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## A HYBRID APPROACH TO MANAGING THE ECONOMIC SUSTAINABILITY OF ENTERPRISES IN THE CRISIS PERIOD

### ГІБРИДНИЙ ПІДХІД ДО УПРАВЛІННЯ ЕКОНОМІЧНОЮ СТІЙКІСТЮ ПІДПРИЄМСТВ В КРИЗОВИЙ ПЕРІОД

#### ANNOTATION

In today's rapidly changing world, where the degree of uncertainty is extremely high and there are situations of true uncertainty, traditional decision-making methods based on the assumption of predictability of the future must be supplemented by new and alternative decision-making models. The rational approach to decision-making, which originated in neoclassical economics, has the right to exist in conditions where it is possible to assess the probability of options for the development of events and access to sufficient information to make a decision. However, in conditions of high uncertainty individuals will make decisions based on their own experience and subjective ideas about the predictability of changes in the external environment. The study of real decision-making processes is particularly relevant to the field of strategic management, since key decisions in an organisation are made by managers based on their individual judgements and subjective perception of reality. Modern decision theory considers subjective probability as a quantitative opinion of an idealised person. The subjective probability of a particular event is determined by a set of odds regarding that event, from which a person is offered a choice. The resulting probability is subjective in the sense that different people may have different estimates of the probability of the same event. In fact, subjective probabilities determine preferences in chances, but are not derived from them, unlike axiomatic rational decision theory. Descriptions of decision-making can be found in a wide variety of fields of knowledge, including concepts and methods from mathematics, statistics, economics, management and psychology. Decision-making processes underlie any purposeful activity in economics and psychology, as well as in the social sphere and politics. The field of decision-making research can be divided into two groups of studies - normative studies, which describe the rational decision-making process, and descriptive studies, which reflect the practice of decision-making in reality. Normative research includes work within economic theory, while descriptive research is the work of heuristic psychologists. The attempt to understand, explain and predict the behaviour of an indi-

vidual making a certain decision can be considered as one of the main tasks of behavioural and social sciences.

**Key words:** crisis period, economic sustainability, approach, enterprise, effectuation, causation.

#### АНОТАЦІЯ

У сучасному швидко мінливому світі, де ступінь невизначеності гранично високий, та існують ситуації повної невизначеності (true uncertainty), традиційні способи ухвалення рішень, що ґрунтуються на припущенні про передбачуваність майбутнього, мають бути доповнені новими й альтернативними моделями ухвалення рішень. Раціональний підхід до ухвалення рішень, що зародився в неокласичній економіці, має право на існування в умовах, коли є можливість оцінювання ймовірності варіантів розвитку подій і доступ до достатньої інформації для ухвалення рішення. Однак в умовах високої невизначеності індивіди ухвалюватимуть рішення на основі власного досвіду та суб'єктивних уявлень про передбачуваність змін у зовнішньому середовищі. Особливо актуальним вивчення реальних процесів ухвалення рішень є для царини стратегічного управління, оскільки ключові рішення в організації ухвалюють менеджери на основі їхніх індивідуальних суджень і суб'єктивного сприйняття реальності. Сучасна теорія прийняття рішень розглядає суб'єктивну ймовірність як кількісну думку ідеалізованої людини. Суб'єктивна ймовірність конкретної події визначається набором шансів щодо цієї події, з яких людині пропонується вибір. Отримана ймовірність суб'єктивна в тому сенсі, що різні люди можуть мати різні оцінки ймовірності однієї й тієї самої події. Насправді, суб'єктивні ймовірності визначають переваги в шансах, але не виводяться з них, на відміну від аксіоматичної теорії раціонального прийняття рішень. Опис процесу ухвалення рішень можна знайти в найрізноманітніших галузях знань, включно з поняттями і методами математики, статистики, економіки, менеджменту і психології. Процеси ухвалення рішень лежать в основі будь-якої цілеспрямованої діяльності як в економіці та психології, так і в соціальній сфері, і в полі-

тиці. Галузь досліджень ухвалення рішень можна поділити на дві групи досліджень - нормативні, що описують раціональний процес ухвалення рішень, і дескриптивні, що відображають практику ухвалення рішень у реальності. До нормативних досліджень належать роботи в рамках економічної теорії, дескриптивні дослідження – це роботи психологів евристичного ухилу. Спробу зрозуміти, пояснити і передбачити поведінку індивіда, який приймає певне рішення, можна розглядати як одне з головних завдань поведінкових і соціальних наук.

