

## A CONCEPTUAL FRAMEWORK FOR THE INTERNATIONALISATION PROCESS: STRATEGIC SOLUTION FOR COMPANIES IN A GEOPOLITICALLY UNCERTAIN WORLD

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### ABSTRACT

*Geoeconomic and geopolitical uncertainty is reshaping the rules of internationalization, particularly for small and medium-sized enterprises (SMEs) in Central and Eastern Europe (CEE). While large multinational corporations can absorb shocks through scale, resources, and diversified operations, SMEs in less affluent EU member states are more vulnerable to disruptions caused by war, supply chain volatility, inflation, or regulatory instability. Their limited capital and market power make internationalization more difficult, although their survival often depends on expanding abroad. Existing internationalization models such as Uppsala, Born Global, or the Network approach provide valuable insights, but they remain general frameworks. They were not designed to capture the specific vulnerabilities of SMEs in CEE facing geoeconomic and geopolitical risks. This study addresses this gap by developing an adapted conceptual model - named **SAGE** (Scanning, Assessment, Governance, Evaluation) - that transforms classical theories into a practical system for uncertainty management. The model emphasises that although uncertainty cannot be fully predicted or controlled, SMEs can still benefit from their flexibility and speed in decision-making by adopting a structured process of scanning, assessing, governance and evaluation, thereby turning agility into a strategic advantage.*

*The framework is developed through an extensive literature review of internationalization theories and uncertainty management, combined with a case study in a SME from CEE applying internationalization under uncertainty. The expected results highlight that SMEs equipped with the SAGE system can mitigate the disadvantages of limited resources, enhance resilience, and pursue internationalisation even under volatile conditions.*

**KEYWORDS:** *geopolitical, internationalization, risk management, SAGE, uncertainty management*

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### 1. INTRODUCTION

Over the past five years, the global economy has been exposed to overlapping shocks that have placed the world at risk of fragmentation, following decades of increasing global integration. Despite the benefits of globalization, the process of geoeconomic fragmentation has manifested across multiple domains, maintaining unusually persistent market volatility. Defined as a policy-driven reversal of financial and economic integration, often guided by strategic considerations (Campos et al., 2023), geoeconomic fragmentation is closely linked to rising geopolitical tensions that follows Brexit, U.S. – China trade frictions, the COVID-19 pandemic, and Russia's invasion of

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Ukraine. In such a global environment, fragmentation is associated with rising trade barriers, supply chain instability, financial market pressures, investment restrictions, and the reconfiguration of economic alliances (Hakobyan et al., 2023). For companies, the main consequence is heightened dependence on national and regional policies as well as increased vulnerability to external shocks (e.g., wars, sanctions, pandemics, trade disputes). In this uncertain and fragmented global context, internationalization emerges as a strategic solution for reducing vulnerabilities and diversifying sources of growth. Whereas internationalization was traditionally seen as a growth and expansion strategy in a relatively stable environment, it now functions as both a risk management and survival strategy in a world shaped by geoeconomic fragmentation (Bracke & Schmitz, 2011). Internationalization allows firms to expand beyond their home countries through exports, partnerships, subsidiaries, or direct investment. However, this expansion involves critical decisions regarding market entry, resource commitments, and adaptation to local environments (Bellucci et al., 2022). Today, internationalization is not only a path to growth, but also a strategic mechanism to enhance resilience, diversify exposures, and safeguard long-term competitiveness in a geopolitically uncertain world (Buchnea & Elsahn, 2022). In fractured global trade systems, economies with strong vertical links to major foreign markets are more exposed to international supply chain disruptions. Because supply chains are highly internationalized, disturbances propagate quickly from one market to another. Firms therefore seek resilience by diversifying markets, suppliers, and partners, and by strengthening risk governance and uncertainty management - measures that complement rather than replace international activities (Bai et al., 2022).

When expanding internationally, organizations confront risks such as political instability, currency fluctuations, regulatory changes, cultural differences, and market volatility. The way multinational corporations (MNCs) and small and medium-sized enterprises (SMEs) perceive and manage these risks differs significantly, due to their resources, structures, and strategic orientations. MNCs typically display higher risk tolerance, supported by large financial reserves, diversified portfolios, and well-established international networks. They also benefit from risk dispersion across multiple regions and specialized teams monitoring global developments, which reduces the impact of geopolitical and geoeconomic uncertainty (Liesch et al., 2011). In contrast, SMEs tend to be more risk-averse, as limited capital and narrower market scope increase their vulnerability to external shocks. For SMEs, internationalization offers access to larger markets, enhanced brand value, and risk diversification, but their capacity to manage uncertainty remains constrained (Cuervo-Cazurra et al., 2018). In summary, MNCs often pursue internationalization as part of a long-term strategic plan aligned with global competitiveness and shareholder expectations, while SMEs tend to approach internationalization reactively, driven by immediate opportunities rather than comprehensive strategies.

Given the growing academic and policy interest in internationalization in emerging and transition economies (Dabic & Lamotte, 2017; Ipsmiller & Dikova, 2021), this paper focuses on SMEs in Central and Eastern Europe (CEE). For these firms, international expansion represents not only an opportunity for growth but also an adaptive response to geopolitical uncertainty. Compared to developed economies, the drivers of internationalization in emerging and transition contexts are distinct. Many CEE economies continue to report GDP per capita levels below the EU average, implying thinner buffers against shocks and lower capital deepening (Eurostat, 2025). According to the EIB (2024), uncertainty and energy costs remain among the most significant obstacles to investment across the EU, disproportionately affecting resource-constrained SMEs in CEE. Moreover, only a minority of EU SMEs export directly, and exporting beyond the Single Market is even rarer, underscoring the need to view internationalization as a critical strategy for growth and development. Newly privatized SMEs emerging from state-owned enterprises also lack strong business networks and international partnerships, which are essential to support internationalization. Nevertheless, even without a long tradition in international expansion, CEE SMEs can leverage agility, flexibility, fast learning, and adaptive capacity to approach internationalization as part of a

structured and predictable system. Research on companies' internationalization strategies has evolved along several theoretical streams, including the Uppsala model (Johanson & Vahlne, 2009), the Born Global model (Gabrielsson & Kirpalani, 2004), the Innovation-related model (Du et al., 2022), and the Network model (Johanson & Mattsson, 2015). Each of these frameworks has implications for the strategy, structure, and resources of firms. However, these frameworks remain largely descriptive and provide limited guidance for strategic assessment. Strategic analysis tools such as PESTEL or Porter's Five Forces (Rahman et al., 2025) are typically applied in isolation rather than integrated into internationalization models, creating a disconnect between theoretical explanations of internationalization and the practical instruments managers require to evaluate risks and uncertainty in new markets. Similarly, while the dynamic capabilities perspective (sensing, seizing, and reconfiguring) (Buccieri et al., 2021; Chirumalla, 2021) is well established in the strategy literature, its application to SMEs' internationalization decisions remains underexplored. This gap is particularly pronounced for SMEs in CEE. Research on internationalization in this region is fragmented, often descriptive, and oriented toward transition-specific challenges rather than toward integrating internationalization models with strategic analysis and capability-building frameworks. Consequently, SMEs in CEE lack tailored conceptual tools to guide their international expansion in an uncertain geopolitical environment.

To address this gap, this paper proposes a new conceptual framework that integrates internationalization models with strategic analysis and dynamic capabilities, offering SMEs a systematic approach to international expansion under conditions of uncertainty. The framework - named **SAGE** - is structured around four components that enable firms to manage and mitigate risks: a) *Scanning* early signals from the market, b) *Assessment* of signals and the development of options and contingency plans, c) *Governance* of decision rules, compliance, and stakeholder alignment, and d) *Evaluation* of outcomes and capability upgrades. The SAGE model acknowledges that uncertainty in the internationalization process cannot be fully predicted or eliminated but can be systematically managed through disciplined routines. Therefore, the research question of this study is:

**RQ:** How can SMEs from Central and Eastern Europe enhance their internationalization strategies through adaptive dynamic capabilities under conditions of geopolitical and geoeconomic uncertainty?

