

From “Incremental” to “Evolutionary” Recovery Pathways: Firm-Level Entrepreneurial Intensity

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Abstract

The purpose of the current study is to examine how a firm’s level of entrepreneurial attitudes and behaviour influences the nature and speed of its recovery, given high levels of uncertainty and turbulence. This study is of four sections. First, a discussion of the Contingency Recovery Typology (Helou, 1995; 2017) is presented. Secondly, this study provides a discussion of the conceptual entrepreneurial behaviour continuum and the firm-level entrepreneurial intensity (Barringer and Bluedorn, 1999). Thirdly, the firm-level entrepreneurial intensity analysis is then applied to the four contingent corporate recovery pathways to investigate the nature of the firm’s emergent contingent recovery path. Finally, the conclusion presents the theoretical and practical managerial implications and provides directions for future research.

Keywords

Entrepreneurial Behaviour, Entrepreneurial Attitudes, Entrepreneurial Intensity, Organizational Recovery, Recovery Path Analysis

I. Introduction

The need for emergency response in reaction to high risk and uncertainty is rather complex, and is becoming a commanding issue nowadays, as organizations find themselves in positions requiring them to deal with situations that have not been previously experienced or forecasted (Anderson et al., 2008). Herbane et al. (2004) argue that businesses are promptly responding to the increased environmental threats in an attempt to counter the possible drastic effects of possible crises. Nevertheless, the question remains as to whether such responses are gaining consideration at the strategic level, as opposed to merely the functional level. The findings of previous research show that corporate entrepreneurship is positively related to environmental turbulence (Kouzman and Jarman, 1989; Naman and Slevin, 1993), and environmental complexity (Kouzman and Jarman, 1989; Zahra, 1991).

It was the economist Joseph Schumpeter (1936) that commenced entrepreneurial research, with his argument that the entrepreneur is the catalyst of economic activity, who continuously introduces innovative products, enhanced process utility and novel systems of production that leads to enhanced buyer interest, as such, improve economic growth. Even though Schumpeter (1936) concentrated his writings on the individual entrepreneur, Barringer and Bluedorn (1999) state that similar observations of entrepreneurship have been conceptualized at the firm level, with the underlying assumption being a behavioural phenomenon, where firms fall on a conceptual continuum ranging from highly “conservative” (low corporate entrepreneurship intensity), to highly “entrepreneurial” (high corporate entrepreneurship intensity). They further explain that entrepreneurial firms are characterised by being innovative, proactive and risk-takers, while conservative firms are more reactive, less innovative and risk-averters. They referred to the position of the firm on the continuum as its “entrepreneurial intensity”.

A comprehensive literature review indicates that there has not been a single study that specially focused on the relationship between corporate entrepreneurial attitudes and behaviours, on the one hand, and the temporal nature of the firm’s recovery process given decline under uncertainty, in general, and its emergent recovery pathway, in particular. The purpose of the current research study is to examine how a firm’s entrepreneurial behaviour influences the nature and speed of its recovery, given high levels of uncertainty and turbulent environments. The approach taken in the current research study is to explore the relationship between the dimensions of the firm’s corporate entrepreneurship intensity and the firm’s transpiring contingent corporate recovery pathway. To achieve this objective, the current research builds on two main studies, namely: The Contingency Recovery Typology (Helou, 1995; 2017), and the Firm-Level Entrepreneurial Intensity (Barringer and Bluedorn, 1999).

To this end, this research is four-fold. First, it provides a discussion of the Contingency Recovery Typology (Helou, 2017), with an analysis of the four interrelated stages of recovery, and associated contingent recovery pathways. Secondly, the current study presents a discussion of the conceptual entrepreneurial behaviour continuum and the firm-level entrepreneurial intensity (Barringer and Bluedorn, 1999). This section further includes an evaluation of the contributions and limitations of the above mentioned two studies.

