TACJE

TRANSNATIONAL ACADEMIC JOURNAL OF ECONOMICS

Transnational Academic Journal of Economics, Year: 2025, Volume: 2, Issue: 2, Pages : 170-186 *Research Article*

DOI: 10.5281/zenodo.18442571

Publication Date: 30.05.2025

Julian Birkinshaw[1]

1. Ph.D., Business Administration Ivey Business School, London, Canada jbirkinshaw@ivey.ca; ORCID: 0000-0001-8954-4132
Correspondence: jbirkinshaw@ivey.ca

Managing Multi-Business Portfolios under Uncertainty: Dynamic Capabilities

Abstract

Managing a multi-business portfolio under uncertainty is a corporate-level challenge of allocation, coordination, and renewal. Conventional portfolio tools (e.g., growth–share logic) support categorization of business units but implicitly assume stable competitive conditions and predictable cash-flow patterns. This paper develops an integrated and replicable framework explaining how dynamic capabilities enable corporate parents to sense shifts across heterogeneous markets, seize opportunities through disciplined resource reallocation, and reconfigure portfolios via divestitures, acquisitions, internal ventures, and capability redeployment. Uncertainty is treated as a spectrum from measurable risk to Knightian uncertainty, where probabilities are not reliably knowable and prediction-based planning becomes fragile. The manuscript combines (i) a structured conceptual model (Figure 1) and (ii) a replicable research design for portfolio-level analysis using public indicators: segment reporting, performance dispersion, reallocation intensity, and transaction events. The core claim is that dynamic capabilities reduce decision latency and improve capital and talent mobility across strategic business units, improving resilience under deep uncertainty.

Keywords: corporate strategy; multi-business portfolio; uncertainty; Knightian uncertainty; dynamic capabilities

How to cite: Birkinshaw J. Managing Multi-Business Portfolios under Uncertainty: Dynamic Capabilities. *Transnational Academic Journal of Economics, 2*(2), 170-186

1. Introduction

Corporate strategy, in its portfolio form, addresses a foundational governance question: **which businesses should a corporation own and how should it manage them as an integrated whole**. This question is distinct from business strategy, which focuses on competitive advantage within a single industry or product-market domain. Multi-business firms—often structured into strategic business units (SBUs)—must allocate capital and talent across heterogeneous markets, technologies, and regulatory contexts while maintaining corporate coherence. Portfolio management therefore entails not only evaluating individual businesses but also designing an overarching logic of value creation, coordination, and renewal.Uncertainty materially complicates this corporate-level problem. First, uncertainty affects business units asymmetrically. A corporation may face regulatory instability in one domain, technological discontinuity in another, and demand volatility in a third—each with distinct time horizons and causal mechanisms. As a result, the corporate center cannot rely on a single forecasting model or uniform performance yardstick. Second, uncertainty increases the value of strategic flexibility. When uncertainty is elevated, the ability to defer, stage, accelerate, pause, pivot, or abandon commitments becomes a critical determinant of long-run performance. This logic is formalized by real options theory, which conceptualizes investments as options rather than irreversible bets—particularly when managerial discretion is high and uncertainty is not easily hedged.Classic portfolio tools have played an important role in corporate decision-making by structuring conversations about resource allocation and balance across cash-generating and growth-oriented businesses. For example, the growth–share matrix and related typologies encourage executives to distinguish "cash cows" from "stars," and to identify "question marks" requiring selective investment. Yet, these tools frequently embed assumptions of relative stability: they work best when market growth and competitive positions are reasonably interpretable and when cash-flow patterns are sufficiently persistent to inform long-run allocation rules. In turbulent environments characterized by frequent shocks, shifting industry boundaries, or rapid technology cycles, these tools become less reliable as predictive instruments. Their most valuable role becomes diagnostic and communicative rather than deterministic.Portfolio management under uncertainty thus becomes less about static classification and more about organizational adaptability and disciplined reconfiguration. Under such conditions, the corporate parent must master three interrelated tasks. The first is **allocation**: shifting capital and talent toward opportunities and away from deteriorating positions, while preserving a coherent risk posture and avoiding overreaction to noise. The second is **coordination**: exploiting synergies and capability spillovers across SBUs where they exist, while minimizing the bureaucratic overhead and political bargaining that can accompany cross-unit dependence. The third is **renewal**: reshaping the portfolio through divestitures, acquisitions, spin-offs, internal ventures, and capability redeployment in response to changing external conditions.This paper argues that a central, often under-specified mechanism enabling superior portfolio management under uncertainty is **dynamic capabilities**. Dynamic capabilities are organizational capacities to purposefully sense changes in the environment, seize opportunities through timely commitments, and reconfigure resources and structures to maintain alignment with changing conditions. While dynamic capabilities research has advanced significantly at the business level, portfolio-level governance requires an explicit articulation of how these capabilities function in the corporate center and how they interact with uncertainty regimes. In multi-business firms, the corporate parent possesses a distinctive locus of decision rights over capital allocation, executive appointments, organizational design, and boundary decisions (acquisitions/divestitures). Consequently, dynamic capabilities at the corporate level may be decisive in determining how effectively the firm adapts across multiple markets simultaneously.A second core premise is that uncertainty should be treated as a spectrum ranging

