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Article

Effectuation in Crisis: How Displaced Women Entrepreneurs in Ethiopia Build Sustainable Businesses

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Abstract: This study explores how displaced women entrepreneurs in Ethiopia leverage effectuation principles to build sustainable businesses in resource-constrained, crisis-affected environments. By examining strategies such as affordable loss, means orientation, and partnership formation, the research extends effectuation theory to displacement contexts, where uncertainty and resource scarcity are prevalent. Findings reveal that affordable loss and means orientation—leveraging available resources and minimizing risks—are critical for sustaining businesses, showcasing the adaptability and resilience of women entrepreneurs. However, reliance on partnership opportunities and rigid control orientation may hinder business longevity, highlighting the limitations of effectuation principles in displacement settings. The study contributes to sustainable entrepreneurship by demonstrating both the relevance and constraints of effectuation theory in crisis-affected environments. It underscores the importance of flexible, resourceful strategies for women entrepreneurs navigating systemic challenges, offering insights for policymakers and support organizations. Practical implications include designing capacity-building programs that promote adaptive strategies, such as risk management and resource optimization, while addressing the challenges of partnerships and rigid control mechanisms. By aligning with the goals of sustainable development, this research not only highlights the potential of effectuation principles but also unravels their limitations, providing a nuanced understanding of how entrepreneurial strategies can foster resilient livelihoods and sustainable economic practices in crisis-affected regions.

Keywords: displacement; women entrepreneurs; effectuation; business sustainability; Ethiopia; sustainable development; crisis-affected environments

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1. Introduction

The intensification of global conflicts, climate crises, and socio-political upheavals has led to unprecedented levels of forced displacement, with millions of individuals uprooted from their homes and livelihoods. Among these displaced populations, entrepreneurship has emerged as a vital mechanism for survival and socio-economic integration. For displaced women entrepreneurs, who often face compounded vulnerabilities due to intersectional barriers, entrepreneurial activity offers a pathway to sustain livelihoods, achieve independence, and rebuild agency. In this context, effectuation theory provides a robust conceptual framework for understanding how these individuals navigate uncertainty and resource constraints to establish and sustain businesses.

Effectuation theory, pioneered by Sarasvathy (2001), fundamentally reorients entrepreneurial strategy by shifting the focus from causation—where predefined goals are pursued through optimal means—to effectuation, where entrepreneurs co-create opportunities by leveraging available resources and partnerships. The theory comprises five core principles: Means Orientation (EMO), Affordable Loss (EAL), Leveraging Contingencies (ECO), Partnership Orientation (EPO), and Control Orientation (EC). Each principle of effectuation offers unique insights into the entrepreneurial strategies employed by displaced populations. Means Orientation (EMO)

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emphasises starting with existing resources such as skills, knowledge, and networks (Al-Dajani & Marlow, 2013; Sarasvathy et al., 2014). For displaced women, this principle underscores the importance of leveraging informal networks, cultural capital, and entrepreneurial ingenuity in the absence of formal support systems. Affordable Loss (EAL) highlights the willingness to take calculated risks within acceptable limits (Daniel et al., 2015), facilitating iterative learning and sustainable venture development (Chen et al., 2021; Li-Hui et al., 2019). This approach is crucial for entrepreneurs in displacement settings, where high uncertainty necessitates prudent risk management.

Leveraging Contingencies (ECO) involves turning unexpected events into opportunities, a critical skill for navigating the rapidly shifting market conditions in displacement contexts (Roach et al., 2016). For instance, IDWs often exhibit remarkable adaptability by pivoting their business models in response to environmental shocks or resource constraints. Partnership Orientation (EPO) focuses on building strategic alliances and securing commitments from partners to reduce uncertainty (Ebegbetale, 2021). Collaborations with host communities, NGOs, and diaspora networks are often central to displaced women's entrepreneurial success. Lastly, Control Orientation (EC) encourages entrepreneurs to focus on controllable factors rather than attempting to predict uncertain futures (Renton & Simmonds, 2019). This principle fosters flexibility and resilience, enabling displaced entrepreneurs to navigate instability effectively.

Research Context and Questions

While effectuation theory provides a valuable lens for understanding entrepreneurial strategies under uncertainty, its application in displacement contexts warrants critical examination. Displacement settings are characterized by systemic barriers, such as restricted access to financial systems, formal markets, and social capital, which challenge the foundational assumptions of effectuation. Critics, including Jones and Li (2017), argue that the theory's emphasis on short-term adaptability may impede long-term scalability and planning, particularly for marginalised groups like displaced women.

Ethiopia provides an important setting for examining these dynamics. With over 3 million internally displaced people (IDPs) as of 2023, driven by ethnic conflicts, environmental disasters, and political instability, the country represents one of the largest displacement crises globally (IDMC, 2023). Displaced women in Ethiopia face profound challenges, including limited access to financial resources, formal markets, and social safety nets. Nonetheless, many of these women have turned to entrepreneurship as a means of economic survival and resilience. Their experiences provide a unique opportunity to explore how effectuation principles are operationalized in displacement contexts, particularly in low-income, resource-scarce settings.

This study addresses these theoretical and practical gaps by investigating the relationship between effectuation principles and business longevity among displaced women entrepreneurs in Ethiopia. Employing a survey of 439 displaced women entrepreneurs and analysing the data using a Generalized Linear Model (GLM), the study seeks to answer the following research questions:

1. How do effectuation principles—Means Orientation, Affordable Loss, Leveraging Contingencies, Partnership Orientation, and Control Orientation—affect business longevity among displaced women entrepreneurs?
2. How can these findings inform policy and support mechanisms to enhance the resilience and sustainability of businesses initiated by displaced women entrepreneurs?

The findings suggest that effectuation principles play a critical yet complex role in shaping business longevity in displacement contexts. Affordable Loss (EAL) emerges as a significant positive predictor of sustained business operations, reaffirming its importance in managing risks and fostering iterative learning. Similarly, Means Orientation (EMO) demonstrates marginally significant positive effects, emphasising the value of resourcefulness and leveraging existing capabilities. In contrast, Control Orientation (EC) and Partnership Orientation (EPO) exhibit significant negative effects, raising questions about the limitations of these principles in volatile displacement settings.

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This study critically contributes to the understanding of effectuation principles by highlighting their contextual limitations in the unique setting of IDP women entrepreneurs in Ethiopia. While effectuation theory emphasises flexibility, leveraging contingencies, and forming partnerships (Zhang et al., 2022), the findings challenge the assumed universality of these principles. The negative and significant impact of control orientation (EC) and partnership opportunities (EPO), along with the non-significance of contingency orientation, underscores how structural barriers such as inadequate legal recognition, discrimination, and marginalisation by host communities inhibit the practical application of these principles (Onuh, 2023; Voznyak, 2023).

By exposing the limitations of effectuation in contexts of forced displacement, this study not only enriches theoretical discourse but also paves the way for future research to examine alternative frameworks suited to vulnerable and resource-deprived entrepreneurs. It advocates for more nuanced approaches that account for structural inequities, the lack of institutional support, and socio-cultural dynamics in such environments (Sendra-Pons et al., 2021). This contributes to advancing the discourse on entrepreneurial resilience and adaptation, providing valuable insights for policymakers and practitioners seeking to design inclusive interventions that foster sustainable entrepreneurship among displaced populations (Block et al., 2014).

The paper is structured as follows: The next section reviews the literature on effectuation theory and displaced entrepreneurship, situating the study within the broader scholarly discourse. The methodology section outlines the survey design, sample characteristics, and analytical framework. The results section presents the empirical findings, followed by a discussion of their theoretical and practical implications. The paper concludes with recommendations for future research and policy interventions aimed at fostering entrepreneurial resilience among displaced populations.

