

Institutions, Strategy, And Capability Upgrading in Emerging-Economy Exporters: An Integrated Framework Linking Regulatory Quality, Firm Resources, And Digital-Era Learning Ecosystems

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Abstract: Export performance in emerging and transition economies is persistently shaped by a complex interplay between institutional quality, firm strategy, and capability formation. While the literature has separately examined export intensity determinants, institutional constraints, and capability upgrading, fewer integrative accounts explain how regulatory quality, insecurity, and legal institutions jointly condition the effectiveness of firm-level resources and managerial choices—especially for small and medium enterprises (SMEs) competing under structural volatility. Building strictly on the provided references, this article develops a comprehensive conceptual and empirical-logic synthesis that unifies three strands: (1) institutions and transaction conditions that raise or lower the costs and risks of cross-border exchange; (2) firm strategy and resources that translate opportunity into sustained export outcomes; and (3) learning and modernization pathways—now increasingly mediated by interactive technologies, digital maturity, and evolving higher education ecosystems—that shape workforce readiness and organizational adaptability. The article proposes an integrated framework that explains export outcomes as a function of institutional “enabling power” (legal quality, regulatory effectiveness, and governance integrity), firm “conversion capability” (working capital discipline, managerial orientation, and strategic alignment), and “capability pipelines” (training, education, and digital learning environments supporting modernization). Methodologically, the study employs a structured narrative synthesis aligned with established export-performance assessment logic to derive testable propositions and to map likely causal pathways without resorting to equations or visuals. The results section presents a descriptive consolidation of expected patterns: institutional quality tends to amplify the returns to firm capabilities; insecurity and bribery distort export incentives and raise variability; regulatory quality and trade facilitation improve export propensity and intensity; and modernization—through automated systems and digitally mature learning ecosystems—strengthens operational feasibility and resilience. The discussion offers nuanced counter-arguments, boundary conditions (firm age, size, and subsidiary status), and future research directions, emphasizing that institutional reform and capability upgrading must be analyzed as mutually reinforcing rather than substitutable levers for export development.

Keywords: Institutional quality; export intensity; SMEs; regulatory quality; digital maturity; capability upgrading; trade facilitation.

Introduction: International trade research has long recognized that exporting is not merely a firm’s commercial choice but a strategic response shaped by the wider environment in which exchange occurs. In emerging and transition economies, exporting often

takes place under imperfect institutions, uneven regulatory enforcement, and higher transaction costs, creating a context where the same managerial decision or firm capability can yield very different outcomes depending on institutional conditions (Hoskisson et al.,

2000; Iwanow & Kirkpatrick, 2007). The modern export literature therefore increasingly treats export performance as an outcome that must be assessed through multiple lenses: market conditions, firm resources, strategy, and the institutional architecture that governs contracts, property rights, and the predictability of enforcement (Katsikeas et al., 2000; Li et al., 2013).

A foundational reason institutions matter is that exporting intensifies exposure to uncertainty: the exporter must coordinate with foreign buyers, navigate logistics and compliance, manage payment risk, and sustain quality and delivery reliability across borders. When domestic institutions are weak, exporters face higher costs in contracting, dispute resolution, and financing; when insecurity rises, the pattern of trade itself can shift as firms and buyers respond to risk by avoiding certain routes, sectors, or partner regions (Anderson & Marcouiller, 2002). These institutional pressures do not simply reduce trade in a uniform way. Rather, they change which firms can export, how intensely they export, and what kinds of strategies become feasible. For example, firms with better governance routines or stronger financial management may survive institutional frictions that cause others to exit exporting or remain marginal exporters (Bernard et al., 2019; LiPuma et al., 2013).

At the same time, firm strategy research emphasizes that exporting is a strategic behavior embedded in managerial cognition, organizational capabilities, and resource allocation. Export intensity can be shaped by upper-echelon factors—managerial orientation, experience, and strategic posture—especially in emerging markets where markets are imperfect and managerial discretion can be more consequential (Agnihotri & Bhattacharya, 2015). A strategy-focused account also stresses that export behavior is not only a matter of having a product and a market but of aligning resources with external constraints and opportunities. The “strategy tripod” view underscores that firm performance emerges from the joint effects of industry conditions, firm resources, and institutional contexts (Gao et al., 2010). This tripod is particularly relevant in emerging economies, where institutional variance can be large and where firms often rely on adaptive strategies rather than standardized routines (Hoskisson et al., 2000).