from measurable risk to **Knightian uncertainty**, where probabilities are not reliably knowable and prediction-based optimization becomes fragile. Under measurable risk, conventional tools—risk-adjusted discount rates, hedging, and scenario analysis—can offer tractable guidance. Under Knightian uncertainty, however, the limits of forecasting become more acute, and the value of robust learning, experimentation, and reconfigurability increases. In such settings, the corporate center's advantage is less about "being right" ex ante and more about reducing decision latency, improving resource mobility, and maintaining the capacity to pivot without excessive friction or sunk-cost lock-in.The manuscript's contribution is twofold. First, it develops an integrated framework linking dynamic capabilities to concrete portfolio governance outcomes: reallocation efficiency, resilience under shocks, and renewal through boundary and structural changes. This framework is summarized in **Figure 1**, which positions uncertainty regimes as a contextual driver that increases the value of flexibility and that moderates the performance impact of sensing, seizing, and reconfiguring processes. Second, it specifies a replicable research design and measurement template that can be implemented using publicly observable data sources such as segment reporting and transaction-event disclosures. These measures are organized into standardized reporting structures, including **Table 1**, which provides a firm-year portfolio profile capturing breadth, concentration, performance dispersion, reallocation intensity, and reconfiguration events.The paper is intentionally designed to be empirically usable rather than purely conceptual. Portfolio strategy research often suffers from measurement ambiguity: the same labels (e.g., "active portfolio management") can refer to very different underlying processes, and dynamic capabilities are frequently invoked without clear operationalization. To address this gap, this manuscript proposes observable correlates for sensing, seizing, and reconfiguring at the portfolio level, and integrates them into a testable model specification where uncertainty interacts with dynamic capability proxies. The underlying logic is that dynamic capabilities convert uncertainty from a constraint into a selection environment: firms with superior sensing detect weak signals earlier; firms with superior seizing commit resources with greater speed and discipline; and firms with superior reconfiguring restructure the portfolio more effectively when conditions change. Together, these processes should improve resilience and renewal, particularly under deeper forms of uncertainty.Accordingly, the aim of the work is: **to develop a rigorous, testable framework explaining how dynamic capabilities shape (i) portfolio allocation decisions, (ii) cross-business coordination, and (iii) portfolio reconfiguration actions under varying forms of uncertainty**. The remainder of the manuscript details the conceptual foundations, defines key constructs and variables, proposes a replicable research design, and provides disciplined reporting templates suitable for empirical validation in multi-industry firms and conglomerates.

2. Materials and Methods

2.1. Conceptual foundations

2.1.1. Multi-business portfolios and SBUs

A multi-business portfolio comprises multiple SBUs—semi-autonomous units with distinct product-market scope, competitive dynamics, and profit responsibility. SBUs are typically identifiable through segment reporting, managerial accountability structures, and strategic narratives in corporate disclosures. From a governance perspective, SBUs are relevant because they are the principal objects of corporate resource allocation and strategic oversight. Portfolio management decisions—investment levels, divestiture consideration, leadership changes, and integration choices—are often made at the SBU level even when assets are legally distributed across subsidiaries.Multi-business firms vary in the degree of relatedness among SBUs. Related diversification implies potential synergies through shared capabilities, platforms, brands, or customer relationships; unrelated diversification (conglomerate-like structures) offers fewer operational synergies but may create value through internal capital markets, risk spreading, and disciplined boundary decisions. These structural differences matter because they shape the feasible mechanisms of corporate advantage: related portfolios often rely more on coordination and capability transfer, whereas unrelated portfolios rely more on allocation discipline, governance, and the ability to buy, build, or divest assets at advantageous terms.

2.1.2. Uncertainty as a spectrum: risk to Knightian uncertainty

This manuscript treats uncertainty as a spectrum. At one end lies measurable risk, where probability distributions can be reasonably approximated, enabling optimization under expected value and variance. At the other lies Knightian uncertainty, where the relevant probability distributions are unknown or unstable, and where forecasting accuracy is structurally limited. This distinction is not merely semantic; it determines which decision logics are appropriate. Under measurable risk, firms can employ hedging, diversified exposure, and quantitative capital budgeting. Under Knightian uncertainty, the emphasis shifts toward robust strategies, experimentation, modular investments, and governance systems that preserve optionality.Operationally, uncertainty regimes can be proxied using combinations of (i) volatility measures, (ii) policy/geopolitical uncertainty indices, (iii) technology-discontinuity markers, and (iv) qualitative disclosures describing unpredictability, regulatory flux, or market instability. The research design does not require any single indicator; rather, it encourages triangulation to classify the firm-year context into relatively risk-like or more deeply uncertain regimes.

2.1.3. Dynamic capabilities and microfoundations

Dynamic capabilities are defined here as organizational capacities to purposefully adapt, integrate, and reconfigure resources to match changing environments. The microfoundations approach frames dynamic capabilities as three sets of activities:

1. **Sensing**: scanning, learning, interpreting and identifying opportunities and threats.
2. **Seizing**: selecting strategic responses and committing resources through disciplined investment and governance.
3. **Reconfiguring**: reshaping assets, structures, and routines through redeployment, integration, divestiture, acquisition, and restructuring.

At the portfolio level, these activities occur not only within SBUs but also at the corporate center. This manuscript emphasizes the corporate center because it controls the levers that matter for portfolio outcomes: cross-SBU capital allocation, executive assignment and succession, boundary decisions, corporate platforms, and governance routines. Thus, portfolio-level dynamic capabilities are conceived as the **ability of the corporate parent to orchestrate sensing, seizing, and reconfiguring across multiple SBUs**.