Thirdly, the findings of Barringer and Bluedorn’s (1999) research in relation to the firm’s level of entrepreneurial intensity- being the position of the firm on the conceptual entrepreneurial behaviour continuum, as it ranges from highly conservative to highly entrepreneurial – is then applied to the emerging four contingent corporate recovery pathways, as determined by the Contingency Recovery Typology (Helou, 1995; 2017), to explore the nature and position of the firm’s emergent contingent recovery path – as it lies on a conceptual recovery pathway continuum ranging from highly evolutionary to highly incremental. “Evolutionary” recovery pathways are shorter, direct, and cost effective, as recovery plans and strategies are implemented in only two recovery states (Path IV); where incremental recovery pathways are longer, indirect and costly, as recovery plans and strategies are implemented in at least three to four recovery states (Path I, Path II, & Path III). For ease of discussion, the polar ends of the recovery pathway continuum are referred to as “evolutionary” (direct, low cost and high-speed recovery path, stretching from State I: “Jumbled” State directly to State IV: “Routinization and Stability”); and “incremental” (indirect, high cost and low-speed recovery path, passing through at least three or all four recovery states: “Jumbled”, “Experiential”, “Transitional” and “Routinization and Stability”). This section also features an analytical evaluation of the temporal properties and determinants of the developmental phases and recovery pathways, and provides a discussion of the impact of the of the firm’s level of corporate intensity on the nature of the recovery path undertaken, and the overall texture of the recovery process. Finally, the conclusion presents the theoretical and practical managerial implications, and provides directions of future research.

II. Theoretical Background

The current research study builds on the following two main studies: The Contingency Recovery Typology (Helou, 1995; 2017), and the firm-level entrepreneurial intensity (Barringer and Bluedorn, 1999). This section provides a brief exploration of each of these studies, followed by a discussion of their contributions, limitations and application.

III. Contingency Recovery Typology: Four Contingent Recovery Pathways

As per Table 1, when juxtaposing the contingent decision-making contexts schema (Jarman and Kouzmin, 1990; Kouzmin and Jarman, 1989) to the elements of the Crisis, Breakdown and Re-equilibration Model (Linz and Stephan, 1978), the decision-making contexts of Algorithm, Opportunity-Cost, Muddling Through and Crisis, correspond to the elements of the Crisis, Breakdown and Re-equilibration Model, namely, Stability, Efficacy; Effectiveness and Instability.

Table 1: Decision-Making Contexts, Crisis, Breakdown and Re-equilibration Elements

S. No	Decision-Making Contexts	Crisis, Breakdown and Re-equilibration Elements
1	Algorithm	Stability
2	Opportunity-Cost	Efficacy
3	Muddling Through	Effectiveness
4	Crisis	Instability

Source: Helou, 2017

This provides a significant analytical tool to assess four corporate evolutionary stages of recovery and development (Stage I: Jumbled State, Stage II: Experimental State, Stage III: Transitional State, Stage IV: Routinization). The four subsequent developmental stages are featured in Table 2 below. Accordingly, the Contingency Recovery Typology outlines four different pathways to progress from a “Jumbled” state to a “Routine” state contexts. Creative and innovative recovery strategies are needed to move the organization out of the “Jumbled” phase and into the “Routine” Phase (Kouzmin and Jarman, 1989), otherwise the organization might find itself absorbed in a “Jumbled” state. As the organization moves out of the jumbled state, and in the direction of the new algorithmic state, the complexity of decision making gradually decreases, and the level of risk and environmental uncertainty incrementally drops. Furthermore, four recovery paths emerge, each commencing with the first contingent class, namely, the “Jumbled” phase, and ending with the fourth contingent class, namely, “Routinization”, with different paths in between that can be traced for events to end up in a new algorithm. Even though these recovery phases are interrelated, each of them holds different properties, as follows:

A. Stage I - Jumbled State

This embodies the first recovery phase, which is characterised by a high level of risk and uncertainty, since the firm has just emerged out of a crisis situation. During this stage, the firm is struggling with the implementation of recovery activities given a “crisis” decision making context, and an “unstable” environmental state (Table 2).

B. Stage II – Experimental State

During this phase, the firm attempts to implement recovery strategies given a “muddling through” decision making context, and an “effective” environmental state. Since the firm is muddling through, it is in need of generating and implementing recovery policies geared towards the realization of the reform forces needed to attain recovery (Table 2).

