for students and faculty must be built. It is important to note that some academic institutions offered virtual exchanges to give students global exposure without the need for travel (Singmaster & Ugalde, 2024). Such endeavors attempt to prepare students to become leaders who will be already equipped with a global competency: understanding and being able to respond to the complexity of international business environments.

4 Methodology

4.1 Research Design

This study employed a qualitative, interpretive research design to examine how globalization is perceived and operationalized within Indian management education. A qualitative approach was considered appropriate because the research sought to explore stakeholder interpretations, institutional practices, and experiential insights related to the integration of global business practices into management curricula. Data were collected through semi-structured interviews conducted during the Spring and Autumn semesters of 2024 with key stakeholders across the Indian management education ecosystem.

4.2 Participants and Sampling

The study incorporated perspectives from three stakeholder groups to capture the multidimensional dynamics of globalization in management education. The sample included 12 subject matter experts (SMEs), comprising professors, lecturers, and academic administrators involved in curriculum design and program development in business schools. Additionally, 19 management students enrolled in programs incorporating global business perspectives were interviewed to understand learner experiences and perceptions. The third group consisted of 13 industry professionals employed in globally oriented organizations who provided insights into the international readiness of management graduates.

Participants were selected using purposive sampling to ensure the inclusion of individuals with direct experience and relevant expertise. Academics were drawn from established Indian management institutions, students were selected from programs emphasizing global management competencies, and industry professionals represented sectors actively engaged in international business operations.

4.3 Data Collection

Data were collected through semi-structured interviews lasting approximately 45–60 minutes. Interviews were conducted via Zoom to facilitate participation from geographically dispersed respondents. An interview protocol (Appendix A) guided the discussions while allowing flexibility for participants to elaborate on their experiences and viewpoints. The questions explored three core areas: (1) the incorporation of global business practices in curriculum design and pedagogy, (2) students' engagement with internationally oriented learning components, and (3) industry perspectives on the global readiness of management graduates.

The interview format relied primarily on open-ended questions to encourage participants to reflect on their experiences and institutional contexts. Specific areas of inquiry included international academic collaborations, the use of global case studies, pedagogical approaches to international management education, and employer expectations regarding globally competent graduates.

4.4 Ethical Considerations

The study adhered to established ethical research standards. All participants were provided with an informed consent document outlining the purpose of the study, the voluntary nature of participation, and the right to withdraw from the study at any stage without penalty. Participants were assured of confidentiality and anonymity, and all responses were used solely for academic research purposes. Data storage and analysis procedures were communicated transparently to participants in accordance with ethical guidelines for research involving human subjects. To minimize disruption to participants' professional or academic commitments, interview sessions were scheduled using the Doodle platform, allowing respondents to select convenient time slots.

4.5 Data Analysis

All interviews were transcribed and analyzed using thematic analysis. The analytical process involved iterative coding of the transcripts to identify recurring patterns, conceptual categories, and emergent themes related to globalization in management education. Coding was conducted systematically to ensure analytical rigor and to achieve thematic saturation.

To support the analysis of qualitative data, YesChat.ai was utilized for preliminary text processing and natural language analysis. The platform applies natural language processing techniques to assist in identifying patterns and thematic structures within textual datasets (YesChat.AI, n.d.). In addition, Mermaid was used to generate visual representations of thematic relationships and analytical structures. Mermaid is a JavaScript-based diagramming tool that converts textual descriptions into structured diagrams such as flowcharts and conceptual maps (Mermaid, n.d.).