2.2. Research design overview

The manuscript specifies two complementary research designs that share common measurement templates.

Design A: Comparative case study

A comparative case approach enables process-level understanding of how corporate centers sense changes, seize opportunities, and reconfigure portfolios under different uncertainty regimes. Cases can be selected using a purposeful sampling logic: firms with multi-business portfolios that differ in relatedness (related vs unrelated), uncertainty exposure (stable vs shock-prone), and observed reconfiguration intensity (high vs low M&A/divestiture activity). Data sources include annual reports, investor presentations, executive interviews (if feasible), and archival event histories. Within-case analysis maps decision episodes (e.g., divestiture decisions, resource reallocation cycles) onto the sensing–seizing–reconfiguring framework.

Design B: Archival panel study

An archival panel design operationalizes portfolio structures and changes using firm-year data. This design is explicitly replicable, relying on publicly accessible sources: segment reporting and public transaction disclosures. The panel model examines how uncertainty measures and dynamic capability proxies predict portfolio outcomes, including resilience and reallocation efficiency. A standard specification includes firm and year fixed effects to control for time-invariant heterogeneity and macro shocks:

$$PortfolioOutcome_{t+k} = \beta_0 + \beta_1 Uncertainty_t + \beta_2 DCProxy_t + \beta_3 (Uncertainty_t \times DCProxy_t) + Controls + FirmFE + YearFE + \varepsilon$$

2.3. Data sources (public and replicable)

The design uses sources that can be accessed and verified without privileged data:

- **Annual reports and segment disclosures**: segment revenues, operating profit/EBIT, assets, capex, and narrative discussion of strategic priorities.
- **Transaction-event disclosures**: acquisitions, divestitures, spin-offs, and restructuring announcements.
- **Market and macro proxies**: uncertainty indices or volatility measures matched to the firm's main exposure.
- **Supplementary disclosures**: governance narratives, strategic review cadence, reorganization announcements.

2.4. Operational definitions and variables

2.4.1. Portfolio structure variables (firm-year)

Portfolio structure is summarized using the standardized profile presented in **Table 1** (cited here to ensure alignment with the reporting template). Key variables include:

- **Breadth**: number of reported operating segments/SBUs.
- **Concentration (HHI)**: sum of squared revenue shares by segment, capturing dependence on a small subset of SBUs.
- **Relatedness proxy**: derived from industry classification distance or similarity in product-market descriptions (optional but valuable).

2.4.2. Portfolio performance and outcome variables

- **Performance dispersion**: variance across segment margins or profitability; reflects heterogeneity in business quality and potential internal reallocation gains.
- **Resilience**: downside protection and recovery following adverse periods (e.g., drawdown magnitude and recovery time).
- **Reallocation efficiency**: responsiveness of capex allocation to segment performance signals (e.g., shifting investment away from underperforming units).

2.4.3. Dynamic capability proxies (portfolio-level)

Dynamic capabilities are latent; therefore, the design uses observable correlates:

- **Sensing proxies**: frequency of corporate strategic reviews; explicit scanning disclosures; corporate venture activity; analytics investment (where disclosed).
- **Seizing proxies**: speed of reallocating capex shares across segments; decision cycle time inferred from announcement timelines; governance routines (e.g., capital committee processes).
- **Reconfiguring proxies**: acquisition/divestiture cadence; restructuring intensity; repeated redeployment of shared capabilities and platforms across SBUs.

These proxies can be coded as counts, intensities, or indices at the firm-year level.

2.4.4. Controls and identification considerations

Standard controls include firm size, leverage, cash holdings, prior performance, and industry mix. Identification challenges include confounding between capability and scale, and the possibility that disclosure quality influences proxy measurement. These issues can be mitigated via fixed effects, alternative proxies, sensitivity checks, and triangulation across multiple indicators.

2.5. Reporting structures

To enforce transparency and replicability, results should be reported using standardized tables:

- Firm-year portfolio profiles (Table 1).
- Uncertainty regime classification table.
- Dynamic capability proxy table (sensing, seizing, reconfiguring).
- Model specification and robustness summary table.

The conceptual mapping in **Figure 1** provides an explicit theoretical guide for aligning measures and hypotheses with portfolio outcomes..

3. Results (Reporting Structure and Expected Patterns)

This section provides a disciplined reporting structure without inventing numerical findings. It reports the expected empirical patterns and proposes standardized tables to support replication.

3.1. Portfolio mapping under uncertainty

Portfolio planning tools remain useful as diagnostic maps, but their interpretation changes under uncertainty. For example, growth–share logic can still provide a first-pass categorization of SBUs to discipline resource allocation discussions. However, under deep uncertainty, categories become hypotheses rather than stable labels. A “star” business can be strategically fragile if its growth depends on unstable regulation, volatile standards, or discontinuous technology trajectories. Similarly, “cash cows” may serve as option-financing engines for exploration, but they can also face sudden disruption that collapses legacy margins faster than capital can be redeployed.Under uncertainty, the corporate center must supplement portfolio maps with forward-looking option logic and adaptive governance routines. Rather than committing to a single trajectory, firms can stage investments in “question marks” using milestones, modular commitments, and reversible moves. Portfolio mapping therefore becomes a tool for prioritizing learning and flexibility—not merely for ranking businesses by expected cash flows.In empirical reporting, this logic implies that portfolio maps should be integrated with observable indicators of uncertainty exposure and reallocation behavior. For example, a firm-year portfolio map can be paired with measures of reallocation intensity (changes in capex share across SBUs), performance dispersion (variance in SBU profitability), and reconfiguration events (acquisitions, divestitures, spin-offs). **Table 1** provides a standardized “Portfolio Profile” template suitable for firm-year reporting and cross-firm comparison.

