

**University of Economics in Bratislava**  
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# ANALYSIS OF THE GUERRILLA MARKETING USE IN INFORMATIC LOGISTICS IN SLOVAKIA AND ABROAD

## ANALÝZA VYUŽITIA GUERRILLA MARKETINGU V INFORMAČNEJ LOGISTIKE NA SLOVENSKU A V ZAHRANIČÍ

*Annamária BEHÚNOVÁ – Katarína ČULKOVÁ – Marcel BEHÚN*

### Abstract

The paper deals with the comparison of guerrilla marketing tactics in Slovakia and international markets, focusing on how these tactics reflect differences between local and global consumer preferences, cultural norms and market conditions. The aim is to uncover the key factors that contribute to the success or failure of marketing campaigns in these different environments. The paper uses survey data to provide a comprehensive view of the effectiveness of guerrilla marketing and its adaptability. The intention is to provide recommendations for marketers and companies looking for innovative ways to engage their target audience while taking into account the specifics of each market. The result should be a better strategy for adapting to global diversity and the use of guerrilla marketing as an effective tool within a comprehensive marketing strategy.

**Keywords:** guerrilla marketing, international markets, consumer preferences, cultural norms, market adaptability, marketing effectiveness

### Abstrakt

Príspevok sa zaoberá porovnaním taktiky guerilla marketingu na Slovensku a medzinárodných trhoch so zameraním na to, ako tieto taktiky odrážajú rozdiely medzi lokálnymi a globálnymi spotrebiteľskými preferenciami, kultúrnymi normami a trhovými podmienkami. Cieľom je odhaliť kľúčové faktory, ktoré prispievajú k úspechu alebo neúspechu marketingových kampaní v týchto rôznych prostrediach. Príspevok využíva údaje z prieskumov na poskytnutie komplexného pohľadu na efektivitu guerilla marketingu a jeho adaptabilitu. Zámerom je poskytnúť odporúčania pre marketérov a spoločnosti, ktoré hľadajú inovatívne spôsoby, ako zaujať svoje cieľové publikum pri zohľadnení špecifik každého trhu. Výsledkom by mala byť lepšia stratégia prispôbenia sa globálnej diverzite a využitie guerilla marketingu ako efektívneho nástroja v rámci komplexnej marketingovej stratégie.

**Kľúčové slová:** guerilla marketing, medzinárodné trhy, preferencie spotrebiteľov, kultúrne normy, adaptabilita trhu, efektívnosť marketingu

### Introduction

Nowadays, when traditional advertising channels often hit their limits in their ability to engage the consumer, guerrilla marketing is proving to be an increasingly important field of innovation and creativity in the marketing space (Behal and Sareen, 2014). This approach, which differs from conventional methods by engaging target audiences in unexpected places and in non-standard ways, gives brands the opportunity to create a deeper and more personal connection with their customers. Its main strength is the ability to transform the everyday environment into a platform for sharing brand stories, opening up space

for original and often viral marketing moments (Kotler et al., 2020; Yodi et al., 2020).

The field of information logistics is a labyrinthine and rapidly changing environment where the value of data has never been more valuable (Kotras, 2020). Businesses are constantly looking for new approaches to collect, organize, and use this data to gain advantage and competitive advantage over their adversaries through focused promotional campaigns (Kotler, 2017). Nevertheless, the confusion surrounding covert marketing tactics raises moral questions of professionals, working in this field. As the Threat casting Lab Report ([www.threatcasting.asu.edu](http://www.threatcasting.asu.edu)) states, "the lack of transparency regarding guerrilla marketing techniques in information logistics raises ethical concerns because end users may not be fully informed about how their data is being used or for what purpose." purpose, targeted advertising actions were ordered". This should concern us all, as it means we may unwittingly become pawns in an ever-expanding game in which our personal data is appropriated for financial gain without our knowledge or permission. Clearly, there needs to be a greater emphasis on clarity in this industry so that individuals can make informed decisions about how to provide access to their private files to both merchants and corporations. Only then can we begin to trust these entities with our confidential records, while enjoying tailored content tailored to our likes and interests.

It is very important for marketers and customers to consider these disadvantages and ethical aspects regarding practices of guerrilla marketing in information logistics (Levinson, 2002), although tailored advertising can be beneficial to both parties involved. It must be done in a completely open manner and with a concern for consumer privacy. Furthermore, as we move into an increasingly digitized era, it will be even more important than ever to balance the benefits of personalized advertising with a commitment to ethical practices that prioritize the public good above all (Goldsmith, 2004; Blazheska et al., 2020). Only then can we ensure that our connection with technology remains constructive and positive. Finally, and importantly, although the use of guerrilla marketing techniques in information logistics undoubtedly brings benefits, businesses must approach this strategy with caution and consider the rights of their patrons. Ultimately, by prioritizing clear communication between themselves and customers, businesses can build consumer trust while reaping greater benefits from personalized advertising methodologies (Usani, 2022).

Marketing is an intense world in which companies are constantly competing for consumers' attention and money. However, in recent years, the number of non-traditional guerrilla marketing tactics to get ahead has increased. Although these methods can be effective, they are often at the expense of the consumer. As Margolis and Garrigan (2008) suggest, some of these tactics may exploit individuals through psychological manipulation or emotional appeals. The very essence of guerrilla marketing is to break away from traditional advertising by creating innovative campaigns that engage audiences through flash mobs or viral

videos. They hope that viewers will take action based on their emotions, whether it is sharing a post on social media or making a purchase. However, when companies use manipulative techniques, such as using scarcity or urgent messages, without disclosing the pros and cons of their products - or exploiting the emotions of fear or guilt - it is painfully obvious that they are focused solely on profit rather than on providing value to customers. In conclusion, although guerrilla marketing can quickly generate hype around products or services, businesses should not sacrifice customer satisfaction for financial gain through exploitative strategies. Before deploying any promotional activities, companies must be aware of their ethical responsibilities towards consumers so that individuals are not forced to buy something they do not need or want as a result of impulsive reactions triggered by well-crafted messages such as scare tactic ads targeting vulnerable groups prone to anxiety about certain topics, products, etc. (Usani, 2022).

The misuse of personal data in GUERRILLA marketing is the reason for solving its use in the environment of the Slovak Republic, compared to abroad, as the use of guerrilla marketing tactics in information logistics is gaining momentum. The issue of consumer privacy has become a major concern as the collection and use of personal data without express consent increases. This practice poses a significant threat to individuals who value their privacy rights. Such marketing strategies can deprive the individual of autonomy and cause devastating consequences such as identity theft or misuse of personal information. Ay et al. (2010) highlighted this problem by confirming the use of guerrilla marketing tactics in information logistics threatens consumer privacy because it often involves the acquisition and use of personal data without proper authorization from the individual. These unethical practices undermine the bonds between companies and consumers, leading to lower levels of trust. It is critical that brands using these types of strategies openly communicate their methods while giving people choices about how they want use of their data - or not used at all, if they choose to opt out - rather than being exploited to any higher profits. Protecting individual privacy should always come before maximizing profit, as customers deserve fairly treatment when entrusting organizations with valuable and sensitive information online or offline.

## **1 Present state of problem solving**

Abroad, several authors, covering the literature more or less at the level of conference contributions, address the subject area. Zarco and Herzallah (2023) did a literature review of guerrilla marketing through content analysis in the Web of Science, Scopus and EBSCO; found literature analyzed 164 articles in depth.

Traditional marketing activities are connected with high costs and therefore unaffordable, mainly for small and medium enterprises (SMEs) (Jahrig et al., 2017). Guerrilla marketing solved this problem via social media, which presents low-cost approach, having influence on crowd-funding success. Also, Zavisic and

Medic (2006) studied guerrilla marketing due to the low-cost (financially limited) approach of marketing, when comparing basic marketing principles and categories of conventional marketing compared with the demands of the unconventional ones, such as guerrilla marketing. Additionally, Dahan and Levi (2012) confirmed guerrilla marketing presents a financially suitable form of marketing communications for every type of the company. The extent of guerrilla marketing use depends only on the type of business activity.

The new approaches to marketing should be studied due to the vast dynamism in present activities of the companies and markets. According to Iosip and Funaru (2011) mainly guerrilla marketing help to meet such dynamism due to little cost. The development in marketing approaches must be considered from the long-term development with a basic strategic management (Teplická et al., 2019) and business process efficiency (Isoraite, 2010) to maintain competitive advantage, which can be achieved not only from the view of viral marketing and content marketing, but also from the view of guerrilla marketing (Olsiaková et al., 2017).

Isoraite (2010) also proved guerrilla marketing is helpful for SMEs. On the other hand, Navrátilová and Milichvoský (2015) proved communication of guerrilla marketing in marketing activities are used also in large enterprises, showing it in the case of central European markets. The study shows the intensity of guerrilla marketing depends on gender and the age of the consumers. Consumer's behavior presents a significant factor during guerrilla marketing establishment (Alsheikh, 2024). The study shows guerrilla marketing had significant effects on both dimensions of customer behavior, when the effect of sensation marketing on customer brand attitude was greater than its effect on customer purchase intention. Therefore, enterprises are required to try nonconventional marketing practices such as guerrilla marketing in order to change customer behaviors. Guerrilla marketing arose from the current interconnection with the gaming sphere, promoting guerrilla marketing actions and digital game's advertising to a new level (Woiciechowski and Mago, 2017).

However, according to Zidó (2011), guerrilla marketing has a threat from the view of ethics, when in his study Zidó (2011) aims to remedy the aggrieved reputation of guerrilla marketing to be more ethical practice and by this way contributing more to the competitive advantage. Utilization of entertainment media, including digital games to engage the audience within advertising efforts, is a new approach of marketing, called advertainment.

Contrastive approaches to marketing are studied not only from the view of traditional and untraditional, or conventional and unconventional, but also from the view of comparing multilingual and multicultural space (Turcanu, 2015). The aim of the paper is therefore a detailed investigation of guerrilla marketing strategies, with a special focus on comparing their application and effectiveness in different cultural and geographical contexts, from Slovakia to Western markets to the Asian region.



## 2 Methodology

The main goal of the paper is to analyze and compare approaches to guerrilla marketing in different markets, namely the Slovak, American and Asian markets. The aim of the paper is not only to provide a comprehensive overview of guerrilla marketing and its application in various markets, but also to identify the key factors that influence its success. The following sub-objectives helped to achieve the main goal of the work:

- Description of different forms and tactics of guerrilla marketing.
- Analysis of approaches to guerrilla marketing on the Slovak, American and Asian markets.
- Identifying the main differences in approaches and strategies between these markets.
- Investigating the effectiveness of guerrilla marketing campaigns in different cultural and economic contexts.
- Market research and analysis of available data.
- Interviews with experts and professionals in the field of marketing.
- Comparison of strategic approaches to guerrilla marketing and their implementation in information logistics.
- Summarizing the findings from the analysis and comparison of approaches to guerrilla marketing.
- Evaluation of the effectiveness and impact of guerrilla marketing on the Slovak, American and Asian markets.
- Recommendations for improving the use of guerrilla marketing in practice.

The work aims to contribute to a better understanding of the dynamics of guerrilla marketing and offer an insight into how its strategies can be effectively adapted to different market conditions.

During the research, we started with the basic characteristics of guerrilla marketing. One of the fundamental characteristics of guerrilla marketing is its ambition to be completely different from traditional marketing. Due to the understanding of this ambition as a whole, it is important not only to analyze its goals and characteristics, but also its origin and context. These aspects make it possible to distinguish guerrilla marketing from traditional marketing and provide a clear picture of what the concept of guerrilla marketing means (Marasigan et al., 2023).