2. Theoretical Literature Review and Hypotheses Development Effectuation

The effectuation approach to entrepreneurship involves flexible, adaptive, and experimental strategies for enterprising efforts, based on cognitive framing of opportunities rather than rational planning (Chandler et al., 2011; Fisher, 2012; Read & Sarasvathy, 2005). Under pure uncertainty conditions, effectuation theory suggests that 'decision-makers will rely on their existing means and a logic of control to activate useful ties, utilize affordable loss, and start building a new future, be it a new market, a new product, or a new organization...', (Cowden et al., 2022, 7; Sarasvathy, 2001). The context of forced internal displacement provides a rich setting to examine the effects of effectuation on women's enterprising and the sustained business operation as it assumes uncertain and dynamic environments where future states are not predetermined but rather created through entrepreneurial actions (Jiang & Tornikoski, 2019; Stuart et al., 2016, Urban and Heydenrych, 2015; Welter & Kim, 2018). Effectuation decision making logic consists of 5 facets to address perceived uncertainty: means orientation, affordable loss, contingency orientation (flexibility), control orientation and partnership opportunity (pre-commitments) (Dew et al., 2009; Sarasvathy, 2008). This approach allows entrepreneurs to change or adapt goals given resource constraints.

The effectuation theory is particularly effective in uncertain business environments, offering a strategic management approach to navigate uncertainties and drive entrepreneurial success (Aggrey et al., 2021). Research has shown that the effectuation principles have a significant impact on entrepreneurial performance (Eyana et al., 2018; Fiedler et al., 2016; Smolka et al., 2018). For instance, experimentation and flexibility have been found to positively influence the competitiveness of entrepreneurs (Smolka et al., 2018). Additionally, the use of effectuation principles, such as affordable loss and leveraging contingencies, has been associated with improved venture performance (Fiedler et al., 2016). Effectuation also helps entrepreneurs view uncertainty as an opportunity rather than a barrier, leading to more proactive internationalization efforts. Read et al. (2009) identified favourable associations between performance and a focus on means-orientation, forming partnerships, and leveraging contingencies.

Scholars have pointed out that the context for effectuation is characterized by radical uncertainty, goal ambiguity, and environmental uniformity (Galkina and Atkova, 2020; Gr´egoire &

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Cherchem, 2020; Kitching and Rouse, 2020). However, such positioning has been critiqued for its insufficient attention to social, cultural, or bounded rationality (Arend et al., 2015; Kitching and Rouse, 2020; Welter et al., 2016; Yu et al., 2018). Therefore, it is important to look beyond the contextual influence on generic uncertainty and examine how other underlying mechanisms can be a source of uncertainty when entrepreneurs interact with their surroundings and other social agents (Kitching and Rouse, 2020; Welter et al., 2016). Drawing on the contingency theory, Shirokova et al. (2021, 169) found 'an effectual behavioural logic' usefulness under conditions of uncertainty and resource constraints in the less developed financial and cultural-cognitive institutions.

2.1. Means Orientation

The Effectuation Means Orientation (EMO) principle emphasises that entrepreneurs should focus on the resources currently available to them rather than chasing distant, often uncertain resources. Effectuation principle of means orientation offers insights into displacement entrepreneurship by emphasising non-predictive control strategies in resource-constrained environments. Entrepreneurs leverage their existing means (who they are, what they know, and whom they know) to exploit opportunities and acquire resources (Pacho, 2022). The logic is that entrepreneurs shape their venture paths based on their immediate means, rather than a pre-determined vision, adapting as they go (Sarasvathy, 2008). The relationship between effectuation means orientation and firm performance has been examined in several studies. Nienhuis (2010) found that means-based actions, rather than goals-based ones, positively influence performance. Furlotti (2019) highlighted that means-based entrepreneurial actions improve new venture performance, especially when moderated by opportunity recognition and process control practices. Furthermore, Cowden et al. (2022) revealed that entrepreneurs adjust their use of effectual decision-making based on uncertainty levels, increasing it during extreme uncertainty to ensure survival. Given that displaced entrepreneurs often face limited external support and unpredictable markets, businesses that focus on means orientation can be more resilient and adaptable. By drawing on their available resources, displacement entrepreneurs are better positioned to weather shocks and uncertainties in the market, ensuring greater business sustainability. The iterative, adaptable approach offered by EMO enables them to pivot and adjust as conditions change, which is crucial for long-term operation. Thus, the following hypothesis is advanced.

H1: *There is a positive relationship between effectuation means orientation (EMO) and the sustained operation of businesses run by displacement entrepreneurs.*

2.2. Affordable Loss

Affordable loss refers to the process through which entrepreneurs assess the potential worst-case outcomes of their actions and establish the extent of loss they are willing to bear (Kalinic et al., 2014). This concept encompasses various dimensions, including opportunity costs, the loss of time, attention, commitment, or financial capital. Accordingly, entrepreneurs adopt a prudent approach, ensuring that they do not commit more resources than they can reasonably afford to lose (Brenk et al., 2019). This approach is particularly relevant for entrepreneurs in uncertain environments, such as developing countries (Ali et al., 2021) and disaster recovery situations (Monllor et al., 2020). EAL encourages entrepreneurs to estimate what they can risk and determine their willingness to lose in pursuing a venture (Dew et al., 2009). It extends beyond economic considerations to include social losses like status and reputation (Daniel et al., 2015). The principle is closely linked to other effectuation concepts like flexibility and pre-commitments (Palmié et al., 2018). While EAL principle is generally associated with effectuation, some research suggests it may have a prevention focus, potentially negatively impacting entrepreneurial orientation (Palmié et al., 2018). Understanding and applying EAL can foster resilient entrepreneurial strategies and aid in decision-making in dynamic markets (Ferrari & Vasconcellos, 2024; Tokunaga et al., 2018). In the context of internal displacement, women entrepreneurs are often forced to operate in highly precarious conditions with limited access

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to resources and safety nets. The affordable loss principle allows them to start and grow businesses without exposing themselves or their families to excessive operational risk. By only investing what they can afford to lose, these women increase their chances of long-term business survival. The iterative nature of the affordable loss approach enables them to learn from small failures, recalibrate, and continue operating, which is crucial in an unpredictable and resource-scarce environment. Moreover, the principle's focus on gradual, sustainable growth makes it particularly suitable for ID women, whose personal and familial responsibilities often demand a cautious, measured approach to entrepreneurship. Through affordable loss, they can manage their entrepreneurial risks while focusing on the longer-term goal of sustaining their business and supporting their families. Based on the foregoing discussion, the study hypothesises that:

H2: *There is a positive relationship between effectuation affordable loss (EAL) and the sustained operation of businesses run by internally displaced women.*

2.3. Contingency Orientation

The Effectuation Contingency Orientation (ECO) principle is rooted in the idea that entrepreneurs should embrace and leverage unexpected events and changes rather than trying to avoid them. Instead of planning for every possible risk, entrepreneurs operating under contingency orientation adapt their strategies dynamically in response to unforeseen circumstances, viewing surprises as opportunities to pivot and innovate. This flexibility allows them to take advantage of emerging opportunities that may arise from unexpected events, changes in the market, or environmental shifts. Refugees or displaced women often engage in necessity-driven entrepreneurship (Lim, 2024) due to limited employment opportunities in host countries, leveraging their innate entrepreneurial traits and adapting to new economic landscapes. The effectuation approach, which emphasises flexibility and leveraging contingencies, is particularly relevant in high-uncertainty environments like those faced by refugee entrepreneurs (Cherbib, 2024). The Effectuation contingency orientation principle also emphasises the importance of leveraging contingencies, which refers to the ability to adapt and pivot in response to unforeseen events or opportunities (Philippi, 2023). For IDPs, the ability to remain flexible and responsive to their new environments is vital. As they navigate the complexities of their host communities, they can capitalize on unexpected opportunities that arise, such as shifts in local demand or new partnerships with other entrepreneurs or organizations (Prijadi et al., 2022). This adaptability is particularly important in conflict-affected areas, where economic conditions can change rapidly and unpredictably (Cheung & Kwong, 2017).