C. Stage III – Transitional State

This is the third recovery state. In this stage, the organization attempts to implement recovery strategies given an “opportunity cost” decision making context, and an “efficacious” environmental state (Table 2). It signifies a new order categorized by short-term stability, where a major challenge for the firm is to develop suitable resolutions to pertinent developmental complications. As such, comprehensive feasibility studies and cost-benefit analyses of alternate recovery strategies are generated (Table 2).

D. Stage IV – Routinization and Stability

This denotes the final state. In this stage, the firm continues to undertake recovery activities given an “algorithmic” decision making context, and a relatively “stable” environment (Table 2). This stage represents an excellent position for management to evaluate corporate recovery and developmental forces, and identify an optimal cost-effective means of attaining them. In comparison to Stage I, the level of uncertainty, urgency and threat experienced by the firm has decreased (Rosenthal, 1986). The attainment of long-term stability is determined by the firm’s realization of the much-needed reform forces (Table 2).

Table 2: Contingent Recovery and Development Stages

	Decision-Making Contexts		Crisis, Breakdown and Re-equilibration Elements		Recovery Contexts
Phase I	Crisis	+	Instability	=	Jumbled Phase
Phase II	Muddling Through	+	Effectiveness	=	Experimental Phase
Phase III	Opportunity Cost	+	Efficacy	=	Transitional Phase
Phase IV	Algorithm	+	Stability	=	Routinisation

Source: Helou, 2017

The nature of the above mentioned four recovery stages, being either “evolutionary” or “incremental”, is determined by the degree of flexibility and effectiveness of the firm’s entrepreneurial-leadership attitudes and functions practised, and the recovery path assumed. Recovery strategies should aim at maximizing recovery activities, and minimizing recovery time (Sahebjamnia, Torabi and Mansouri, 2015). The ability to gradually achieve this is determined by the gravity and the pace for which recovery forces are being realized by the firm, which, in turn, is once again reliant on the style and nature of the firm’s entrepreneurial-leadership behaviour in practice.

PHASE IV Routinization and Stability	PHASE II Experimental State
PHASE III Transitional State	PHASE I Jumbled State

Fig. 1: Contingent Stages of Recovery and Development
Source: Helou, 2017

As the firm cruises on a recovery mode, it shifts away from Phase I (Jumbled Phase) in the direction of Phase IV (Routinization and Stability). Meanwhile, there are other recovery pathways that the firm may choose to adopt. This study evaluates four recovery pathways, all of which commence at Phase I and end in Phase IV, while conceivably transiting through Stage II, or Stage III, or both, as follows:

- **Path I:** This signifies the longest recovery path, where recovery plans are gradually implemented at every recovery phase. It transits through the four recovery phases, commencing with the jumbled phase, and concluding in the routine and stable phase, as follows: It starts at the “Jumbled” stage, shifts to the “Experimental” stage, passes by the “Transitional” stage, and concludes in “Routinization and Stability” (Path I: 1,2,3,4) (Fig. 1).
- **Path II:** This also denotes a long recovery path, yet shorter than Path I, where recovery plans are gradually implemented over three of the recovery phases. It transits through three recovery phases, commencing with the jumbled phase, and concluding in a routine and stable phase, as follows: It starts with the “Jumbled” phase, transits to the “Experimental” state, and concludes in “Routinization and Stability” (Path II: 1, 2, 4) (Fig. 1).
- **Path III:** This is also a long recovery path. It is shorter than Path I, where recovery plans are gradually implemented over three of the four phases. It transits through three recovery phases, commencing with the jumbled phase, and concluding in a routine and stable phase, as follows: It starts at the “Jumbled” phase, transits to the “Transitional” phase, and concludes in “Routinization and Stability” (Path III: 1, 3, 4) (Fig. 1).
- **Path IV:** This depicts an evolutionary recovery pathway. It is the shortest and conceivably the most cost-effective path. Recovery plans are implemented in only two recovery phases, commencing at the jumbled phase, and concluding in a routine and stable state, as follows: It starts at the “Jumbled” state, and concludes in “Routinization and Stability” (Path IV: 1,4) (Fig. 1).