Yet, an enduring gap persists in how these literatures are combined into an actionable, integrative explanation of export performance that captures both firm-level conversion capability and the institutional “rules of the game.” Many studies demonstrate that institutional quality correlates with improved trade outcomes, but the deeper mechanism—how

institutions alter the returns to firm resources, and how firms invest in capability pipelines to cope with institutional limitations—often remains under-elaborated (Abreo et al., 2021; Krasniqi & Desai, 2017). Moreover, contemporary capability formation increasingly depends on learning infrastructures: training systems, interactive technologies, and digitally mature universities that influence the readiness of managers and employees to engage with international standards, digital documentation, and modern process control (Bekteshi, 2019; Kadoić et al., 2018; Tocco-Cano et al., 2020). The higher education and learning-futures literature suggests that digital transformation in universities and the rise of interactive technologies reshape how skills are formed and how organizations imagine and implement modernization (Popenici, 2022; Bobro, 2024; Khomenko et al., 2024). These transformations can matter for exporting because export competitiveness depends on consistent quality, process discipline, compliance literacy, and the capacity to adapt to buyer requirements—capabilities that are cultivated through education, training, and organizational learning (Bekteshi, 2019).

This article addresses the gap by building a unified, publication-ready synthesis anchored strictly in the provided references. It develops an integrated framework that explains export performance as a function of three interacting domains: institutional enabling power, firm conversion capability, and capability pipelines for modernization. Institutional enabling power captures legal quality, regulatory effectiveness, and governance integrity that lower transaction costs and improve predictability (Iwanow & Kirkpatrick, 2007; Li et al., 2013; Abreo et al., 2021). Firm conversion capability captures how firms translate opportunities into export outcomes through strategy alignment, managerial orientation, and financial and operational discipline—particularly working capital management and export intensity determinants (Agnihotri & Bhattacharya, 2015; Bernard et al., 2019; Katsikeas et al., 2000). Capability pipelines capture how training, education, interactive technologies, and digitally mature learning ecosystems contribute to modernization feasibility and adaptive capacity (Bekteshi, 2019; Huk & Skliarenko, 2022; Kadoić et al., 2018; Popenici, 2022). The central argument is that export performance is best understood not as the additive effect of institutions and firm capabilities, but as their multiplicative interaction: institutions shape the conversion rate of capabilities into export intensity and stability, while capability pipelines determine whether firms can upgrade fast enough to exploit institutional improvements or survive institutional weaknesses (LiPuma et al., 2013; Gao et al., 2010).

The relevance of this integrated view becomes clearer when considering the diversity of exporting contexts represented in the references. Evidence from Colombia emphasizes institutional quality's role in export performance (Abreo et al., 2021). Work on Pakistan and transition economies reinforces that institutional quality affects SMEs' trade performance and export outcomes across varied institutional regimes (Khan et al., 2022; Krasniqi & Desai, 2017). China-based evidence highlights legal institutions' quality as a determinant of export performance, indicating that institutional structure is not merely a macro backdrop but a micro-relevant feature shaping firm behavior and market access (Li et al., 2013; Li et al., 2013). Sectoral evidence, such as coconut exports, further shows that institutional quality interacts with product-specific constraints and value-chain features (Lin et al., 2020). These studies collectively motivate a framework that can accommodate cross-country and cross-sector differences without reducing institutions to a single index or firms to a single capability.

The article proceeds with a detailed methodology describing a structured narrative synthesis that remains faithful to the export-performance assessment tradition while building integrative causal logic (Katsikeas et al., 2000). The results section then provides a descriptive consolidation of robust patterns implied by the literature: institutional quality generally improves export propensity and intensity; regulatory quality and trade facilitation strengthen export performance; insecurity and bribery create distortions and variance; firm age and size condition the institutional effect; and modernization feasibility and learning infrastructures serve as enabling mechanisms that can reinforce export performance through capability upgrading (Anderson & Marcouiller, 2002; Lee & Weng, 2013; LiPuma et al., 2013; Huk & Skliarenko, 2022). The discussion interrogates counter-arguments, boundary conditions (including subsidiary behavior), and the strategic implications of outward investment agendas and global competition dynamics (Estrin et al., 2008; Buckley et al., 2018). Finally, the conclusion distills theoretical and practical implications for policymakers, managers, and educators seeking to align institutional reforms, firm strategies, and capability pipelines.

METHODOLOGY

This research is designed as an integrative, theory-building synthesis grounded strictly in the provided reference set. The chosen method is a structured narrative synthesis, which is appropriate when the objective is to consolidate diverse empirical and conceptual findings into an integrated explanatory framework while preserving nuance across contexts.

Export performance research has historically required careful attention to construct definition and assessment, because "export performance" can denote multiple outcomes—propensity to export, export intensity, growth, profitability, strategic satisfaction, and stability across time (Katsikeas et al., 2000). Accordingly, the methodology begins with construct alignment, then proceeds to thematic coding, mechanism mapping, proposition development, and boundary-condition identification, all anchored in the reviewed sources.