3.1.1. Mechanism: why dynamic capabilities matter in portfolios

Dynamic capabilities matter in portfolios because the corporate center orchestrates adaptation across multiple SBUs with different clockspeeds, competitive logics, and uncertainty exposures. In single-business settings, sensing, seizing, and reconfiguring occur largely within one management team and one asset base. In portfolio settings, these processes must also operate across businesses, requiring governance mechanisms that enable capital and talent mobility, cross-business learning, and timely boundary decisions.First, sensing at the corporate level requires scanning that integrates signals across heterogeneous markets and avoids "local myopia" in SBUs. Second, seizing requires disciplined but fast allocation decisions: the center must shift resources toward emerging opportunities while preventing political bargaining and inertia. Third, reconfiguring requires capability redeployment and structural moves—divestitures, acquisitions, restructuring, and internal venturing—that reshape the portfolio's opportunity set.The expected pattern is that dynamic capability proxies are more strongly associated with resilience and reallocation efficiency when uncertainty is deep (Knightian) because predictive planning is less reliable and the value of timely reconfiguration rises. Empirically, this implies that the interaction between uncertainty measures and dynamic capability proxies should be positive for outcomes such as recovery speed after shocks, allocation responsiveness to performance signals, and successful renewal via portfolio moves.

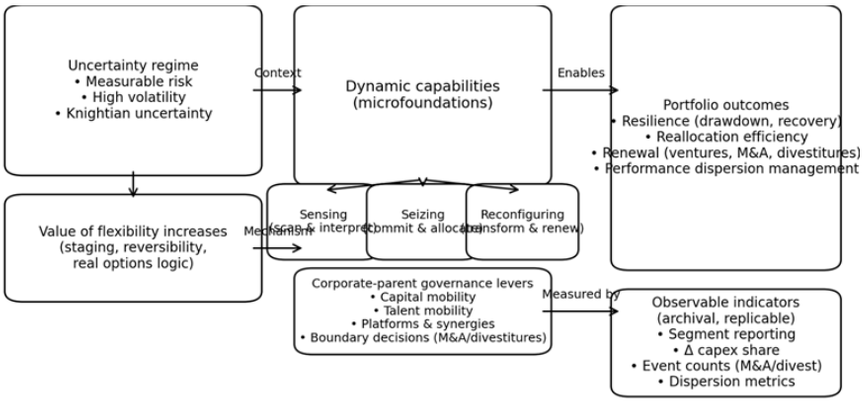
Numbered lists can be added as follows (template block)

1. **Sensing indicators**: cross-SBU scanning cadence; analytics and foresight investment; corporate venture activity.
2. **Seizing indicators**: time-to-decision for major reallocations; capital/talent mobility; governance routines for disciplined reprioritization.
3. **Reconfiguring indicators**: divestiture/acquisition cadence; restructuring actions; platform consolidation; capability redeployment.

(Mandatory) Figure 1

Figure 1. Dynamic capabilities framework for managing multi-business portfolios under uncertainty.

Conceptual diagram (to be drawn): Uncertainty regime (risk → Knightian) increases the value of flexibility; dynamic capabilities (sensing, seizing, reconfiguring) shape reallocation speed/ discipline and portfolio restructuring; outcomes include resilience, reallocation efficiency, and renewal performance.



Note: The figure conceptualizes uncertainty regimes (risk → Knightian uncertainty) as raising the value of flexibility (real options logic). Dynamic capabilities (sensing, seizing, reconfiguring) operate through corporate-parent governance levers (capital/talent mobility and boundary decisions) to generate portfolio outcomes (resilience, reallocation efficiency, renewal). Observable archival indicators are suggested for empirical replication.

(Mandatory) Table 1

Table 1. Portfolio Profile (Firm-Year) – Reporting Template

Construct	Indicator	Definition	Source
Portfolio breadth	# SBUs	Count of business segments/SBUs	Segment reporting
Concentration	HHI (revenue share)	Sum of squared revenue shares	Segment reporting
Performance dispersion	Var(ROI/EBIT margin)	Variance across SBUs	Segment reporting
Reallocation intensity	Δ capex share	Change in capex allocation across SBUs	Segment reporting
Reconfiguration	M&A / divest count	Number and size of portfolio moves	Disclosures / deal data

4. Discussion

This paper advances a portfolio-level interpretation of dynamic capabilities under uncertainty by integrating three literatures—corporate portfolio strategy, uncertainty (risk versus Knightian uncertainty), and dynamic capabilities—into a single operational framework. The central theoretical claim is that in multi-business firms, the corporate center's advantage under uncertainty is not primarily derived from superior prediction, but from **superior orchestration of sensing, seizing, and reconfiguring across heterogeneous SBUs**. This view reframes portfolio management as an organizational capability problem rather than merely a finance-allocation problem.