Internally displaced women entrepreneurs operate in unpredictable and resource-poor settings. The ability to dynamically respond to unexpected changes and shocks enhances their resilience and ability to keep their businesses running. Rather than being derailed by disruptions, those who apply contingency orientation may thrive, as they turn challenges into opportunities for innovation and new business avenues. The flexible and adaptive nature of ECO makes it a powerful approach for maintaining long-term business operations, especially for entrepreneurs who cannot rely on stable market conditions or institutional support. The study hypothesises thus:

H3: *There is a positive relationship between effectuation contingency orientation (ECO) and the sustained operation of businesses run by internally displaced women.*

2.4. Control Orientation

The effectuation principle of control orientation is crucial for understanding displacement or refugee entrepreneurship. Effectuation emphasises control over prediction in entrepreneurial action, particularly under uncertainty (Sarasvathy, 2008). Control orientation in effectuation involves flexibility, experimentation, and fluid goals (Johnson & Hörisch, 2021), which can be beneficial for sustainable entrepreneurship in developing contexts (Dawa & Marks, 2023). Ko et al. (2021) argue that the control dimension of effectuation logic encourages firms to assess their available resources

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and be more willing to experiment, leading to improved performance outcomes. This adaptability allows firms to pivot quickly in response to market demands, enhancing their overall performance. In the context of internal displacement, where future conditions are highly uncertain and external support is limited, *control orientation* offers a pathway for ID women to maintain agency over their entrepreneurial ventures. By focusing on the variables they can influence—such as leveraging local networks, adapting to immediate market needs, and maintaining flexible operational strategies—these women are more likely to sustain their businesses over time. The principle of control orientation provides a sense of empowerment and resilience, enabling ID women to continue operating their businesses despite ongoing challenges and uncertainties. By controlling the factors they can manage, they are able to continue generating income and supporting their families, which enhances the sustainability of their ventures in the long term. Thus it is hypothesised:

H4: *There is a positive relationship between effectuation control orientation (EC) and the sustained operation of businesses run by internally displaced women.*

2.5. Partnership Opportunity

Internally displaced women face unique challenges in starting and maintaining businesses due to resource scarcity, limited access to capital, and the absence of supportive institutions. The effectuation principle of partnership opportunity plays a crucial role in understanding displacement and refugee entrepreneurship. Partnership opportunities become vital in these conditions because they enable ID women entrepreneurs to leverage external resources and expertise, reducing the burden of entrepreneurship in a highly volatile environment. Displaced and/or migrant entrepreneurs leverage resources from various networks to create opportunities in host country markets (Lassalle et al., 2021). The comprehensive review of Harima and Freudenberg (2020) highlights the critical role of partnership opportunities (EPO) as displaced and refugee entrepreneurs leverage social capital, informal networks, and local partnerships to navigate and overcome challenges in hostile business environments. By forming strong partnerships, displaced women can gain access to crucial inputs such as raw materials, financing, and customer networks, all of which contribute to sustaining their business operations (Dushime & Muathe, 2023). Additionally, partnerships provide a mechanism for sharing risk, learning from partners, and innovating in response to market changes, enhancing the long-term viability of their ventures. Given the uncertainty and instability of displacement, partnerships allow these women to create more secure and resilient business models that are adaptable to their changing environments. Sarasvathy's (2001) foundational work on effectuation theory, along with contemporary research by Harima and Freudenberg (2020), supports these claims by showing how partnership-oriented approaches enhance the flexibility and adaptability of entrepreneurs, especially in resource-constrained environments like those faced by displaced individuals. Based on the foregoing review, this study hypothesises:

H5: *There is a positive relationship between effectuation partnership opportunities (EPO) and the sustained operation of businesses run by internally displaced women.*

2.6. Age of the Entrepreneurs

The age of displaced women entrepreneurs positively influences their ability to sustain business operations over time. This relationship arises from age-related factors such as accumulated experience, broader social networks, and psychological traits like resilience and adaptability, all of which enhance the effective application of entrepreneurial principles. Older entrepreneurs often possess a wealth of knowledge and expertise, enabling them to leverage effectuation principles like means orientation and strategic partnerships more effectively. Research by Khurana et al. (2021) suggests that while the use of causation and effectuation logics does not statistically vary by age, experience significantly shapes how these principles are applied in practice. Additionally, older

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entrepreneurs typically exhibit higher entrepreneurial self-efficacy, supported by career experiences and well-established social capital, which facilitate resource acquisition and decision-making in uncertain environments (Maitlo et al., 2020). Furthermore, psychological traits associated with age, such as greater resilience, enhance their capacity to navigate challenges, fostering sustained business operations (Hensel & Visser, 2019). In contrast, younger entrepreneurs may lack these advantages, facing barriers such as limited networks and experience, which can impact their ability to sustain ventures. Hence, the study advances the following hypothesis.

Hypothesis 6: *There is a positive relationship between the age of displaced women entrepreneurs and their ability to sustain business operations over a prolonged period.*

3. Materials and Methods

This study was conducted in Ethiopia to explore the entrepreneurial opportunities available to internally displaced women residing in the vicinities of Addis Ababa. Collecting data from internally displaced populations presents unique challenges compared to refugees, as noted by the World Bank (2017a). Most African internally displaced women are engaged in informal sole trading activities such as street vending, home-based kiosks, open market spaces, and farmer markets. Consequently, considerable effort was required to locate these women and obtain their consent to participate in the research.

The study adopted a survey research strategy, using a structured questionnaire to capture the experiences, aspirations, and barriers faced by internally displaced women in accessing entrepreneurial opportunities. A stratified random sampling technique using random number generation was employed to ensure representation across different age groups and business sectors. 640 questionnaires and interview requests were sent out. The final sample comprised 439 internally displaced women, offering a comprehensive perspective on their entrepreneurial practices. The survey questionnaires were meticulously translated into local languages to enhance comprehension and then cross-checked back to English to maintain accuracy and reliability.

The data collection instrument included a five-point Likert scale to measure perceptions of entrepreneurial opportunity identification, ranging from strongly agree (1) to strongly disagree (5). To operationalize the construct of effectuation, 20 validated measurement items were used, following the frameworks established by Chandler et al. (2011) and Frese et al. (2020). These measures encompass dimensions of effectuation such as Means Orientation, Affordable Loss, Contingency Orientation, Control Orientation, and Partnership Opportunities. The dependent variable, business longevity, was measured categorically by years of operation, ranging from less than a year to over ten years, with longer operation times signifying greater business resilience and sustainability.

Data coding and analysis were conducted using SPSS Version 28. Descriptive statistics were calculated to summarize the data, and reliability analysis was performed to assess the internal consistency of the effectuation constructs. Cronbach's alpha for the effectuation scale was 0.886, exceeding the benchmark of 0.7, indicating strong reliability.

To examine the relationship between effectuation principles, age, and business sustainability, a Generalized Linear Model (GLM) with logit regression was employed. This method was chosen due to the ordinal nature of the dependent variable, "Years in operation," allowing for robust analysis of the odds of sustained business and to account for the heterogeneity of respondents. Independent variables included aggregated constructs of effectuation principles: AggEMO (Means Orientation), AggEAL (Affordable Loss), AggECO (Contingency Orientation), AggEC (Control Orientation), and AggEPO (Partnership Opportunities). The respondent's age was included as a control variable to assess its moderating effect on the relationship between effectuation principles and business sustainability.

The specified GLM Nominal Logistic Regression model is expressed as follows:

$$\text{Log}\ [P(Y \leq j)\ \backslash (1-P(Y \leq j) = \beta0(j) + \beta1\text{AggEMO} + \beta2\text{AggEAL} + \beta3\text{AggECO} + \beta4\text{AggEC} + \beta5\text{AggEPO} + \beta6\text{Age}$$

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Where:

- P(Y ≤j): The cumulative probability of the dependent variable Y being in category *j* or lower.
- β0(j): The threshold (intercept) for the j-th category. There will be J−1thresholds (where *J* is the number of categories of Y).
- *β*1,*β*2,*β*3,*β*4,*β*5,*β*6: The coefficients for the independent variables (AggEMO, AggEAL, AggECO, AggEC, AggEPO, Age) explain their influence on the sustainability outcome.

The proportional odds assumption implies that the coefficients *β*1,*β*2,*β*3,*β*4,*β*5,*β*6 are the same across all categories of Y.

The model fit was assessed using various statistical tests to ensure the validity and robustness of the results (Table 1). The Omnibus Test (likelihood ratio test) yielded a significant result ($\chi 2$=83.025,p<0.001), indicating that the specified model provided a significantly better fit than the null model. Goodness-of-fit measures, including deviance (*Deviance*/*df* = 0.600) and Pearson Chi-Square (Pearson/*df* = 0.982), suggested an adequate model fit. Furthermore, the Akaike Information Criterion (AIC = 1029.395) provided a baseline for model comparison, with lower values indicating better fit.

Table 1. Model Fit Indicators.