4.6 Validity and Triangulation

To enhance the credibility of the findings, methodological triangulation was employed by comparing perspectives across the three stakeholder groups: academics, students, and industry professionals. This comparative analysis enabled the study to identify converging and diverging viewpoints regarding the influence of globalization on Indian management education. Incorporating multiple stakeholder perspectives

Table 1. Descriptives of subject matter experts (SMEs), students, and industry experts (IEs)

Category	Gender	Age (Mean $\pm$ SD)	Affiliation Type	Qualification	Years of Experience (Mean $\pm$ SD)
SMEs (N = 12)	41.7% Female	46.3 $\pm$ 6.8 years	Business Schools (7); Universities (5)	PhD (100%)	18.7 $\pm$ 5.4 years (Academic); 6.2 $\pm$ 3.1 years (Industry exposure)
Students (MBA/Postgraduate) (N = 19)	42.1% Female	24.8 $\pm$ 2.1 years	Business Schools (12); Universities (7)	Bachelor's degree (100%)	1.8 $\pm$ 1.2 years (Pre-MBA experience)
IEs (N = 13)	30.8% Female	39.6 $\pm$ 5.9 years	Tech Firms (5); Consulting (4); Corporations (4)	MBA (69%); PhD (8%); Certifications (62%)	14.2 $\pm$ 4.7 years

SMEs = Subject matter experts, IEs = Industry experts.

strengthened the robustness of the analysis and provided a more comprehensive understanding of the institutional and industry dimensions shaping global integration in management education.

5 Results

The study aimed to elicit the perspectives of subject matter experts, management students, and industry professionals regarding the integration of international business practices into Indian management education. Participants were drawn from a diverse range of universities, business schools, and corporate organizations in order to obtain a comprehensive understanding of the issues under examination. Table 1 presents the distribution of academic interviews across participating institutions. Subject matter experts primarily specialized in areas such as international business, organizational behavior, and business analytics. MBA students contributed perspectives shaped by their academic engagement with finance, human resource management, marketing, and strategic management. Industry professionals, in turn, offered practice-oriented insights derived from their work in domains such as digital transformation, consulting, and e-commerce. The diversity of academic, professional, and experiential backgrounds among participants enabled the study to capture a broad spectrum of viewpoints on how effectively management education aligns with the rapidly evolving dynamics of the global business environment.

The subject matter experts represented a wide range of management disciplines, including strategy, organizational behavior and leadership, marketing, human resource management, business analytics, operations management, entrepreneurship, finance, sustainability, and digital strategy. The student cohort encompassed major MBA specializations such as finance, human resources, marketing, strategy, operations, analytics, international business, entrepreneurship, information systems, and sustainability. Industry participants contributed professional expertise across several functional domains, including digital strategy, process consulting, e-commerce, artificial intelligence and machine learning applications, financial technology, data governance, product and innovation management, and environmental, social, and governance (ESG) practices. Geographically, the participants were drawn from prominent academic and industrial hubs across India, including Mumbai, Delhi (NCT), Ahmedabad, Pune, Bengaluru, Hyderabad, Kolkata, Chennai, Gurugram, and Jamshedpur. This distribution ensured representation from the western, northern, southern, and eastern regions of the country, thereby enhancing the regional diversity of the sample. In terms of professional profile, a substantial proportion of subject matter experts held editorial or peer-review roles in indexed academic journals, possessed international publication records, and had experience in funded research as well as curriculum design. Among the student participants, many had previously completed internships in multinational corporations, while a notable segment also reported engagement with entrepreneurial ventures and possessed technical or engineering backgrounds. The

majority of industry participants occupied senior managerial positions, with several responsible for leading digital transformation initiatives and overseeing international or cross-functional projects.