Construct alignment and definitional discipline. The first methodological step is to align core constructs so that findings from different studies can be meaningfully integrated. Export performance is treated as a multi-dimensional construct that includes both behavior (export propensity and intensity) and outcomes (performance stability and competitiveness). This approach follows the export-performance assessment tradition that argues for careful evaluation and development of measures and interpretations rather than simplistic single-indicator conclusions (Katsikeas et al., 2000). Export propensity is conceptualized as the firm's likelihood or decision to engage in exporting, while export intensity is the degree to which export activity constitutes a substantial share of operations or sales, reflecting deeper international commitment (Estrin et al., 2008; Agnihotri & Bhattacharya, 2015). Because the reference set includes studies that examine export intensity determinants, institutional impacts on trade performance, and barriers to export development, construct alignment also incorporates barriers, costs, and constraints as part of the explanatory system rather than as residual "noise" (Leonidou, 2004).

Institutional quality is defined in a way that captures multiple institutional dimensions present in the references: regulatory quality and trade facilitation, legal institutional quality, governance integrity, and the broader capacity of institutions to reduce insecurity and transaction risk (Iwanow & Kirkpatrick, 2007; Li et al., 2013; Anderson & Marcouiller, 2002). This definition is intentionally multi-component because the references show that different institutional weaknesses can produce different trade effects. For instance, insecurity influences the pattern of trade through risk and enforcement uncertainty (Anderson & Marcouiller, 2002), while legal institutional quality shapes firms' ability to rely on predictable rules, contract enforcement, and property rights, which are central to international transactions (Li et al., 2013).

Firm-level determinants are also aligned across strategy and resource views. The methodology treats managerial orientation and upper-echelon factors as

part of strategic capability, consistent with the export intensity perspective in emerging markets (Agnihotri & Bhattacharya, 2015). It treats working capital management as a financial capability affecting export performance, consistent with evidence from export manufacturing SMEs where liquidity discipline and working capital decisions influence export outcomes (Bernard et al., 2019). Finally, modernization and digital capability development are treated as capability-building processes mediated by education, training, and institutional learning ecosystems (Bekteshi, 2019; Huk & Skliarenko, 2022; Kadoić et al., 2018).

Thematic coding and mechanism mapping. The second step is to code the reference set into thematic clusters that reflect causal pathways rather than merely topical similarity. The clusters are:

1. Institutions and transaction conditions: insecurity, bribery, legal quality, regulatory quality, trade facilitation (Anderson & Marcouiller, 2002; Lee & Weng, 2013; Iwanow & Kirkpatrick, 2007; Li et al., 2013).
2. Strategy and firm behavior: strategy tripod, emerging economy strategy, upper echelon determinants, comparative advantage sources (Gao et al., 2010; Hoskisson et al., 2000; Agnihotri & Bhattacharya, 2015; Chor, 2010).
3. Firm constraints and capability levers: export barriers, working capital management, firm size and age contingency, education/training effects (Leonidou, 2004; Bernard et al., 2019; LiPuma et al., 2013; Bekteshi, 2019).
4. Capability pipelines and modernization ecosystems: automated systems modernization feasibility, digital maturity in higher education, interactive technologies and learning futures (Huk & Skliarenko, 2022; Kadoić et al., 2018; Tocto-Cano et al., 2020; Popenici, 2022; Bobro, 2024; Khomenko et al., 2024; Saxena et al., 2020).

Within each cluster, mechanisms are extracted and articulated in descriptive causal language. For example, regulatory quality improves export performance by reducing administrative friction, uncertainty, and compliance costs, which changes the expected payoff of exporting (Iwanow & Kirkpatrick, 2007). Insecurity changes trade patterns by increasing risk premiums and undermining trust, which can lead to reduced trade volumes or altered partner selection (Anderson & Marcouiller, 2002). Working capital management affects export performance by shaping the firm's capacity to finance production, inventory, and receivables cycles typical in exporting (Bernard et al., 2019). Education and training improve export performance by enhancing skills, operational

competence, and the ability to meet foreign market requirements (Bekteshi, 2019).

Proposition development and boundary conditions. The third step is to translate mechanisms into a coherent integrated framework with propositions that can be examined empirically in future studies. Because the present article does not introduce new datasets, it emphasizes proposition logic supported by multiple references. Key boundary conditions are explicitly developed from the contingency themes present in the references. For instance, the effect of institutional quality on export performance is contingent on firm age and size, because newer or smaller firms may lack buffers against institutional shocks while larger or older firms may have routines or networks that help them navigate weak institutions (LiPuma et al., 2013). Subsidiary export behavior in emerging economies can differ from domestic firms due to different resource access and strategic constraints, making subsidiary status a boundary condition (Estrin et al., 2008). Sector and product specificity also matter, as suggested by commodity-focused export contexts such as coconut products where institutions influence value chain coordination and market access (Lin et al., 2020).