We conduct a systematic literature review across internationalization models, as well as strategy and uncertainty economics to identify the gaps specific to SMEs in CEE when facing geoeconomic and geopolitical uncertainty. Therefore, we developed the SAGE adaptive framework by linking the classical models of internationalization along with strategic analysis (PESTEL analysis, and Porter's Five Forces), and pivoting toward a practical dynamic capability approach to manage uncertainty under three specific dimensions: the nature of uncertainty (i.e. geoeconomic and geopolitical), the regional operating context (CEE), and organizational scale (SMEs).

## 2. THEORETICAL BACKGROUND

### 2.1 Internationalization: concept and core models

The seminal papers in the field of business research define the internationalization process as the extension of a firm's product-market strategy to other countries, often through a partial or total replication of its value chain abroad (Johanson & Vahlne, 1977). It also refers to increasing activities outside the home country by adapting strategy, structure, and resources to foreign environments (Calof & Beamish, 1995). The trend toward the globalization of markets makes the internationalization process a driver of sustainable growth and development (Velinov et al., 2020), not only for multinational companies but also for firms from emerging and transition economies (Dabic & Lamotte, 2017). The global context, shaped by political, economic, and social turbulence, poses significant challenges to companies' internationalization, turning it into a multifaceted

process influenced by firm capabilities, market conditions, and global trends (Zaki et al., 2015). Research studies address internationalization as a stepwise, incremental process characterized by cycles of entry, exit, and re-entry, shaped by knowledge, networks, and decision-making under uncertainty (Bellucci et al., 2022; Gammeltoft & Cuervo-Cazurra, 2021). Moreover, contextual factors such as the home-country environment, government policies, and integration into global value chains also play significant roles, particularly for emerging and transitioning economies (Ipsmiller & Dikova, 2021). To explain the diverse ways organizations internationalize - reflecting both gradual and rapid approaches, as well as the influence of organizational type and market context - several conceptual frameworks have emerged. The literature has systematized these typical paths into internationalization models that help managers align objectives, timing, and commitment under conditions of limited information and resources (Roque et al., 2019). The major internationalization models will be presented below.

The Uppsala model (U-model) explains internationalization as a cumulative, experience-based process. Firms start with low-commitment and low-risk entry modes (e.g., occasional exports or intermediaries), then progress to establishing sales subsidiaries and sometimes local production, intensifying their involvement as experiential knowledge reduces perceived uncertainty. Managers often guide expansion based on “psychic distance”, entering culturally and institutionally closer markets first (Johanson & Vahlne, 2009). According to Vahlne (2020), the original Uppsala model incorporates two sets of variables: state variables (the firm’s knowledge and existing commitments) and change variables (learning and new commitment decisions). These elements co-evolve: the firm’s current state shapes how change unfolds, while each change reshapes the state. This continuous interplay creates a dynamic, cumulative process through which knowledge development gradually builds - or, in some cases, erodes - trust and commitment. The model highlights the incremental nature of internationalization, suggesting that firms should align their level of commitment with the pace of learning, advancing step by step as uncertainty decreases. In this context, networks play a central role, as building and strengthening relationships enables firms to cope with uncertainty and identify subsequent commitments (Vahlne & Johanson, 2017).

The Born Global model (BG) explains internationalization as an early and rapid process beginning at the firm’s inception (Knight & Cavusgil, 2004). It assumes that young, knowledge-intensive ventures can leverage founder international orientation, digital channels, and niche positioning to sell abroad without a prolonged domestic stage. This pathway is especially relevant for start-ups and young SMEs whose products or services scale across borders and for which speed to international markets is strategically critical (Roque et al., 2019).

The Innovation-related model (I-model) describes the relationship between internationalization and innovation, often reciprocal in nature (Chang et al., 2019; Chiva et al., 2014). On one hand, innovation serves as a prerequisite for international expansion, as firms must develop new products, processes, or business models to overcome entry barriers and remain competitive in foreign markets (Chang et al., 2019). On the other hand, internationalization itself acts as a driver of innovation by exposing firms to new customer demands, technological advancements, and knowledge networks (Henley & Song, 2019). For example, entering emerging markets may drive firms to redesign products for affordability and efficiency, while expansion into advanced economies fosters learning from highly competitive environments. Similar to the U-model, the I-model conceptualizes internationalization as a sequential process, including a series of distinctive stages. While the *U-model* describes internationalization as a cumulative, experience-based process, the I-model focuses explicitly on the learning processes surrounding the export function and their link to increasing commitment (Roque et al., 2019).

The Network model places relationships at the center of internationalization. Expansion is seen as a process of establishing, maintaining, and developing relationships with other actors in foreign markets (Chandra & Wilkinson, 2017). Access to business networks and the position held within them shape how organizations identify opportunities, gather information, and interpret uncertainty.

Firms lacking network integration face liabilities that can slow or distort foreign market entry, whereas stable network connections reduce uncertainty and support informed decision-making (Musteen et al., 2010). Recent evidence shows that networks mitigate uncertainty caused by institutional distance, which is crucial for international growth. Conversely, under high volatility, SMEs embedded in networks often adopt non-predictive approaches, moving in small, reversible steps and adapting as they learn, rather than committing to detailed plans upfront (Bai et al., 2022). In practice, many firms adopt hybrid or integrated approaches, combining elements from multiple models. They may progress incrementally in some markets, expand rapidly in digitally served niches, and leverage networks broadly, selecting the configuration that best aligns with their objectives, capabilities, and constraints (Saridakis et al., 2019).

The traditional internationalization models presented are robust general frameworks, primarily focused on multinational enterprises (MNEs). However, they are not purpose-built to account for firm size, geographic region, or specific types of uncertainty. By focusing on SMEs from Central and Eastern Europe (CEE) and the uncertainty generated by geopolitical and geoeconomic contexts, this paper proposes a new pathway for internationalization. Several arguments support this approach. First, today's uncertainty is often institutional and policy-driven (e.g., sanctions, technology controls, regulatory shifts), making prediction difficult and necessitating staged commitments. Second, SMEs - particularly in emerging or transition economies - have smaller financial and organizational buffers than MNEs. Third, being more reliant on external networks, SMEs are more likely to delay or scale down expansion when shocks occur. Conversely, stable networks can mitigate institutional frictions and support decision-making under uncertainty (Bai et al., 2022). These observations strengthen the case for pairing internationalization models such as Uppsala, Network, or Born Global with explicit uncertainty-management routines tailored to SME realities in CEE. Success in new markets depends on adaptability, learning, and strategic integration. Strategic analysis frameworks such as PESTEL and Porter's Five Forces are widely used to guide knowledge acquisition, network building, and decision-making logic, which are critical in shaping internationalization pathways (Gammeltoft & Cuervo-Cazurra, 2021). PESTEL analysis examines Political, Economic, Social, Technological, Environmental, and Legal factors that influence international expansion on global market and ongoing operations (Rahman et al., 2025). This framework is particularly useful for companies entering foreign markets or launching new ventures. Porter's Five Forces evaluates industry competitiveness, helping firms understand competitive pressures in target markets by assessing the threat of new entrants, the bargaining power of buyers and suppliers, the threat of substitutes, and rivalry among competitors (Isabelle et al., 2020). Combining PESTEL and Porter's Five Forces as well as other strategic analysis tools (e.g., SWOT - Strengths, Weaknesses, Opportunities, Threats, RBV - Resource-Based View, KBV - Knowledge-Based View) enables companies to align their internationalization processes with today's globalized business environment. Furthermore, recent research (Anastasiu et al., 2020; Helmold, 2019; Rahman et al., 2025) suggests that these frameworks must incorporate modern challenges - such as digital transformation, innovation, regulatory shifts, and demographic and intercultural dynamics - to remain relevant across industries and regions.