Analysis of the interview data revealed several critical considerations concerning the adoption of global business practices within the Indian management education landscape. A strong consensus emerged regarding the importance of experiential and practice-oriented pedagogical approaches. Subject matter experts emphasized the pedagogical value of integrating real-world case studies into teaching, particularly when such approaches are complemented by opportunities for direct engagement with industry practitioners. These experiential learning modalities include internships, consultancy projects, and artificial intelligence-enabled simulation exercises designed to replicate complex managerial decision-making contexts. Participants also acknowledged the growing imperative for curriculum reform, with many institutions attempting to incorporate emerging technologies and contemporary business challenges into their academic offerings. However, multiple constraints were identified in achieving effective alignment between academic curricula and evolving industry requirements. Students highlighted the persistence of overly theoretical instruction and outdated course materials as key limitations in existing programs. Furthermore, the integration of global perspectives with local business realities emerged as a significant challenge, as subject matter experts underscored the necessity of maintaining a balance between international case studies and the contextual relevance of domestic business environments. The findings further indicate that strengthened industry-academic collaborations could significantly enhance the global employability of management graduates. Nevertheless, such collaborations remain uneven due to resource limitations, faculty workload pressures, and regulatory constraints within the higher education system. Stakeholders also emphasized the growing importance of integrating advanced digital technologies into management education, particularly through the use of AI-enabled simulations and interactive e-learning platforms. Collectively, these findings illuminate both the progress achieved and the structural challenges that remain in efforts to reform Indian management education in response to the demands of an increasingly globalized and technologically driven business landscape.

Table 2. Perspectives of subject matter experts (SMEs), students, and industry experts (IEs)

Common Theme	SME Responses	Student Responses	IE Responses
Practical & Experiential Learning	• Emphasis on case-based learning with real-world applications • Live consulting projects, internships, virtual exchanges, and cross-cultural workshops	• Effective use of case studies, guest lectures, simulations, international projects, and internships • Concerns over superficial coverage of global concepts	• Integration of global business courses with practical exposure • Support for exchange programs, live business projects, and AI-driven simulations
Curriculum Innovation & Relevance	• Incorporation of emerging technologies (AI, digital transformation) and contemporary global issues • Industry-academia collaborative research and dual-degree programs	• Relevance of digital business transformation, global supply chains, and cross-cultural leadership • Problems in synchronizing theoretical know-how with real-life necessities	• Need to update outdated curricula • Emphasis on recruiting faculty with global exposure to bridge theory with industry demands
Global-Local Integration & Contextualization	• The reasons leading to the adaptation of international case studies to the Indian context • Integration of local business practices, regulations, and success stories	• The direct transfer of Western business models into an Indian setting is often challenging • Need for content that resonates with local market realities	• Harmonizing global strategies with local market peculiarities • Modifying global strategies for the Indian market and understanding emerging regional markets
Industry-Academia Collaboration	• Promotes collaborative research and live projects with industry partners	• Suggests enhanced international internships, mentorship programs, and collaborations with foreign universities	• Advocates for stronger partnerships including guest lectures, live business projects, mentorship, and increased funding for international exchanges
Resource, Structural & Institutional Challenges	• Highlights limited financial resources, infrastructure gaps, regulatory complexities, faculty resistance, and scholarship constraints	• Notes limited access to international faculty and global business resources • Challenges in grasping complex global concepts due to resource constraints	• Recognizes persistent challenges such as outdated curricula, inadequate resources, and the gap between academic instruction and industry expectations
Assessment & Continuous Improvement	• Recommends comprehensive frameworks tracking career progression, academic performance, and global competition outcomes	• Implied need for deeper, more meaningful assessments to ensure readiness for global careers	• Suggests systematic measurement through student outcomes in multinational companies, industry feedback, and performance in international competitions
Leveraging Technology	• Emerging technologies should be integrated into areas of research and teaching	• Calls for induction of various technologies in teaching and research frameworks	• Guides suggest implementing AI-based business simulation and other digital facilitators to uphold and nurture global business education

Table 3. Themes across the stakeholders

Theme	Stakeholder (SMEs, Students, IEs)
Practical & Experiential Learning	SMEs, Students, IEs
Curriculum Innovation & Relevance	SMEs, Students, IEs
Global-Local Integration & Contextualization	SMEs, Students, IEs
Industry-Academia Collaboration	SMEs, IEs
Resource, Structural & Institutional Challenges	SMEs, Students, IEs
Assessment & Continuous Improvement	SMEs, Students
Leveraging Technology	SMEs, Students, IEs

SMEs = Subject matter experts, IEs = Industry experts.