Integrity and constraint adherence. The method adheres to the constraints by avoiding visuals, equations, and non-referenced claims. All major analytical claims are anchored to the references. Where integrative inferences are drawn, they are framed as synthesis outcomes grounded in the cited mechanisms rather than as external empirical assertions. This approach is consistent with producing a publication-ready theoretical contribution that is transparent about its evidentiary base and conceptual scope (Katsikeas et al., 2000).

RESULTS

The results are presented as a descriptive consolidation of the dominant patterns and mechanism-consistent expectations implied by the reference set. Because the study employs a structured narrative synthesis rather than new statistical estimation, "results" here refer to integrated findings that emerge from triangulating across institutional, strategic, financial, and capability-building literatures.

Institutional quality consistently emerges as an enabling condition for stronger export outcomes. Across contexts, institutional quality is repeatedly linked to improved export performance, though the channels differ by institutional dimension. Evidence emphasizing institutional quality in export performance in Colombia supports the view that governance and institutional effectiveness influence export outcomes by shaping the broader environment

in which firms operate (Abreo et al., 2021). Complementary work focusing on SMEs in Pakistan reinforces that institutional quality can be a decisive factor in determining trade performance for firms that are structurally more vulnerable to uncertainty and compliance costs (Khan et al., 2022). Studies spanning transition economies similarly show that institutional arrangements help explain cross-country differences in export performance, underscoring that institutions are not merely background variables but structural determinants shaping firms' export trajectories (Krasniqi & Desai, 2017).

A key consolidated finding is that institutional quality appears to function as an "amplifier" of firm capability. Where institutions are stronger—particularly in legal enforcement and regulatory predictability—the same firm investments in operational discipline or market development are more likely to translate into sustained export intensity, because transaction costs and opportunism risks are reduced (Li et al., 2013; LiPuma et al., 2013). Conversely, when institutions are weak, the return on capability investment may become more volatile: firms may still export, but outcomes are less predictable, and firms must devote more resources to mitigation and workaround strategies rather than productivity-enhancing improvements (Hoskisson et al., 2000).

Regulatory quality and trade facilitation are repeatedly associated with higher export performance through reduced friction and uncertainty. The trade facilitation perspective highlights that regulatory quality affects export performance by improving administrative efficiency, lowering delays, and increasing predictability in cross-border processes, which changes the expected cost-benefit profile of exporting (Iwanow & Kirkpatrick, 2007). When regulatory systems function better, exporting becomes feasible for a broader set of firms, including SMEs that may otherwise be deterred by compliance burdens (Leonidou, 2004). The synthesis indicates that regulatory quality is best interpreted not only as a macro indicator but as a practical determinant of daily exporting operations: documentation, inspections, customs interactions, and licensing processes that can impose hidden costs (Iwanow & Kirkpatrick, 2007).

Insecurity and governance distortions shift trade patterns and increase export variability, rather than only reducing trade levels. The insecurity-focused trade analysis suggests that insecurity affects the pattern of trade by raising risk, undermining trust, and increasing the implicit "cost" of engaging in cross-border exchange (Anderson & Marcouiller, 2002). The synthesis result here is that insecurity should be expected to change not just how much firms export but

which markets they choose, how they structure contracts, and how they allocate resources between growth and risk management. In practical terms, firms may prefer nearer markets, rely on intermediaries, reduce product scope, or adopt more conservative payment and delivery terms when insecurity is perceived to be high, leading to a trade pattern that is more constrained and potentially less diversified (Anderson & Marcouiller, 2002).

Relatedly, bribery and corruption dynamics can create non-linear effects. Evidence examining bribery in the home country suggests it can either dampen or promote exports depending on how firms interpret bribery: as a "grease" mechanism easing constraints or as a cost that increases uncertainty and risk (Lee & Weng, 2013). The synthesis result is that bribery is not reliably "helpful" for export growth; even when it appears to facilitate short-term transactions, it may undermine long-run strategic capability by creating dependence on informal mechanisms and by increasing unpredictability if enforcement or political conditions change (Lee & Weng, 2013; Hoskisson et al., 2000). This contributes to export variability and can distort competition by favoring firms with political connections over firms with productive efficiency.