## **2.2 Risk and uncertainty**

When expanding internationally, organizations encounter new markets, cultures, and regulatory environments, which expose them to various risks and uncertainties. Previous studies in international business highlight the distinction between these two concepts (Eduardsen & Marinova, 2020; Liesch et al., 2011). Risk is usually defined as exposure to events whose probability can be estimated, allowing managers to model potential outcomes and prepare mitigation strategies (Liesch et al., 2011). In contrast, uncertainty arises when probabilities cannot be meaningfully assessed or when the environment changes so rapidly that predictions lose reliability (Alimadadi et al., 2018). In fact, uncertainty reflects the natural condition under which most entrepreneurial decisions and

processes unfold (Korsgaard et al., 2016). Alvarez and Barney (2020) emphasize that risk can be managed with statistical tools and insurance-type mechanisms, while uncertainty requires flexible responses and continuous adaptation (Magnani & Zucchella, 2019). Seminal contributions in management theory reinforce this distinction. Knight (1921) underlined that risk corresponds to measurable variation, while uncertainty refers to the immeasurable aspects of entrepreneurial behavior. Later research confirmed that uncertainty is best understood as a perceived inability to forecast with confidence, which directly influences judgment, timing, and the willingness to commit resources (Verbeke & Ian Lee, 2021). Internationalization decisions represent a strategic paradigm involving both risks and uncertainties, especially for SMEs from emerging and transition economies. In recent years, scholars and institutions have highlighted the growing importance of geoeconomic and geopolitical uncertainty. According to the IMF (2023), these forms of uncertainty are deeply institutional and political, encompassing trade restrictions, regulatory shifts, technology controls, and disruptions in supply chains. Bailey et al. (2022) argue that these shocks propagate far beyond conflict zones due to the high interdependence of global value chains, making them systemic in nature. Panon et al. (2024) further show that for European economies, reliance on foreign critical inputs such as energy and advanced components has made vulnerabilities particularly visible.

The COVID-19 pandemic, the war in Ukraine, and tensions in the Middle East illustrate how unexpected events can reshape international business landscapes within very short periods. These disruptions affect not only macroeconomic indicators such as inflation and energy prices but also microeconomic realities at the firm level, where companies face logistics delays, input shortages, and sharp cost increases (Gereffi, 2020). In such an environment, internationalization becomes more difficult, as managers cannot rely on stable rules of the game. Instead, they must pursue strategic expansion while accounting for the risk of abrupt reversals driven by political or regulatory shocks (Bremmer, 2022). The way small and medium-sized enterprises (SMEs) perceive these challenges directly influences their internationalization behavior and decisions. SMEs often have thinner financial buffers, less specialized staff, and more limited access to external financing than large multinationals. They are also highly dependent on the decisions of their owners, who may prioritize short-term survival and immediate revenue over long-term strategic positioning. This tendency often leaves risk and uncertainty management underdeveloped, particularly in internationalization strategies where the pressure is to expand quickly rather than prepare for adverse scenarios. Nevertheless, SMEs also benefit from several advantages. Their flexibility and speed in decision-making can become strengths when guided by appropriate frameworks (Bai et al., 2022). As Miocevic and Morgan (2018) observed, small firms can adjust operations rapidly, shift resources with fewer bureaucratic obstacles, and exploit niche opportunities that larger firms might overlook. The key challenge is to provide them with tools that make uncertainty more manageable without requiring heavy investments or complex expertise. Existing frameworks, such as ISO 31000 or COSO (the most popular enterprise risk management frameworks) standards, offer structured approaches to risk governance, but Witantri et al. (2025) argue that these remain broad and general, failing to address the distinctive challenges of geoeconomic and geopolitical shocks. This situation reveals an important gap. While established risk management systems are valuable, there is a pressing need for models that translate their principles into practical instruments adapted to the realities of smaller firms operating in uncertain economic environments. Addressing this gap requires integrating the lessons of classical management with the specificities of today's uncertainty, thereby creating approaches that are both rigorous and applicable (Verbeke & Ian Lee, 2021).

### **2.3 Managing uncertainty through Dynamic Capabilities**

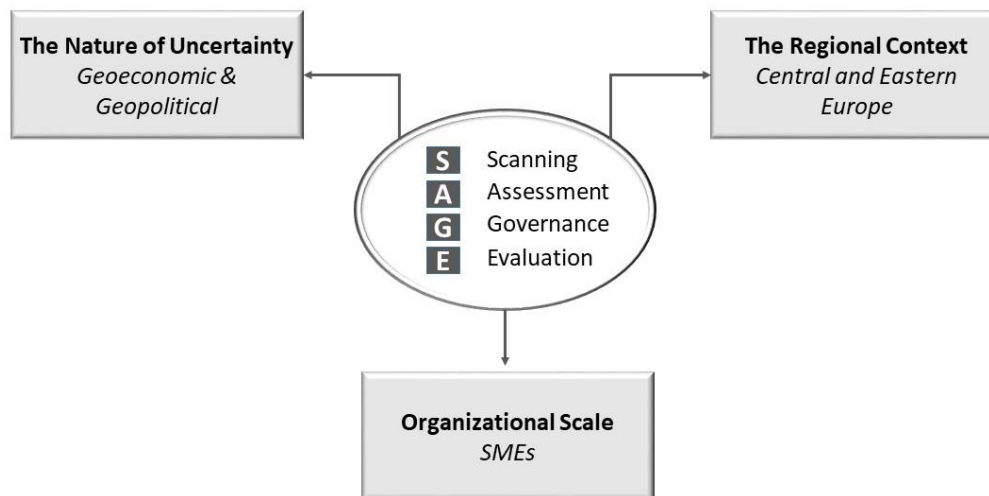
Traditional risk management frameworks, such as ISO 31000 and COSO, provide structured processes for identifying, assessing, and mitigating risks. They are particularly effective in

relatively stable contexts where risks can be defined, probabilities estimated, and controls embedded into governance structures. However, when organizations operate in truly unpredictable environments, these models lose much of their practical relevance. Their reliance on ex ante assessment and compliance-oriented procedures makes them less suitable for contexts characterized by ambiguity, volatility, and systemic shocks. In such settings, the ability to sense weak signals, seize emerging opportunities, and transform routines becomes more valuable than standardized controls. This is precisely the domain of Dynamic Capabilities theory (Teece, 2007; Eisenhardt & Martin, 2000), which prioritizes agility, resilience, and continuous learning over prescriptive frameworks. Dynamic capabilities are considered by many scholars to be the organizational antidote to profound uncertainty (Teece et al., 2016). Rather than relying on prediction - which becomes impossible in highly volatile contexts - these capabilities embody organizational agility, enabling firms to adapt quickly and reconfigure their resources as circumstances demand (Bechtel & Kock, 2023). This shift from prediction to adaptability is particularly crucial during internationalization, where companies face multiple layers of uncertainty, such as regulatory shifts, cultural complexities, and geopolitical tensions (Fredrich et al., 2022). The dynamic capabilities framework identifies three core dimensions: sensing opportunities and threats, seizing them through strategic resource commitments and business model innovation, and transforming through continuous asset reconfiguration (Teece, 2007). Eisenhardt and Martin (2000) offer a complementary processual view, identifying dynamic capabilities as specific organizational processes such as new product development, strategic alliance formation, supply chain reconfiguration, and due diligence routines. Their key insight concerns how environmental dynamism shapes these processes. In moderately dynamic markets, processes tend to be stable, analytical, and codified through standard operating procedures. In contrast, in high-velocity environments, they become simpler, faster, and more iterative, guided by basic rules and experimentation (Winter, 2003). These perspectives are not mutually exclusive but rather complementary. Dynamic capabilities operates both as internal building blocks that generate organizational agility, and as concrete processes through which this agility manifests. Their effectiveness depends on how well organizations calibrate these elements to match the level of dynamism and uncertainty they face (Ma et al., 2025).

The mechanisms through which organizations develop dynamic capabilities highlight the role of organizational learning, based on three activities (Zollo & Winter, 2002): a) experience accumulation, b) knowledge articulation, and c) knowledge codification. According to Basten and Haamann (2018), experience accumulation occurs through learning by doing - repeatedly performing tasks and extracting lessons from outcomes. Knowledge articulation involves discussions, debriefings, and collective reflection to clarify causal relationships and understand why certain approaches succeed or fail. Knowledge codification formalizes these insights into manuals, rules, procedures, or organizational routines, thereby preserving learning beyond individual memory. For companies pursuing internationalization in today's geoeconomic and geopolitical context, dynamic capabilities provide a suitable framework for managing uncertainty, in contrast with traditional risk management approaches (Peng, 2025). This challenge is particularly acute for small and medium enterprises (SMEs) in Central and Eastern Europe (CEE), which typically operate with limited buffers against external shocks and rarely employ formal uncertainty management models. Consequently, they face disproportionate exposure to geopolitical disruptions, including sanctions, regional instability, and shifting trade regimes (Fredrich et al., 2022). Such context requires using the dynamic capabilities framework by integrating Teece's sensing-seizing-transforming cycle with the learning mechanisms of Zollo and Winter. This provides a foundation for adaptive approaches - such as the SAGE framework we proposed - better suited to guide SMEs through internationalization under uncertainty.