Guerrilla marketing is a marketing strategy that uses unconventional and often inexpensive methods to promote a brand or product. It can be very effective, but also risky. Table 1 shows its pros and cons (Isoraité, 2010).

**Table 1 Advantages and disadvantages of guerilla marketing**

<b>Advantages</b>	<b>Disadvantages</b>
Low costs	Risk of failure
Fun and creativity	Risk of loss
Feedback	Risk of embarrassing or scaring of the audience
Viral potential	Controversy risk
Building of partnerships	Management rejection

*Source: own processing according to Behal and Sareen (2014)*

Characteristics of guerrilla marketing (see Table 2) are key factors for successful implementation of guerrilla marketing, and they help to create an interesting and impressive campaign.

**Table 2 Guerilla marketing characteristics**

<b>Characteristic</b>	<b>Description</b>
<b>Interactivity</b>	Engaging the audience and creating an experience, they will remember.
<b>Attraction of attention</b>	Stand out from the crowd and grab the attention of potential customers.
<b>Viral effect</b>	Creating campaigns that spread online and offline.
<b>Creativity</b>	Use of original and engaging ideas.
<b>Partnerships</b>	Cooperation with various entities to expand the reach of the campaign.
<b>Element of surprise</b>	Using the moment of surprise to generate the interest.
<b>Building awareness</b>	Raising awareness of the brand and its products.

*Source: own processing according to Behal and Sareen (2014)*

Nowadays, marketing strategies are changing and guerrilla marketing is becoming more and more popular. Table 3 compares guerrilla marketing with traditional marketing. Understanding these differences helps to choose the most suitable approach for business.

**Table 3 Differences in marketing strategy**

<b>Aspect</b>	<b>Traditional marketing</b>	<b>Guerrilla marketing</b>
<b>Financial investment</b>	High	Low
<b>Target group</b>	Big companies	Small companies
<b>Measurement of success</b>	Turnover, sales, website traffic	Profit
<b>Growth strategies</b>	Obtaining of new consumers	Increasing of transactions, frequencies and recommendations
<b>Orientation in communication</b>	"We", "our"	"You, "yours"
<b>Long-term relation with consumers</b>	Low emphasize	High emphasize

*Source: own processing according to Varadarajan (2015)*

These differences reflect a shift from traditional, mass approaches to more flexible, target-oriented strategies that guerrilla marketing brings. The guerrilla marketing approach is a living example of how creativity and customer focus can be the key to success, regardless of the size of the budget.

### 3 Results

In today's age of competition, one of the biggest challenges for businesses is to capture and retain the attention of their customers. Traditional forms of advertising and marketing are often not enough for a company to rise above the competition in this busy and crowded business environment. Therefore, more and more companies are resorting to non-traditional and creative methods of promoting their products and services. One of the most interesting and effective forms of such marketing is guerrilla marketing. Guerrilla marketing is a form of marketing strategy, characterized by unconventional and imaginative approaches to promoting products and services. This method of marketing often uses creative and non-standard methods to reach the target group without high advertising costs. From placing prominent advertisements in unusual places to using social media and interactive events, guerrilla marketing offers businesses the opportunity to engage and engage with their customers uniquely (Behal and Sareen, 2014).

In the area of guerrilla marketing use, we will look at the different ways in which companies tried to use non-traditional marketing strategies to achieve their goals (see Table 4). Each example offers a unique insight into how a business has chosen to reach its target group and increase its visibility in the eyes of customers. Whether it's the creative use of public space, the creation of interactive experiences, or unusual ways of distributing products, each example provides us with inspiration and the opportunity to learn from the successes (or failures) of others.

**Table 4 Comparison of markets from the view of marketing strategies**

Aspect	Slovakian market	Foreign market
Market scope	Smaller, local market with limited number of consumers.	Big, global market with big number of consumers.
Consumers' preferences	Strong preference of local products and brands.	Various preferences with high acceptance of international brands.
Marketing strategies	Orientation to the personal approach and use of local media.	Broad use of digital media and global marketing campaigns.
Competition	Lower level of competition with less number of competitors.	High level of competition with number of global competitors.
Regulation and cultural aspects	Strong influence of local regulations and cultural aspects.	Regarding various regulations and cultural differences in various countries.
Innovations and trends	Possible slower adaptation to the global trends due to the less market dynamics.	Rapid adaptation to the new trends and innovation due to the high competition and demands of the market.

*Source: own processing*

The analysis and comparison of marketing aspects between the Slovak and foreign markets reveals significant differences that have a direct impact on the formulation and implementation of marketing strategies. These differences are essential not only for domestic companies expanding abroad, but also for international brands entering the Slovak market.

### *Market scope*

Compared to foreign markets, the Slovak market is smaller and more local, which brings specific advantages and challenges. A smaller market enables a better understanding of the needs and preferences of local consumers, but this also limits the potential for large-scale expansion. In contrast, foreign markets, especially those in Asia and the US, offer a huge number of consumers and thus greater opportunities for growth, but the competition here is much more intense and understanding local iterations is key to success.

### *Consumers' preferences*

A strong preference for local brands and products is visible in Slovakia, which reflects consumers' trust in what is culturally close to them. Abroad, with a diverse and multicultural population, the acceptance of international brands is higher, but success requires the adaptation of products and marketing messages to different cultural backgrounds.

### *Marketing strategies*

While a more personal approach and focus on traditional and local media channels is effective in Slovakia, foreign markets require extensive use of digital media and global campaigns. Innovative digital strategies and social media are key to engaging a broad and diversified customer base in foreign markets.

### *Competition and regulations*

The high level of competition in foreign markets stimulates innovation and the creation of creative content, while in Slovakia the competitive environment can be less intense, but at the same time more connected to local regulatory and cultural aspects. Understanding and following local regulations and cultural customs is critical to success in any market.

### *Innovation*

Innovation plays a vital role in differentiating brands and products in crowded markets. In Slovakia, where the market is smaller and less dynamic, the pace of innovation can be slower, which allows brands to develop and adapt their products to local needs and preferences in more detail. However, this slower pace can also mean missed opportunities with rapidly changing trends and technologies. Conversely, foreign markets, especially those in technologically advanced regions such as Asia and North America, are characterized by rapid innovation cycles. Firms in these markets must constantly innovate to maintain a competitive edge and meet the expectations of more technologically able and demanding consumers. This constant need to innovate leads to faster adoption of new technologies, trends and business models. For Slovak companies expanding abroad, or for foreign brands entering the Slovak market, it is important to recognize this dynamic and adapt their innovation strategies to suit the specifics of each market. In Slovakia, this may mean focusing on adapting products and services to local cultural and market needs, while in foreign markets the key may

be the rapid introduction of innovations and the use of the latest technological trends. Ultimately, a firm's ability to innovate and adapt its products and marketing strategies to different market conditions is a critical factor for its success in a globally connected world. Firms that can effectively navigate between the need for local relevance and global innovation stand a better chance of achieving long-term sustainability and growth.

### 3.1 Optimal use of guerrilla marketing

In the present era of digital overload and constant information noise, guerrilla marketing is proving to be a key tool for brands trying to differentiate themselves and create a lasting impression. This chapter focuses on identifying the optimal use of guerrilla marketing by analyzing the various aspects and strategies that increase its effectiveness in different markets.

#### *Key strategies of guerrilla marketing and their effectiveness*

Every successful guerrilla marketing campaign is based on a deep understanding of its target group. This means that it is not enough to know only demographic data, but it is also important to understand the psychological motives, cultural assumptions and consumption habits of potential customers. Table 5 illustrates a review of key strategies for successful guerrilla marketing campaigns. This deep insight enables brands to create personalized and resonant content strategies that naturally attract attention and increase engagement.

**Table 5 Key strategies of guerrilla marketing and their effectiveness**

Strategy	Target group involvement	Viral effect	Total effectiveness	Notes
Target personalization	high	medium	high	Personal approach increases relevance
Creative content	high	high	high	Original content attract naturally sharing
Interactive campaigns	high	high	high	Involvement and interaction increases engaging and sharing
Low cost solutions	medium	medium	high	Effectiveness also at the limited budget
Use of technology	high	high	high	Digital tools extending interactivity and impact
Building of the community	high	medium	high	Creation of long-term relations and loyalty
Elements of surprise	high	high	high	Unexpected moments increasing memorability

*Source: own processing*

In the area of creativity and originality, guerrilla marketing really stands out. It's not just about being different, it's about creating something unique and memorable that naturally spreads among people. These campaigns often use elements of surprise, humor, or even shock to create strong emotional responses that promote viral and the spread of the campaign. This approach proves that even with limited financial resources, it is possible to create a significant impact.

### *Implementation and recommendations*

For the successful implementation of guerrilla marketing, it is necessary to consider various aspects that contribute to the effectiveness and resonance of campaigns among the target group. Table 6 offers a synthesis of common elements of successful campaigns and recommendations for optimal use.

Interactivity is the key element that transforms passive reception of content into active participation. Guerrilla marketing campaigns, which create space for interaction with the target group, not only increase brand memorability, but also strengthen the relationship between the brand and its audience. The use of digital platforms and social media in this context opens up new possibilities for engagement, from gamification to interactive storytelling campaigns, which can go far beyond traditional advertising formats.

Building a community around a brand is another critical aspect, often overlooked. Successful guerrilla marketing campaigns are able to create a sense of belonging and belonging, making customers not just passive consumers, but active brand advocates. This strong connection between a brand and its community can significantly contribute to sustainable growth and positive brand perception in the market.

**Table 6 Optimal implementation of guerrilla marketing**

<b>Aspect</b>	<b>Description</b>
Target group	Successful campaigns projected with clear understanding of the target group.
Creativity and originality	All campaigns use high measure of creativity and originality.
Interactivity	Campaigns supported involvement and interaction with the audience.
Budget	Number of campaigns reported effectiveness also at the low budget.
Viral potential	Orientation to the content creation with high viral potential presented a common element.
Involvement of communities	Campaigns used many times existing communities or they created new communities around the brand.
Use of technologies	The key is the use of the newest technologies and digital platforms.

*Source: own processing*

The optimal use of guerrilla marketing involves a deep understanding of the target audience, using creativity and originality to create memorable campaigns, encouraging interactivity and community involvement, as well as effectively using available budgets and technologies. The key to success is the ability to adapt and innovate, allowing brands to differentiate themselves and create a strong impression on their target audience.

Guerrilla marketing represents an important tool in the arsenal of the modern marketer, providing the possibility of effectively addressing the target group through creative and innovative campaigns that can have a significant impact at minimal costs. By using the above strategies and approaches, brands can maximize the effectiveness of their guerrilla marketing activities and achieve a lasting impact in a competitive environment.

## **Conclusion**

The analysis clearly shows that while the basic principles of guerrilla marketing – such as creativity, unexpectedness and the ability to evoke strong emotional reactions – are constants, specific tactics and implementation methods must be constantly adapted to local assumptions and preferences. The mentioned factors are in accord with the result of Marcekova et al. (2015).

A comparison of marketing aspects between the Slovak and foreign markets revealed that successful brand globalization requires more than just the translation of marketing materials. It requires an in-depth understanding and respect for local cultures, customs and consumer behaviors. Adaptability, local relevance and the ability to innovate are the keys to overcoming these differences and achieving success in the global market. The results are similar to the results of Vavrecka et al. (2017) in the Czech Republic, due to the common situation in Slovakia and the Czech Republic as post-communist countries, having similar developments.