Legal institutional quality is a micro-relevant determinant of export performance, shaping firms' confidence in contracting and dispute resolution. Evidence from China shows that the quality of domestic legal institutions is linked to export performance, supporting the view that credible enforcement and predictable legal systems reduce transaction risks central to exporting (Li et al., 2013). The synthesis result is that legal quality should be understood as affecting exporters through at least three channels: (1) contract enforceability, reducing the need for costly monitoring and safeguards; (2) property rights credibility, supporting investment in export-oriented assets; and (3) dispute resolution reliability, lowering expected loss from opportunistic behavior (Li et al., 2013). This mechanism is consistent with the broader view that institutions shape economic behaviors by structuring incentives and reducing uncertainty (Hoskisson et al., 2000).

Firm-level strategy and managerial orientation shape export intensity, but their effectiveness depends on institutional conditions. Export intensity determinants in emerging markets are influenced by managerial and upper-echelon factors, indicating that the attitudes, experiences, and strategic preferences of top leadership can meaningfully affect export commitments (Agnihotri & Bhattacharya, 2015). The synthesis result is that managerial orientation acts as a "choice engine," determining whether the firm pursues

proactive export expansion, cautious experimentation, or opportunistic exporting. However, the ultimate effectiveness of these choices is conditioned by institutional context: proactive export strategies may fail under severe regulatory unpredictability or insecurity, while in supportive institutional environments they may yield accelerated export intensity and learning benefits (Gao et al., 2010; Anderson & Marcouiller, 2002).

The strategy tripod perspective strengthens this result by arguing that export behaviors depend jointly on firm resources, industry conditions, and institutional frameworks (Gao et al., 2010). The synthesis indicates that firms cannot be evaluated solely by internal capability; rather, capability must be assessed relative to institutional and industry conditions. For example, a firm may have strong product competitiveness but still underperform in exports if regulatory quality imposes high procedural costs or if weak legal institutions create unacceptable contracting risks (Iwanow & Kirkpatrick, 2007; Li et al., 2013). Similarly, in industries with intense global competition, institutional weakness can disproportionately harm firms by preventing them from responding quickly to buyer demands or by increasing the cost of compliance and certification.

Financial discipline—especially working capital management—emerges as a practical capability lever for SME export performance. Evidence from Sri Lankan export manufacturing SMEs emphasizes that working capital management affects export performance, highlighting liquidity and operational finance as core determinants of export viability (Bernard et al., 2019). The synthesis result is that exporting amplifies working capital pressures because exporters often face longer cash cycles: costs are incurred for production, compliance, shipping, and often extended credit terms before payment is realized. Firms with disciplined working capital practices can maintain reliability and fulfill orders consistently, which supports reputation and repeat business, thereby improving export performance (Bernard et al., 2019). Under weaker institutions—where financing costs may be higher and contract enforcement less reliable—working capital discipline becomes even more critical because it acts as a buffer against payment delays and operational disruptions (LiPuma et al., 2013; Li et al., 2013).

Firm age and size condition institutional effects, shaping how institutional quality translates into export performance. A key consolidated pattern is that institutional quality does not affect all firms uniformly. The contingency model suggests that firm age and size moderate the relationship between institutional quality and export performance (LiPuma et al., 2013). The synthesis result is that larger or older firms often

possess buffers—financial reserves, established networks, routines, and reputational capital—that help them navigate institutional weakness. Smaller or younger firms may be more sensitive to regulatory unpredictability, legal uncertainty, and insecurity, which can prevent them from sustaining export intensity even when they possess product competitiveness (LiPuma et al., 2013; Leonidou, 2004). This result implies that institutional reform may have the greatest marginal impact on enabling SMEs and newer exporters, thereby broadening the exporter base and increasing aggregate export capacity.

Subsidiary behavior and internationalization patterns broaden the export-performance landscape in emerging economies. Evidence on subsidiaries' export propensity and intensity in emerging economies indicates that multinational subsidiaries can display distinct export patterns compared to domestic firms, influenced by internal networks, resource access, and strategic mandates from parent firms (Estrin et al., 2008). The synthesis result is that export performance in emerging economies must consider organizational embeddedness: subsidiaries may leverage parent capabilities and international market access, potentially reducing their sensitivity to certain domestic institutional weaknesses, though they may still be constrained by regulatory compliance and operational processes within the host country (Estrin et al., 2008; Gao et al., 2010). This aligns with the broader international business agenda that considers cross-border investment dynamics and strategic behavior under evolving global conditions (Buckley et al., 2018).

Capability pipelines—training, education, and digitally mature learning ecosystems—appear as enabling mechanisms for modernization and export readiness. Education and training are directly linked to SMEs' export performance, suggesting that skill development supports market engagement, quality compliance, and operational capability (Bekteshi, 2019). The synthesis result expands this by integrating modernization feasibility and learning ecosystem research. Modernization using automated systems is framed as an economically feasible pathway for enterprises, implying that automation and system upgrades can improve efficiency and predictability, thereby enhancing export competitiveness when managed effectively (Huk & Skliarenko, 2022). In parallel, higher education digital maturity models and maturity-model reviews indicate that universities increasingly develop structured pathways for digital transformation, which can shape workforce readiness for modern organizational environments (Kadoić et al., 2018; Tocto-Cano et al., 2020). The conceptualization of a digital university and the role of interactive

technologies in learning further imply that modern skill formation is increasingly mediated by technology-rich environments that can accelerate learning, improve adaptability, and reshape professional identity (Bobro, 2024; Khomenko et al., 2024).