**Ключові слова:** кризовий період, економічна стійкість, підхід, підприємство, ефектуція, каузація.

**Formulation of the problem.** Small and medium-sized firms need to develop the ability to adapt to the changing dynamic business environment in order to preserve not only their own well-being, but also the economy of the whole country. The uncertainty generated by the combined impact of negative trends in the economy, politics and social life of our country in the period under review has led to a decline in the performance of small and medium-sized firms and deterioration in the performance of the country's economy. of small and medium-sized business firms and deterioration of national economic indicators. indicators of the country's economy. The uncertainty caused by the crisis implies a lack of ability of decision makers to predict future changes in the external environment. future changes in the state of the external environment. In order to improve their efficiency and performance, firms need to find ways to overcome increased uncertainty by improving their strategic behaviour to gain sustainable competitive advantage. Strategic behaviour in order to gain sustainable competitive and maintain their position in the marketplace. In this situation, small and medium-sized firms need to develop the ability to adapt to the changing dynamic business environment in order to maintain not only their own well-being but also the economy of the whole country.

**Analysis of recent achievements and publications.** Many Ukrainian and foreign scientists are studying the trends and problems of sustainable development of industrial enterprises in an innovative economy. Among them are domestic ones: O. Amosha, [1], O. Balan [2], V. Heets [3], L. Dovgan [4], Y. Klius [5], E. Krykavsky [6]; foreign: C. Andrews [7], V. Baumol [8], E. Chafee [9], A. Chandler [10]. Despite the importance of scientific research, certain aspects of ensuring the sustainable development of industrial enterprises require further study, in particular, in the context of studying the organizational and economic features of crisis situations in the innovation economy.

The article is **aimed** at considering the effectuation and causation within the framework of the hybrid approach to managing the economic sustainability of enterprises and suggesting ways to improve it.

**Presentation of the main material.** One of the fundamental research questions in strategic management is the question of the determinants

of firm success/failure. In order to better understand these determinants, researchers have begun to move away from universality and develop more individualised approaches to the study of managerial processes in firms. This trend has fostered the development of the study of behavioural aspects of firm performance, with intra-firm processes at the which centre on intra-firm decision-making processes. In essence, the concept of effectuation complements and develops the argumentation of the behavioural model of the firm, combining the entrepreneurial approach to decision-making under uncertainty with the subjectivity of actions. under uncertainty with the subjectivity of the actions and behaviour of of managers to explain differences in firm success.

The relationship of effectuation and causation to the performance of new and established firms has been studied in the literature since recently and is currently at a nascent stage. Identifying the most appropriate dependent variables for effectuation and causation reflecting firm performance becomes even more necessary at the current stage of concept development in moving towards a mature stage of theoretical framing [13]. At the same time, in works on strategic management and entrepreneurship, the elements of plan-oriented and transformational approaches to decision making in their relationship to firm performance have been studied since the middle of the 20th century [8]. The planned approach to decision making helps managers of firms to cope with the processing of large amounts of information, to conduct systematic analyses, to control strategic steps on the way of business development and to achieve established goals [7]. In addition, the presence of planning processes increases the legitimacy of the firm in negotiations with stakeholders, and a quality business plan is necessary for presentation to investors. A planning-oriented approach to decision making also contributes to firm development as it leads to more efficient utilisation of resources. Previous studies have shown that business planning, marketing and competitive analysis are positively related to the performance of small firms. It is the established small firms rather than start-ups that benefit more from business planning [10]. Top managers of firms perceive planning and prediction as an effective tool to overcome risk under conditions of limited availability of information and necessary resources.