The analysis reveals that in the dynamic environment of Asia, where technological innovation and rapid adoption of digital trends go hand in hand with deep-rooted cultural traditions, campaigns of guerrilla marketing that successfully combine these elements can achieve extraordinary success. Conversely, in Western markets where consumers often demand authenticity and personal resonance, campaigns must balance innovation and authenticity in order to be accepted and appreciated by the target audience (see also Redding, 2009).

Despite these regional differences, it turns out that the flexibility and ability of an innovative thought process, which is the basis of guerrilla marketing, is crucial for overcoming the challenges associated with the diversity of markets. Innovation within available means and technologies, along with an emphasis on creating meaningful and memorable experiences, is becoming a universal tool that allows brands to penetrate the consumer's consciousness. However, innovative approaches of marketing communication are problematic in SMEs (Civelek et al.,

2021) and SMEs must do training and financial support provided by policymakers and with collaboration of other institutions.

Most international marketing studies, taking a sociological position, assume homogeneity within and heterogeneity between cultures Fatehi et al., (2018). The analysis of guerrilla marketing and its application in different geographical and cultural contexts revealed a number of important aspects and trends that have a significant impact on marketing communication today. By identifying key success factors such as creativity, adaptability and effective use of digital and social media, this analysis provides valuable insights into the dynamics of guerrilla marketing and its ability to shape consumer perception and engagement.

The results of the paper show that creativity, adaptability and the ability to use digital channels and social media to strengthen the brand and its story are an integral part of successful guerrilla marketing campaigns. A comparison of the use of guerrilla marketing in Slovakia and abroad points to the fact that, despite the different cultural and social contexts in which these campaigns are implemented, it is possible to identify universal elements of success. These findings suggest that guerrilla marketing, when properly applied, can be a significant and effective tool for brands seeking to make a significant impact in a globalized and digital marketing environment.

Although we have pointed out some differences and potential conflicts between different approaches depending on regional characteristics and cultural assumptions, it is important to realize that guerrilla marketing is not a monolithic phenomenon. Rather, a set of strategies and tactics must constantly adapt to changing conditions.

Due to the identified iterations and complex connections, it is necessary to continue further research and deeper analysis. This will not only promote a better understanding of guerrilla marketing as such, but also help in defining effective strategies and solutions for its application in practice. Expanding the knowledge base in this area is key to developing innovative and resonant marketing campaigns that can reach and engage audiences - consumers on a global level. When implementing the findings and recommendations in practice, it is necessary to take into account the constantly changing dynamics of the market and consumer behavior. In an era of digital transformation, where new technologies and platforms create an ever-changing environment for interacting with brands, marketing strategies must be flexible and reactive. This process involves not only adapting existing campaigns based on feedback and results, but also anticipating future trends and being ready to experiment with new approaches. Such a proactive approach will enable brands to not only keep pace with rapidly changing consumer preferences, but also actively shape those preferences through innovative and engaging marketing initiatives. An organization's ability to learn and adapt in real time is a critical factor that determines its ability to achieve long-term success and create a positive impact on society.



Focusing on the practical implementation of the findings and recommendations arising from this analysis is important for achieving positive change. The application of this knowledge can bring significant benefits not only for marketing departments, but also for the wider society, as it strengthens the bridges between brands and their consumers, supports the creation of authentic and memorable experiences. This process of continuous learning, adaptation and innovation is an integral part of developing effective marketing strategies that can positively affect our social and economic life.

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# ASSESSMENT OF A COMPANY'S FINANCIAL HEALTH USING TRADITIONAL INDICATORS AND THE EVA INDICATOR

## HODNOTENIE FINANČNÉHO ZDRAVIA PODNIKU POMOCO TRADIČNÝCH UKAZOVATEĽOV A UKAZOVATEĽA EVA

*Alžbeta DŽUJKOVÁ*

### Abstract

The article focuses on assessing the financial health of a selected company using traditional financial indicators and the Economic Value Added (EVA) metric. The analysis is based on accounting data from 2019 to 2024 and includes an evaluation of liquidity, activity, indebtedness, profitability, and financial stability. The study also incorporates the calculation of the EVA indicator, which allows for assessing the company's ability to create value after accounting for the cost of capital. The results indicate a fluctuating development of financial performance, with the company creating economic value throughout the analyzed period, while weaker areas were identified mainly in liquidity and capital stability.

**Keywords:** financial health, analysis, EVA, financial stability, value, liquidity

### Abstrakt

Článok sa zameriava na posúdenie finančného zdravia vybraného podniku prostredníctvom tradičných finančných ukazovateľov a ukazovateľa ekonomickej pridanej hodnoty (EVA). Analýza vychádza z účtovných údajov za obdobie rokov 2019 až 2024 a zahŕňa hodnotenie likvidity, aktivity, zadlženosti, rentability a finančnej stability. Súčasťou štúdie je aj výpočet ukazovateľa EVA, ktorý umožňuje posúdiť schopnosť podniku vytvárať hodnotu po zohľadnení nákladov kapitálu. Výsledky poukazujú na kolísavý vývoj finančnej výkonnosti, pričom podnik počas celého analyzovaného obdobia vytváral ekonomickú hodnotu, avšak slabšie stránky boli identifikované najmä v oblasti likvidity a kapitálovej stability.

**Kľúčové slová:** finančné zdravie, analýza, EVA, stabilita, hodnota, likvidita

### Introduction

The financial health of a company represents a fundamental prerequisite for its long-term existence, stability, and ability to generate value for its owners. Academic literature considers financial analysis to be a tool that supports economic decision-making, risk identification, and forecasting of a company's future development, serving not only to assess past performance but also to evaluate the potential for future performance (Kotulič et al., 2018).

A core component of financial analysis consists of ratio indicators derived from the balance sheet and income statement, which are used to quantify liquidity, indebtedness, activity, and profitability. According to Kislingerová (2010), these indicators enable the assessment of a company's ability to meet its obligations, the efficiency of asset utilization, the structure of financing, and the rate of return on invested capital. Profitability ratios, in particular, represent an important

indicator of economic success, as they evaluate a company's ability to generate profit in relation to invested resources (Synek et al., 2015).

Within the context of financial stability, emphasis is placed on adherence to the principles of sound asset financing, especially the principle that long-term assets should be financed by long-term sources, known as the Golden Balance Rule. In the literature, this principle is regarded as a key determinant of solvency and a stable capital structure (Kislingerová, 2010).

However, traditional accounting indicators may fail to capture a company's true value-creating capability. For this reason, modern financial management applies the concept of Economic Value Added (EVA), which is based on the requirement that a company creates value only when its profit exceeds the cost of capital (Stern & Shiely, 2001; Mařík, 2018). EVA thus represents an indicator that enables the assessment of managerial efficiency in the context of long-term value creation.

The objective of this article is to analyse the financial health of a selected company using financial ratios, profitability indicators, selected principles of financial stability, and the EVA indicator. The analysis identifies the strengths and weaknesses of the company's financial management and proposes recommendations aimed at optimizing its performance and value-creating potential.

## **1 Characteristics of the Analysed Company**

The subject of this research is a selected enterprise that has long been focused on the processing of hardwood and the production of final products made from this material. The operation employs approximately 50 workers, and the production primarily involves species such as beech (*Fagus sylvatica*), oak (*Quercus robur*), and black walnut (*Juglans nigra*). The product portfolio includes various types of solid semi-finished and finished products, such as beams, glued panels with continuous or finger-jointed lamellas, briquettes made exclusively from hardwood, and a specific type of wood flour suitable for use in composite production, the fur industry, or as bedding in animal husbandry.

The enterprise ranks among the most significant hardwood processors in the Central European region. The majority of its production, approximately 95%, is exported to foreign markets, particularly Germany, Denmark, Norway, the Czech Republic, and Poland. The company maintains its competitiveness mainly through a strong emphasis on technological modernization and regular investments in highly efficient production equipment. A fundamental strategic principle of its operations is environmental responsibility. The enterprise strives for maximum utilization of wood raw material, with all by-product material streams processed into briquettes or wood flour. The company is involved in the FSC® certification system and regularly undergoes chain-of-custody audits.

Although it is not possible to certify all products due to the limited availability of certified wood, the enterprise expects an increase in its share in the coming years.

In addition to its economic activities, the company is also actively engaged in regional development by supporting social, cultural, and community initiatives. The integration of economic stability, environmental responsibility, and social engagement contributes to a positive image of the company in both domestic and international contexts.

The company's long-term presence in the market is complemented by partnership relationships with leading technology firms. Production quality is closely linked to the technical equipment used by the enterprise, as evidenced by cooperation with renowned technology manufacturers such as Weinig, Mebor, Salvamac, RUF Briquetting Systems, and Fagus GreCon. These companies specialize in various segments of the wood-processing industry, thereby providing comprehensive support throughout the entire production process, ranging from primary wood processing and optimization and safety solutions to the processing of residual materials.

### 1.1 Traditional Indicators of a Firm's Financial Health

Traditional indicators of financial health represent a fundamental tool for assessing a firm's economic condition based on financial statements. They are primarily used to evaluate the firm's ability to meet its obligations, efficiently utilize its assets, and achieve an adequate level of profitability.

**Table 1 Development of Liquidity Indicators in the Observed Period 2019–2024**

	2019	2020	2021	2022	2023	2024
<b>Quick Liquidity</b>	0,60	0,81	0,62	0,84	0,44	0,63
<b>Current Liquidity</b>	1,09	1,56	1,35	1,57	1,39	1,54
<b>Overall Liquidity</b>	1,90	2,49	1,66	1,95	3,23	4,13

*Source: Author's own processing*

The company's quick liquidity ratio ranged from 0.44 to 0.84 during the period 2019–2024 and did not reach the recommended value of 1 throughout the observed period. The highest values were recorded in 2020 and 2022, while a significant decline occurred in 2023, indicating a temporary deterioration in the cash position or an increase in short-term liabilities.

The current liquidity ratio showed a more stable development, ranging from 1.09 to 1.57. The values were mostly within or close to the recommended interval, indicating an average ability of the company to meet its short-term obligations through current assets, particularly inventories and short-term receivables.

The overall liquidity ratio exhibited a markedly increasing trend, rising from 1.90 in 2019 to 4.13 in 2024. This development indicates a substantial predominance of assets over short-term liabilities, which may signal a

conservative approach to financial management or, alternatively, inefficient allocation of financial resources.

**Table 2 Development of Activity Ratios in the Observed Period 2019–2024**

	2019	2020	2021	2022	2023	2024
<b>Inventory Turnover Period</b>	39,11	39,73	14,12	12,34	75,34	113,23
<b>Receivables Collection Period</b>	23,79	31,74	34,43	23,80	39,04	39,71
<b>Fixed Assets Turnover</b>	2,04	2,27	2,97	2,94	2,46	3,06
<b>Total Assets Turnover</b>	1,34	1,36	1,81	1,93	1,28	1,20

*Source: Author's own processing*

The inventory turnover period exhibited significant fluctuations over the observed period. In 2019 and 2020, it was approximately 39 days, while in 2021 and 2022 it shortened markedly to 14.12 and 12.34 days, respectively, indicating more efficient inventory management. In contrast, a substantial increase occurred in 2023, when the inventory turnover period rose to 75.34 days, and this trend further deepened in 2024 to 113.23 days. This development was caused by a deterioration in inventory turnover and the possible excessive tying up of capital in inventories.