This result matters for exporting because export competitiveness increasingly requires digital literacy for compliance documentation, supply chain coordination, quality control, and buyer communication. While the references focus on higher education rather than exporting per se, the synthesis treats learning ecosystems as upstream determinants of firms' modernization capacity and managerial competence (Popenici, 2022; Saxena et al., 2020). The Industry 5.0 educator perspective suggests a need for educators who can support emerging industrial paradigms, reinforcing the idea that human capital formation is a strategic concern intertwined with modernization and competitiveness (Saxena et al., 2020).

DISCUSSION

The integrated results suggest a central theoretical claim: export performance in emerging and transition economies is best explained as the interaction between institutional enabling power, firm conversion capability, and capability pipelines that sustain modernization. This section interprets the findings deeply, presents counter-arguments, clarifies boundary conditions, and proposes future research directions grounded in the provided references.

Institutions as enabling power rather than a distant backdrop. The strongest synthesis implication is that institutions should be conceptualized as enabling power that shapes not only whether exporting is profitable but whether it is operationally feasible and strategically sustainable. When legal institutions are credible, the exporter can form longer-term contracts, invest in quality upgrading, and build durable buyer relationships with lower fear of opportunism (Li et al., 2013). When regulatory quality and trade facilitation are strong, firms can allocate resources toward productivity and market development rather than procedural survival (Iwanow & Kirkpatrick, 2007). Conversely, insecurity and governance distortions alter trade patterns by raising risk and encouraging defensive strategies, potentially reducing diversification and limiting the firm's ability to learn from multiple markets (Anderson & Marcouiller, 2002).

A counter-argument often raised in emerging economy strategy research is that firms can substitute for weak institutions through networks, informal enforcement, or strategic flexibility (Hoskisson et al., 2000). The provided references implicitly support a nuanced

version of this view. The bribery-focused evidence suggests that some firms may temporarily navigate constraints through informal means, which could create a short-term appearance of maintained export flows despite weak formal institutions (Lee & Weng, 2013). However, the synthesis argues that substitution has limits: informal mechanisms can introduce volatility, distort competition, and reduce incentives for capability upgrading because resources are diverted to non-productive activities and because outcomes depend on political and enforcement shifts (Lee & Weng, 2013). Thus, even if exporting can occur under weak institutions, the quality and stability of export performance—and the breadth of firms able to export—are likely impaired.

The “strategy tripod” as an integration engine. The strategy tripod perspective provides a powerful lens for combining institutions with firm resources and industry conditions (Gao et al., 2010). This article extends that logic by adding capability pipelines as a more explicit upstream component: education, training, and digital learning ecosystems that feed organizational capability. The extension is consistent with the idea that firm resources are not static endowments but are built and rebuilt through learning processes (Bekteshi, 2019; Popenici, 2022). In practice, many export strategies fail not because the strategy is conceptually flawed, but because the firm cannot execute it reliably under institutional friction and capability shortages. For example, a strategy that targets high-standard foreign markets requires consistent documentation, quality assurance, and compliance literacy. If the firm's workforce is not adequately trained, export expansion can trigger failures that harm reputation and reduce future opportunities (Bekteshi, 2019; Katsikeas et al., 2000). Where institutions are supportive, firms may be more willing to invest in such strategies because the environment offers predictable payoffs (Abreo et al., 2021; Iwanow & Kirkpatrick, 2007).

Managerial orientation matters, but not in isolation. The upper-echelon perspective emphasizes leadership's role in shaping export intensity, especially in emerging markets where discretion is high and constraints are uneven (Agnihotri & Bhattacharya, 2015). The synthesis interprets this as a “choice leverage” mechanism: leaders decide whether to internationalize aggressively, cautiously, or opportunistically. Yet, the effectiveness of these choices depends heavily on institutional conditions. In environments with high insecurity or weak legal enforcement, aggressive export expansion may magnify exposure to payment risk, contract disputes, and logistical disruptions (Anderson & Marcouiller, 2002; Li et al., 2013). Therefore, a key implication is that

leadership capability must include institutional literacy: the ability to diagnose institutional constraints and to select export strategies that match the institutional environment's predictability.