Measure	Value	Threshold for Good Fit
Likelihood Ratio Chi-Square	83.025	$p < 0.05$ (Significant)
Deviance/df	0.600	Adequate fit
Pearson Chi-Square/df	0.982	Adequate fit
AIC	1029.395	Lower is better

The multicollinearity diagnostic test indicates no multicollinearity in the used independent variables (see the estimated test statistics in Table 2). Variance Inflation Factors (VIF) were below the critical threshold of 10 (e.g., AggECO = 1.988, AggEAL = 1.151), while tolerance values exceeded 0.1 (e.g., AggECO = 0.503, AggEAL = 0.869), indicating no multicollinearity concerns. These test statistics support the appropriateness for inclusion of these independent variable in the model.

Table 2. Multicollinearity Diagnostics.

Predictor	Tolerance	VIF	Threshold for Multicollinearity Concerns
AggEAL	0.869	1.151	VIF < 10, Tolerance > 0.1
AggECO	0.503	1.988	VIF < 10, Tolerance > 0.1
AggEC	0.544	1.838	VIF < 10, Tolerance > 0.1
AggEPO	0.725	1.379	VIF < 10, Tolerance > 0.1

These measures collectively validate that the GLM with logit regression is statistically robust and suitable for exploring the effect of effectuation principles on business sustainability in this study. We have chosen a baseline model with the lowest Akaike Information Criterion by estimating the impacts of the explanatory variables mostly used in the literature.

4. Results and Analysis

4.1. Sociodemographic Profile

The demographic profile of the study participants reveals significant insights into the entrepreneurial opportunities and challenges faced by internally displaced women in Ethiopia (see Table 3). A majority of the respondents (55.6%) are aged 20–29 years, with 32.6% aged 30–39 years, indicating a predominantly young and potentially energetic workforce. However, the lower representation of women aged 40 years and above (9.5%) may suggest that older women face barriers

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to entrepreneurial participation, such as physical limitations or societal expectations, which could limit the diversity of experience within the entrepreneurial landscape.

Educational attainment is a critical factor influencing entrepreneurial capability, with 68.2% of respondents having no formal education or only a primary-level education. This limited educational background may constrain the respondents' ability to access formal business opportunities, navigate regulations, or adopt innovative practices. Conversely, it highlights the potential for training programs targeting basic business and financial skills to empower these women entrepreneurs.

Table 3. Sociodemographic status of study households.

No	Variables	Measurement	Ethiopia (N=439)	
			N	%
1.	**Age of the respondent**	< 20 years	10	2.3
		20-29 years	244	55.6
		30-39 years	143	32.6
		40-49 years,	30	6.8
		≥50 years	12	2.7
2.	Highest level of education of the respondent	No formal schooling	117	26.7
		Primary	182	41.5
		Junior secondary	50	11.4
		Secondary	72	16.4
		Diploma	11	2.5
		Undergraduate Degree	7	1.6
3.	Marital status of the respondent	Single	9	2.1
		Married (traditional/religious)	337	76.8
		Married (civil)	47	10.7
		Divorced	26	5.9
		Widowed	20	4.6
4.	Role of the respondent in the household	Dependent household member	4	0.9
		Wife/partner	338	77.0
		Head of household	97	22.1
5.	Number of children in the household	None	16	3.6
		1	59	13.4
		2	122	27.8
		3 to 5	198	45.1
		6 and above	44	10.0

Source: Field surveys, 2022.

Marital and household roles also provide crucial implications. A majority (76.8%) are traditionally or religiously married, with 77% identifying as wives/partners in their households, suggesting that their entrepreneurial efforts are likely driven by family needs. The significant proportion of respondents managing households with three or more children (55.1%) underscores the necessity for flexible business models that accommodate caregiving responsibilities. These findings emphasise the importance of addressing educational and resource gaps, tailoring interventions to support young and family-centred entrepreneurs, and creating inclusive opportunities for older women.

4.2. Descriptive Statistics: Opportunities for Enterprising

Table 4 presents descriptive statistics for the application of effectuation principles by internally displaced women entrepreneurs in Ethiopia. Among the five dimensions, **Means Orientation (EMO)** exhibited the highest adherence, with respondents strongly agreeing on leveraging personal knowledge (M=1.54, SD=0.698), motivation (M=1.97, SD=0.935), and competencies (M=1.92,

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SD=1.032). This reflects a strong reliance on existing resources to navigate entrepreneurial challenges. **Affordable Loss (EAL)**, on the other hand, demonstrated moderate agreement, with the highest mean (M=3.08, SD=1.321) indicating cautious investments to avoid financial ruin. These results suggest a pragmatic approach to managing risks amidst uncertainty.

The other dimensions showed more variability. **Contingency Orientation (ECO)** highlighted adaptability in using new information (M=1.98, SD=0.961) and surprises (M=2.01, SD=0.908) as opportunities, though setbacks were less often leveraged (M=2.30, SD=1.153). **Control Orientation (EC)** revealed moderate efforts to influence entrepreneurial environments, with proactive opportunity-seeking (M=2.02, SD=0.899) being more common than co-creating future markets (M=2.36, SD=1.100). Lastly, **Partnership Opportunities (EPO)** had the lowest adherence, with high mean values indicating limited engagement with partners early in the business process (M=3.03, SD=1.291). This suggests potential constraints in accessing networks or forming collaborations. Overall, the findings reveal strong reliance on internal resources, cautious risk-taking, and moderate adaptability, while partnerships remain an underutilized strategy.

Table 4. Effectuation in enterprising opportunities.

No	Variables	Ethiopia (N=439)	
		Mean	Std. Dev.
	Effectuation - Means Orientation (EMO)		
EMO1	I used my personal knowledge and experience in the best possible way	1.54	0.698
EMO2	I pursued those initiatives for which I have great motivation and interest	1.97	0.935
EMO3	I pursued those initiatives for which I personally have the relevant competencies	1.92	1.032
	Effectuation – Affordable Loss (EAL)		
EAL1	I only invested what I/family can afford to lose	2.26	1.042
EAL2	I tried to limit the potential loss of initiatives to an acceptable degree	2.62	1.203
EAL3	I only invested if the loss of the investment would not ruin the business	3.08	1.321
EAL4	I was unwilling to make profitable investment if this will jeopardize the stability of the business	2.61	1.147
	Effectuation – Contingency Orientation (ECO)		
ECO1	I regarded surprises to be new opportunities	2.01	0.908
ECO2	I exploited contingencies as effectively as possible	2.15	0.941
ECO3	I used new information as resources	1.98	0.961
ECO4	I used setbacks as new opportunities	2.30	1.153
	Effectuation – Control Orientation (EC)		
EC1	I attempted to influence the environment we operate in	2.29	0.958
EC2	I attempted to proactively design the environment with others	2.26	1.030
EC3	I attempted to co-create future markets	2.36	1.100
EC4	I attempted to influence trends	2.16	0.969
EC5	I always look for new opportunities despite what I do at present	2.02	0.899
	Effectuation – Partnership Opportunities (EPO)		
EPO1	I approached potential partners very early on to jointly co-create the future	3.03	1.291
EPO2	I entered business relationships where the partners are willing to commit (e.g., invest time) from the onset	2.95	1.253
EPO3	I perceived new actors on the market as potential partners	2.62	1.242
EPO4	I tried to reduce risks for my business by engaging in partnership with other actors in the market	2.62	1.062

Source: Field surveys, 2022. NB: Measurement: 1= strongly agree, 2= Agree, 3= Not sure, 4= Disagree, 5= strongly disagree.

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4.3. Generalised Linear Logistics Mode Results and Hypotheses Tests

This section presents the results of the Generalized Linear logistics Model (GLM) analysis, and the hypothesis testing conducted to examine the relationship between various effectuation principles and the sustained operation of businesses run by displacement entrepreneurs. The findings are reported using parameter estimates, significance levels, and odds ratios, providing insights into the extent to which the advanced hypotheses were supported (Table 5).

Table 5. Generalized Linear Logit Regression Results.