The receivables collection period ranged from 23.79 to 39.71 days during the analysed period. The shortest collection periods were recorded in 2019 and 2022, while the gradual prolongation in 2023 and 2024 indicates a deterioration in customers' payment discipline and a relaxation of the company's credit policy.

The fixed asset turnover showed an overall favourable trend, increasing from 2.04 in 2019 to 3.06 in 2024. The highest values were achieved in 2021 and 2024, reflecting the company's more efficient utilisation of long-term assets to generate revenues, despite a temporary decline in 2023.

The total asset turnover ranged from 1.20 to 1.93 during the observed period. The highest values were recorded in 2021 and 2022, indicating higher efficiency in the use of total assets. Conversely, the decline in 2023 and 2024 suggests a reduced ability of assets to generate sales, which is related to an increase in the volume of assets or a deterioration in the turnover of current assets.

**Table 3 Development of Indebtedness Indicators (%) in the Observed Period 2019–2024**

	2019	2020	2021	2022	2023	2024
<b>Total Indebtedness of the Company</b>	22,71	18,73	24,35	17,59	18,30	17,37
<b>Bank Indebtedness</b>	7,03	4,67	6,02	0,73	4,52	3,57
<b>Equity Indebtedness</b>	35,36	26,69	36,16	23,87	23,99	21,82
<b>Financial Autonomy</b>	64,23	70,18	67,33	73,66	76,26	79,59

*Source: Author's own processing*

The company's total indebtedness, as presented in Table 3, remained at a low level during the period from 2019 to 2024, ranging from 17.37% to 24.35%, with



a slightly declining trend in the most recent years. This development indicates a conservative financial policy and a stable capital structure of the company.

Bank indebtedness decreased significantly over the observed period, particularly in 2022, when it reached its minimum value. Despite a slight increase in 2023 and 2024, bank debt remains low, contributing to a reduction in financial risk.

The debt indicators, together with the increasing financial independence, which rose from 64.23% to 79.59%, confirm the gradual strengthening of equity capital and a high level of financial stability of the company.

**Table 4 Development of Profitability Indicators (%) in the Period 2019–2024**

	2019	2020	2021	2022	2023	2024
<b>ROI</b>	3,86	2,83	8,21	12,91	3,54	3,11
<b>ROA</b>	3,58	2,73	8,14	12,86	3,48	2,93
<b>ROE</b>	5,58	3,90	12,09	17,45	4,57	3,68
<b>ROS</b>	2,67	2,01	4,50	6,65	2,71	2,44

*Source: Author's own processing*

Profitability indicators in the period from 2019 to 2024 showed significant fluctuations. The most favourable development was recorded in 2022, when all indicators (ROI, ROA, ROE, and ROS) reached their maximum values, indicating high efficiency in the use of capital and assets. In contrast, a significant decline in profitability occurred in 2023 and 2024, with values returning approximately to the levels observed in 2019–2020. This development suggests a deterioration in the company's profitability following a previous period of strong growth.

**Table 5 The Golden Balance Rule in the Long Term (in thousand EUR) in the Observed Period 2019–2024**

	2019	2020	2021	2022	2023	2024
<b>Non-current assets</b>	4 245	3 688	3 772	4 026	3 234	2 421
<b>Long-term sources of financing</b>	4 454	4 484	4 228	4 522	4 959	5 081
<b>Difference</b>	-208	-796	-456	-495	-1 725	-2 660
<b>Long-term undercapitalized</b>						

*Source: Author's own processing*

As shown in Table 5, the company is long-term undercapitalized. This means that non-current assets were not fully covered by long-term sources, which is contrary to the golden balance rule. The most significant deterioration of this situation occurred in 2023 and 2024, thereby increasing the risk in terms of the company's financial stability.

**Table 6 Golden balance rule in thousand EUR from a short-term perspective in the period 2019–2024.**

	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Current assets</b>	2 214	2 462	2 412	2 082	2 924	3 719
<b>Short-term sources</b>	1 172	998	1 465	1 075	912	907
<b>Difference</b>	1 042	1 463	947	1 007	2 012	2 811
<b>Net working capital</b>						

*Source: Author's own processing*

Table 6 shows that the company generated positive net working capital throughout the analysed period, which represents a desirable financial condition. This indicates that current assets exceeded short-term liabilities. The value of net working capital exhibited an upward trend, particularly in 2023 and 2024, pointing to an improvement in the company's short-term financial stability and liquidity position.

## 1.2 Modern Performance Indicator EVA

In this section of the article, we focus on the calculation of the EVA indicator and the subsequent evaluation of the company's financial performance. Since EVA is a methodologically more demanding indicator, the calculation itself is divided into several partial steps. The first step involves determining operating profit after tax, which is derived by adjusting profit before tax so that it includes exclusively costs and revenues related to the company's operating activities. The calculation procedure is illustrated in Table 7.

**Table 7 Calculation of Net Operating Profit After Tax (NOPAT) in thousand EUR over the observed period 2019–2024**

	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Profit from ordinary activities</b>	364	270	768	1 072	358	323
<b>+ Interest expenses</b>	22	7	5	3	4	13
<b>= EBIT</b>	386	277	774	1 076	363	336
<b>-Tax</b>	81	58	162	226	76	70
<b>NOPAT</b>	305	219	611	850	287	266

*Source: Author's own processing*

Based on the data presented in the table, it can be stated that the Net Operating Profit After Tax (NOPAT) exhibited a fluctuating development over the observed period. In 2019, NOPAT reached a value of 305,321.57€, followed by a decline in 2020. Subsequently, a significant increase was recorded in 2021 and 2022, with NOPAT peaking in 2022 at 850,571.67€. From 2023 onward, however, NOPAT declined again, and this downward trend continued in 2024, indicating a deterioration in the company's operating performance in recent years.

In the next step, the cost of equity is determined using the Capital Asset Pricing Model (CAPM). The risk-free interest rate represents the minimum return required by investors and is typically derived from the yields of ten-year government bonds, with its annual value calculated as the average of monthly yields. The beta coefficient ( $\beta$ ) is determined as the average value at a zero-debt level for European companies operating in the municipal services and waste processing sector in the Central European region.

Table 8 presents the calculated cost of equity of the company determined using the CAPM model. The results indicate that the cost of equity remained at a relatively low level throughout the analysed period, with the lowest values recorded in 2020 and 2021 (0.001, i.e., 0.1%). The highest value was observed in 2023, when the cost of equity reached 0.038, corresponding to 3.8%. Based on these results, the calculation of the weighted average cost of capital (WACC) follows and is presented in Table 9.

**Table 8 Calculation of the Cost of Equity Using the CAPM Model in the Period 2019–2024**

	2019	2020	2021	2022	2023	2024
$r_f$	0,004	0,001	0,001	0,025	0,037	0,035
$+ \beta$	0,012	0,008	0,008	0,008	0,015	0,012
$\times (r_m - r_f)$	0,042	0,036	0,020	0,022	0,034	0,031
$r_e = n_{VK}$	0,004	0,001	0,001	0,025	0,038	0,035

*Source: Author's own processing*

The weighted average cost of capital (WACC) represents the total cost incurred by the company in obtaining financial resources and consists of the cost of both equity and debt capital. The values of the cost of equity are presented in Table 8, while the cost of debt capital was calculated as the ratio of interest expenses to the company's total liabilities. After determining these components, it is possible to proceed with the calculation of Economic Value Added (EVA).

**Table 9 Calculation of the Weighted Average Cost of Capital (WACC) during the Period 2019–2024**

	2019	2020	2021	2022	2023	2024
$C_d \cdot (1-t) \cdot D/TC$	0,003	0,001	0,001	0,001	0,001	0,002
$C_e \cdot (E/TC)$	0,003	0,001	0,001	0,019	0,029	0,028
<b>WACC</b>	0,006	0,002	0,001	0,019	0,030	0,030

*Source: Author's own processing*

The weighted average cost of capital (WACC) was low throughout the analysed period, reaching its minimum in 2020 and 2021. From 2022 onwards, an increase was observed, with the highest values recorded in 2023 and 2024 (3.0%), mainly due to the growth in the cost of equity. Based on these individual results, the calculation of the Economic Value Added (EVA) indicator is subsequently performed.

**Table 10 Calculation of the EVA indicator in the analysed period 2019–2024**

	2019	2020	2021	2022	2023	2024
<b>NOPAT (€)</b>	305 321,57	219 278,72	611 682,78	850 571,67	287 237,68	266 192,08
<b>C (€)</b>	5 851 529,65	5 683 527,79	4 892 482,87	5 424 041,34	5 360 744,46	5 212 191,47
<b>WACC</b>	0,01	0,00	0,00	0,02	0,03	0,03
<b>EVA (€)</b>	272 395,37	208 593,01	604 375,60	747 181,45	129 007,69	110 216,70

*Source: Author's own processing*

Table 10 presents the calculation of the Economic Value Added (EVA) indicator for the years 2019–2024, which is based on a comparison of Net Operating Profit After Tax (NOPAT) and the cost of capital employed in the company. Capital costs were determined as the product of invested capital (C) and the Weighted Average Cost of Capital (WACC).

The results clearly show that the company achieved a positive EVA throughout the entire observed period, indicating that its operating profit exceeded the cost of the capital employed and that the company was therefore creating value for its owners. The highest EVA value was recorded in 2022 (747,181.45€ ), which was associated with a significant increase in NOPAT combined with a relatively low level of WACC.

Conversely, in 2023 and 2024, EVA declined markedly, mainly due to a decrease in operating profit and an increase in capital costs, indicating a weakening of the company's ability to create economic value in recent years.

The EVA results confirm the conclusions derived from traditional financial indicators. At the same time, EVA, similarly to profitability and activity ratios, highlights a deterioration in performance in 2023 and 2024.

## Conclusion

The aim of this paper was to assess the financial health of a selected enterprise using traditional financial indicators, principles of financial stability, and the Economic Value Added (EVA) indicator. The results of the traditional financial analysis indicated relatively stable indebtedness and increasing financial independence of the enterprise; however, they also revealed weaknesses in the area of quick liquidity and inventory turnover, particularly in the later years of the analysed period.

The profitability analysis showed a significant improvement in performance in 2022, followed by a decline in profitability in 2023 and 2024. From the perspective of the golden balance rule, the enterprise was undercapitalized in the long term throughout the entire period, which represents a potential risk to its long-term financial stability, although from a short-term perspective the company reported positive net working capital.

The calculation of the EVA indicator confirmed that the enterprise created value for its owners throughout the analysed period, with the highest value achieved in 2022. The subsequent decline in EVA in 2023 and 2024 corresponds with the decrease in operating performance and the increase in capital costs. The EVA results are largely consistent with the conclusions derived from traditional financial indicators, while at the same time providing a deeper insight into the company's value-creation capability.

Based on the conducted analysis, it can be concluded that the combination of traditional financial indicators and the modern EVA indicator represent the appropriate tool for a comprehensive evaluation of a company's financial performance and stability.