Recovery challenges may emerge at each and every state. Organizational capability to board on a recovery mode, whilst endeavouring to gradually overcome developing recovery challenges, is determined by the adaptability and efficiency of the firm’s entrepreneurial-leadership intensity and governance patterns practised. Accordingly, the corporate recovery route adopted is dependent on the attainment of the following:

- Organizational capacity to formulate an innovative and optimal recovery strategy;
- The firm’s capability to effectively implement set recovery strategies within the allocated time and budget; and

- The intensity and effectiveness of the firm’s entrepreneurial-governance patterns practised in attaining the recovery requisites needed, and adapting to environmental changes.

Regardless of the degree of the firm’s readiness to the prospect of emergent risks, momentous surprises may surface (Helou, 1995). This requires constant appraisal and assessment of preceding contingent strategies in light of probable new challenges (Dror, 1988). When considering the contingent stages of organizational recovery, post-turbulence situational entrepreneurial-leadership patterns, adopted whilst managing the progression of the firm’s recovery path, can be identified. The Contingency Recovery Typology argues for a temporal and adaptive entrepreneurial-leadership paradigm, which permits leaders in charge to transit among alternate entrepreneurial-leadership functions, patterns and strategies (for example, authoritarian to participatory, and vice versa), as needed throughout the recovery and post-crisis periods.

Every crisis situation is unique, as such the need for situation-specific temporal governance emergency response strategies (Rosenthal, 1986). Nevertheless, developing an understanding of the entrepreneurial-leadership intensity and associated governance patterns practised during past recovery situations, assist in developing future recovery response plans and activities. Recovery hurdles arise if the firm fails to identify and effectively implement the recovery strategies needed, thus, deterring the realization of crucial recovery requisites. In such cases, the firm may get absorbed in long-term turbulent and uncertain environmental states, thus, prolonging its duration at the “Jumbled” stage (Phase I). With augmented decline, recovery may become unachievable, or even unsolicited.

IV. Firm-Level Entrepreneurial Intensity

Corporate entrepreneurship, in terms of both attitudes and behaviour, represents a major organizational process that impacts organizational performance and survival under competitive environments (Lumpkin and Dess, 1996). In a study encompassing 169 U.S. manufacturing firms, employed to explore the impact of a firm’s strategic management practices on its corporate entrepreneurial intensity (attitudes and behaviours), Barringer and Bluedorn (1999) selected five strategic management dimensions to study their potential influence on one or more of the key firm-level entrepreneurial behaviour enablers, namely, opportunity recognition, organizational flexibility, and a firm’s ability to measure, encourage, and reward innovative and risk-taking behaviour.

The five strategic management dimensions selected are: The scanning intensity (degree of rigor of the managerial activity aimed at uncertainty absorption given the trends and events in the firm’s environment), planning flexibility (adaptability of strategic plans with the identification of environmental opportunities and threats), planning horizon (length of the future time period that decision makers consider in planning), locus of planning (level of employee involvement in the firm’s strategic planning process), and control attributes (a control system in place ensuring that business strategies meet predetermined goals and objectives, i.e., the control systems of entrepreneurial organizations must encourage innovation, proactiveness and risk-taking. While financial controls base performance on financial criteria, strategic controls base performance on strategic relevant criteria). In this study, the information on environmental turbulence and environmental complexity was collected via a self-report survey.

The authors explain that high corporate entrepreneurial process is congruent with high level of environmental scanning intensity, aimed at detecting market shifts that present opportunities for totally new or new and improved goods and services, and enable the risk-taking and proactive dimensions of entrepreneurial behaviour; high levels of planning flexibility aimed at changing set strategies as need arises; a short-term planning horizon (less than 5 years) to facilitate a speedy recognition of environmental change, and develop appropriate goods and service innovations; deep locus of planning that facilitates the consideration of good ideas from all levels of management; a well-designed strategic control system that is capable of rewarding employees on product or process innovations that take a longer time to reach the market; and a less rigorous financial control system.