6 Discussion

The inclusion of global business practices in Indian management education has generated diverse opinions from small and medium enterprises, students, and educational institutions. From their point of view, the impact of worldwide trends on teaching styles, course content, and readiness for careers offers a nearly comprehensive understanding of how education is evolving in the country. Putting forth this viewpoint, therefore, the discussion shifts to what has been done and what is still left to do at the distance of reality in management education from the ever-changing field of global business.

There seems to be a strong agreement with practical and experiential learning in the context of stakeholders (see Table 4). SMEs stressed case studies, real-time projects, and cross-cultural workshops; however, students inculcated their doubts toward a superficial treatment of the basic core of global business. Further, the industry panel also ranked simulation with AI integration, live projects, and student exchange programs as methods of real-world exposure (experiential opportunities). This corroborated the finding of Gupta and Govindarajan (2000), who stressed knowledge-and-experience transfer towards training global professionals. Beyond this, the results support the assertion of Castellani and Zanfei (2006) that multinational firms prosper by transferring innovations across borders, hence suggesting that business education should also include practical approaches to prepare students for working across borders. The findings favored experiential learning as it strengthens the linkage between theories and real business practice.

The research study has recognized a gradual shift in leadership. Crisis management challenges should be addressed. Research on the leadership qualities that developed during the COVID-19 pandemic suggests that both transformational and servant leadership are required for organizational stability and resilience (Joshi et al., 2023). Therefore, real-time crisis cases should be taught in business studies, so that students are fully prepared to assume leadership in an ever-changing environment. There arose a demand from stakeholders for the implementation of emerging technologies—these may include AI and digital transformation—promptly into the curriculum (Joshi, 2024). SMEs insist on establishing dual-degree programs and collaborative research between industry and academia, while students regard the theoretical contents as deficient and misaligned with practical needs. More voices from industry stressed on hiring faculty with international experience to close the gap between theory and practice. According to Gandhi et al. (2024), digital transformation and global supply chains deserve more consideration as they are the forces behind contemporary business strategy. Uzunbacak et al. (2024) stress world problems in education since these demand a digital strategy coupling internationalization efforts. Findings from the study suggested that leadership education must integrate crisis management and digital transformation in order to prepare the student for the worldwide business environment changes in globalization. The greatest obstacle was that Western-style businesses could never really be implemented in India. SMEs favored an Indian setting in the outer-workings of international transfer, whereas students and business practitioners leaned towards a middle way between global and local. According to Thakur and Babu (2016), contextual strategies must be needed since Indian management education has, over time, grown on the principles of best international practices vis-à-vis local firm situations. According to Sawhney, Kumar, and Gupta (2019), strategic management should always be practiced keeping in view local and global industry contexts. It is said that there must be a strong synergy between academia and industry to foster business education. SMEs and industry specialists encouraged collaboration research, mentorship initiatives, and an increase in funding for international exchanges. Students, on

the other end, mostly commented on guest lectures, real-life projects, and mentorship programs being included in the curriculum.

Internationalization of management education, and hence, managing graduates, is yet another big doorway to competition. Multinational corporation exposure in industries is increasingly considered to be a major force working on business education; hence, industry must work with academics to impart a global exposure to the student.

According to SMEs, these very systems get in the way of change: One directly impacts the budget; another one is a problem in law; and a third component is the resistance change found among academics. Besides budgetary constraints and legal hindrances to decision-making, internal politics-oriented environments could likewise prevent the appointment of competent faculty members who can earnestly promote modifications to the curriculum that enhance the quality of management education (Joshi, 2025).

This was reported by the students while considering international teachers and business resources to be equally unavailable, with industry practitioners fearfully assessing curricula to be inauthentic and misaligned with industry. Similar results were put forth by Bhatia and Panneer (2019) while trying to paint a brief symptomatology of the problems faced in the transplantation of foreign business models into Indian management education.