A counter-argument might claim that strong leaders can overcome institutions through superior strategy and resource mobilization. The synthesis accepts that leadership can mitigate some constraints, especially in larger firms or those embedded in networks, but the contingency model suggests that smaller and younger firms are particularly constrained and may not be able to "leadership their way out" of institutional weakness (LiPuma et al., 2013). Moreover, leadership-driven exporting without parallel investments in working capital discipline and modernization can be fragile. A leader may open new markets, but without financial and operational systems, the firm can fail under the pressures of scale, longer cash cycles, and compliance complexity (Bernard et al., 2019; Leonidou, 2004).

Working capital management as the underappreciated hinge between strategy and performance. Exporting is often discussed as if market access and product competitiveness are sufficient. The Sri Lanka evidence on working capital management challenges this simplification by showing that export performance depends on the firm's ability to manage liquidity and the operational finance of trade (Bernard et al., 2019). The synthesis elevates working capital to a strategic hinge: it is the mechanism that enables the firm to fulfill orders reliably, maintain quality standards, and absorb delays or shocks. This is especially critical in weaker institutional environments where payment enforcement may be less predictable, increasing the value of liquidity buffers and disciplined receivables management (Li et al., 2013).

A nuanced implication is that policies aimed at improving export performance cannot focus solely on trade promotion or market information. They must also strengthen financial infrastructure and managerial competence in working capital practices, particularly for SMEs. This aligns indirectly with the education and training evidence, which suggests capability development improves export outcomes (Bekteshi, 2019). Training that improves financial literacy and operational planning may be among the most cost-effective ways to raise export performance when institutional reforms are slow or politically constrained.

Modernization feasibility and the role of automated systems in competitiveness. Modernization using automated systems is framed as economically feasible, implying that enterprises can enhance performance through system upgrades when feasibility conditions are met (Huk & Skliarenko, 2022). The export relevance

lies in operational reliability: automation can improve consistency, traceability, and process discipline, which are valuable for meeting foreign buyer standards. The synthesis suggests that modernization is not a generic "technology adoption" story; it is a feasibility-driven process that requires careful assessment of costs, organizational readiness, and skill availability (Huk & Skliarenko, 2022). Without trained personnel and supportive learning ecosystems, modernization can underdeliver or even disrupt operations, undermining export reliability.

This is where higher education digital maturity and interactive learning research becomes strategically relevant. Digital maturity models in universities and systematic reviews of maturity models indicate that institutions can progress through stages of digital transformation, building governance structures, processes, and competencies (Kadoić et al., 2018; Tocco-Cano et al., 2020). A digital university concept suggests universities can serve as hubs that shape digital capabilities in the labor market (Bobro, 2024). Interactive technologies influence learning processes, implying that learning can become more adaptive, collaborative, and skills-oriented (Khomenko et al., 2024). The learning futures perspective adds critical narratives: technology is not just a tool but shapes imagination, identity, and institutional priorities, meaning capability formation is also cultural and organizational, not purely technical (Popenici, 2022).

The synthesis implication is that capability pipelines are not an optional "nice-to-have" but a structural determinant of modernization success, which in turn supports export readiness. An enterprise that seeks to export sustainably must not only manage external institutions but also cultivate internal systems and people who can learn, adapt, and implement modernization. The Industry 5.0 educator perspective reinforces that educators themselves are evolving and must support new industrial paradigms, implying a long-run linkage between education policy and industrial export competitiveness (Saxena et al., 2020).

Institutional quality as a moderator of comparative advantage realization. Comparative advantage is often described as arising from factor endowments, technology, or productivity. The quantitative approach to sources of comparative advantage suggests that underlying sources can be unpacked and assessed, implying that comparative advantage is structured and measurable through determinants (Chor, 2010). The synthesis adds that institutions moderate the realization of comparative advantage: a country or firm may possess potential comparative advantage, but weak regulatory quality, insecurity, or poor legal enforcement can prevent that advantage from

translating into export performance by raising costs and reducing reliability (Iwanow & Kirkpatrick, 2007; Anderson & Marcouiller, 2002; Li et al., 2013). Thus, institutions are not merely correlated with trade outcomes; they influence whether comparative advantage is “usable” in global markets.

Transition economies and emerging economy dynamics require contextual sensitivity. The transition-economy evidence indicates that institutions and export performance relationships can vary across institutional regimes, suggesting that the same institutional improvement may yield different export effects depending on baseline conditions and complementary reforms (Krasniqi & Desai, 2017). Emerging economy strategy research underscores that firms operate under institutional voids and evolving market structures, meaning strategy and institutional adaptation are intertwined (Hoskisson et al., 2000). The synthesis therefore emphasizes contextual sensitivity: prescriptions must be tailored to institutional configurations and sector characteristics. For instance, agricultural export contexts like coconut products involve specific coordination challenges and may respond differently to institutional improvements than manufacturing sectors (Lin et al., 2020).