A significant amount of research shows a positive relationship between resource control, experimentation, flexibility, adaptability, partnership building and firm performance [5]. These constructs individually represent the principles of effectuation, forming together the essence of effectuation logic of decision making. In the pioneering work of S. Reed et al [9] conducted a meta-analytical review of existing research on the relationship between the four principles of effectuation (means, partnerships, affordable loss,

and leverage contingencies) as separate constructs and the performance of new firms. In an analysis of data on 9897 new firms, it was found that three of the four behavioural principles - affordability orientation, partnership development and leverage contingencies are positively related to new firm performance [9]. Thus, previous studies have proved the relationship between the behavioural principles that form the basis of the two decision-making approaches and the performance of newly established firms. The emergence of research on the role of directly effectuation and causation in the success of firms was facilitated by the emergence of a scale to measure the constructs presented [8]. Building on the original work of S. Saraswati [5], G. Chandler et al. presented causation as a unidimensional construct and effectuation as a multidimensional construct consisting of four components: experimentation, affordable loss, flexibility and pre-commitments. Recent work has found a significant positive relationship between the above components of effectuation and the performance of small and medium-sized firms [9], including those from Africa and the emerging market of China. The authors of another study found that experimentation, loss tolerance, flexibility and prior agreements act as significant moderators of the relationship between product diversification and new firm performance [7]. Evidence from studies on the role of effectuation as a unified decision logic in enhancing firm performance confirmed the positive relationship between effectuation and new firm performance. Additionally, the application of effectuation principles ensures fewer investment failures and leads to higher productivity of highly innovative R&D projects in established firms. Causation in most papers is considered in tandem with effectuation as an alternative decision-making approach that also has a meaningful positive impact on the performance of new firms [8]. In addition, it is found that causation acts as a moderator of the relationship between founder team heterogeneity and innovative idea generation. Thus, various studies have shown the positive effect of both decision-making approaches in the development and performance of new and established firms.

In addition to studying the direct effects of causation and effectuation on firm performance, a number of studies have noted the need to identify contextual factors that may influence the relationship between these decision-making approaches and firm performance [8]. One of the most significant factors within the concept of effectuation is the level of uncertainty. In this study, the context is the uncertainty generated by the economic crisis, both objective uncertainty of the external environment and subjectively perceived by managers.

The methods of planning, forecasting and analytical approach in a number of studies are presented as effective tools for overcoming

uncertainty in risk situations, when there is available data and information for decision-making [5]. The planning-oriented approach to management decision making (causation) is widely used by established firms and provides positive performance to small and medium-sized businesses [10]. Therefore, the causative approach to decision making can serve as a way for SME firms to overcome risk in times of crisis. In turn, effectuation as a transformational approach to decision making is based on actions and behaviours aimed at controlling total uncertainty and using non-predictive strategies [6]. For small and medium-sized firms, this approach allows them to levelling out their inherent disadvantages and limitations due to their small size. For example, experimentation facilitates the search for and creation of new opportunities for small firms in times of crisis, while the focus on the principle of acceptable loss helps to manage limited financial, human and intellectual resources, increasing the probability of firm survival in the event of failure. Flexibility, as one of the key principles of effectuation, in periods of rapid change in the external environment acts as a key characteristic of decision-making, giving small and medium-sized firms the advantage of rapid adaptation by using any changes as new opportunities, combining existing resources and creating partnerships to attract additional sources of funding [5]. Together, these characteristics of the effectuation approach to decision making contribute to a more effective management of SMEs in the face of constant change in the context of economic crisis. Since previous studies have proved the positive role of both approaches to decision-making under uncertainty, the following research hypotheses can be formulated:

- Hypothesis H1a. Causation is positively related to the performance of SME firms during the economic crisis.
- Hypothesis H1b. Effectuation is positively related to the performance of SME firms during the economic crisis.

Most studies on the relationship between decision-making approaches and firm performance consider effectuation and causation as alternative behaviours that separately affect the performance of new and established firms [5]. However, despite the differences in the decision logic of the two approaches, they «can occur simultaneously, overlapping and intertwining in different contexts of decisions and actions» [5]. The simultaneous use of effectuation and causation by entrepreneurs in decision-making processes at the stage of entrepreneurial firm creation has been proven by researchers in a number of conceptual and empirical works [8]. Empirical substantiation of the existence of a hybrid (simultaneous use of the principles of both approaches – effectuation and causation) approach to decision-making is first presented in the work of K. Smolka et al [8], which examines the joint

influence of causation and effectuation (as well as its principles) on the performance of firms created by student entrepreneurs. As a result of the analysis, the authors found a significant positive synergistic effect on the performance of entrepreneurial firms from the joint application of causation and effectuation. It can be said that the combination of effectuation and causation has a stronger effect on performance than the simple sum of these approaches separately. The authors of another study [8] found a significant positive effect of the combination of causation and effectuation on the performance of small firms in a under high levels of uncertainty in the external environment. A framework for the study of hybrid approach to decision making, laid by the above-mentioned works, requires further investigation of the essence of the joint effect of causation and effectuation on the performance of small firms under conditions of uncertainty in the external environment. causation and effectuation on the performance of firms in different contexts.