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# JOB SATISFACTION MANAGEMENT AND ITS CHALLENGES: BURNOUT AND TURNOVER DECISIONS IN AUDITING PRACTICE

## RIADENIE PRACOVNEJ SPOKOJNOSTI A JEHO VÝZVY: VYHORENIE A ROZHODNUTIA O ODCHODE Z POVOLANIA V AUDITORSKEJ PRAXI

*Revaz LAZARIASHVILI – Natia SURMANIDZE*

### Abstract

The paper investigates how job practices influence job satisfaction, burnout, and turnover among auditing firms. In conducting qualitative interviews with human resource and audit managers, it recognizes workload, long hours, and restricted recognition as main stressors. The findings reveal that stress is commonly tolerated as standard, causing managers to neglect burnout potential. Even though companies conduct satisfaction surveys and exit interviews, their measures are largely formal and ineffective in fixing workload or imbalances in rewards. The paper concludes that satisfying management is not merely about financial rewards, but also about active techniques that properly balance workload, reinforce recognition, and promote career development. The outcome provides managers with actionable advice on enhancing auditor retention and recognizing organizational burnout causes.

**Keywords:** job satisfaction, burnout, turnover, auditing profession, managerial practices, qualitative research

### Abstrakt

Štúdia skúma, ako manažérske prístupy ovplyvňujú pracovnú spokojnosť, vyhorenie a fluktuáciu v auditorských firmách. Pomocou kvalitatívnych rozhovorov s personálnymi a auditorskými manažérmi identifikuje pracovné zaťaženie, dlhé hodiny a nedostatočné uznanie ako hlavné stresory. Výsledky ukazujú, že stres sa často považuje za normálny, čo vedie k prehliadaniu rizika vyhorenia. Hoci firmy používajú prieskumy spokojnosti a výstupné rozhovory, tieto opatrenia zostávajú prevažne formálne. Štúdia zdôrazňuje, že efektívne riadenie spokojnosti si vyžaduje nielen finančné stimuly, ale aj vyváženú záťaž, posilnenie uznania a podporu kariérneho rastu. Zistenia prinášajú praktické odporúčania na zníženie fluktuácie a lepšie pochopenie organizačných príčin vyhorenia.

**Kľúčové slová:** pracovná spokojnosť, vyhorenie, fluktuácia, auditorská profesia, manažérske prístupy, kvalitatívny výskum

### Introduction

Auditing practice is central to making financial markets transparent and credible. Credible opinions in auditing bolster investors' confidence and economic stability by assuring that financial reports are a true reflection of a company's actual performance (Khudhair, Al-Zubaidi, & Raji, 2018). Nevertheless, whilst auditing is a highly respected profession, this is itself also a very stressful job. High workloads, tight reporting schedules, and relentless pressure to meet quality

standards are work environments that frequently risk employees' well-being and motivational levels (Rodrigues et al., 2022).

More recently, studies have shown that long working hours, excessive client pressure, and high psychological stress are directly related to professional burnout and declining job satisfaction, which in turn increase turnover intentions (Persellin et al., 2019; Knight, Cooper, & Law, 2021). Nevertheless, previous studies have mostly dealt with the individual-level realities faced by auditors, with the managerial aspect—it is how managers at the audit firms perceive and deal with satisfaction and burnout—from staying relatively unstudied. Managerial viewpoints are indispensable, as managers control the very arrangements that have direct influence on workload, recognition, and turnover (Nguyen, 2019; Ramona, Blanca, & Delia, 2022).

The purpose of this work is then to explore how job satisfaction, burnout, and turnover decisions are affected by managerial practices amongst auditing firms. Taking a qualitative approach based on semi-structured interviews with human resource and audit managers, the work identifies principal organisational stressors and examines how they are understood and addressed at company level. This framework provides a more nuanced appreciation of organisational practice and workers' well-being in high pressure professional contexts (Maslach & Leiter, 2016; Lee & Ashforth, 1996).

The paper contributes to the literature by highlighting how stress normalisation and symbolic oversight of satisfaction shape managerial decision-making in auditing. It offers pragmatic recommendations on how to improve satisfaction management and retention practices while moving the theoretical debate between job satisfaction and burnout frameworks ahead (Herzberg, 1959; Schaufeli & Enzmann, 1998). The paper is outlined as follows: Section 2 reviews the literature and conceptual framework, Section 3 outlines the methodology, Section 4 presents the findings, Section 5 considers the implications, and Section 6 concludes with recommendations for practice and future work.

## **1 Literature Review and Conceptual Framework**

### **1.1 Burnout: Definition and Scientific Development**

In contemporary research, the concept of burnout has attracted the attention of scholars across diverse fields, including economics, medicine, and auditing. Its impact has been documented in professions that may appear mutually unrelated but share high stress environments, such as healthcare and auditing (Rodrigues et al., 2022; Degheili, et al., 2019).

At its core, burnout syndrome represents a set of psychological and behavioral responses intended to mitigate the effects of workplace stress (Wulantika, Ayusari, & Wittine, 2023). However, when these responses persist over time, they require significant emotional and cognitive resources, ultimately resulting in occupational or personal dysfunctions. Importantly, burnout should not be

attributed to personal issues; rather, it is a work-related condition that develops as a consequence of organizational environments and job demands (Edú-Valsania, Laguía, & Moriano, 2022).

Burnout is a psychological outcome of long-term work stress that is marked by emotional exhaustion, depersonalization, and decreased personal accomplishment (Maslach, 1982; Maslach & Leiter, 2016). Various studies have found that prolonged exposure to challenging settings draws down emotional and cognitive resources and culminates in disengagement and decline in work performance (Lee & Ashforth, 1996). In auditing, extensive busy seasons, extensive accountability, and constant regulatory change lend themselves to settings where burnout risk is strongest (Rodrigues et al., 2022).

## **1.2 Job Satisfaction: Definition and Scientific Development**

Job satisfaction is a psychological state that emerges when individuals evaluate their work experience by comparing outcomes with their personal expectations and values. In essence, it reflects an employee's overall assessment of the job itself. Within organizational psychology, job satisfaction constitutes one of the most widely studied constructs, as it significantly influences employees' attitudes toward their employer and, consequently, organizational performance (Khavis, Krishnan, & Tipton, 2020).

The dynamics of job satisfaction can be effectively explained through Maslow's hierarchy of needs. At the initial stages, individuals prioritize basic physiological and safety needs, such as food, shelter, and security. Once these are met, higher-level needs, including self-actualization and esteem, emerge. Importantly, satisfaction is not static; what fulfills an employee at one stage of career development may no longer suffice at later stages. As employees gain qualifications and experience, their expectations evolve, thereby raising the threshold for achieving job satisfaction (Syrou & Adamopoulos, 2022).

Scholarly perspectives on the formation of job satisfaction vary. Some argue that it is primarily emotional, consisting of positive or negative feelings toward one's job and accumulated professional experiences (Narotama & Sintaasih, 2022; Ramona, Blanca, & Delia, 2022). Others emphasize the cognitive dimension, suggesting that satisfaction arises from employees' evaluative reasoning and mental assessments of their work environment (Syrou & Adamopoulos, 2022). A third perspective positions job satisfaction as a behavioral construct, acknowledging that both emotional and cognitive factors jointly shape employees' attitudes toward their work.

Despite differing theoretical viewpoints, consensus exists that several key determinants directly shape employees' perceptions of job satisfaction. These include:

- Salary and financial benefits : compensation serves not only as a means of covering daily expenses and supporting long-term goals but also as a symbolic



recognition of the value of work performed. Fair and adequate wage systems, supplemented by bonuses or incentives, reinforce employees' perception that their contributions are valued, thereby strengthening satisfaction (Syrou & Adamopoulos, 2022).

- Working environment and conditions: safe workplaces, appropriate tools, and well-structured duties contribute significantly to satisfaction. For auditors, this may include access to high-quality computers and efficient data-processing systems. Equally important are reasonable working hours, clearly communicated responsibilities, and equitable compensation for additional duties. Smooth internal communication, constructive feedback, and supportive organizational culture further enhance satisfaction (Nguyen, 2019; Ramona, Blanca, & Delia, 2022).
- Development opportunities: employees who are ambitious and growth-oriented value training programs, knowledge exchange, and career advancement prospects. Mechanisms such as professional training, cross-departmental transfers, and promotion pathways play an important role in retaining such personnel. In auditing firms, for instance, opportunities to rotate across departments or advance hierarchically are critical drivers of job satisfaction (Nguyen, 2019; Narotama & Sintaasih, 2022).
- Achievement and recognition: employees require a sense of purpose in their work, which often comes from achieving clear goals. For auditors, these goals may include assessing the reliability of financial information or evaluating internal controls. Beyond personal accomplishment, organizational recognition—through praise, encouragement, or formal acknowledgment—further enhances satisfaction (Syrou & Adamopoulos, 2022).

In sum, job satisfaction is a multidimensional construct shaped by emotional, cognitive, and behavioral factors, with financial, environmental, developmental, and recognition-related components playing a decisive role. Understanding how these elements interact is essential for evaluating their impact on burnout and turnover intentions in demanding professions such as auditing.

Job satisfaction is the degree to which employees' experience matches their expectations (Khavis, Krishnan, & Tipton, 2020). Researchers point to compensation, work environment, developmental opportunities, and recognition as key predictors (Nguyen, 2019; Syrou & Adamopoulos, 2022). Satisfaction among auditors is significantly influenced by workload balance and belief about fairness of rewards (Persellin et al., 2019). By Herzberg's two-factor theory (1959), salary forestalls dissatisfaction but actual motivation is due to achievement, growth, and recognition—a common constraint in professional firms like the audit firms.

### **1.3 Linking Job Satisfaction and Burnout**

Job satisfaction and burnout are often conceptualized as two opposing dimensions of an employee's psychological state at work. Job satisfaction

represents a positive orientation toward one's professional duties and the employing organization, while burnout reflects chronic emotional exhaustion, depersonalization, and reduced professional accomplishment resulting from prolonged stress exposure (Maslach & Leiter, 2016). Satisfaction can thus be viewed as a protective resource that enhances resilience, whereas burnout signals the depletion of cognitive and emotional reserves (Lee & Ashforth, 1996). Their interrelationship is not linear but reciprocal: high job satisfaction reduces the likelihood of burnout, while declining satisfaction often foreshadows its onset. This duality is particularly evident in professions that demand high levels of accuracy, responsibility, and sustained effort, such as auditing.

The first determinant of job satisfaction—salary and financial benefits—illustrates the symbolic and functional link between satisfaction and burnout. Salary does not only serve as an economic reward but also communicates the organization's recognition of employee contributions (Sirou & Adamopoulos, 2022). In auditing, however, compensation is frequently misaligned with workload, especially during peak periods when auditors may work 65–80 hours per week (Persellin et al., 2019). When employees perceive that financial rewards do not reflect the effort invested, a sense of inequity arises, diminishing satisfaction and accelerating emotional exhaustion. Over time, this mismatch fosters cynicism toward the profession and weakens organizational commitment.

The second determinant, the working environment and conditions, is equally decisive. A safe and supportive environment, coupled with access to adequate tools and effective communication channels, helps employees manage stress and preserve satisfaction (Nguyen, 2019). In auditing, however, the reality often involves prolonged working hours, insufficient guidance, and complex technological demands. These conditions undermine employees' ability to perform effectively, which not only diminishes job satisfaction but also contributes directly to the burnout components of depersonalization and fatigue. Moreover, weak organizational cultures and poor communication between supervisors and subordinates further aggravate stress by leaving auditors isolated in problem-solving (Ramona, Blanca, & Delia, 2022).