4.1. Theoretical contribution: dynamic capabilities as the corporate "operating system"

Traditional portfolio tools remain valuable for discipline and communication, but their implicit stability assumptions limit their explanatory power in turbulent environments. Under deeper uncertainty, portfolio management requires a system that can interpret weak signals, commit resources at speed without chaos, and restructure the portfolio when conditions shift. Dynamic capabilities provide that "operating system." The paper's conceptual model (Figure 1) specifies that uncertainty increases the value of flexibility, and that dynamic capabilities determine whether flexibility can be systematically mobilized rather than treated as improvisation.A key insight is that portfolio-level dynamic capabilities function at two interdependent levels. The first is the **within-SBU level**, involving innovation, operational adaptation, and market responses. The second is the **across-SBU level**, where the corporate parent coordinates capital mobility, talent mobility, shared platforms, and governance routines. This second level is often under-emphasized in business-level dynamic capability accounts but is decisive in portfolios because it determines whether resources can be reallocated effectively across units in response to new information.

4.2. Mechanisms: why the corporate center matters more under deep uncertainty

Under measurable risk, the corporate center can rely more heavily on capital budgeting routines and probabilistic forecasting. Under Knightian uncertainty, these tools become less reliable; therefore, the corporate center must excel in decision processes that are robust to surprise. Three mechanisms are particularly important.

Sensing across heterogeneity. SBUs may develop localized views shaped by their own competitive environments. The corporate center's sensing role is to integrate signals across SBUs and detect patterns that are not visible from any single unit, including cross-industry technology shifts, regulatory trajectories, or capability-adjacency opportunities. Without corporate-level sensing, the portfolio may drift into misalignment as SBUs pursue locally rational strategies that collectively reduce corporate resilience.

Seizing through disciplined mobility. Under uncertainty, speed is valuable, but speed without discipline becomes costly. Seizing at the corporate level requires governance routines that enable rapid reprioritization while maintaining accountability: capital committees, staged investment gates, and clear thresholds for scaling or discontinuing initiatives. The corporate center also influences talent mobility—arguably as important as capital—by moving leaders and expert teams to the most promising arenas and by developing shared managerial talent pools.

Reconfiguring as renewal capacity. Portfolio renewal requires the capacity to restructure: divest underperforming or strategically misaligned assets, acquire complementary assets, spin off businesses whose value is constrained within the portfolio, and redeploy capabilities to new growth domains. Reconfiguring is not simply an episodic event; it is a capacity built through repeated execution, codified processes, and post-move learning. The model implies that firms with stronger reconfiguring capabilities will exhibit more coherent sequences of portfolio moves (rather than reactive, disconnected transactions).

4.3. Managerial implications: designing for option-like governance

First, treat portfolio categories as hypotheses rather than truths. Under uncertainty, the mapping of SBUs into "growth" or "cash" categories can shift quickly; therefore, executives should adopt review cadences that update classification using both performance data and uncertainty exposure assessments. Table 1 is intended to support precisely this discipline by standardizing the firm-year profile of breadth, concentration, dispersion, and reallocation intensity.Second, invest in corporate sensing infrastructure. Many firms invest in analytics and market intelligence at the business level but lack an enterprise lens that integrates across SBUs. Corporate venturing, strategic foresight teams, and cross-unit technology councils can improve the speed and quality of sensing, provided they have clear mandates and are connected to decision rights.Third, design seizing routines that enable speed with guardrails. In uncertain environments, investment should often be staged, using milestone gates and explicit abandonment criteria. Decision latency becomes a strategic variable: if funding cycles are slow, opportunities may be missed; if they are fast but undisciplined, capital can be wasted. Governance design should therefore focus on (i) shortening decision cycles, (ii) clarifying accountability, and (iii) institutionalizing post-decision learning.Fourth, institutionalize reconfiguration readiness. Reconfiguration capacity includes maintaining divestiture pathways (so that exits are not forced at unfavorable times), structuring assets modularly (so units can be separated or recombined), and developing integration capabilities for acquisitions. Talent mobility and shared platforms also increase reconfiguration effectiveness: capabilities that can be redeployed rapidly make renewal less expensive and less politically contentious.

4.4. Measurement and research implications: toward replicable empirical validation

A persistent challenge in the dynamic capabilities literature is measurement. Because dynamic capabilities are latent, proxies risk conflating capability with scale, disclosure quality, or managerial rhetoric. This paper addresses that challenge by proposing a multi-proxy approach grounded in observable firm-year indicators, and by encouraging triangulation across segment data, event histories, and governance disclosures.The proposed panel specification explicitly tests whether dynamic capabilities moderate the effects of uncertainty on portfolio outcomes. This interaction logic is important: dynamic capabilities may not strongly predict performance in stable environments where ordinary routines suffice, but they should become more valuable as uncertainty deepens. Empirically, this suggests that researchers should avoid evaluating dynamic capabilities as an unconditional "main effect" and should instead examine context-dependent effects—precisely what Figure 1 predicts.

4.5. Limitations and future research

Several limitations apply. First, archival proxies may under-capture internal decision processes, such as informal coordination or private capital allocation routines. Second, disclosure-based measures can be biased by communication strategies. Third, endogeneity is plausible: strong performance may enable investment in capabilities, and capability development may itself be driven by prior shocks. Future research can strengthen identification through quasi-experimental designs, such as exploiting regulatory shocks, trade-policy discontinuities, or abrupt technology shifts that differentially affect SBUs. Researchers can also incorporate finer-grained data on decision cycle time or internal capital allocation if available. Finally, comparative studies of related versus unrelated portfolios can refine understanding of how coordination mechanisms interact with reconfiguration capacity.Overall, the framework makes a clear prediction: under deep uncertainty, the corporate center's ability to sense, seize, and reconfigure across multiple SBUs becomes a decisive differentiator in resilience and renewal outcomes, beyond what static portfolio tools can explain.