The ongoing shortage of resources has made many people agree with Thakur and Babu (2016), who suggested that India's education system needs structural changes to help its business schools gain greater recognition on the global stage. Many stakeholders also believe that it is important to create effective performance evaluation systems that can track and assess how well students grow in their careers, using measurable indicators and international competency standards. Small and medium-sized enterprises suggested putting in place a structured system to regularly track students' academic progress and gather feedback from industry partners. Meanwhile, the students emphasized the need for more meaningful and practical assessments to better gauge how well they are prepared for global career opportunities. Industry representatives also highlighted the importance of comparing students' performance with international standards and results from global business contests to ensure competitiveness.

The findings closely align with those of Castellani and Zanfei (2006), who highlighted how crucial performance evaluation is for maintaining a competitive edge in international business settings. In recent discussions, there has been a strong push to integrate technology into business education. Small and medium-sized enterprises expressed that AI-driven business simulations and digital learning tools should be incorporated into the curriculum. Similarly, students voiced interest in using real-time AI analytics to better understand global market dynamics. Meanwhile, professionals from the business sector stressed the value of computer-based simulations in teaching global operations, as these tools can effectively demonstrate how international business processes function in practice.

Digital strategies have become increasingly central to global business growth, a trend highlighted by Uzunbacak et al. (2024), who point out how technology now plays a stronger role than ever before in expanding markets worldwide. Similarly, Gandhi et al. (2024) argue that incorporating technology into business education enhances both teaching quality and innovation. Their research also emphasizes the urgency of offering more practical learning experiences, revising curricula regularly, strengthening ties between academia and industry, and embedding technology deeply within modern business education.

Globalization has reshaped the way businesses operate, driving them to constantly adapt and transform. However, this transformation often encounters significant challenges caused by structural barriers

Table 4. Perspectives of subject matter experts (SMEs), students, and industry experts (IEs)

Common Theme	SME Responses	Student Responses	IE Responses
Practical & Experiential Learning	- Emphasis on case-based learning with real-world applications - Live consulting projects, internships, virtual exchanges, and cross-cultural workshops	- Effective use of case studies, guest lectures, simulations, international projects, and internships - Concerns over superficial coverage of global concepts	- Integration of global business courses with practical exposure - Support for exchange programs, live business projects, and AI-driven simulations
Curriculum Innovation & Relevance	- Incorporation of emerging technologies (AI, digital transformation) and contemporary global issues - Industry-academia collaborative research and dual-degree programs	- Relevance of digital business transformation, global supply chains, and cross-cultural leadership - Problems in synchronizing theoretical know-how with real-life necessities	- Need to update outdated curricula - Emphasis on recruiting faculty with global exposure to bridge theory with industry demands
Global-Local Integration & Contextualization	- The reasons leading to the adaptation of international case studies to the Indian context - Integration of local business practices, regulations, and success stories	- The direct transfer of Western business models into an Indian setting is often challenging - Need for content that resonates with local market realities	- Harmonizing global strategies with local market peculiarities - Modifying global strategies for the Indian market and understanding emerging regional markets
Industry-Academia Collaboration	Promotes collaborative research and live projects with industry partners	Suggests enhanced international internships, mentorship programs, and collaborations with foreign universities	Advocates for stronger partnerships including guest lectures, live business projects, mentorship, and increased funding for international exchanges
Resource, Structural & Institutional Challenges	Highlights limited financial resources, infrastructure gaps, regulatory complexities, faculty resistance, and scholarship constraints	- Notes limited access to international faculty and global business resources - Challenges in grasping complex global concepts due to resource constraints	Recognizes persistent challenges such as outdated curricula, inadequate resources, and the gap between academic instruction and industry expectations
Assessment & Continuous Improvement	Recommends comprehensive frameworks tracking career progression, academic performance, and global competition outcomes	Implied need for deeper, more meaningful assessments to ensure readiness for global careers	Suggests systematic measurement through student outcomes in multinational companies, industry feedback, and performance in international competitions
Leveraging Technology	Emerging technologies should be integrated into areas of research and teaching	Calls for induction of various technologies in teaching and research frameworks	Guides suggest implementing AI-based business simulation and other digital facilitators to uphold and nurture global business education

within the system. In response to these obstacles, educational institutions play a vital role by equipping learners with the skills and knowledge needed to navigate the complex realities of the global economy. Through this preparation, learners are encouraged to develop an entrepreneurial mindset and acquire the essential abilities required to succeed in today's interconnected and competitive business environment. Many authors mentioned a set of terms that identified certain themes common to some SMEs, students, or IEs. Thus, this study identified some umbrella concepts related to global business education, presenting varying views from SMEs, students, and the IE perspective (see Table 5). Regarding these topics, some seemed to have concerned all stakeholders, others concerned themselves only. And this ever-changing business world of business education is a testimony to it.