### 3. SAGE FRAMEWORK DEVELOPMENT

This section presents a conceptual model for uncertainty management in small and medium-sized enterprises (SMEs) from Central and Eastern European (CEE) countries, grounded in the dynamic capabilities approach. The model aligns with international business literature by linking classical internationalization theories with strategic analysis and uncertainty management to develop a framework structured around three specific dimensions: the nature of uncertainty (gloeconomic and geopolitical), the regional operating context (CEE), and organizational scale (SMEs) (Figure 1). We adopted a sequential approach, as outlined below.



**Figure 1. Positioning of the SAGE framework**

*Source: Authors*

#### 3.1 Rationale for a New Framework

Internationalization faces significant challenges when the geopolitical and economic environment changes unpredictably at the global level. While multinational enterprises (MNEs) maintain enduring cross-border capabilities, SMEs face more complex strategic challenges as they pursue growth opportunities abroad, thereby increasing their exposure to risk. Furthermore, SMEs in the CEE region often operate with constrained resources, limited managerial capacity, and a high dependence on external markets for growth. They are also disproportionately vulnerable to external shocks, including geopolitical disruptions, sanctions, supply chain dislocations, and shifting regulatory regimes. This evidence reveals a strategic dilemma: pausing international expansion may seem safer in the short term, yet prolonged hesitation rarely preserves competitive advantage. The fundamental question, therefore, is how resource-constrained firms can continue expanding while maintaining strategic flexibility in an increasingly volatile geopolitical landscape.

Classical internationalization frameworks provide valuable strategic logics for global expansion (Chandra & Wilkinson, 2017; Chang et al., 2019; Johanson & Vahlne, 2009; Knight & Cavusgil, 2004). Models such as the Uppsala, I-model, and Born Global offer useful conceptual anchors but show clear limitations under conditions of heightened uncertainty. The Uppsala model emphasizes gradual market entry and experiential learning, assuming relatively stable environments and predictable institutional contexts. By contrast, the Born Global model highlights speed and early internationalization but often presupposes the availability of extensive networks, resources, and

institutional support - factors that SMEs in CEE rarely possess. This asymmetry of exposure and resilience underscores the inadequacy of traditional internationalization frameworks in emerging and transition contexts. Dynamic capabilities theory, as articulated by Teece (2007), offers a valuable lens for understanding adaptation under uncertainty by emphasizing firms' abilities to sense environmental changes, seize emerging opportunities, and transform their resource base accordingly. However, these established frameworks – although theoretically and empirically validated - remain general and abstract in their formulation. When SMEs in CEE confront the specific volatility of geopolitical uncertainty, characterized by policy-driven disruptions in trade flows, technology access, and regulatory compliance, a more adaptive and contextually specialized model becomes essential.

This study responds to these specificities by proposing an adaptive framework that overlays classical internationalization logics with a disciplined approach to uncertainty, designed specifically for SMEs from the CEE region facing policy-driven shocks. For these firms, the challenge lies in translating dynamic capabilities theory into practical, low-cost, and accessible routines that enable managers to sense risks, identify opportunities, and reconfigure operations accordingly. The framework focuses on SMEs in CEE for two key reasons:

1. The region faces heightened exposure to geopolitical volatility due to geographical proximity to conflict zones and historical dependence on disrupted trade corridors (Meyer & Peng, 2016).
2. These firms operate under typical SME constraints, such as concentrated decision-making by owner-managers and limited analytical capacity (Laufs & Schwens, 2014).

Hence, we propose the SAGE framework as a complementary approach to classical internationalization theories, designed to make geopolitical uncertainty manageable at the SME scale. The SAGE framework emerges from the need to re-anchor theory in operationally viable mechanisms for SMEs in volatile regional contexts.

### **3.2 Integration of Theoretical Foundations**

Drawing on a synthesis of classical internationalization models (Chandra & Wilkinson, 2017; Johanson & Vahlne, 2009; Knight & Cavusgil, 2004), the literature on dynamic capabilities (Cyfert et al., 2021; Fernandes et al., 2017; Kurtmollaiev, 2020), and uncertainty management (Bai et al., 2022; Bailey et al., 2022; Liesch et al., 2011), the proposed framework aligns these theoretical foundations with the contextual specificities of SMEs in Central and Eastern Europe. The internationalization process for such firms must integrate robust mechanisms for scanning and evaluating the geopolitical and geoeconomic environment, as well as capabilities for rapid strategic reorientation and resource reallocation when environmental conditions shift. These requirements call for an adaptive uncertainty management approach, which is the central focus of the framework we proposed. The SAGE framework integrates two complementary theoretical pillars. On one side, Teece's dynamic capabilities framework (sensing, seizing, and transforming) (Teece, 2007) articulates the high-level processes through which organizations navigate uncertainty. On the other, Zollo and Winter's mechanisms of organizational learning (experience accumulation, knowledge articulation, and knowledge codification) specify how these processes become embedded in organizational routines (Zollo & Winter, 2002). Although conceptually powerful, these foundations are often too abstract and demanding for SMEs, especially those in emerging European economies. Small firms lack substantial financial reserves, diversified portfolios, established international networks, and specialized departments. Moreover, mechanisms that reduce uncertainty - such as extensive market research, long-term partnerships, or lobbying capabilities - are often absent. To be relevant in the CEE context, these theoretical insights must be simplified, routinized, and operationalized into managerial practices that can be deployed without significant financial or cognitive overhead. The SAGE framework thus serves as a bridge between theoretical depth and managerial pragmatism. It translates the abstract constructs of dynamic capabilities and

organizational learning into a sequence of straightforward, SME-friendly routines that can be integrated into daily management practices.

### 3.3 The SAGE Framework

The SAGE framework translates dynamic capabilities theory into a set of structured routines for managing geopolitical uncertainty within SME internationalization processes. It integrates the two major approaches to dynamic capabilities - those of Teece and of Zollo & Winter - into a unified operational cycle. This allows us to provide stronger conceptual depth by aligning what organizations must do (sensing–seizing–transforming; Teece, 2007) with how they learn to do it (accumulation–articulation–codification; Zollo & Winter, 2002). Accordingly, SAGE introduces accessible stages with clear operational steps, adapting data, processes, and procedures to the specific type of uncertainty faced. The following subsections describe how Teece’s dynamic capabilities (strategic “what”) and Zollo & Winter’s learning mechanisms (process “how”) integrate within each of the four SAGE stages.

**a) Scanning.** The first stage emphasizes the *sensing* function (Teece, 2007), which detects early signals of policy-driven and geopolitical change. For SMEs, systematic scanning requires structured strategic analysis methods such as PESTEL (for macro-environmental analysis of political, legal, and economic factors with geoeconomic implications) and Porter’s Five Forces (for assessing industry structure under shock conditions). These tools enable the identification of weak geopolitical signals such as policy speeches, draft legislation, tariff changes, sanction updates, or logistics bottlenecks. The emphasis lies in cultivating managerial sensitivity to early warning signs that might otherwise be overlooked in daily operations. Simultaneously, the Scanning stage reflects the *experience accumulation* mechanism described by Zollo and Winter (2002). Through repeated monitoring of markets, policies, and supply chains, SMEs accumulate tacit knowledge about which sources are reliable and which signals are meaningful - a process of “learning by doing” that strengthens experiential awareness of uncertainty.