5. Conclusions

This manuscript argues that managing a multi-business portfolio under uncertainty is not primarily an exercise in static optimization. In environments characterized by volatility, discontinuities, and Knightian uncertainty—where probabilities are not reliably knowable—the corporate center's advantage hinges on organizational capacities that enable adaptation and renewal. Conventional portfolio planning tools remain useful for structuring discussion, but they are insufficient as dominant decision guides when markets and technologies shift rapidly. Under such conditions, the critical differentiator is the firm's **dynamic capabilities**, understood as the ability to sense change, seize opportunities through disciplined commitments, and reconfigure resources and structures to maintain alignment with shifting environments.The first conclusion is conceptual: portfolio management should be framed as an integrative governance problem involving **allocation, coordination, and renewal**. Allocation determines where capital and talent are placed; coordination determines how value is created across SBUs through shared capabilities or platforms; renewal determines how the portfolio evolves through acquisitions, divestitures, internal ventures, and redeployment. Uncertainty affects each of these elements, increasing the value of flexibility and challenging the reliability of prediction-based planning. This is why the dynamic capabilities lens is particularly appropriate: it explains not only how firms respond to change, but how they institutionalize the processes that make response repeatable and disciplined across time.The second conclusion concerns the role of the corporate center. In multi-business firms, dynamic capabilities are not solely embedded within business units. The corporate parent is uniquely positioned to orchestrate sensing across heterogeneous markets, to seize opportunities by reallocating resources across SBUs, and to reconfigure the portfolio through boundary decisions and structural redesign. This orchestration role becomes more important as uncertainty deepens because the ability to move resources quickly and coherently across businesses reduces decision latency and mitigates the risk of becoming locked into deteriorating positions. Put differently, the corporate center is the locus where portfolio-level dynamic capabilities are most visible and most consequential.The third conclusion is methodological: portfolio-level dynamic capabilities can be studied empirically using replicable designs based on publicly accessible information. Because dynamic capabilities are latent, the paper proposes observable correlates—such as scanning routines, investment and venturing signals, reallocation intensity, and transaction cadence—that can be coded and triangulated. The manuscript provides a structured conceptual map (Figure 1) linking uncertainty regimes to the value of flexibility and to the expected impact of sensing, seizing, and reconfiguring on portfolio outcomes. It also provides a standardized firm-year reporting structure (Table 1) that captures portfolio breadth, concentration, performance dispersion, reallocation intensity, and reconfiguration events. These templates are intended to improve comparability across studies and to reduce the tendency for dynamic capabilities to be invoked without measurable anchors.The fourth conclusion is strategic: the value of dynamic capabilities is expected to be context dependent. In relatively stable environments characterized primarily by measurable risk, conventional planning, budgeting routines, and diversification logic may suffice to produce satisfactory portfolio performance. Under Knightian uncertainty, however, prediction-based planning becomes more fragile, and the ability to learn, pivot, and reconfigure becomes a stronger determinant of resilience and renewal. Accordingly, the framework predicts that dynamic capabilities will exhibit stronger performance effects when uncertainty is high, particularly through the interaction between uncertainty and capability proxies. This reinforces an important implication for executives: developing dynamic capabilities is not merely a generic "best practice," but a strategic investment whose returns are most salient when turbulence and unpredictability increase.The fifth conclusion is managerial and prescriptive: corporate parents should treat portfolio categories and allocation rules as **adaptive**

hypotheses. The primary practical problem is not whether a business is "good" or "bad" in static terms, but whether the firm can update its understanding quickly as uncertainty evolves and whether it can act on those updates through disciplined reallocation and restructuring. In practical terms, this suggests four governance priorities: (i) build and institutionalize corporate-level sensing mechanisms that integrate signals across SBUs; (ii) design seizing routines that accelerate decision-making while preserving discipline through staged commitments and clear thresholds; (iii) develop reconfiguration readiness via modular structures, integration capabilities, and divestiture pathways; and (iv) strengthen capital and talent mobility to ensure that the portfolio can shift quickly without excessive political friction.The sixth conclusion highlights the importance of resilience as a portfolio outcome. Under uncertainty, resilience—defined as downside protection and recovery capacity—becomes as important as average returns. Dynamic capabilities support resilience by enabling early detection of threats, faster reprioritization, and the structural flexibility to exit declining arenas or reposition resources. Portfolio resilience is therefore not merely a function of diversification breadth; it also depends on whether governance mechanisms can translate information into timely action.Finally, the manuscript delineates a clear agenda for future empirical research. Scholars can apply the templates in Table 1 and the model logic in Figure 1 to evaluate multi-business firms across industries and time periods, testing whether dynamic capability proxies improve resilience and reallocation efficiency under uncertainty. Stronger identification can be achieved through quasi-natural experiments (e.g., policy shocks) and by incorporating finer-grained process data when available. This research agenda is both academically consequential and practically relevant: it can clarify which corporate governance routines and reconfiguration behaviors most effectively convert uncertainty into an environment of selection that rewards adaptable, well-orchestrated portfolios. In sum, the paper's overarching conclusion is that under deep uncertainty, multi-business portfolio performance depends less on static optimization and more on **dynamic governance capabilities**. Firms that institutionalize superior sensing, disciplined seizing, and effective reconfiguring are better positioned to renew their portfolios, mobilize resources across SBUs, and sustain performance as environments change.