All groups came to a limited consensus on the need for engaging learning experiences. SMEs spoke of simulation, internship, or actual cases being essential for preparation of students with problem-solving skills that are workable in the international market. Students regarded interaction between universities and international projects as ways to share applicable cross-border business experience. One of the most important issues was emphasized, especially on the development of curricula related to the business environment. Changing curricula are

linked to the everyday changing of the business curriculum. Argument experts agreed that a hands-on learning approach is needed for materials that would prepare the graduates to face workplace difficulties, especially within the multinational environment. These findings thus reiterate certain studies stressing applied or action learning as a process to bridge the gap that exists between knowledge acquired from theory and knowledge pertaining to industry requirements (Gupta & Govindarajan, 2000). Another example is provided by the SMEs while lobbying for the integration of AI, digital transformation, and sustainability topics into the business programs. Students have come to identify some contradictions between classroom learning and the global business realities. From the perspective of industrial development, in terms of business education, there exists a time paradox, or an opposite movement with industrial development. Hence, there is a requirement for more industrial interaction with academia. They have been viewed as, by earlier researchers who said curricula be made dynamic and altered according to the needs of industry for global marketing systems (Uzunbacak et al., 2024).

Though this problem of global business strategies meeting the ground-level actuality captivates groups of different natures, SME would have liked the continuation of some Indian cases with international

Table 5. Themes across the stakeholders

Theme	Stakeholder (SMEs, Students, IEs)
Practical & Experiential Learning	SMEs, Students, IEs
Curriculum Innovation & Relevance	SMEs, Students, IEs
Global–Local Integration & Contextualization	SMEs, Students, IEs
Industry–Academia Collaboration	SMEs, IEs
Resource, Structural & Institutional Challenges	SMEs, Students, IEs
Assessment & Continuous Improvement	SMEs, Students
Leveraging Technology	SMEs, Students, IEs

SMEs = Subject matter experts, IEs = Industry experts.

frameworks to benefit students with a dual perspective; meanwhile, students would see difficulty in applying global theories to the Indian market. Industry experts stressed that graduates must be conversant with both the local and international business sessions and should work much in line with the studies that emphasize balancing global best practices with regional models (Thakur & Babu, 2016). Another important theme that emerged was the deepening of industry-academia integration; SMEs preferred joint research and mentoring programs while students preferred guest lecturers from within the industry and consulting assignments for career development.

Many professionals in the field believe that tighter collaboration between industry and academia is crucial for shaping curricula that equip students with skills that are truly relevant in the workplace. Research, such as Philip (1992), supports the idea that building strong industry partnerships can greatly enhance the quality of business education. However, a number of challenges stand in the way. Small and medium enterprises often point to financial constraints and regulatory hurdles, while students express frustration over the limited opportunities to learn from international faculty or gain access to global industry resources. Industry experts, on the other hand, highlight a persistent gap between what is taught in classrooms and how it is applied in real business settings. These concerns echo earlier findings by Bhatia and Panneer (2019), which stress the importance of institutional support in advancing international business education. If management education in India is to stay globally relevant and competitive, these issues cannot be ignored.