In contrast, the authors further explain that conservative firms usually experience more stable environments, characterized by low levels of uncertainty, with goods and services having longer life cycles, as such, undertake low levels of environmental scanning with low degrees of innovativeness, and longer planning horizons; limited planning flexibility; long-term planning horizon (more than 5 years), as these firms tend to operate in a stable and predictable environments; shallow locus of planning that limits planning to only top management, as deep employee participation in planning is not needed, and is expensive in terms of time and energy; less strategic control system which is costly in terms of managerial time and effort; a well-designed financial control system which introduces a high degree of discipline into the control process, and a less strategic control system given its cost in terms of managerial time and effort.

V. Contributions and Limitations

This section discusses the contributions and limitations of the above two research studies. The Contingency Recovery Typology represents a holistic, contingent and “heuristic” approach to corporate recovery policy planning. The application of such an approach, as opposed to one dictated by purely short-term economic forces, explains the reason why some organizations are able to timely emerge from chaos, while others seem to submerge in on-going turbulence. It represents a dynamic tool to be employed by academics, organizational leaders and policy decision-makers, for the analysis of the corporate recovery process, and the development of effective recovery plans and strategies, at each and every stage throughout the recovery process. It is situation specific, as such, relevant to various levels of analysis. In other words, it is applicable to nations, states and organizations. A main limitation of the Contingency Recovery Typology (Helou, 1995; 2017) is that it does not provide for the dynamic nature of stage I, the “Jumbled” State. That is, it does not allow for the time-sensitivities inherent in the jumbled stage. Beyond a certain degree of decline, the organization may find itself rather hooked and unable to progress from Stage I: “Jumbled” State. At this stage, moving on to the next recovery phase becomes either extremely difficult, or even impossible. Another main limitation of the Contingency Recovery Typology (Helou, 1995; 2017) is that it fails to specify the entrepreneurial-leadership intensity determinants impacting the nature and speed of recovery, and, thus, the nature of the firm’s emergent recovery path experienced, being either gradual and “incremental” or “evolutionary”. In other words, the above-mentioned typology fails to identify the entrepreneurial-leadership functions and behaviours needed to facilitate and speed up the firm’s recovery efforts.

Barringer and Bluedorn’s (1999) research study contributes in presenting the relationship between the five selected strategic management practices mentioned above and the firm-level entrepreneurship intensity. Nevertheless, it also has few flaws as well. First, as Barringer and Bluedorn (1999) explain, less mature streams of literature bases are available to support the validity of two of the strategic management practices selected, namely, planning flexibility and locus of planning. Secondly, the control variables considered included environmental turbulence, environmental complexity, firm size, debt level and current ratio. A change in one or more of these variables may impact on the attained results. Thirdly, the analysis is confined to only five strategic management practices and the level of corporate entrepreneurship intensity. Finally, the analysis is also limited to only manufacturing firms.

Nevertheless, applying the firm-level entrepreneurial intensity, via the conceptual entrepreneurial behaviour continuum (Barringer and Bluedorn, 1999), to the four contingent recovery pathways (Helou, 1995; 2017), would facilitate organizational understanding of the entrepreneurial attitudes and behaviours required to facilitate organizational recovery given decline. Accordingly, it would further assist in developing a deeper understanding of the nature and speed of firms’ recovery processes, and the position of the contingent recovery path on the Recovery Pathway Continuum. As such, organizations would then be able to match their entrepreneurial attitudes and behaviours with their allocated temporal and budgetary recovery objectives.

VI. Entrepreneurial-Recovery Path Analysis

Organizational attainment of the requirements for contingency-related analysis of recovery pathways needed to be able to adapt to crucial changes in the decision-making contexts and environmental states, is highly dependent on the displayed corporate leadership skills and training (Kouzman and Jarman, 1989), and the level of corporate entrepreneurial intensity (Barringer and Bluedorn, 1999). For example, the research outcome of Barringer and Bluedorn (1999) indicate that a firm with high corporate entrepreneurial intensity is continuously innovative, and undertakes extensive environmental scanning to identify and exploit environmental change in an attempt to remain competitive. A firm experiencing a turbulent environment is in need of extensive environmental scanning, short planning horizons, and a flexible planning system, to identify and implement innovative and relevant recovery requisites. This supports previous research findings (Rosenthal, 1986), in that firms facing turbulent environments are found to be more innovative, proactive and risk-takers (Naman and Slevin, 1993).