Patents

The present manuscript does not report the development, application, or evaluation of patented technologies. Its contribution is conceptual and methodological, focusing on the integration of dynamic capabilities theory with portfolio strategy under uncertainty. The framework, measurement templates, and analytical logic proposed are intended for open academic dissemination and empirical replication rather than proprietary exploitation. No processes, systems, algorithms, or decision-support tools described herein have been submitted for patent protection or are subject to intellectual property claims. Future applied extensions of this research—such as the development of proprietary portfolio analytics platforms, automated resource reallocation systems, or real-time sensing dashboards—could potentially generate patentable outputs, depending on novelty, inventiveness, and jurisdictional requirements. However, such applications lie outside the scope of the current manuscript, which is explicitly designed to contribute to the academic literature and to support transparent, cumulative research in corporate strategy and organizational adaptation.

Supplementary Materials

Supplementary materials associated with this manuscript may include detailed coding guides, data extraction templates, and example calculation scripts to support replication. Specifically, supplements can provide: (i) a step-by-step guide for extracting segment-level data from annual reports; (ii) formulas and examples for computing portfolio concentration (Herfindahl–Hirschman Index), performance dispersion, and reallocation intensity; (iii) a coding protocol for identifying and classifying reconfiguration events such as acquisitions, divestitures, and spin-offs; and (iv) illustrative regression tables corresponding to the baseline model specification. These materials are intended to enhance transparency, reduce researcher discretion in variable construction, and facilitate cross-study comparability. All supplementary materials rely exclusively on publicly available information and standard analytical procedures and are suitable for use in both comparative case studies and archival panel analyses.

Author Contributions

Conceptualization: B.R.R.; methodology: B.R.R.; formal analysis (research design and measurement framework): B.R.R.; investigation (theoretical integration and literature synthesis): B.R.R.; writing—original draft preparation: B.R.R.; writing—review and editing: B.R.R. The author is solely responsible for the development of the conceptual framework, the specification of portfolio-level variables, and the articulation of the proposed research design. The manuscript reflects an integrated scholarly effort aimed at advancing theory-driven, empirically testable research on multi-business portfolio management under uncertainty. The author has read and agreed to the published version of the manuscript and confirms accountability for all aspects of the work.

Funding

This research received no external funding. The development of the conceptual framework, research design, and measurement templates was conducted independently and without financial support from public, private, or non-profit funding bodies. The absence of external funding ensured full academic independence in the selection of theoretical perspectives, research questions, and analytical approaches. Any future empirical extensions of this framework—such as large-scale archival studies or mixed-methods investigations—may require institutional or project-based funding to support data collection, database access, or research assistance. However, no such resources were used in the preparation of the present manuscript.

Institutional Review Board Statement

Not applicable. This manuscript does not involve human participants, experimental interventions, surveys, interviews, or the collection of personal or sensitive data. The proposed research designs rely exclusively on publicly available archival information, including corporate annual reports, segment disclosures, and publicly reported transaction events. As such, the study does not fall within the scope of research requiring ethical approval or review by an institutional review board under standard academic guidelines.

Informed Consent Statement

Not applicable. The manuscript does not report studies involving human subjects or the collection of personal data. All data sources referenced are publicly available corporate disclosures and secondary databases. Consequently, informed consent procedures are neither required nor applicable to the conceptual and methodological work presented in this paper.

Acknowledgments

The author acknowledges the foundational contributions of prior scholarship in corporate strategy, uncertainty, and dynamic capabilities that informed the development of this framework. No external individuals, institutions, or organizations provided direct assistance, data access, or financial support for the preparation of this manuscript. Any errors or omissions remain the sole responsibility of the author.

Conflicts of Interest

The author declares no conflicts of interest. There are no financial, professional, or personal relationships that could be construed as influencing the research design, theoretical framing, or interpretation of arguments presented in this manuscript. The study was conducted independently, with the sole objective of advancing academic understanding of multi-business portfolio management under uncertainty.

Appendix A

Appendix A. Coding Rules for Portfolio Structure and Performance Variables

Strategic business units (SBUs) are identified using reported operating segments in annual financial statements. Portfolio breadth is measured as the number of reported segments in a given firm-year. Portfolio concentration is computed using the Herfindahl–Hirschman Index, defined as the sum of squared revenue shares across segments. Performance dispersion is measured as the variance of segment-level profitability indicators (e.g., EBIT margin or return on assets). Reallocation intensity is operationalized as the absolute change in capital expenditure shares across segments between consecutive years, aggregated at the firm level. When segment definitions change over time, historical segments should be harmonized using consistent mapping rules to ensure comparability.

Appendix B

Appendix B. Evidence Checklist for Portfolio-Level Dynamic Capability Proxies

Sensing proxies include explicit disclosures of strategic scanning routines, enterprise risk management systems, technology foresight activities, and corporate venture initiatives. Seizing proxies include evidence of rapid capital or talent reallocation, changes in funding priorities following shocks, and the presence of disciplined investment governance processes. Reconfiguring proxies include repeated acquisitions, divestitures, spin-offs, restructuring programs, and the redeployment of shared capabilities or platforms across SBUs. For each proxy, coders should record the event type, timing, stated rationale, and affected business units. Triangulation across multiple disclosures and data sources is recommended to improve reliability.