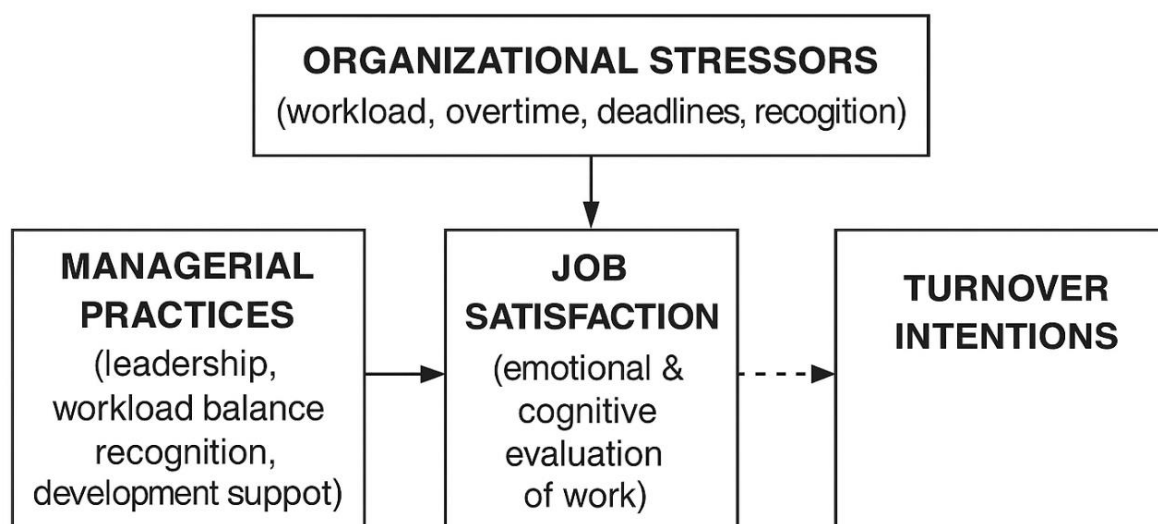
A third key factor, development opportunities, reflects the extent to which employees perceive growth and progression within their profession. Opportunities for training, mentoring, and promotion strengthen satisfaction by ensuring that work contributes to long-term personal and professional advancement (Narotama & Sintaasih, 2022). In the auditing sector, however, excessive workloads often prevent auditors from investing time in preparing for certification exams or attending training programs. When developmental prospects are blocked, employees experience stagnation, which diminishes their sense of professional accomplishment—one of the three dimensions of burnout. In such contexts, burnout does not emerge merely from fatigue but also from the perception that one's professional trajectory is constrained.

The fourth determinant, achievement and recognition, highlights the psychological importance of acknowledging employee contributions. In professions such as auditing, where tasks are complex, detail-oriented, and frequently invisible to external stakeholders, recognition from supervisors and peers is critical in sustaining motivation (Sirou & Adamopoulos, 2022). When recognition is absent, employees may question the meaning of their work and feel that their efforts are undervalued. This perception fosters detachment, one of the central elements of burnout, and further weakens the motivational bond between effort and reward. In contrast, consistent recognition strengthens the link between individual performance and organizational goals, thereby acting as a buffer against stress.

Job satisfaction and burnout are work experience poles that are inverses: satisfaction indicates resource acquisition, and burnout indicates resource loss (Maslach & Leiter, 2016). High satisfaction is a buffer against emotional exhaustion, while dissatisfaction promotes burnout at a faster rate (Ramona, Blanca, & Delia, 2022). Mismatched effort and reward, restricted mobility, and poor recognition processes in auditing raise the odds that dissatisfaction transforms into burnout and ultimate turnover (Knight, Cooper, & Law, 2021).

Integrating prior studies means that managerial practices mediate the satisfaction-burnout association, that is, the allotment of workload, schemes of recognition, and developmental assistance. Nonetheless, most studies investigate the auditor at the personal level, and managers' perception and response to such dynamics are disregarded (Narotama & Sintaasih, 2022).

This study therefore adopts a managerial perspective, exploring how leaders interpret and manage job satisfaction and burnout within auditing firms. Figure 1 (optional schematic) can illustrate the proposed relationship:



**Figure 1 Conceptual framework: Interactions between managerial practices, job satisfaction, burnout, and turnover in auditing**

*Source: Authors' compilation based on Maslach and Leiter (2016); Herzberg (1959); Persellin et al. (2019).*

This conceptual focus guides the qualitative inquiry presented in the following section.

## **2 Methodology**

### **2.1 Research Design**

It employs a qualitative study design in trying to learn how managerial practices influence job satisfaction, burnout, and turnover decisions among auditing firms. A qualitative design was used because it was not possible to capture the complexity and sophistication in organizational culture and managerial thinking with quantitative surveys. Semi-structured interviews were used to provide rich information regarding how work stress, satisfaction, and staff turnover are conceptualized by human resource managers and their equivalents in auditing.

### **2.2 Sample and Data Collection**

The study was completed with three managerial representatives across a single audit firm: two managers of human resources and a departmental manager of audits. The participants had been randomly selected to reflect appropriate professional experience and direct engagement with staff management. Data were generated by semi-structured interviews based on eight open-ended questions related to stress factors, satisfaction mechanisms, and turnover reasons. Two interviews took place face to face at the headquarters of the company, and a third was done virtually.

Each interview took roughly 25–30 minutes. Owing to participants' refusal to be audio recorded, responses were recorded using detailed field notes. The notes were then elaborated into full transcripts directly following each interview for the purpose of accuracy and completeness.

### **2.3 Data Analysis and Findings**

Thematic analysis was applied to provide meaning to the data, allowing inductive coding and comparison between participants in emerging themes. The analysis was applied to identify recurring patterns in managerial stress perception, job satisfaction, burnout, and turnover.

Three key thematic categories were found:

- (1) stress normalisation as a characteristic of work in auditing,
- (2) Symbolic or formalized monitoring satisfaction mechanisms, and
- (3) Managerial understanding of burnout and turnover decisions.

These themes were then contrasted with conceptual models of job satisfaction and burnout found in the literature (Maslach & Leiter, 2016; Herzberg, 1959; Persellin et al., 2019).

## **2.4 Research Quality and Ethics**

To provide for research integrity, predictable processes were adopted in data collection and analysis. A level of reliability was aided with the commonality of utilizing the same interview schedule with participants and systematic cross-validation of interpretations across researchers.

Respondents were also informed regarding the purpose of the study and consented to participate. Anonymity and confidentiality were also guaranteed, and information were not put to any other utilization than academic. No identifying information about the firm or respondents is presented within this paper.

## **3 Results**

Three main themes emerged from qualitative analysis that reflect how managers think and manage job satisfaction, burnout, and turnover at auditor firms as follows: (1) normalization of stress and overload, (2) symbolic feedback on satisfaction, and (3) managerial attribution of burnout and turnover. The above themes reflect a typical managerial reasoning that views stress as unavoidable, satisfaction as a surface-level phenomenon that is not effectively actionable, and burnout as temporary or individualistic rather than systemic.

### **3.1 Overload and Stress Normalization**

All respondents agreed that auditing is a stressful job, but two framed stress as an inherent aspect of a professional career instead of a distinct issue with their firms. Managers stressed deadlines, client procrastinations, and complicated engagements as key pressure causes. A manager said that "work peaks are the norm and part of the job." The regularity of commuting long hours was found in each account despite the presence of official time-allocation regimes. Managers also reported a generational change: younger accountants are less accepting of long work on a regular basis, indicating evolving work–life balance expectations.

### **3.2 Symbolic Monitoring of Satisfaction**

Each firm used instruments such as annual satisfaction surveys, suggestion boxes, or manager–worker conferences. Yet managers agreed that no such instrument ever elicited tangible change. A manager exemplified that workers "complete surveys, but problems are the same annually." The findings suggest that a measurement mechanism serves more as a formality compliance indicator than a springboard for improvement. Three explanations can account for this outcome: unwillingness on the auditor side to articulate dissatisfaction overtly; survey questions limit open opinion expression; or inadequate implementation of remedial measures by management. Despite such shortcomings, managers agreed that even the presence of such a system depicts organizational concern and a gap between formality and substantive satisfaction administration.

### **3.3 Managerial Interpretation of Burnout and Turnover**

It was rarely recognized as an organizational issue. Two managers characterized it as a "temporary tiredness" that is treatable with vacation or rest, and another waved it away as not serious due to staff youth. No systematic burnout level tracking was reported. This underestimation is quite a contrast to the literature that reports burnout effects on performance and turnover.

As to turnover, managers all named low pay as their main resignation reason. Other reasons were burnout, displeasure with appraisal processes, and opportunities in other countries. Nevertheless, the prevalence of compensation explanations implies that managers favor externally conspicuous reasons rather than internal organizational causes like work overload or recognition.

## **4 Discussion**

The results of this qualitative study shed light on how managers at auditing firms perceive and address matters of job satisfaction, burnout, and turnover. Compared to well-developed bodies of theory on motivation and occupational stress, several regularities become stark that reveal managerial awareness as well as critical blind spots.

### **4.1 Normalization of Stress and Implications**

Managers commonly accepted stress as a given feature of auditing, commonly likening it to other stress-filled professions. Normalizing stress implies a professional culture that views excessive workloads and long hours as a given rather than a concern. Perceptions that are at odds with theoretical models that highlight chronic stress as a key antecedent of burnout (Maslach & Leiter, 2016). By characterizing stress as unavoidable rather than a manageable concern, managers potentially reinforce organizational practices that maintain emotional exhaustion and disengagement. The endurance of role overload and long hours suggests that managerial interventions reduce role ambiguity but not the intensity of workloads, consistent with earlier findings that auditor firms fail to achieve a balance between efficiency and well-being (Persellin et al., 2019).

### **4.2 Symbolic vs. Substantive Satisfaction Management**

Though firms' adoption of tools like surveys and suggestion boxes is extensive, their minimal effect indicates a primarily symbolic presence of satisfaction monitoring. Managers mistakenly think that the presence of such mechanisms proves true care even where the consequences do not lead to significant change. This result is consistent with Herzberg's (1959) contention that extrinsic factors like administration and policy deter dissatisfaction but will not engender motivation. If no observable change follows employees' feedback, organizational belief and engagement fall. The gap between procedural mechanisms and actual improvement then sustains dissatisfaction and erodes

turnover. These findings imply that firms' audits have less to do with measuring frequency and everything with converting feedback into observable managerial responses.

### **4.3 Underestimation of Burnout and Turnover Simplification**

Managers commonly dismissed burnout, perceiving it as temporary fatigue or not being relevant to younger employees. This is inconsistent with findings that burnout may arise early in a professional career and is a substantial correlate with organizational demands (Knight, Cooper, & Law, 2021; Rodrigues et al., 2022). By depersonalizing burnout rather than recognizing burnout as a systemic issue, organizations might overlook its impact on sustainability of employees and quality of audits.

Correspondingly, turnover was almost exclusively explained by compensation, and underlying reasons—such as workload imbalance and recognition—were underplayed. This explanation is typical in that it seeks to deflect internal responsibility by casting turnover as a function of the labor-market instead of the result of internal management styles. But, as Ramona, Blanca, & Delia (2022) and Nguyen (2019) point out, intrinsic motivators like recognition, growth, and meaning are no less crucial in retaining professionals. The focus by managers on compensation alone therefore suppresses the organizational origin of discontent.

### **4.4 Theoretical and Practical Implications**

The findings together indicate that managerial perceptions are crucial in orchestrating organizational well-being approaches. When stress and burnout are naturalized and satisfaction management is proceduralistic, companies unintentionally reproduce the very dynamics that fuel turnover. The outcomes extend the Maslach burnout framework in that they show that managerial interpretation is an intermediary process: managers' definition of stress will either have it remedied or institutionalize it. Furthermore, the work confirms Herzberg's two-factor theory by demonstrating that higher salary without enhanced recognition or workload reduction offers nothing more than temporary respite.