Variable	B	Std. Error	95% CI for B (Lower, Upper)	Wald Chi-Square	Sig.	Exp(B)	95% CI for Exp(B) (Lower, Upper)
AggEMO	0.302	0.1735	-0.038, 0.642	3.035	0.081*	1.353	0.963, 1.901
AggEAL	0.571	0.1425	0.292, 0.850	16.052	<0.001***	1.770	1.339, 2.341
AggECO	-0.232	0.1868	-0.599, 0.134	1.549	0.213	0.793	0.550, 1.143
AggEC	-0.425	0.1603	-0.739, -0.111	7.021	0.008***	0.654	0.478, 0.895
AggEPO	-0.604	0.1103	-0.820, -0.388	30.003	<0.001***	0.546	0.440, 0.678
D1: Age	0.269	0.1213	0.031, 0.507	4.927	0.026**	1.309	1.032, 1.660

*p < 0.05, **p < 0.01, ***p <0.001. Source- Author's Analysis.

4.3.1. Age Matters for Business Sustained Operation

The estimated mean of the parameter for the impact for respondent's age is B(age) =0.269 with the p-value =0.026, and the exponentiated parameter is exp(0.269) = 1.309, which implies that as the respondents become older, on average, the odds of moving into a higher category *j* of business sustainability are increasing by around 1.3 times with each age year (see Table 5). This suggests that older women, possibly those with more life experience, are better able to navigate the uncertainties of displacement and sustain their businesses over time. When seen in the lens of effectuation, age may correlate with a higher propensity for using *pre-existing means*—such as social capital, skills, or knowledge—more effectively as effectuation theory suggests, entrepreneurs leverage their available means rather than waiting for ideal conditions.

As businesses move into longer duration categories, the odds ratios increase significantly, indicating that businesses are increasingly stable the longer they remain in operation. The largest portion of businesses (52.1%) fall into the "1-3 years" category, with odds 2.6 (Exp(B)= 2.627) times higher than for businesses lasting less than a year. However, businesses that survive beyond 3 years see a substantial improvement in stability, as indicated by much higher odds ratios for the 4-5 years, (Exp(B)= 3.649), "6-10 years, (Exp(B)= 8.593)" and "10 years and over" categories, with odds increasing up to 8.6 times. The p-values further indicate the strength of these associations, with the 1–3-year threshold being marginally significant, while the other categories show strong statistical significance.

4.3.2. Effectuation Affordable

The positive and highly significant coefficient for **Affordable Loss (AggEAL)** (B=0.571, p<0.001) indicates that as affordable loss increases, the likelihood of longer business durations rises significantly. The odds ratio (Exp(*B*)=1.770) suggests that for every one-unit increase in affordable loss, the odds of displaced women being in a higher business duration category increase by 77%,

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holding other factors constant. This highlights the importance of financial resilience and risk management in sustaining business operations over time. This result is consistent with effectuation theory, where entrepreneurs assess and limit potential downsides (rather than maximising returns), particularly in uncertain environments like displacement contexts. This result indicates that in volatile settings, such as those faced by displaced people, focusing on affordable loss can be critical for survival. Displaced entrepreneurs often operate with limited resources, so risk-averse strategies—ensuring they don't lose more than they can afford—become key to longevity. This aligns with research that highlights the importance of survival strategies and resilience in displacement contexts (e.g., Harima & Freudenberg, 2020; Al-Dajani et al., 2019). The principles of affordable loss and leveraging means thus foster resource-based, iterative decision-making (Ali et al., 2021) and allow firms to innovate and adapt their offerings to local market conditions (Deligianni et al., 2016).

4.3.3. Effectuation Means Orientation

The positive coefficient for Means Orientation (AggEMO) B = 0.302, ($0.05 < p < 0.10$) suggests a marginally significant relationship with longer business durations. While not highly significant, the result indicates that as Means Orientation increases, there is a tendency for firms to operate for longer periods. The odds ratio (Exp(B) = 1.353) implies that for every one-unit increase in Means Orientation, the odds of being in a higher business duration category increase by approximately 35.3%, holding other factors constant. This hints at the potential role of resourcefulness and leveraging available means in contributing to business longevity, though further investigation may be needed to confirm this relationship. This is consistent with effectuation's principle of using what you have to create opportunities as displaced entrepreneurs often have to make do with limited resources. Migrant and refugee entrepreneurship literature (e.g., Wauters & Lambrecht, 2008) emphasises that entrepreneurs in these contexts rely heavily on social capital, personal skills, and informal networks to establish and sustain businesses. The findings highlight the value of means orientation in helping displaced individuals adapt and thrive under constrained conditions.

4.3.4. Effectuation Contingency Orientation

The non-significant coefficient for Contingency Orientation (AggECO) B = -0.232, $p = 0.213$ indicates no meaningful relationship with business duration. The odds ratio (Exp(B) = 0.793) suggests a slight tendency for higher contingency orientation to reduce the odds of longer business durations by 20.7%, but this effect is not statistically reliable. Thus, contingency orientation does not significantly influence business longevity in this analysis. While effectuation emphasises flexibility and exploiting contingencies, displaced entrepreneurs might face structural challenges (e.g., legal barriers, movement barriers, limited access to markets or financing) that limit their ability to seize unexpected opportunities. Further, the institutional voids and uncertain environments in displacement contexts may restrict their ability to act on contingencies, aligning with literature that highlights such barriers (e.g., Klosterman et al., 1999; Al-Dajani et al., 2019).

4.3.5. Effectuation Control Orientation

The negative and statistically significant coefficient for Control Orientation (AggEC) (B = -0.425, $p = 0.008$) indicates a significant relationship with shorter business durations. The odds ratio (Exp(B) = 0.654) suggests that for every one-unit increase in Control Orientation, the odds of being in a higher business duration category decrease by approximately 34.6%, holding other factors constant. This implies that rigid, control-oriented strategies may hinder business longevity, particularly in dynamic or uncertain environments. This is because displaced entrepreneurs face environments with extreme volatility and unpredictability, where attempts to control outcomes may backfire. This finding aligns with the work of Shepherd and Williams (2014), who emphasise that displaced entrepreneurs in crisis-affected, resource-constrained environments often face unpredictable challenges that require flexibility and adaptability. Shepherd and Williams argue that rigid control mechanisms can limit an

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entrepreneur's ability to pivot or innovate in response to changing circumstances, such as shifting markets, scarce resources, or unstable conditions. Research on refugee and migrant entrepreneurship often points out that flexibility and adaptation are more critical than control (Harima & Freudenberg, 2020). In effectuation, entrepreneurs should *embrace uncertainty* rather than attempting to control it—this seems particularly relevant for displaced entrepreneurs, where control is often impossible due to external factors like government policies or economic instability.

4.3.6. Effectuation Partnership Orientation

The significant and negative coefficient for Partnership Opportunities (AggEPO) (AggEPO, B = -0.604, $p < 0.001$) indicates that a greater focus on partnership opportunities is associated with shorter business durations. The odds ratio Exp(B) = 0.546) suggests that for every one-unit increase in partnership orientation, the odds of being in a higher business duration category decrease by approximately 45.4%, holding other factors constant. This implies that pursuing partnership opportunities may, in this context, hinder business longevity. This finding can be interpreted in light of Shepherd and Williams (2014), who highlight the complexities of collaboration in crisis-affected and resource-constrained environments. While partnerships can provide access to resources and networks, they may also introduce dependencies, conflicts, or inefficiencies, particularly in unstable settings. Furthermore, in displacement contexts, partnerships might be more difficult to establish or sustain due to trust issues, legal constraints, or discrimination (Desai et al., 2020; Schmich & Mitra, 2023). Displaced entrepreneurs might struggle to form stable partnerships in environments where their legitimacy or legal status is questioned (Heilbrunn & Iannone, 2020). Further, the absence of social connections can hinder their ability to identify and engage with potential partners, which is critical for entrepreneurial success (Kazlou & Wennberg, 2021). They may thus rely more on close-knit social networks rather than broader partnerships, reflecting the importance of bonding social capital over bridging social capital (Al-Dajani et al., 2019).