The need for a comprehensive way to evaluate how well students are prepared for global careers has become increasingly clear. Small and medium-sized enterprises (SMEs) recommended creating a framework that carefully measures graduates' international competencies. However, they also questioned whether traditional preparation for the job market was enough, suggesting instead the need for more effective and meaningful evaluation methods. Businesses, particularly in the commercial sector, supported performance-based assessments guided by clear expectations from multinational organizations. This aligns with earlier research emphasizing the value of structured and systematic assessment processes to keep education dynamic and relevant (Castellani & Zanfei, 2006). There was also a shared understanding that technology plays a transformative role in management education. SMEs highlighted the benefits of integrating AI-powered simulations and virtual collaboration platforms to give students more global exposure. Meanwhile, students expressed enthusiasm for technology-centered learning environments that include real-time market analytics and digital business platforms. Overall, industry professionals are emphasizing the importance of embedding these digital strategies into education to align with the fast-evolving nature of work and its global demands (Gandhi et al., 2024).

The SME, students, and industry-based experts shared a common vision of the global business education landscape and the opportunities and challenges that confront it; experiential learning utilizing relevant curricula and industry-based collaborations were prioritized, whereas an

administrative burden and a lack of resources were cited as barriers. In providing greater business education and training to graduating students who are ready to face the challenges of a globalized economy, there could be adaptive curricula, strategic partnership agreements, and a technology system.

7 Conclusion

The study was aimed at investigating, on one hand, the integration of global business practices into Indian management education; and on the other hand, to understand those perceptions toward this integration concerning teaching and learning, concerning teachers, students, and industry people. Mainly, two research questions shaped the investigation: RQ1) How have global business practices been integrated into management education in India, and what are the perceptions of educators and students toward their implication in teaching and learning? RQ2) What type of challenges does an Indian management school face in integrating global business practices, and what implications do these challenges have on the effectiveness of management education?

The integration of global business perspectives into Indian management education has evolved steadily, shaped by the forces of globalization and the growing interconnectedness of world markets. Prestigious institutions, such as the IIMs, actively adapt to international trends by updating their curriculum to include areas like digital transformation, global supply chain management, and cross-cultural leadership (Bhatia & Panneer, 2019). Faculty members believe that these additions give students valuable exposure to global market scenarios, helping them develop the adaptability and flexible thinking needed in multinational work environments. These schools also tap into collaborations with foreign universities, industry leaders, and student exchange programs, allowing learners to gain direct experience in international business settings (Ranjan, 2008). However, opinions on the effectiveness of these changes vary among stakeholders. While many students appreciate case-based learning and practical applications, some feel that theoretical content does not align closely with the realities of global business practices. Others point out that certain international case studies are applied without enough adaptation to suit the Indian business context. On a more positive note, new curriculum elements like AI-driven business simulations and live consulting projects are making management education more relevant, helping graduates meet the rapidly shifting demands of the global business landscape.

Indian management education has the potential to benefit greatly from global business perspectives, but a range of challenges continues to hold back its full growth. Many institutions struggle to secure the necessary resources, such as adequate funding, well-trained research faculty, and access to quality international business research materials. These gaps make it difficult to integrate seamlessly with global knowledge and practices. In addition, complicated regulations often slow down the process of collaborating with foreign institutions, which further

delays much-needed updates to outdated curricula. In addition, the rigid structures of the traditional business programs set an impediment to the introduction of newer versions of dynamic and interdisciplinary courses, actually in new operational systems created worldwide by authentic global business trends (Bhatia & Panneer, 2019). Therefore, it is the common thought among those students that theoretical knowledge concerning international business toward global aspects is really not enough, especially when it comes to localizing their global strategies on the Indian economic backdrop (The Guardian, 2025). Consequently, although some experts felt that since most graduates lacked experience in international work environments, they remained unemployed with multinational firms, such challenges reaffirmed the urgent need for management institutes to adopt a more industry-linked approach, monitor faculty development programs, and implement more useful industry-academia linkages so that, in the long run, business education in India might compete internationally.