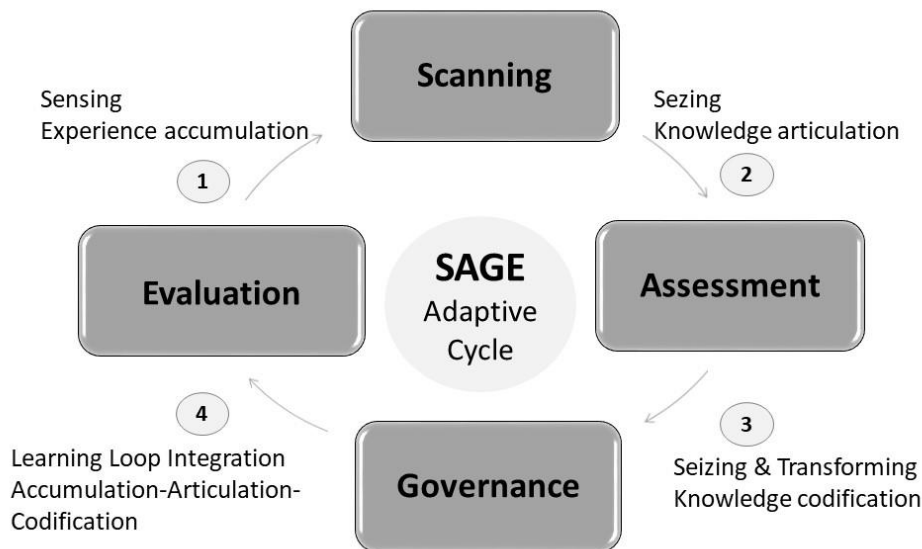
**b) Assessment.** This stage embeds the seizing capability (Teece, 2007), transforming environmental signals into inputs variables and decision options. It focuses on interpreting geopolitical signals detected in the previous stage, including political instability, economic fluctuations, cyber threats, or supply chain vulnerabilities. For SMEs in CEE, geopolitical risks often have distinctive impacts, and many rely excessively on historical data rather than anticipating transformative events. The Assessment stage helps firms prioritize the most relevant developments and set actionable objectives, preventing strategic paralysis in volatile contexts. This stage corresponds to Zollo and Winter’s knowledge articulation mechanism. Assessment involves converting raw signals into actionable insights through structured discussions, debriefings, and managerial reflection. In many SMEs, such articulation occurs informally - in meetings or ad hoc conversations - but this informality limits effectiveness. The SAGE framework formalizes this process, transforming ambiguous information into actionable knowledge through repeatable procedures.

**c) Governance.** The third stage bridges the seizing and transforming phases (Teece, 2007), translating strategic options from the Assessment stage into adaptive mechanisms related to contractual, organizational, and relational structures. Governance focuses on partner selection, flexible contractual clauses, and decision protocols that allow firms to pivot during shocks (Musawir et al., 2020). For SMEs in CEE, governance mechanisms are critical, as informal networks and path dependence often dominate strategic relationships. Formalizing this stage through a project management–based approach (Dewulf & Garvin, 2020) can help coordinate uncertainty-driven initiatives. The integration of RACI principles - defining who is Responsible, Accountable, Consulted, and Informed for each decision or task (Lee, 2021) - reduces ambiguity and clarifies decision rights and information flows without creating excessive bureaucracy. Moreover, embedding project management tools such as RACI matrix ensures that strategic triggers

identified during Assessment stage are rapidly translated into coherent action without delays or overlaps, even in resource-constrained environments. Governance mechanisms become effective only when lessons from past experiences are codified into rules, checklists, and templates - reflecting Zollo and Winter’s knowledge codification mechanism. Codification allows SMEs to standardize adaptive practices (e.g., multi-sourcing guidelines, flexible contracts, partner evaluation protocols), ensuring that resilience does not depend solely on individual experience. This makes the Governance stage scalable and repeatable.

**d) Evaluation.** The final stage emphasizes rapid learning and continuous adaptation. Evaluation requires systematic reflection on what worked, what failed, and why. SMEs can operationalize this through checklists, after-action reviews, or brief debrief meetings that codify lessons learned for future application. Evaluation closes the learning loop by integrating Zollo and Winter’s mechanisms - experience accumulation, articulation, and codification - into a continuous cycle. After-action reviews allow firms to embed new experiences into codified routines, ensuring that each SAGE iteration strengthens organizational capabilities. Evaluation thus serves as the mechanism that reinforces learning across all stages.

In essence, dynamic capabilities define what capabilities are required, while organizational learning mechanisms define how they are operationalized. The SAGE framework specifies how these two dimensions can jointly enhance SME internationalization strategies through context-specific routines and governance mechanisms adapted to uncertainty (Figure 2).



**Figure 2. The SAGE Framework as an Adaptive Learning Cycle**  
 Source: Authors

The alignment between Teece’s Dynamic Capabilities (“what to do”), Zollo & Winter’s Learning Mechanisms (“how to do”), and the SAGE operational routine is presented in Table 1.

**Table 1. Linking Dynamic Capabilities, Learning Mechanism, and the SAGE framework**

Dynamic Capabilities (“what to do”)	Learning Mechanisms (“how to do”)	SAGE Framework (SME operationalization)	Managerial Implication
Sensing - identifying opportunities and threats	<b>Experience Accumulation</b> – learning by doing, repeated exposure to signals.	<b>Scanning</b> - systematic detection of weak signals (geopolitical, commercial).	Build sensitivity and pattern recognition through regular monitoring and market exposure.
Seizing - mobilizing resources to capture opportunities	<b>Knowledge Articulation</b> – reflection, dialogue.	<b>Assessment</b> - transforming signals into actionable decision options.	Clarify meaning through structured discussions and prioritization routines
Transforming - reconfiguring assets and processes	<b>Knowledge Codification</b> – formalizing insights into rules, procedures, templates	<b>Governance</b> - adaptive decision protocols, flexible contracts, partner safeguards.	Institutionalize adaptive practices into codified routines.
<b>All three capabilities cycle</b>	Integration of accumulation-articulation-codification.	<b>Evaluation</b> - rapid learning loops, after-action reviews.	Reinforce organizational learning.

Source: Authors

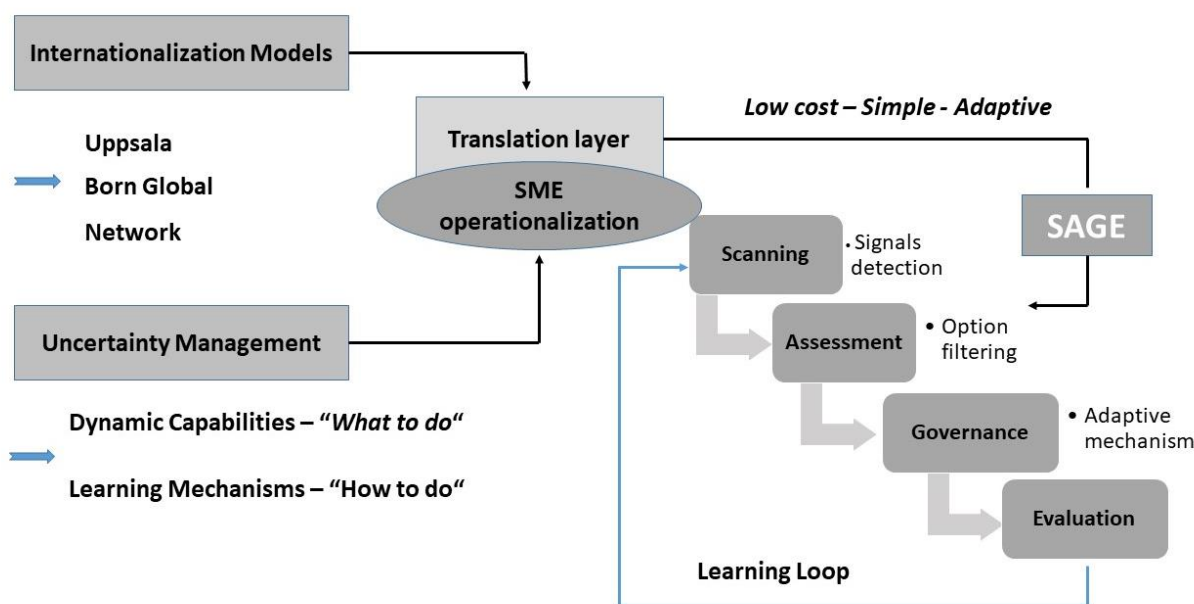
Our framework prioritizes accessibility and practical implementation, offering a low-cost operational tool that teams responsible for SME internationalization can readily adopt and integrate into existing decision-making processes. The SAGE framework operates as an integrated decision cycle in which environmental monitoring flows naturally into strategic assessment and adaptive governance, complementing established internationalization approaches under geopolitical uncertainty. What is novel in SAGE is its design principle based on simplicity, low cost, and adaptability, tailored to SMEs operating in volatile regional environments. Unlike abstract theoretical models or resource-intensive corporate systems, SAGE embeds strategic adaptability into a manageable cycle that SMEs can realistically adopt.