5. Discussion, Conclusions and Implications

The positive significant impact of *affordable loss* and *means orientation* reinforces the idea that displaced entrepreneurs are highly resourceful, resilient and risk management oriented. These entrepreneurial qualities are crucial for their business survival (Al-Dajani & Marlow, 2010, Cowden et al. 2022). Displacement entrepreneurs are often forced to adopt strategies that limit risk exposure and leverage whatever resources are at their disposal, supporting the core principles of effectuation. Aligning with Kwong et al. (2018), the Ethiopian study validates the bricolage strategy by demonstrating how means orientation contributes to navigating resource constraints. However, their resilience and resourcefulness stem from the necessity to survive, not necessarily from strategic entrepreneurial decision-making. This may point to a broader issue where displaced entrepreneurship is driven more by survival than by the pursuit of opportunity. Thus, this study reveals how displacement creates environments where affordable loss and means orientation are not just strategic choices but necessary responses to adversity. This positions displaced entrepreneurs as adaptive agents, but ones whose entrepreneurial actions are conditioned by extreme vulnerability.

While the Ethiopian study found means orientation to be marginally significant, highlighting the importance of leveraging existing resources, Demirgüç-Kunt et al. (2017) emphasise a more severe exclusion from formal financial systems, suggesting reliance on informal savings groups. The Ethiopian study offers a slightly more optimistic view by indicating that internally displaced women entrepreneurs do find modest value in their resourcefulness, albeit within constrained environments. However, this contrasts with the broader narrative in other reports, which suggest even greater difficulties in accessing resources and means. The Ethiopian study reveals a nuanced divergence from Harima and Freudenberg's (2020) finding that displaced entrepreneurs often rely on adaptive strategies, such as forming informal networks. Specifically, the study highlights the negative impact of control orientation, suggesting that rigid strategies may be ill-suited to rapidly changing environments. Additionally, it found that partnership orientation was negatively associated with

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business sustainability, indicating that external dependencies can introduce risks in crisis settings. These findings underscore the relevance of effectuation's adaptability in displacement contexts, where predictability is limited, and flexibility is crucial.

The findings of the Ethiopian study align with key challenges identified in previous studies, particularly in the context of institutional and legal barriers. Like Onuh (2023), who highlights the bureaucratic hurdles that limit access to business registrations and financial resources for internally displaced persons (IDPs), the Ethiopian study shows that ID women entrepreneurs face significant institutional challenges. These barriers hinder the effectiveness of certain effectuation principles, such as partnership orientation, which was found to have a negative effect in the Ethiopian context. This mirrors the World Bank (2017b) report, which discusses the difficulty in securing financial services, particularly for displaced women, due to institutional failures and lack of collateral. The Ethiopian study supports these findings by showing that attempting to form formal partnerships or maintain rigid control in such an environment negatively impacts business sustainability.

The above findings indeed highlight limitations of effectuation theory when applied in the specific context of displacement entrepreneurship. While some core principles of effectuation—like affordable loss and means orientation—remain relevant, others (such as control orientation and partnership orientation) seem less applicable or even counterproductive in these environments. This study makes several significant contributions to the research on effectuation theory and entrepreneurship in displacement and/or refugee contexts.

First, the Ethiopian study provides a unique contribution by revealing the contextual limitations of effectuation principles in volatile displacement settings. While previous studies have emphasised social capital, networks, and informal financing as essential coping mechanisms (Harima & Freudenberg, 2020; UNHCR, 2021), this study introduces a contrasting perspective: certain effectuation principles, like *partnership and control orientations*, may not always be beneficial in displacement environments. This study also highlights the importance of the *affordable loss* principle, which aligns with PeConga et al., 2020) findings that resilience in the face of external shocks is critical. The ways in which the effectuation logic manifested in the study context may reflect human tendencies to use safety-seeking heuristics under increasing uncertainty, which may act as potential constraints to the full use of effectuation logic due to the unaffordability of the perceived loss (Roach et al., 2016). However, this study goes further by suggesting that adopting affordable loss strategies can *actively enhance business sustainability* in these challenging environments. This contribution broadens the understanding of entrepreneurial strategies in displacement settings, offering critical insights for both the theoretical development of effectuation theory and practical approaches to supporting ID women entrepreneurs.

Second, effectuation theory was originally developed for relatively stable entrepreneurial environments, where entrepreneurs have more flexibility to experiment, build networks, and manage certain variables. In contrast, displaced entrepreneurs face extreme institutional constraints, including legal barriers, social exclusion, and resource scarcity, which reduce their capacity to exercise control or build partnerships. This may reinforce the growing evidence that under conditions of high uncertainty, and unspecified goals women were not able to identify the desired connections and networking outcomes in advance (Galkina and Jack, 2022). These findings show that displaced entrepreneurs need to embrace *flexibility*, but they may not be able to control or influence their external environment as effectuation traditionally suggests. By illustrating the *contextual boundaries* of effectuation, the research offers a critical revision of the theory, highlighting how some aspects (e.g., control and partnerships) require adaptation or re-evaluation. In doing so, this research provides evidence that *contextualized effectuation* is necessary for settings characterized by institutional voids. This can be a key contribution to both entrepreneurship and refugee studies, advancing a refined version of effectuation theory that better explains entrepreneurship in resource-constrained, high-risk, and fragmented environments. Future research could build on this by developing a tailored effectuation framework for displaced or refugee entrepreneurs, incorporating aspects like resilience strategies and bonding social capital.

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Third, this study showed that displaced entrepreneurs often operate in environments with severe institutional voids, where formal market structures and support mechanisms are underdeveloped or absent. Partnerships, as envisaged in effectuation theory, may be difficult to establish due to distrust, legal constraints, or social marginalization. Instead, displaced entrepreneurs may rely more on informal networks or strong bonding ties within communities of displaced individuals (families, ethnic groups, or refugee camps) to sustain their businesses. This study thus emphasises the importance of understanding how institutional voids shape entrepreneurial behaviour. These insights can enrich effectuation theory by incorporating institutional and contextual factors that influence entrepreneurial decision-making in displacement settings.

Fourth, the study's findings on affordable loss and means orientation could contribute to other entrepreneurship theories, such as resource-based view or bricolage theory. Entrepreneurs in displacement contexts may not follow traditional entrepreneurial pathways but instead engage in bricolage, where they make do with what they have and creatively improvise solutions. This study thus bridges effectuation theory and bricolage theory, showing how displaced entrepreneurs use their limited resources in innovative ways. By doing so, it can offer cross-theoretical insights that extend beyond effectuation and enrich the broader field of entrepreneurship research, particularly in resource-constrained settings.

6. Conclusions and Contributions to Policy and Practice

The study makes two key conclusions. First, it emphasizes the context-dependent applicability of effectuation principles, revealing that while affordable loss and leveraging existing means are impactful in resource-constrained settings, their universal relevance is limited, necessitating a hybrid approach that integrates elements of both effectuation and other decision-making logics. Second, it contributes to the understanding of displaced and resource-constrained entrepreneurship, demonstrating that while effectuation provides valuable insights, its application must be tailored to the socio-economic and institutional realities of developing economies, challenging existing theoretical assumptions and advocating for more nuanced and localised entrepreneurial frameworks.

Given the limited applicability of control orientation and partnership orientation, it becomes clear that policy interventions are crucial for supporting displaced entrepreneurs. Governments, NGOs, and other stakeholders must address institutional voids and structural barriers to create an environment where displaced entrepreneurs can thrive. The study argues that effectuation alone cannot bridge the gap between entrepreneurial intent and outcome in displacement contexts without external support mechanisms. By drawing attention to these policy needs, the research can make a strong case for institutional reforms, such as improved access to finance, legal protections, and formal networking opportunities, to enhance entrepreneurial success among displaced populations.