Based on strategic management research and empirical work on the relationship of effectuation concept with the performance of new and established firms, the following research hypothesis was formulated:

Hypothesis H2. Causation and effectuation are complementary decision-making approaches, suggesting that there is a positive relationship between hybrid decision-making approach and the performance of small and medium-sized firms during economic crisis.

The concept of effectuation is based on the assumption that people make decisions according to their perceptions of the level of uncertainty, ongoing changes and predictability of the future. Here, subjectively perceived uncertainty is understood as the inability to accurately predict the future due to insufficient knowledge and/or information about the changing dynamic external environment [8]. C. Saraswati suggests that effectuation will be a more effective approach to decision making under conditions of high uncertainty, when the principles of the plan-oriented approach cease to work [9]. Under such conditions, the shortcomings of the planned approach to decision making can be overcome by alternative approaches that support the flexibility and adaptability of firms in a rapidly changing and unpredictable environment. This assumption has been confirmed in a number of studies that have found a positive relationship between the effectuation and performance of firms and highly innovative R&D projects in contexts characterised by a high degree of uncertainty.

In periods of economic crisis, characterised by constant changes in the external environment, additional uncertainty is introduced by industry factors. The impact of significant changes in an industry is significant for all firms in that industry, often translating into lower productivity. A decline in an industry is usually the result of

a downturn in the environment (e.g. economic crisis), when the industry loses its ability to sustain growth and the level of dynamism increases due to increased competitive intensity and changes in customer demands. Increased dynamism of the external environment, as a consequence of increased uncertainty during the economic crisis, leads to the inability of top managers to predict the consequences of their decisions on current and future business operations. At the same time, the severity of the consequences of such changes can vary significantly depending on the individual perception and behaviour of the firm's top management team [4]. The role played by top managers and their perception of the internal and external environment of the business in the decision-making processes in the organisation has been highlighted in the strategic management literature under the concept of strategic choice [7]. The actions and managerial decisions of managers of organisations can have a direct impact on the firm's performance, contributing to its improvement. That is why it was decided to use the perceived level of dynamism in the industry by decision makers as an assessment of the subjective level of uncertainty in the external environment in this study [2]. Dynamism of the external environment implies a high rate of change in the industry and a high level of unpredictability of environmental conditions and future events [3].

The intensity of change, as one of the key characteristics of a high level of dynamism in the external environment, leads to the need to develop new creative and innovative strategies for the effective operation of companies. This approach to strategy formation is fully consistent with the logic of effectuation, which allows us to use each unexpected change as a new opportunity in the decision-making process. In addition, according to transaction cost theory, the ability of firms to adapt to changes in the environment by responding to market changes or restructuring management systems improves firm economic performance. At the same time, the inflexibility of a plan-oriented approach to decision making in a period of constant changes in the external environment can negatively affect firm performance. Taking into account the above argumentation, the following hypotheses can be formulated research:

Hypothesis H3a. The positive relationship between causation and the performance of SME firms will be stronger in contexts with low levels of industry dynamism.

Hypothesis H3b. The positive relationship between effectuation and the performance of SME firms will be stronger in contexts with high levels of industry dynamism.

**Conclusions.** In this paper, the hypothesis of the cross-effect of environmental dynamism and the hybrid decision-making approach has not been hypothesised because it is assumed that the balance of the application of effectuation

and causation will have a positive effect on the performance of SME firms regardless of the state of the industry environment.

Thus, the hybrid approach assumes that there are differences in the effects of causation and effectuation on the management of economic sustainability in contexts with different levels of uncertainty. Uncertainty is taken into account in this study at two levels: first, at the national level by using firm-level data collected during the economic crisis, and second, at the industry level by assessing the moderating effect of managers' perceived dynamism of the external environment on the relationship between the two decision-making approaches and the performance of SME firms.

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