From a pragmatic point of view, findings identify a necessity for auditing firms to move along the continuum from symbolic to substantive satisfaction management. Interventions must comprise realistic workload management, frequent qualitative analysis of the employee experience, transparent recognition programs, and stress prevention training for leaders. Remedying these arenas can build organizational resilience and turnover reduction in a pressured profession marked chronically by work stress.

## Conclusion

We explored managerial perspectives on job satisfaction, burnout, and turnover in auditing practices to achieve an appreciation for organizational practices' impact on workers' well-being and remaining. Results reveal managers are aware that work is stressful but often accept this as a fait accompli. Satisfaction monitoring exists, although often tokenistic with little corrective influence. Burnout is underdiagnosed and temporary or a personal failing, and turnover is caused by wages and not organizational issues such as loads or recognition.

Theoretically, the work contributes to the literature by foregrounding managerial interpretation as a central mediator between workers' outcomes and organizational practices. The work also extends Maslach and Leiter's burnout framework (2016) by identifying how managers' attitudes toward stress can decrease or increase exhaustion. The work also substantiates Herzberg's two-factor theory (1959) by demonstrating that pay adjustments are not enough to ensure satisfaction without intrinsic factors such as praise and developmental opportunity.

In practice, the report emphasizes the need for a shift from symbolic to substantive satisfaction management. The accountancy firms must have realistic workloads, open reward structures, and defined career-progression planning. Regular qualitative reviews—complementing quantitative surveys—could identify burnout precursors early and boost organizational responsiveness. A culture that values well-being and recognition can reduce turnover and support long-term audit quality.

There is, however, a limitation that must be mentioned with the findings. The small sample and the exclusive focus on a single audit firm can restrict generalized inference. Adoption of note-based interviews may also limit the quotes' validity. Future work therefore has to draw larger, multi-firm samples, managers as well as auditors, and both qualitative and quantitative methods combined, in order to understand further how managerial behavior shapes satisfaction and turnover.

Ultimately, job satisfaction in auditing is not solely a function of money, but instead organizational values that emphasize fairness, recognition, and workable workloads. Pinpointing stress and burnout as systemic—not person—weaknesses is key to employees' health as well as long-term auditor firm success.

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# PRICE DEVELOPMENTS IN CONSUMPTION CATEGORIES AND THEIR SOCIO-ECONOMIC IMPLICATIONS FOR HOUSEHOLDS IN V4 COUNTRIES

## CENOVÝ VÝVOJ V KATEGÓRIÁCH SPOTREBY A JEHO EKONOMICKO-SOCIÁLNE DÔSLEDKY PRE DOMÁCNOSTI V KRAJINÁCH V4

*Jana MAŤAŠOVÁ*

### Abstract

The article addresses the impact of inflation on household expenditures in the V4 countries, with a particular focus on price developments across individual categories as defined by the COICOP classification. The objective of the paper is to identify the areas of household consumption where price changes have been most pronounced, and to analyse their potential implications for changes in consumer behaviour. The findings indicate that the highest price increases occurred in essential expenditure categories, which may adversely affect the standard of living of households, particularly those with low incomes. This development highlights the growing economic vulnerability of parts of the population as a result of inflationary pressures.

**Key words:** household consumption, COICOP, inflation, V4 countries

### Abstrakt

Príspevok sa venuje problematike dopadov inflácie na výdavky domácností v krajinách V4, so zameraním na vývoj cien v jednotlivých kategóriách podľa klasifikácie COICOP. Cieľom príspevku je identifikovať oblasti spotreby domácností, v ktorých sa cenové zmeny prejavili najvýraznejšie a analyzovať ich možné dôsledky na zmenu spotrebiteľského správania. Zistenia ukazujú, že najväčší cenový rast nastal v základných výdavkových kategóriách, čo môže negatívne ovplyvňovať životnú úroveň domácností, najmä v prípade nízkopříjmových skupín. Tento vývoj poukazuje na rastúcu ekonomickú zraniteľnosť časti populácie v dôsledku inflačného tlaku.

**Kľúčové slová:** spotreba domácností, COICOP, inflácia, krajiny V4

### Introduction

Inflation represents a significant macroeconomic phenomenon that influences household behaviour and their ability to meet basic needs. In the context of the V4 countries, which have experienced a dynamic increase in prices in recent years, changes in the prices of goods and services have translated into shifts in household consumption patterns. Low-income groups have been most severely affected, as they possess limited capacity to adapt to rising costs, thereby increasing their economic vulnerability. The escalation in the prices of essential expenditures (such as food, housing, and energy) reduces the funds available for other areas of consumption and contributes to a decline in overall quality of life.

Changes in household consumption behaviour may signal deepening social disparities and the increasing proximity of parts of the population to the poverty threshold. In this context, the COICOP expenditure classification plays a key role, as it enables the identification of the most affected categories. Monitoring developments within these categories allows for a deeper understanding of the socio-economic consequences of inflation and facilitates the identification of at-risk population groups.

## **1 Literature Review**

Inflation constitutes a process characterised by a general and persistent increase in the prices of goods and services within an economy, resulting in a decline in the purchasing power of money (Feldkircher, Siklos, 2019). In practical terms, this means that households are able to afford progressively fewer goods and services with the same amount of financial resources (Musarat, Alaloul, 2021). Inflation thus directly affects living standards and compels households to reassess their spending behaviour and reallocate consumption towards essential needs (Binetti et al., 2024).

Households, as fundamental economic units, allocate their income between consumption and savings. The level of consumption is determined not only by the amount of disposable income but also by expectations concerning future price developments, job stability, and the general economic outlook (Agarwal, Zhang, Zou, 2022). Household income typically consists of wages, pensions, and other transfers, which form the basis of their financial stability (Besustringue, Garcia-Vigonte, Abante, 2023). Within this context, consumption is a key indicator of demand, while rising prices of essential goods and services can lead to a decrease in real demand and a deterioration in overall living standards.

Inflation may act as an accelerator of social inequality, as its impact is not uniformly distributed across income groups (Mahua, Pooja, 2019). Higher-income households are often able to reallocate a portion of their resources into investments or alternative instruments to protect against currency devaluation, whereas low-income households are frequently forced to spend nearly their entire income on routine consumption (Schiller, Gebhardt, 2018). As a result, they lack financial buffers to absorb unexpected expenses, placing them at heightened risk of social exclusion. Over the long term, inflation may exacerbate poverty, particularly when accompanied by wage stagnation or limited access to social transfers (Mehboob et al., 2016).

Since the beginning of 2021, inflation rates have steadily increased, reaching historical highs across global economies in 2022. The European Union has also experienced a significant surge in inflation, reflected in disrupted supply chains, the energy crisis, and global economic shocks (Honohan, 2024). The most pronounced impacts have been observed in essential categories such as food, energy, and housing. These segments constitute a substantial share of expenditure for low-income households, thereby significantly increasing their vulnerability to

inflationary shocks and undermining their ability to secure adequate living conditions (Sohag et al., 2023).

In this context, the COICOP (Classification of Individual Consumption by Purpose) system plays a crucial role in categorising household expenditure. This classification enables the identification of specific expenditure categories most affected by price increases. Particularly important are categories such as “Food and non-alcoholic beverages”, “Housing, water, electricity, gas and other fuels”, and “Health”, which represent a major portion of the budgets of low-income households (Villani, Vidal Lorda, 2022).

Theoretical considerations thus suggest that inflation influences not only price levels and relative prices in the market but also household behaviour in terms of consumption, saving, and investment. These developments present new challenges requiring adaptive strategies, particularly for vulnerable groups - such as the elderly, the long-term unemployed, and families with multiple children, who are most sensitive to fluctuations in the prices of basic goods. These theoretical foundations provide the basis for a quantitative assessment of the relationship between price developments in COICOP categories and the socio-economic consequences for households.

## **2 Data and Methodology**

This article examines the impact of price developments across various consumption categories, as defined by the COICOP classification, on household consumer behaviour in the Visegrad Group (V4) countries, namely Slovakia, the Czechia, Poland, and Hungary. The analytical timeframe spans the period from 2020 to 2024. Data were sourced from the publicly available Eurostat database. Annual price indices across twelve expenditure categories, as defined by COICOP, were selected and processed into a comparable format. The aim was to identify the most pronounced price changes.

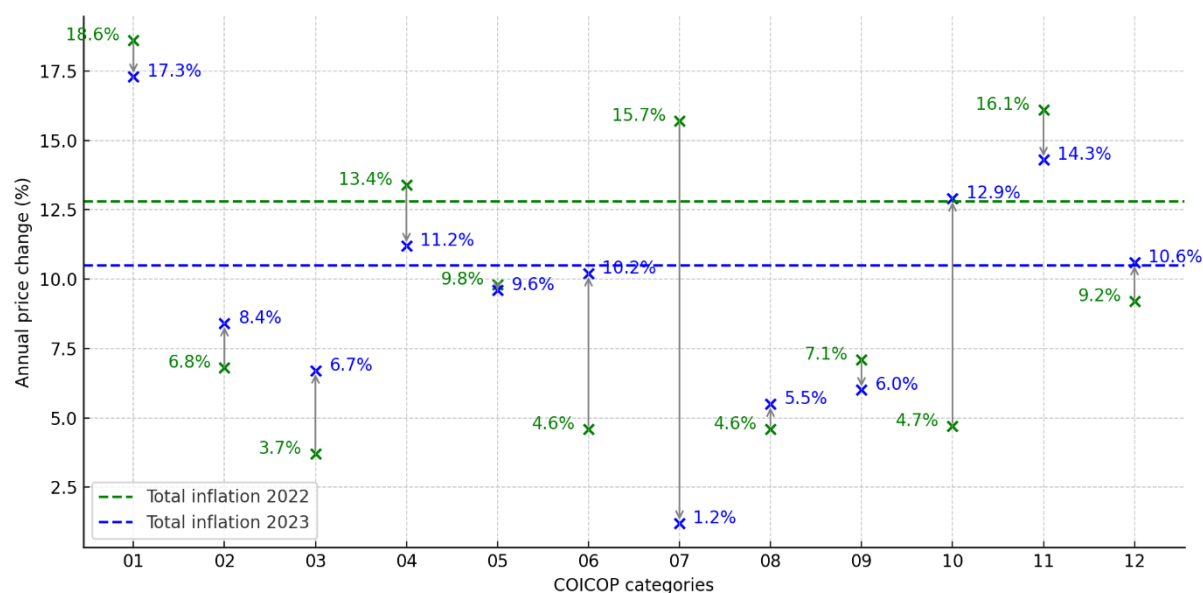
The methodology involved the collection, processing, and analysis of annual price indices within COICOP categories for each V4 country. The results were then compiled into structured tables to facilitate comparison across both countries and years, with a particular focus on key household expenditure categories such as food, housing, energy, and transport. The objective was to determine which categories exhibited the most significant price increases and to assess their potential impact on household consumption behaviour. However, due to the limited number of available observations and a high degree of multicollinearity between expenditure categories, no statistical methods were applied; consequently, the analysis remained purely descriptive.

## **3 Results and Discussion**

The development of prices across household consumption categories, as classified by COICOP, between 2020 and 2024 was characterised by significant differences both among the V4 countries and across individual periods. The most

notable price fluctuations occurred in core expenditure areas, where inflationary pressures manifested most rapidly and intensely. Price changes in these categories influenced the structure of household expenditures and suggested potential shifts in consumer behaviour.