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References

1. Aggrey, O., Djan, A., Antoh, N., & Tettey, L. (2021). "Dodging the bullet": are effectual managers better off in a crisis? a case of Ghanaian agricultural SMEs. Journal of Enterprising Communities People and Places in the Global Economy, 15(5), 755-772.
2. Al-Dajani, H., Akbar, H., Carter, S., & Shaw, E. (2019). Defying contextual embeddedness: evidence from displaced women entrepreneurs in Jordan. *Entrepreneurship & Regional Development*, *31*(3–4), 198–212. https://doi.org/10.1080/08985626.2018.1551788
3. Al-Dajani, H. and Marlow, S. (2013). Empowerment and entrepreneurship: a theoretical framework. *International Journal of Entrepreneurial Behaviour & Research*, 19(5), 503-524.
4. Al-Dajani, H. and Marlow, S. (2010). Impact of women's home-based enterprise on family dynamics: evidence from Jordan. *International Small Business Journal Researching Entrepreneurship*, 28(5), 470-486.
5. Ali, M., Ali, M., & Umer, L. (2021). Examining effectuation theory: lessons for entrepreneurial activity in developing countries. Review of Applied Management and Social Sciences, 4(2), 569-582. https://doi.org/10.47067/ramss.v4i2.159
6. Arend, R. J., Sarooghi, H., & Burkemper, A. (2015). Effectuation as ineffectual? Applying the 3E theory-assessment framework to a proposed new theory of entrepreneurship. Academy of Management Review, 40(4), 630–651.
7. Brenk, S., Lüttgens, D., Diener, K. and Piller, F. (2019). Learning from failures in business model innovation: solving decision-making logic conflicts through intrapreneurial effectuation", *Journal of Business Economics*, 89 (8–9), 1097–1147.
8. Block, J., Kohn, K., Miller, D., & Ullrich, K. (2014). Necessity entrepreneurship and competitive strategy. Small Business Economics, 44(1), 37-54.
9. Chandler GN, DeTienne DR, McKelvie A, et al. (2011). Causation and effectuation processes: a validation study. Journal of Business Venturing 26(3): 375–390.
10. Chen, J., Liu, L., & Chen, Q. (2021). The effectiveness of effectuation: a meta-analysis on contextual factors. International Journal of Entrepreneurial Behaviour & Research, 27(3), 777-798.
11. Cherbib, J. (2024). Exploring the interplay between entrepreneurial orientation, causation and effectuation under unexpected covid-19 uncertainty: Insights from large French banks. *Technological Forecasting and Social Change*, **200**, 123090. https://doi.org/10.1016/j.techfore.2023.123090
12. Cheung, C. and Kwong, C. (2017). Path- and place-dependence of entrepreneurial ventures at times of war and conflict. *International Small Business Journal Researching Entrepreneurship*, 35(8), 903-927. https://doi.org/10.1177/0266242617691802
13. Cowden, B., Karami, M., Tang, J., Ye, W., & Adomako, S.(2022): The spectrum of perceived uncertainty and entrepreneurial orientation: Impacts on effectuation, Journal of Small Business Management, https://doi.org/10.1080/00472778.2022.2051179
14. Daniel, E., Domenico, M., & Sharma, S. (2015). Effectuation and home-based online business entrepreneurs. International Small Business Journal Researching Entrepreneurship, 33(8), 799-823.
15. Dawa, S., and Marks, J. (2024), An effectuation approach to sustainable entrepreneurship. *Journal of Entrepreneurship in Emerging Economies*, 16(6), 1931- 1965. https://doi.org/10.1108/JEEE-06-2023-0252
16. Deligianni, I., Voudouris, I., & Lioukas, S. (2016). Do effectuation processes shape the relationship between product diversification and performance in new ventures?. *Entrepreneurship Theory and Practice*, 41(3), 349-377. https://doi.org/10.1111/etap.12210
17. Demirgüç-Kunt, Asli, Klapper, L., and Singer D. (2017). Financial Inclusion and Inclusive Growth: A Review of Recent Empirical Evidence (April 25, 2017). World Bank Policy Research Working Paper No. 8040, Available at SSRN: https://ssrn.com/abstract=2958542
18. Desai, S., Naudé, W., & Stel, N. (2020). Refugee entrepreneurship: context and directions for future research. Small Business Economics, 56(3), 933-945. https://doi.org/10.1007/s11187-019-00310-1
19. Dew N, Read S, Sarasvathy SD, et al. (2009). Effectual versus predictive logics in entrepreneurial decision-making: differences between experts and novices. Journal of Business Venturing 24(4): 287–309.
20. Dushime, J. and Muathe, S. (2023). Refugee entrepreneurship. *International Journal of Entrepreneurship and Business Development*, 6(1), 25-35. https://doi.org/10.29138/ijebd.v6i1.2105

Preprints.org (www.preprints.org) | NOT PEER-REVIEWED | Posted: 11 February 2025 doi:10.20944/preprints202502.0786.v1

21. Ebegbetale, C. (2021). Effectuation and causation decision making logics of managing uncertainty and competitiveness by Nigerian retail business entrepreneurs. Facta Universitatis Series Economics and Organization, 157. https://doi.org/10.22190/fueo210311011e
22. Eyana, S., Masurel, E., & Paas, L. (2018). Causation and effectuation behaviour of Ethiopian entrepreneurs. *Journal of Small Business and Enterprise Development*, 25(5), 791-817.
23. Ferrari, S., & Vasconcellos, S. de. (2024). Exploring the affordable loss principle: a systematic literature review. *Internext, International Business and Management Review*, *19*(2). https://doi.org/10.18568/internext.v19i2.800
24. Fisher, G. (2012), "Effectuation, causation, and entrepreneurial bricolage: a behavioral comparison of emerging theories in entrepreneurship research", *Entrepreneurship Theory and Practice*, 36(5): 1019-1051.
25. Fiedler, A., Fath, B., & Whittaker, D. (2016). Overcoming the liability of outsidership in institutional voids: trust, emerging goals, and learning about opportunities. *International Small Business Journal Researching Entrepreneurship*, 35(3), 262-284.
26. Frese, T., Geiger, I., Dost, F., (2020). An empirical investigation of determinants of effectual and causal decision logics in online and high-tech start-up firms. *Small Business Economics*, 1–24. 54, 641–664.
27. Galkina, T., & Atkova, I. (2020). Effectual networks as complex adaptive systems: Exploring dynamic and structural factors of emergence. *Entrepreneurship Theory and Practice*, 44(5), 964–995.
28. Galkina, T., and Jack, S. (2022). The synergy of causation and effectuation in the process of entrepreneurial networking: Implications for opportunity development. *International Small Business Journal: Researching Entrepreneurship*, 40(5):564–591.
29. Gr´egoire, D. A., & Cherchem, N. (2020). A structured literature review and suggestions for future effectuation research. *Small Business Economics*, 54(3), 621–639.
30. Harima, A, and *Freudenberg*, J, (2021). Co-Creation of Social Entrepreneurial Opportunities with Refugees. *Journal of Social Entrepreneurship*, 11(1), 40-64. http://hdl.handle.net/10.1080/19420676.2018.1561498
31. Heilbrunn, S. and Iannone, R. (2020). From center to periphery and back again: a systematic literature Hensel, R. and Visser, R. (2019). Does personality influence effectual behaviour?. *International Journal of Entrepreneurial Behaviour & Research*, 26(3), 467-484. https://doi.org/10.1108/ijebr-06-2019-0343
32. IDMC (2023). Global Report on Internal Displacement 2023. Internal Displacement Monitoring Centre and Norwegian Refugee Council.
33. Jiang, Y., & Tornikoski, E. T. (2019). Perceived uncertainty and behavioral logic: Temporality and unanticipated consequences in the new venture creation process. *Journal of Business Venturing*, 34(1), 23–40
34. Jones, O. and Li, H. (2017). Effectual entrepreneuring: sensemaking in a family-based start-up. *Entrepreneurship and Regional Development*, 29(5-6), 467-499.
35. Johnson, M. and Hoerisch, J. (2021). Reinforcing or counterproductive behaviors for sustainable entrepreneurship? the influence of causation and effectuation on sustainability orientation. *Business Strategy and the Environment*, 31(3), 908-920. https://doi.org/10.1002/bse.2925
36. Kalinic, I., Sarasvathy, S.D. and Forza, C. (2014), "'Expect the unexpected': Implications of effectual logic on the internationalization process", *International Business Review*, 23 (3), 635–647.
37. Kazlou, A. and Wennberg, K. (2021). How kinship resources alleviate structural disadvantage: self-employment duration among refugees and labor migrants. Journal of Enterprising Communities People and Places in the Global Economy, 17(1), 16-45. https://doi.org/10.1108/jec-03-2020-0025
38. Khurana, I., Dutta, D., & Schenkel, M. (2021). Crisis and arbitrage opportunities: the role of causation, effectuation and entrepreneurial learning. *International Small Business Journal Researching Entrepreneurship*, 40(2), 236-272. https://doi.org/10.1177/02662426211061679
39. Kitching, J., and Rouse, J. (2020) Contesting effectuation theory: Why it does not explain new venture creation. *International Small Business Journal: Researching Entrepreneurship*, 38(6): 515–53.
40. Klosterman, R., van Der Leun, and Rath, J. (1999). Mixed Embeddedness: (In)formal Economic Activities and Immigrant Businesses in the Netherlands. *International Journal of Urban and Regional Research, 23(2),* 252-266
41. Ko, G., Roberts, D., Perks, H., & Candi, M. (2021). Effectuation logic and early innovation success: the moderating effect of customer co-creation. *British Journal of Management*, 33(4), 1757-1773.