### 3.4 Classical Models of Internationalization with SAGE Integration

The Uppsala model’s incremental internationalization through experiential learning gains enhanced resilience when combined with SAGE functions at each of its four stages. In the initial export phase, the *Scanning* function focuses on identifying policy developments that affect target markets - such as energy price volatility or transport corridor disruptions. For instance, a CEE manufacturer targeting DACH (The acronym for Germany, Austria, and Switzerland region countries that represent some of the world’s fastest-growing hubs for global commerce) markets should continuously monitor sanctions regimes or cross-border freight restrictions, as these directly affect operational feasibility. The Assessment function then transforms such signals into strategic intelligence, evaluating implications for cost structures and market entry risks. This process supports low-commitment strategies - such as marketplace exports or distributor partnerships - that facilitate experiential learning while maintaining strategic flexibility. Decision-making is therefore linked to clear operational triggers: for example, if logistics lead times exceed a defined threshold, subsidiary establishment is postponed until stability returns. As internationalization progresses toward higher commitment modes, the Governance function embeds geopolitical uncertainty management into operational procedures. Partner vetting processes may include systematic

sanctions and export-control screening, while commercial contracts can integrate automatic renegotiation or suspension clauses activated by predefined geopolitical risk indicators. Finally, the Evaluation function captures learning from each step, codifying insights about geopolitical risk patterns and market responses. This institutionalized learning reinforces future decision quality and reduces the likelihood of costly strategic reversals. Integrating SAGE into the Uppsala model preserves its incremental logic while introducing a structured geopolitical risk management layer that strengthens resilience under uncertainty. Other classical internationalization approaches - such as the Network model and the *Born Global* model - can also benefit from SAGE integration. In network-driven strategies, where SMEs' expansion depends on relational ties, Scanning helps detect early geopolitical signals that could disrupt interfirm linkages, while Governance establishes contractual, organizational, and relational safeguards. For Born Global firms - whose internationalization is rapid and often simultaneous across markets - SAGE enables parallel Scanning across multiple environments and accelerated Assessment-Evaluation cycles. This is especially valuable for CEE SMEs, for which speed of internationalization is strategically critical but often constrained by uncertainty.

The integration of SAGE into classical models follows the operational characteristics of each approach. SAGE is particularly suitable for SMEs because it enhances flexibility and enables rapid decision-making without requiring extensive resources or complex analytical infrastructure (Figure 3).



**Figure 3. SAGE framework integration into classical models and theories**  
 Source: Authors

Overall, the SAGE framework demonstrates strong transferability: its four stages represent a modular architecture that can be populated with context-specific processes, rules, and data across different uncertainty types. Unlike broadly applied dynamic capabilities approaches, SAGE offers a low-cost, lightweight, and context-sensitive mechanism for uncertainty management - particularly suited to SMEs in volatile geopolitical or regulatory environments. This mechanism lies in the research question of the study, showing to what extent can the SAGE framework provide SMEs from CEE region with a practical dynamic capability approach to manage uncertainty in their internationalization process.

#### 4. LIMITATIONS AND FUTURE RESEARCH

Although this study proposes a conceptual framework for managing uncertainty in SME internationalization, several limitations remain. The SAGE model emerged through theoretical synthesis rather than empirical validation; thus, its strength lies in conceptual plausibility rather than observed outcomes. As Jaakkola (2020) notes, conceptual frameworks often precede empirical theory-building, positioning this work as exploratory and preliminary. The absence of case-based demonstrations limits explanatory power. No empirical studies have yet tested how SMEs might implement SAGE or how its mechanisms perform under geopolitical turbulence. This gap calls for qualitative and quantitative research (Eisenhardt & Graebner, 2007), including multiple-case or longitudinal designs comparing SAGE adopters with control groups. Moreover, because the current paper focuses on geopolitical uncertainty in CEE region, the model’s transferability to other uncertainty domains - such as technological volatility, regulatory change, or market turbulence - remains untested. Similarly, its adaptability across different institutional environments is unknown. Addressing these constraints will determine whether SAGE captures universal internationalization routines or merely context-specific responses to CEE conditions.

Future research should therefore assess SAGE’s practical impact through empirical testing and broaden its scope beyond CEE contexts. Studies applying SAGE to other uncertainty types and regions would clarify how institutional and cultural differences affect implementation. Such research would transition SAGE from a theoretical proposition to an empirically grounded model, enhancing both its academic robustness and managerial relevance.

#### 5. CONCLUSIONS

This paper introduces **SAGE**, an adaptive uncertainty management framework for the internationalization of SMEs operating under volatile geopolitical and economic conditions. Derived from Dynamic Capabilities theory, SAGE operationalizes Teece’s sensing-seizing-transforming logic and Zollo & Winter’s learning mechanisms (accumulation-articulation-coding) into four managerial routines: Scanning, Assessment, Governance, and Evaluation. While Dynamic Capabilities provide a valuable conceptual foundation for organizational adaptation, their abstract nature limits applicability in SMEs that face resource constraints. The SAGE framework addresses this limitation by tailoring the approach to three contextual dimensions: the nature of uncertainty (geoeconomic/geopolitical), the regional context (CEE), and the organizational scale (SMEs). SAGE’s distinct contribution lies in translating dynamic capabilities into pragmatic, resource-efficient practices. Its novelty derives from three features:

- a. Low-cost design – the framework does not rely on advanced analytical systems but instead leverages managerial discipline and simple tools.
- b. Context sensitivity – explicitly accounts for the geopolitical and geoeconomic vulnerabilities of SMEs in Central and Eastern Europe.
- c. Practical adaptability – it is structured to evolve iteratively, enabling firms to recalibrate their routines as environmental conditions shift.

By integrating strategic analysis tools such as PESTEL and Porter’s Five Forces within the Scanning stage, and RACI-based principles within Governance, SAGE enables structured yet agile decision-making even in firms lacking formal risk management functions. Beyond its immediate geopolitical focus, SAGE serves as a *transferable architecture* applicable across uncertainty types and industries. Its dual value lies in both its managerial practicality - as a roadmap for owner-managers navigating uncertainty – and its theoretical contribution as a contextualized operationalization of dynamic capabilities. Through these contributions, the study aimed to

transform the abstract language of dynamic capabilities into a practical roadmap for decision-making under uncertainty. It offers SMEs not only a way to withstand volatility but a means to navigate through it with strategic intent - turning uncertainty into a strategic learning arena that supports sustainable international growth.