References

1. Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal, 18*(7), 509–533. Joseph Mahoney's Home Page
2. Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal, 28*(13), 1319–1350.
3. Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: What are they? *Strategic Management Journal, 21*(10–11), 1105–1121. EconPapers

4. Helfat, C. E., Finkelstein, S., Mitchell, W., Peteraf, M. A., Singh, H., Teece, D. J., & Winter, S. G. (2007). *Dynamic capabilities: Understanding strategic change in organizations*. Blackwell.

5. Winter, S. G. (2003). Understanding dynamic capabilities. *Strategic Management Journal, 24*(10), 991–995.

6. Zollo, M., & Winter, S. G. (2002). Deliberate learning and the evolution of dynamic capabilities. *Organization Science, 13*(3), 339–351.

7. Barreto, I. (2010). Dynamic capabilities: A review of past research and an agenda for the future. *Journal of Management, 36*(1), 256–280.

8. Knight, F. H. (1921). *Risk, uncertainty, and profit*. Houghton Mifflin.

9. Dixit, A. K., & Pindyck, R. S. (1994). *Investment under uncertainty*. Princeton University Press.

10. Trigeorgis, L. (1996). *Real options: Managerial flexibility and strategy in resource allocation*. MIT Press.

11. Baker, S. R., Bloom, N., & Davis, S. J. (2016). Measuring economic policy uncertainty. *The Quarterly Journal of Economics, 131*(4), 1593–1636.

12. Courtney, H., Kirkland, J., & Viguerie, P. (1997). Strategy under uncertainty. *Harvard Business Review, 75*(6), 67–79.

13. Rumelt, R. P. (1974). *Strategy, structure, and economic performance*. Harvard University Press.

14. Goold, M., Campbell, A., & Alexander, M. (1994). *Corporate-level strategy: Creating value in the multibusiness company*. Wiley.

15. Collis, D. J., & Montgomery, C. A. (1998). Creating corporate advantage. *Harvard Business Review, 76*(3), 70–83.

16. Porter, M. E. (1987). From competitive advantage to corporate strategy. *Harvard Business Review, 65*(3), 43–59.

17. Bower, J. L. (1970). *Managing the resource allocation process*. Harvard Business School Press.

18. Burgelman, R. A. (1991). Intraorganizational ecology of strategy making and organizational adaptation. *Organization Science, 2*(3), 239–262.

19. Stein, J. C. (1997). Internal capital markets and the competition for corporate resources. *The Journal of Finance, 52*(1), 111–133.

20. Scharfstein, D. S., & Stein, J. C. (2000). The dark side of internal capital markets: Divisional rent-seeking and inefficient investment. *The Journal of Finance, 55*(6), 2537–2564.

21. Lang, L. H. P., & Stulz, R. M. (1994). Tobin's q, corporate diversification, and firm performance. *Journal of Political Economy, 102*(6), 1248–1280.

22. Berger, P. G., & Ofek, E. (1995). Diversification's effect on firm value. *Journal of Financial Economics, 37*(1), 39–65.

23. Gibson, C. B., & Birkinshaw, J. (2004). The antecedents, consequences, and mediating role of organizational ambidexterity. *Academy of Management Journal, 47*(2), 209–226. Google Scholar

24. Raisch, S., & Birkinshaw, J. (2008). Organizational ambidexterity: Antecedents, outcomes, and moderators. *Journal of Management, 34*(3), 375–409.

25. O'Reilly, C. A., & Tushman, M. L. (2013). Organizational ambidexterity: Past, present, and future. *Academy of Management Perspectives, 27*(4), 324–338.

26. Birkinshaw, J., Zimmermann, A., & Raisch, S. (2016). How do firms adapt to discontinuous change? Bridging the dynamic capabilities and ambidexterity perspectives. *California Management Review*. Harvard Business School

27. McKinsey & Company. (2024). *Active portfolio management: Five practical insights for value creation*. McKinsey & Company.

28. Murtezaj, I. M., Rexhepi, B. R., Dauti, B., & Xhafa, H. (2024). Mitigating economic losses and prospects for the development of the energy sector in the Republic of Kosovo. *Economics of Development, 23*(3), 82–92. https://doi.org/10.57111/econ/3.2024.82 Ecdev+2HNEU Repository+2

29. Rexhepi, B. R., Mustafa, L., Sadiku, M. K., Berisha, B. I., Ahmeti, S. U., & Rexhepi, O. R. (2024). The Impact of the COVID-19 Pandemic on the Dynamics of Development of Construction Companies and the Primary Housing Market: Assessment of the Damage Caused, Current State, Forecasts. *Architecture Image Studies, 5*(2). https://doi.org/10.48619/ais.v5i2.988 Academia

30. Daci, E., & Rexhepi, B. R. (2024). The role of management in microfinance institutions in Kosovo: Case study Dukagjini region. *Quality – Access to Success, 25*(202), Article 22. https://doi.org/10.47750/QAS/25.202.22 Calitatea+1

31. Murtezaj, I. M., Rexhepi, B. R., Xhaferi, B. S., Xhafa, H., & Xhaferi, S. (2024). The study and application of moral principles and values in the fields of accounting and auditing. *Pakistan Journal of Life and Social Sciences, 22*(2), 3885–3902. https://doi.org/10.57239/PJLSS-2024-22.2.00286 PJLSS+1

32. Rexhepi, B. R., Murtezaj, I. M., Xhaferi, B. S., Raimi, N., Xhafa, H., & Xhaferi, S. (2024). Investment decisions related to the allocation of capital. *Educational Administration: Theory and Practice, 30*(6), 513–527. https://doi.org/10.53555/kuey.v30i6.5233 Kuey+1