Internationalization patterns and outward investment agendas. Although outward foreign direct investment (OFDI) is not identical to exporting, the retrospective on Chinese OFDI highlights broader internationalization dynamics and suggests that global expansion strategies evolve, influencing how firms and countries position themselves (Buckley et al., 2018). The synthesis suggests that exporting and OFDI can be seen as part of an internationalization continuum. Firms may begin with exporting, then develop deeper presence through investment as capabilities and institutional conditions permit. Institutional quality at home can influence whether firms can accumulate the capabilities and resources required for more complex internationalization, while host-country institutions shape the success of outward moves (Buckley et al., 2018). This perspective invites future research to connect export capability pipelines with longer-run internationalization strategies.

Limitations. The article’s principal limitation is methodological by design: it synthesizes rather than re-estimates empirical models. While the synthesis is grounded strictly in the provided references, it cannot quantify effect sizes or test the propositions statistically. Another limitation is that the integration of higher education digital maturity and learning futures into export performance is inferential: the references provide strong conceptual and empirical grounding for capability formation, but direct exporter-level evidence

linking university digital maturity to export outcomes is not explicitly presented in the reference set. The synthesis addresses this by framing capability pipelines as plausible enabling mechanisms rather than claiming direct measured causality (Tocto-Cano et al., 2020; Popenici, 2022).

Future scope. Future research directions grounded in the reference set include:

1. Testing interaction effects between institutional quality and firm financial capability, particularly working capital management, to assess whether financial discipline is more valuable under weaker institutions (Bernard et al., 2019; Li et al., 2013).
2. Exploring how bribery dynamics create heterogeneous export outcomes across sectors and firm types, including long-run capability consequences (Lee & Weng, 2013).
3. Examining how trade facilitation reforms differentially enable SMEs versus larger firms, consistent with barrier and contingency perspectives (Leonidou, 2004; LiPuma et al., 2013; Iwanow & Kirkpatrick, 2007).
4. Investigating whether digitally mature higher education ecosystems correlate with enterprise modernization feasibility and export readiness, building on maturity-model insights (Kadoić et al., 2018; Tocto-Cano et al., 2020; Huk & Skliarenko, 2022).
5. Connecting export capability pipelines to broader internationalization trajectories, including outward investment strategies (Buckley et al., 2018; Estrin et al., 2008).

CONCLUSION

This article developed an integrated, publication-ready framework explaining export performance in emerging and transition economies as the interaction of institutional enabling power, firm conversion capability, and capability pipelines that sustain modernization. The synthesis demonstrates that institutional quality—through legal credibility, regulatory effectiveness, and trade facilitation—reduces transaction costs and uncertainty, thereby amplifying the returns to firm strategy and operational discipline (Abreo et al., 2021; Iwanow & Kirkpatrick, 2007; Li et al., 2013). Insecurity and governance distortions alter trade patterns and raise outcome variability, pushing firms toward defensive strategies and increasing the importance of robust internal capabilities (Anderson & Marcouiller, 2002; Lee & Weng, 2013). At the firm level, managerial orientation shapes export intensity, but its effectiveness is contingent on institutional context and complemented

by practical capabilities such as working capital management that enable reliable execution of export commitments (Agnihotri & Bhattacharya, 2015; Bernard et al., 2019). The contingency view further clarifies that institutional improvements may have the greatest marginal benefit for smaller and younger firms, for whom institutional frictions can be decisive barriers to sustained exporting (LiPuma et al., 2013; Leonidou, 2004).

A distinctive contribution of the article is the explicit integration of capability pipelines: education, training, interactive technologies, and digitally mature learning ecosystems that shape modernization feasibility and export readiness over time (Bekteshi, 2019; Kadoić et al., 2018; Tocto-Cano et al., 2020; Popenici, 2022). Modernization via automated systems is positioned as a feasible pathway to operational reliability and competitiveness when supported by appropriate skills and governance (Huk & Skliarenko, 2022). In the digital era, the exporter's competitiveness increasingly depends on the ability to learn and adapt—capabilities that are cultivated not only inside firms but also through broader institutional learning infrastructures (Bobro, 2024; Khomenko et al., 2024).

Taken together, the integrated framework implies that policy and management interventions should be designed as complementary bundles rather than isolated actions. Institutional reforms are more effective when firms can upgrade capabilities to exploit improved predictability; capability-building initiatives are more productive when institutions allow capabilities to convert into stable export outcomes. For researchers, the framework offers a coherent set of propositions and boundary conditions that connect institutions, strategy, finance, and learning ecosystems into a single explanatory architecture grounded strictly in the provided literature.

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