Preprints.org (www.preprints.org) | NOT PEER-REVIEWED | Posted: 11 February 2025 doi:10.20944/preprints202502.0786.v1

42. Kwong, C., Cheung, C., Manzoor, H., & Rashid, M. (2018). Entrepreneurship through bricolage: a study of displaced entrepreneurs at times of war and conflict. *Entrepreneurship and Regional Development*, 31(5-6), 435-455.
43. Lassalle, P. and Shaw, E. (2021). Trailing wives and constrained agency among women migrant entrepreneurs: an intersectional perspective. *Entrepreneurship Theory and Practice*, 45(6), 1496-1521. https://doi.org/10.1177/1042258721990331
44. Li-Hui, X., Luo, B., & Sun, Y. (2019). How can entrepreneurs achieve success in chaos? Kybernetes, 49(5), 1407-1428. https://doi.org/10.1108/k-01-2019-0035
45. Maitlo, Q., Pacho, F., Jia, L., Bhutto, T., & Wang, X. (2020). The role of entrepreneurial self-efficacy in resources acquisition in a new venture: the mediating role of effectuation. *Sage Open*, 10(4). https://doi.org/10.1177/2158244020963571
46. Monllor, J., Pavez, I., and Pareti, S. (2020), "Understanding informal volunteer behavior for fast and resilient disaster recovery: an application of entrepreneurial effectuation theory", *Disaster Prevention and Management, 29(4):* 575-589. https://doi.org/10.1108/DPM-05-2019-0151
47. Onuh, E. (2023). Assessment of the role of government in addressing the challenges of internally displaced persons in Abuja, Nigeria camps. African Journal of Social Issues, 5(1), 226-238.
48. Pacho, F. (2022) The effect of effectuation principles on opportunity exploitation by entrepreneurs in a developing economy, Journal of Developmental Entrepreneurship, 27(3), 2250022 https://doi.org/10.1142/S1084946722500224
49. Palmié, M., Huerzeler, P., Grichnik, D., Keupp, M.M., & Gassmann, O. (2018). Some principles are more equal than others: Promotion- versus prevention-focused effectuation principles and their disparate relationships with entrepreneurial orientation. *Strategic Entrepreneurship Journal*, 13(1), 93-117 https://doi.org/10.1002/sej.1305
50. PeConga EK, Gauthier GM, Holloway A, et al., (2020). Resilience is spreading: Mental health within the COVID-19 pandemic. *Psychological Trauma: Theory, Research, Practice, and Policy*, 12(S1):S47-S48.
51. Philippi, S. (2023). Effectuation and lean startup in Swiss start-ups: an integrative analysis. *European Conference on Innovation and Entrepreneurship*, 18(2), 730-738. https://doi.org/10.34190/ecie.18.2.1751
52. Prijadi, R., Santoso, A., Balqiah, T., Jung, H., Desiana, P., & Wulandari, P. (2022). Does effectuation make innovative digital multi-sided platform startups? An investigation of entrepreneurial behavior in platform-based open innovation. *Benchmarking an International Journal*, 30(9), 3534-3553. https://doi.org/10.1108/bij-02-2021-0078
53. Read, S., & Sarasvathy, S. D. (2005). Knowing What to Do and Doing What You Know: Effectuation as a Form of Entrepreneurial Expertise. *The Journal of Private Equity*, *9*(1), 45–62. http://www.jstor.org/stable/43503446
54. Read S., Song M., & Smit W. (2009). A meta–analytic review of effectuation and venture performance. *Journal of Business Venturing*, 24, 573–587.
55. Renton, M. and Simmonds, H. (2019). Effectuation and morphogenesis in the New Zealand fairtrade marketing system. *Journal of Macromarketing*, 39(4), 385-399.
56. Roach, D., Ryman, J., & Makani, J. (2016). Effectuation, innovation and performance in SMEs: an empirical study. *European Journal of Innovation Management*, 19(2), 214-238.
57. Sarasvathy, S.D., (2001). Causation and effectuation: toward a theoretical shift from economic inevitability to entrepreneurial contingency. Academy of Management Review, 26 (2): 243– 263.
58. Sarasvathy, S. D. (2008). Effectuation: elements of entrepreneurial expertise. Cheltenham: Edward Elgar.
59. Sarasvathy, S., Kumar, K., York, J., & Bhagavatula, S. (2014). An effectual approach to international entrepreneurship: overlaps, challenges, and provocative possibilities. Entrepreneurship Theory and Practice, 38(1), 71-93.
60. Schmich, M. and Mitra, J. (2023). Can entrepreneurship enable economic and social integration of refugees? a comparison of the economic, social and policy context for refugee entrepreneurship in the UK and Germany. *Journal of Entrepreneurship and Innovation in Emerging Economies*, 9(1), 9-32. https://doi.org/10.1177/23939575221146848
61. Sendra-Pons, P., Belarbi-Muñoz, S., Garzón, D., & Mas-Tur, A. (2021). Cross-country differences in drivers of female necessity entrepreneurship. *Service Business*, 16(4), 971-989.

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62. Shepherd, D. A., & Williams, T. A. (2014). Local venturing as compassion organizing in the aftermath of a natural disaster: The role of localness and community in reducing suffering. *Journal of Management Studies*, 51(6), 952-994.
63. Shirokova, G., Morris, M.H., Laskovaia, A., and Evelyn Micelotta, E. (2021) Effectuation and causation, firm performance, and the impact of institutions: A multi-country moderation analysis. *Journal of Business Research*, 129, 169-182.
64. Smolka K. M., Verheul I., Burmeister-Lamp K, et al. (2018). Get it together! Synergistic effects of causal and effectual decision-making logics on venture performance. *Entrepreneurship Theory and Practice* 42(4): 571–604.
65. Stuart, R., Sarasvathy, S. D., Dew, N., & Wiltbank, R. (2016). Response to Arend, Sarooghi, and Burkemper (2015): Cocreating effectual entrepreneurship research, *Academy of Management Review*, 41(3), 528–536.
66. United Nations High Commissioner for Refugees (UNHCR) (2021). Ethiopia Country Operation Profile.
67. Urban, B., & Heydenrych, J.A. (2015). Technology orientation and effectuation - links to firm performance in the renewable energy sector of south AFRICA. *South African Journal of Industrial Engineering, 26*, 125-136.
68. Voznyak, H., Mulska, O., Druhov, O., Patytska, K., & Тимечко, I. (2023). Internal migration during the war in Ukraine: recent challenges and problems. *Problems and Perspectives in Management*, 21(1), 312-325.
69. Wauters, B., & Lambrecht, J. (2008). Barriers to refugee entrepreneurship in Belgium: Towards an explanatory model. *Journal of Ethnic and Migration Studies*, 34(6), 895-915. https://doi.org/10.1080/13691830802211190
70. Welter, C., & Kim, S. (2018). Effectuation under risk and uncertainty: A simulation model. Journal of Business Venturing, 33(1), 100–116
71. Welter, C., Mauer, R., Wuebker, R.J., (2016). Bridging behavioral models and theoretical concepts: effectuation and bricolage in the opportunity creation framework. Strategic Entrepreneurship Journal, 10 (1), 5–20.
72. World Bank (2017a). Refugees: The Human Face of a Regional Crisis. Country Focus: Niger, World Bank Group.
73. World Bank. (2017b). Forcibly displaced: Toward a development approach supporting refugees, the internally displaced, and their hosts. Washington, DC: World Bank.
74. Yu X, Tao Y, Tao X, et al. (2018). Managing uncertainty in emerging economies: the interaction effects between causation and effectuation on firm performance. Technological Forecasting and Social Change 135: 121–131.
75. Zhang, Y., Li, Z., Sha, Y., & Yang, K. (2022). The impact of decision-making styles (effectuation logic and causation logic) on firm performance: a meta-analysis. *Journal of Business and Industrial Marketing*, 38(1), 85-101

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