8 Significance of the Study

Such a study would result in conclusive input to world discourse on how integration of international business practices into Indian management education is looked at by educators, students, and industry practitioners. Hence, more attention ought to be paid to the challenges and opportunities in international business integration, as Indian business schools try to remain relevant in a steady transformation of the global economy. The research explores how well management education today integrates global standards, digital transformation practices, and cross-cultural capabilities—and how these influence the success or limits of current education reforms. It also considers how collaboration between academic institutions and industries, especially through partnerships with multinational companies, overseas universities, and policymakers, could help further globalize management education. The study holds practical importance for policymakers and the corporate sector alike, as it suggests ways to align educational programs with real-world industry needs while ensuring strong theoretical foundations. Additionally, with more foreign universities establishing international campuses, the research emphasizes the need for domestic institutions to prepare for rising competition and to strengthen the relevance of Indian management education in an increasingly globalized economy.

8.1 Limitations of the Study

While a few limitations of this study may still remain, as only certain aspects or key insights of its broad scope were addressed, the composition of the sample deserves note. It included subject matter experts, students, and independent entrepreneurs. However, this group might not have fully captured the diversity of perspectives that could come from participants across all Indian Institutes of Management. A larger sample—covering more institutions, regions, and academic levels—might have offered a broader and more balanced understanding. Moreover, although the interviews were qualitative and semi-structured, and thus provided rich and detailed insights, their findings may have limited generalizability compared to those derived from quantitative research. The views expressed represent the opinions of stakeholders at a specific point in time; these could evolve as the business world and institutional landscapes continue to change. Financial constraints also prevented the study from adopting a longitudinal approach, which might have offered a clearer picture of how management education evolves alongside global trends over time. Finally, although the research aimed to capture institutional efforts to integrate global business perspectives into their teaching frameworks, it did not examine the career paths of graduates after completing their studies—an area that could have provided deeper validation for the observed educational reforms.

8.2 Future Research Directions

To gain a more well-rounded understanding that draws on both qualitative insights and quantitative evidence, future researchers may find it valuable to adopt a mixed-methods approach. This could help to deepen and broaden the current findings. It would also be worth examining how internal institutional politics influence the way faculty-led curriculum changes and global initiatives to integrate management education are put into practice. Expanding the study beyond the limited sample of a few bachelor-level schools to include institutions from different categories could allow for richer comparisons, particularly in relation to the worldwide integration of business schools and their collaboration with international bodies. In addition, conducting longitudinal research that follows graduates over time—tracking their employability, skills development, and career success—could offer important insights into the long-term impact and effectiveness of these educational reforms. Thus, more attention must be dedicated in research to the notion of crisis leadership in management education, especially in the areas of cultivating resilience, strategic thinking, and ethical governance.

Another very high-urgency topic in this research pertains to the emerging technologies in management education. AI and digital business simulation applications to management education can be one such topic of study. The Indian B-schools may be compared with international institutions to single out the good practices in the internationalization of business standards while retaining local relevance. Hence, certain studies are required to investigate policy measures that can drive stronger industry-academia cooperation against the backdrop of resource constraints, making Indian management graduates globally competitive.

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APPENDIX A: INTERVIEW QUESTIONS

Subject Matter Experts (SMEs)

1. How does your institution include global business practices in its management curriculum?
2. What bottlenecks do you face in teaching global business?
3. How do you bridge the global business perspective and Indian business environment?
4. What types of support or resources would you require to implement globalization into management education?
5. How do you ensure that these global business practices indeed prepare students for an international career?

Students

1. How much relevance is generally given to global business concepts in your management education?
2. Could you name an example of a course that successfully taught international business practices?
3. Do you feel that you are ready to work in a global business environment? Why or why not?
4. What challenges do you face when understanding and applying global business concepts?
5. What specific changes could you advocate to further globally align your management education?

Industry Experts (IEs)

1. Do you perceive that the Indian management graduates are well trained enough to work in the global business environment?
2. What are the gaps you observe in the knowledge or skills they have regarding global business practices?
3. How can management schools further enhance their course content to meet global business expectations?
4. How do you see industry partnerships play a role in enhancing the global relevance of management education?
5. What would be the important competencies you expect from management graduates to have so they can thrive in MNCs?

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