## REFERENCES

- Alimadadi, S., Bengtson, A. & Hadjikhani, A. (2018). How does uncertainty impact opportunity development in internationalization. *International Business Review*, 27, 161–172. <https://doi.org/10.1016/j.ibusrev.2017.06.002>.
- Alvarez, S., A. & Barney, J., B. (2020). Has the concept of opportunities been fruitful in the field of entrepreneurship? *Academy of Management Perspectives*, 34(3), 300–310. <https://doi.org/10.5465/amp.2018.0014>.
- Anastasiu, L., Gavriş, O. & Maier, D. (2020). Is human capital ready for change? A strategic approach adapting Porter’s five forces to human resources. *Sustainability*, 12(6), 2300. <https://doi.org/10.3390/su12062300>.
- Bai, W., Johanson, M., Oliveira, L., Ratajczak-Mrozek, M. & Francioni, B. (2022). Where business networks and institutions meet: Internationalization decision-making under uncertainty. *Journal of International Management*, 28(1), 100904. <https://doi.org/10.1016/j.intman.2021.100904>.
- Bailey, D., Cowling, K. & Tomlinson, P., R. (2022). Global value chains and geoeconomic policy uncertainty. *International Business Review*, 31(4), 101843. <https://doi.org/10.1016/j.ibusrev.2021.101843>.
- Basten, D. & Haamann, T. (2018). Approaches for organizational learning: A literature review. *SAGE Open*, 8(3). <https://doi.org/10.1177/2158244018794224>.
- Bechtel, J. & Kock, A. (2023). The interplay between dynamic capabilities’ dimensions and their relationship to project portfolio agility and success. *International Journal of Project Management*, 41(4), 102469. <https://doi.org/10.1016/j.ijproman.2023.102469>.
- Bellucci, C., Lavarda, R., A., B. & Floriani, D., E. (2022). Open strategizing and accelerated internationalization process in different contexts. *Journal of Strategy and Management*, 16(3), 189–210. <https://doi.org/10.1108/JSMA-10-2021-0207>.
- Bremmer, I. (2022). *The power of crisis: How three threats – and our response – will change the world*. Ebury Press.
- Bracke, T. & Schmitz, M. (2011). Channels of international risk-sharing: Capital gains versus income flows. *International Economics and Economic Policy*, 8(1), 45–78. <https://doi.org/10.1007/s10368-010-0176-6>.
- Buchnea, E. & Elsahn, Z. (2022). Historical social network analysis: Advancing new directions for international business research. *International Business Review*, 31, 101990. <https://doi.org/10.1016/j.ibusrev.2022.101990>.
- Buccieri, D., Javalgi, R., G. & Jancenelle, V., E. (2021). Dynamic capabilities and performance of emerging market international new ventures: Does international entrepreneurial culture matter? *International Small Business Journal: Researching Entrepreneurship*, 39(5), 474–499. <https://doi.org/10.1177/0266242620969682>.
- Calof, J., L. & Beamish, P., W. (1995). Adapting to foreign markets: Explaining internationalization. *International Business Review*, 4(2), 115–131. [https://doi.org/10.1016/0969-5931\(95\)00001-G](https://doi.org/10.1016/0969-5931(95)00001-G).
- Campos, R., Estefania-Flores, J., Furceri, D. & Jacopo, T. (2023). Geopolitical fragmentation and trade. *Journal of Comparative Economics*, 51(4), 1289–1315. <https://doi.org/10.1016/j.jce.2023.06.008>.

- Chandra, Y. & Wilkinson, I., F. (2017). Firm internationalization from a network-centric complex-systems perspective. *Journal of World Business*, 52(5), 691–701. <https://doi.org/10.1016/j.jwb.2017.06.001>.
- Chang, C., H. Chang, C., H., Hsu, P., K. & Yang, S., Y. (2019). The catalytic effect of internationalization on innovation. *European Financial Management*, 25(4), 942–977. <https://doi.org/10.1111/eufm.12190>.
- Chirumalla, K. (2021). Building digitally enabled process innovation in the process industries: A dynamic capabilities approach. *Technovation*, 105, 102256. <https://doi.org/10.1016/j.technovation.2021.102256>.
- Chiva, R., Ghauri, P. & Alegre, J. (2014). Organizational learning, innovation and internationalization: A complex system model. *British Journal of Management*, 25(4), 687–705. <https://doi.org/10.1111/1467-8551.12026>.
- Cuervo-Cazurra, A., Ciravegna, L., Melgarejo, M. & Lopez, L. (2018). Home country uncertainty and the internationalization-performance relationship: Building an uncertainty management capability. *Journal of World Business*, 53(2), 209–221. <https://doi.org/10.1016/j.jwb.2017.11.002>.
- Cyfert, S., Chwiłkowska-Kubala, A., Szumowski, W. & Miśkiewicz, R. (2021). The process of developing dynamic capabilities: The conceptualization attempt and the results of empirical studies. *PLoS ONE*, 16. <https://doi.org/10.1371/journal.pone.0249724>.
- Dabic, M. & Lamotte, O. (2017). Internationalization of Central and Eastern European firms: Trends and strategies. *European Business Review*, 29 (2), 154–163. <https://doi.org/10.1108/ebrev-01-2017-0020>.
- Dewulf, G. & Garvin, M. (2020). Responsive governance in PPP projects to manage uncertainty. *Construction Management and Economics*, 38, 383–397. <https://doi.org/10.1080/01446193.2019.1618478>.
- Du, J. Zhu, S. & Li, W. (2022). Innovation through internationalization: A systematic review and research agenda. *Asia Pacific Journal of Management*, 1 - 35. <https://doi.org/10.1007/s10490-022-09814-z>.
- Eduardsen, J. & Marinova, S. (2020). Internationalisation and risk: Literature review, integrative framework and research agenda. *International Business Review*, 29, 101688. <https://doi.org/10.1016/j.ibusrev.2020.101688>.
- Eisenhardt, K., M. & Martin, J. (2000). Dynamic capabilities: What are they? *Strategic Management Journal*, 21, 1105–1121. [https://doi.org/10.1002/1097-0266\(200010/11\)21:10/11<1105:AID-SMJ133>3.0.CO;2-E](https://doi.org/10.1002/1097-0266(200010/11)21:10/11<1105:AID-SMJ133>3.0.CO;2-E).
- Eisenhardt, K., M. & Graebner, M., E. (2007). Theory building from cases: Opportunities and challenges. *Academy of Management Journal*, 50(1), 25–32. <https://doi.org/10.5465/AMJ.2007.24160888>.
- European Investment Bank (EIB). (2024). *EIB Investment Survey 2024: European Union overview*. Retrieved September 6, 2025 from [https://www.eib.org/attachments/lucalli/20240238\\_econ\\_eibis\\_2024\\_eu\\_en.pdf](https://www.eib.org/attachments/lucalli/20240238_econ_eibis_2024_eu_en.pdf).
- Eurostat. (2025). *Purchasing power parities and GDP per capita – preliminary estimate*. Retrieved September 20, 2025 from [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Purchasing\\_power\\_parities\\_and\\_GDP\\_per\\_capita\\_-\\_preliminary\\_estimate](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Purchasing_power_parities_and_GDP_per_capita_-_preliminary_estimate).
- Fernandes, C., Ferreira, J., Raposo, M., Estevão, C., Peris-Ortiz, M. & Rueda-Armengot, C. (2017). The dynamic capabilities perspective of strategic management: a co-citation analysis. *Scientometrics*, 112, 529–555. <https://doi.org/10.1007/s11192-017-2397-8>.
- Fredrich, V., Gudergan, S., P. & Bouncken, R., B. (2022). Dynamic capabilities, internationalization and growth of SMEs: The roles of R&D intensity and collaborative