Four out of the six hypotheses tested by Barringer and Bluedorn (1999) were supported, postulating a positive relationship between corporate entrepreneurial intensity and environmental scanning intensity, planning flexibility, broad locus of planning, and high strategic controls. In other words, this outcome suggests that entrepreneurial intensity is affected by the nature of the firm’s strategic management practices. Likewise, the attainment of the much-needed recovery requisites under turbulent environments, conditioning the organizational embarkation on a recovery mode, in general, and determining the nature of the contingent corporate recovery path, in specific, are also a function of the entrepreneurial-leadership behavioural patterns practised over time (Kouzman and Jarman, 1989).

As such, instead of having environmental forces shaping, and, at times, hindering, corporate recovery, the firm itself could shape the

nature and speed of its own recovery and its recovery pathway, with the nature and extent of its own strategic management practices. For example, given Barringer and Bluedorn's (1999) research outcome discussed above, firms with high entrepreneurial intensity levels (that is, undertaking high scanning intensity, planning flexibility, broad planning locus, with a strong emphasis on strategic controls), are more likely to experience an evolutionary type corporate recovery path (Path IV: 1, 4), characterised by its shortness, relatively low cost and high-speed of recovery. It is conceivably the most cost-effective recovery path, where recovery strategies are implemented in only two recovery states, namely, Phase I: "Jumbled" State and Phase IV: "Routinization and Stability". Following this path, the recovery process is rather direct, that is, it commences in Phase I and ends in Phase IV (Figure 1).

In contrast, the more conservative the firm is, in terms of practising a low level of entrepreneurial intensity (low in scanning intensity, planning inflexibility, narrow planning locus, with minimal or no emphasis on strategic controls), the more likely it is to experience one of the three incremental type corporate recovery paths (Path I: 1, 2, 3, 4; Path II: 1, 2, 4; or Path III: 1, 3, 4) (Figure 1), all of which are characterized by their hefty costs, length (prolonged recovery process), and, thus, recovery delays. Path I (1, 2, 3, 4), is conceivably the longest incremental path, where recovery strategies are implemented in all four recovery stages, namely, "Jumbled" State, "Experimental" State, "Transitional" State and "Routinization & Stability".

VII. Conclusion: Significance, Contributions and Directions for Future Research

This section presents the significance, contributions and implications of the current research study to management theory and practice. With the application of the firm-level entrepreneurial intensity research (Barringer and Bluedorn, 1999) to the contingent recovery pathways (Helou, 1995; 2017), the firm would be in a better situation to determine the emergent recovery path it is likely to experience, given the nature of its strategic management practices. As such, given high turbulence and decline, the firm would be in better command of planning its recovery strategies, given the available knowledge of the relationships between the nature of five pertinent strategic management practices and the level of intensity of its entrepreneurship, which, in turn, impacts the nature of its recovery and development. Knowledge of the relationship between the level of corporate entrepreneurial intensity and the nature of the firm's recovery pathway, is significant to both researchers and managers, as it assists in developing a better understanding of the intricacies of the firm's recovery pathways and corporate entrepreneurship interface.

This study represents the basis for future empirical research in the area of firms' recovery given decline and firm-level of entrepreneurship intensity. In addition, future research will further seek to validate the findings of the current research through applications to real case studies relating to both public and private-sector firms operating in both manufacturing and service industries. Furthermore, future research would in corporate exploring further organizational dimensions, including additional strategic management practices, that positively impact the corporate entrepreneurial intensity needed for the realization of a shorter, and possibly more cost-effective evolutionary recovery path, as opposed to the costly and time consuming incremental recovery pathways.

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