- intensity. *Management International Review*, 62(3), 367–395. <https://doi.org/10.1007/s11575-022-00480-3>.
- Gabrielsson, M., & Kirpalani, V. (2004). Born globals: how to reach new business space rapidly. *International Business Review*, 13 (5), 555-571, DOI: 10.1016/j.ibusrev.2004.03.005.
- Gammeltoft, P. & Cuervo-Cazurra, A. (2021). Enriching internationalization process theory: insights from the study of emerging market multinationals. *Journal of International Management*, 27(3), 100884. <https://doi.org/10.1016/j.intman.2021.100884>.
- Gereffi, G. (2020). What does the COVID-19 pandemic teach us about global value chains? The case of medical supplies. *Journal of International Business Policy*, 3(3), 287–301. <https://doi.org/10.1057/s42214-020-00062-w>.
- Hakobyan, S., Meleshchuk, S. & Zymek, R. (2023). Divided we fall: Differential exposure to geopolitical fragmentation in trade. *IMF Working Papers* 2023/270. <https://doi.org/10.5089/9798400262302.001>.
- Helmold, M. (2019). Tools in PM. In M. Helmold (Ed.), *Progress in performance management* (pp. 111–122). Springer. <https://doi.org/10.1007/978-3-030-20534-8>.
- Henley, A. & Song, M. (2019). Innovation, internationalisation and the performance of microbusinesses. *International Small Business Journal: Researching Entrepreneurship*, 38(4), 337-364. <https://doi.org/10.1177/0266242619893938>.
- International Monetary Fund (IMF). (2023). *Geoeconomic fragmentation and the future of multilateralism* (IMF Staff Discussion Note SDN/2023/001). Retrieved August 28, 2025 from <https://www.imf.org/en/Publications/Staff-Discussion-Notes/Issues/2023/01/11/Geo-Economic-Fragmentation-and-the-Future-of-Multilateralism-527266>.
- Ipsmiller, E. & Dikova, D. (2021). Internationalization from Central and Eastern Europe: A systematic literature review. *Journal of International Management*, 27 (4), 100862. <https://doi.org/10.1016/j.intman.2021.100862>.
- Isabelle, D., Horak, K., McKinnon, S. & Palumbo, C. (2020). Is Porter's Five Forces Framework Still Relevant? A study of the capital/labour intensity continuum via mining and IT industries. *Technology Innovation Management Review*, 10, 28-41. <https://doi.org/10.22215/timreview/1366>.
- Jaakkola, E. (2020). Designing conceptual articles: four approaches. *AMS Rev*, 10, 18–26. <https://doi.org/10.1007/s13162-020-00161-0>.
- Johanson, J. & Vahlne, J.-E. (1977). The internationalization process of the firm—A model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies*, 8, 23–32. <https://doi.org/10.1057/palgrave.jibs.8490676>.
- Johanson, J. & Vahlne, J.-E. (2009). The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership. *Journal of International Business Studies*, 40(9), 1411–1431. <https://doi.org/10.1057/jibs.2009.24>.
- Johanson, J. & Mattsson, L.-G. (2015). Internationalisation in industrial systems — A network approach. In M. Forsgren, U. Holm, & J. Johanson (Eds.), *Knowledge, networks and power* (pp. xx–xx). Palgrave Macmillan. <https://doi.org/10.1057/9781137508829>.
- Knight, F., H. (1921). *Risk, uncertainty, and profit*. MA: Hart, Schaffner & Marx; Houghton Mifflin Company.
- Knight, G., A. & Cavusgil, S., T. (2004). Innovation, organizational capabilities, and the born-global firm. *Journal of International Business Studies*, 35(2), 124–141. <https://doi.org/10.1057/palgrave.jibs.8400071>.
- Korsgaard, S., Berglund, H., Thrane, C. & Blenker, P. (2016). A tale of two Kirzners: Time, uncertainty, and the “nature” of opportunities. *Entrepreneurship Theory and Practice*, 40(4), 867-889. <https://doi.org/10.1111/etap.1215>.
- Kurtmollaiev, S. (2020). Dynamic Capabilities and Where to Find Them. *Journal of Management Inquiry*, 29, 3-16. <https://doi.org/10.1177/1056492617730126>.

- Laufs, K. & Schwens, C. (2014). Foreign market entry mode choice of small and medium-sized enterprises: A systematic review and future research agenda, *International Business Review*, 23(6), 1109–1126. <https://doi.org/10.1016/j.ibusrev.2014.03.006>.
- Lee, S.-H. (2021). Development of the RACI model for processes. *Sustainability*, 13(4), 1806. <https://doi.org/10.3390/su13041806>.
- Liesch, P., W., Welch, L., S. & Buckley, P., J. (2011). Risk and uncertainty in internationalisation and international entrepreneurship studies. *Management International Review*, 51(6), 851–873. <https://doi.org/10.2307/41411011>.
- Ma, X., Chen, L. & Yu, X. (2025). Failure Analysis and SME Growth: The Role of Dynamic Capabilities and Environmental Dynamism, *Systems*, 13(8), 690. <https://doi.org/10.3390/systems13080690>.
- Magnani, G. & Zucchella, A. (2019). Coping with uncertainty in the internationalisation strategy. *International Marketing Review*, 36 (1), 131-163. <https://doi.org/10.1108/IMR-02-2017-0042>.
- Meyer, K., E. & Peng, M., W. (2016). Theoretical foundations of emerging economy business research. *Journal of International Business Studies*, 47(1), 3–22. <https://doi.org/10.1057/jibs.2015.34>.
- Miocevic, D. & Morgan, R. (2018). Operational capabilities and entrepreneurial opportunities in emerging market firms. *International Marketing Review*, 35(2), 320-341. <https://doi.org/10.1108/IMR-12-2015-0270>.
- Musawir, A., Abd-Karim, S. & Mohd-Danuri, M. (2020). Project governance and its role in enabling organizational strategy implementation: A systematic literature review. *International Journal of Project Management*, 38(1), 1-16. <https://doi.org/10.1016/j.ijproman.2019.09.007>.
- Musteen, M., Francis, J. & Datta, D., K. (2010). The influence of international networks on internationalization speed and performance: A study of Czech SMEs. *Journal of World Business*, 45(3), 197-205. <http://dx.doi.org/10.1016/j.jwb.2009.12.003>.
- Panon, L., Timini, J., Essers, D., Lebastard, L., Gentili, E., Mancini, M., Linarello, A., Borin, A., Padellini, T., Čaka, P., Requena, F. & Cariola, G. (2024). Inputs in Distress: Geoeconomic Fragmentation and Firms' Sourcing, *ECB Working Paper 2024/2992*. Retrieved September 10, 2025 from <https://www.ecb.europa.eu/pub/pdf/scpwps/ecb.wp2992~ccb9cb4a80.en.pdf>.
- Peng, M., Y., P. (2025). The role of international strategic alliance and dynamic internationalization capability in building competitive advantage for SMEs: evidence from Taiwan. *Humanities and Social Sciences Communications*, 12, 1148. <https://doi.org/10.1057/s41599-025-05076-4>.
- Rahman, K., Khanam, A., Hasan, M., Akash, A., Rezvi, R., Nasrullah, F., Jishan, S. & Nusrat, N. (2025). Decoding U.S. Retail Dynamics: A Holistic Strategic Analysis Using PESTEL and Porter's Five Forces Frameworks. *Journal of Business and Management Studies*, 7(2), 176-183. <https://doi.org/10.32996/jbms.2025.7.2.12>.
- Roque, A., F., Alves, M. & Raposo, M. (2019). Internationalization Strategies Revisited: Main Models and Approaches. *IBIMA Business Review*, Vol. 2019, Article ID 681383, 1-10. DOI: 10.5171/2019.681383.
- Saridakis, G., Idris, B., Hansen, J., M. & Dana, L., P. (2019). SMEs' internationalisation: When does innovation matter? *Journal of Business Research*, 96, 250–263. <https://doi.org/10.1016/j.jbusres.2018.11.001>
- Teece, D., J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28(13), 1319–1350. <https://doi.org/10.1002/smj.640>.
- Teece, D., Peteraf, M. & Leih, S. (2016). Dynamic Capabilities and Organizational Agility: Risk, Uncertainty, and Strategy in the Innovation Economy. *California Management Review*, 58, 13-35. <https://doi.org/10.1525/cm.2016.58.4.13>.

- Vahlne, J., E. (2020). Development of the Uppsala model of internationalization process: From internationalization to evolution. *Global Strategy Journal*, 10, 239–250. <https://doi.org/10.1002/gsj.1375>.
- Vahlne, J.-E. & Johanson, J. (2017). From internationalization to evolution: The Uppsala model at 40 years. *Journal of International Business Studies*, 48(9), 1087–1102. <https://doi.org/10.1057/s41267-017-0107-7>.
- Velinov, E., Maly, M., Petrenko, Y., Denisov, I. & Vassilev, V. (2020). The Role of Top Management Team Digitalization and Firm Internationalization for Sustainable Business. *Sustainability*, 12, 9502. <https://doi.org/10.3390/su12229502>.
- Verbeke, A. & Ian Lee, I., H. (2021). *International Business Strategy: Rethinking the Foundations of Global Corporate Success*. Cambridge University Press.
- Winter, S. (2003). Understanding dynamic capabilities. *Southern Medical Journal*, 24, 991-995. <https://doi.org/10.1002/SMJ.318>.
- Witantri, G., Giovanni, A., Kurniasari, E., & Nurunnisa, I. A. (2025). Financial Risk Management Strategies in SME International Expansion: A Systematic review. *SHS Web of Conferences*, 217, 02003. <https://doi.org/10.1051/shsconf/202521702003>.
- Zaki, A., M., Edwards, D., J. & El-Gohary, H. (2015). A Theoretical Examination of SMEs Internationalization in a Globalized Business Environment: An Eye on the Future. *International Journal of Customer Relationship Marketing and Management*, 6(4), 1–29. DOI: 10.4018/IJCRMM.2015100101.
- Zollo, M. & Winter, S., G. (2002). Deliberate Learning and the Evolution of Dynamic Capabilities. *Organization Science*, 13(3), 339–351. <https://doi.org/10.1287/orsc.13.3.339.2780>.