In Slovakia, the evolution of prices across household consumption categories between 2020 and 2024 reveals substantial year-on-year differences. The most dynamic price changes were observed particularly in 2022 and 2023, corresponding to the peak period of inflation (Figure 1).



Note: 01 Food and non-alcoholic beverages, 02 Alcoholic beverages, tobacco and narcotics, 03 Clothing and footwear, 04 Housing, water, electricity, gas and other fuels, 05 Furnishings, household equipment and routine household maintenance, 06 Health, 07 Transport, 08 Communications, 09 Recreation and culture, 10 Education, 11 Restaurants and hotels, 12 Miscellaneous goods and services

**Figure 1 Year-on-year changes in household consumption prices by COICOP category in Slovakia in 2022 and 2023**

Source: Own processing based on data from Eurostat, 2025

The most significant price increase was recorded in the category “Food and non-alcoholic beverages”, where inflation reached 18.6% in 2022 and 17.3% in the following year. Substantial price growth was also observed in the category “Restaurants and hotels”, which rose by 16.1% in 2022 and by 14.3% in 2023. These figures indicate a marked rise in the cost of everyday consumption, which had a direct impact on household living expenses. Significant inflationary pressures also emerged in the category “Housing, water, electricity, gas and other fuels”, where prices surged by 13.4% in 2022 and by 11.2% in 2023. This trend has had a considerable effect on the spending behaviour of lower-income groups, as housing and energy constitute essential components of household consumption.

**Table 1 Household consumption categories according to the COICOP classification in Slovakia**

	2020	2021	2022	2023	2024
Food and non-alcoholic beverages	2,5	1,8	<b>18,6</b>	<b>17,3</b>	2,5
Alcoholic beverages, tobacco and narcotics	1,1	6,9	6,8	8,4	6,7
Clothing and footwear	0,5	1,1	3,7	6,7	2,9
Housing, water, electricity, gas and other fuels	3,6	-1,9	<b>13,4</b>	<b>11,2</b>	1,3
Furnishings, household equipment and routine household maintenance	1,7	2,6	9,8	9,6	2,1
Health	2,5	2,0	4,6	<b>10,2</b>	6,8
Transport	-3,4	8,9	<b>15,7</b>	1,2	3,2
Communications	1,0	6,6	4,6	5,5	4,4
Recreation and culture	2,1	3,4	7,1	6,0	1,8
Education	4,1	4,1	4,7	<b>12,9</b>	10,5
Restaurants and hotels	2,6	6,3	<b>16,1</b>	<b>14,3</b>	5,1
Miscellaneous goods and services	4,1	2,6	9,2	10,6	4,3

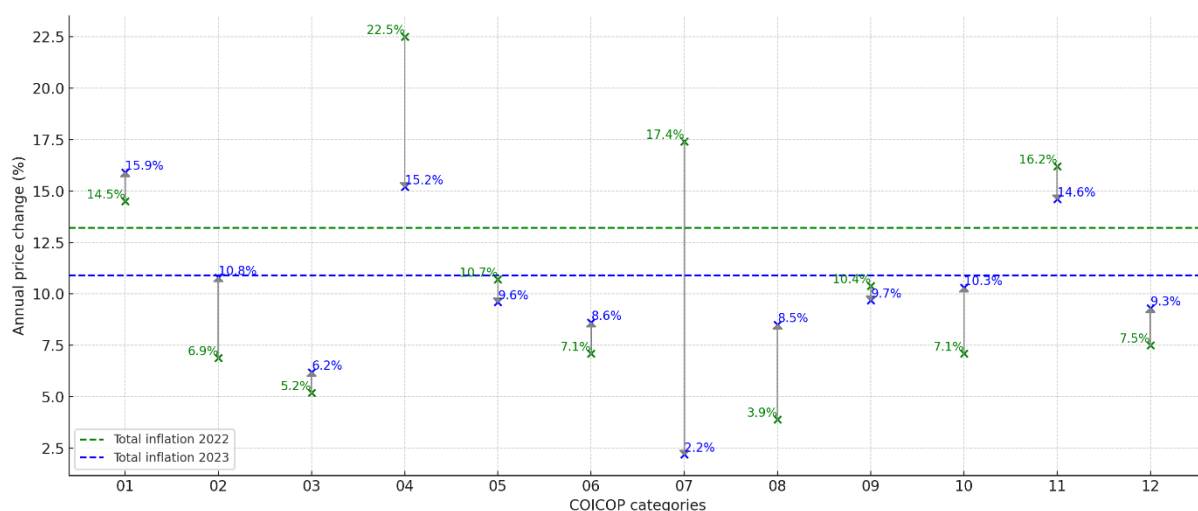
*Source: Own processing based on data from Eurostat, 2025*

The “Transport” category displayed highly volatile developments. Following a significant decline in 2020 (−3.4%), it surged to 15.7% in 2022, reflecting the instability of fuel and transport service prices as a consequence of the energy crisis. In conclusion, the analysis shows that, in Slovakia during the observed period, the most affected categories were essential household needs such as food, housing, energy, restaurant services, and transport. This confirms that inflation has the greatest impact on inelastic components of consumption. Such developments have a considerable effect on the overall household expenditure structure and may contribute to the deepening of social inequalities.

Poland experienced notable price fluctuations across several household consumption categories during the analysed period, with the most intense growth observed in 2022 and 2023 (Figure 2). These years marked the peak of the inflationary phase, which affected the country across multiple market segments.

The largest price increase was recorded in the category “Housing, water, electricity, gas and other fuels”, where prices rose by as much as 22.5% in 2022, followed by a further increase of 15.2% in 2023. This development reflects the sharp rise in housing and energy costs, which significantly affects household budgets - particularly those of lower-income groups.

The “Transport” category also experienced significant growth. After a decline in 2020 (−2.2%), the inflation rate rose sharply to 17.4% in 2022, largely due to rising fuel prices and operating costs triggered by global energy shocks. The “Food and non-alcoholic beverages” category maintained a high level of price dynamics throughout the entire period, peaking at 15.9% in 2023, which clearly indicates the increasing cost of essential goods.



Note: 01 Food and non-alcoholic beverages, 02 Alcoholic beverages, tobacco and narcotics, 03 Clothing and footwear, 04 Housing, water, electricity, gas and other fuels, 05 Furnishings, household equipment and routine household maintenance, 06 Health, 07 Transport, 08 Communications, 09 Recreation and culture, 10 Education, 11 Restaurants and hotels, 12 Miscellaneous goods and services

**Figure 2 Year-on-year changes in household consumption prices by COICOP category in Poland in 2022 and 2023**

Source: Own processing based on data from Eurostat, 2025

Overall, it can be concluded that Polish households faced exceptionally high costs during 2022 and 2023, particularly in the areas of housing, food, transport, and services. As these categories represent a substantial share of everyday consumption, it is reasonable to assume that inflation negatively affected the population's standard of living and may have led to changes in household spending behaviour.

**Table 2 Household consumption categories according to the COICOP classification in Poland**

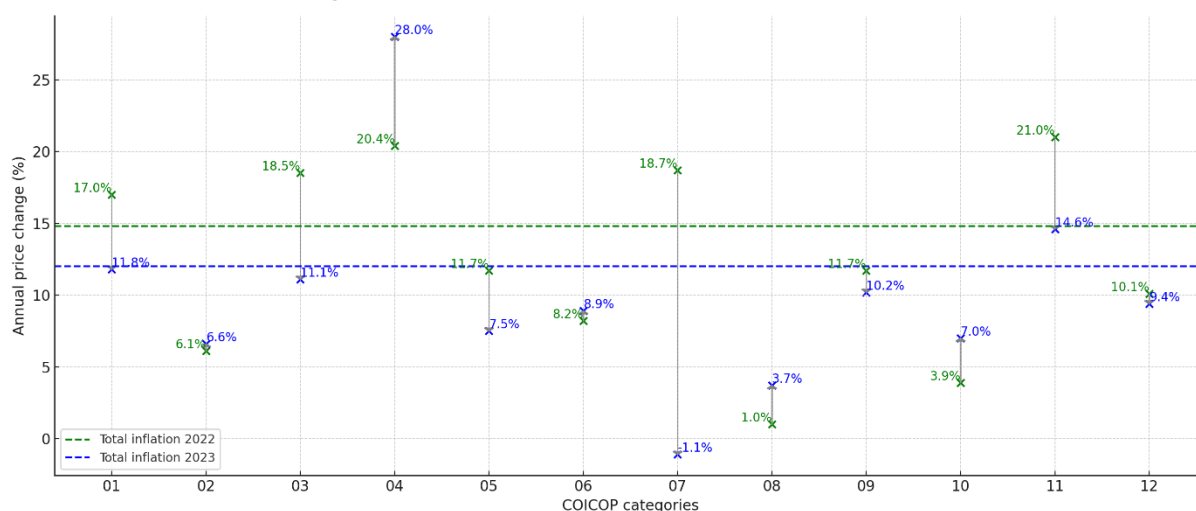
	2020	2021	2022	2023	2024
Food and non-alcoholic beverages	4,4	3,0	<b>14,5</b>	<b>15,9</b>	3,5
Alcoholic beverages, tobacco and narcotics	4,6	2,0	6,9	10,8	5,4
Clothing and footwear	-2,5	-0,1	5,2	6,2	-0,4
Housing, water, electricity, gas and other fuels	6,0	7,2	<b>22,5</b>	<b>15,2</b>	5,0
Furnishings, household equipment and routine household maintenance	1,3	3,8	10,7	9,6	2,4
Health	5,1	3,5	7,1	8,6	4,5
Transport	-2,2	11,0	<b>17,4</b>	2,2	-0,8
Communications	3,5	5,4	3,9	8,5	2,7
Recreation and culture	2,8	4,5	10,4	9,7	4,4
Education	4,6	4,5	7,1	10,3	7,6
Restaurants and hotels	6,3	6,7	<b>16,2</b>	<b>14,6</b>	7,6
Miscellaneous goods and services	7,7	5,3	7,5	9,3	5,1

Source: Own processing based on data from Eurostat, 2025

Between 2020 and 2024, the Czech Republic experienced a significant increase in prices across various areas of household consumption, with the highest inflation rates recorded in 2022 and 2023 (see Figure 3).



The most pronounced price increase was observed in the category ‘Housing, water, electricity, gas and other fuels’, where inflation reached 20.4% in 2022. An even steeper rise occurred in 2023, with prices surging by 28.0%. This represents the highest value among all COICOP categories and across all years under review, highlighting the significant impact of the energy crisis and rising housing costs on Czech household budgets.



Note: 01 Food and non-alcoholic beverages, 02 Alcoholic beverages, tobacco and narcotics, 03 Clothing and footwear, 04 Housing, water, electricity, gas and other fuels, 05 Furnishings, household equipment and routine household maintenance, 06 Health, 07 Transport, 08 Communications, 09 Recreation and culture, 10 Education, 11 Restaurants and hotels, 12 Miscellaneous goods and services

**Figure 3 Year-on-year changes in household consumption prices by COICOP category in Czechia in 2022 and 2023**

Source: Own processing based on data from Eurostat, 2025

Substantial increases were also recorded in the ‘Restaurants and hotels’ category, where prices rose by 21.0% in 2022, reflecting a sharp upturn in service sector costs. Similarly, the ‘Clothing and footwear’ category saw a notable rise, reaching 18.5% in the same year.

**Table 3 Household consumption categories according to the COICOP classification in Czechia**

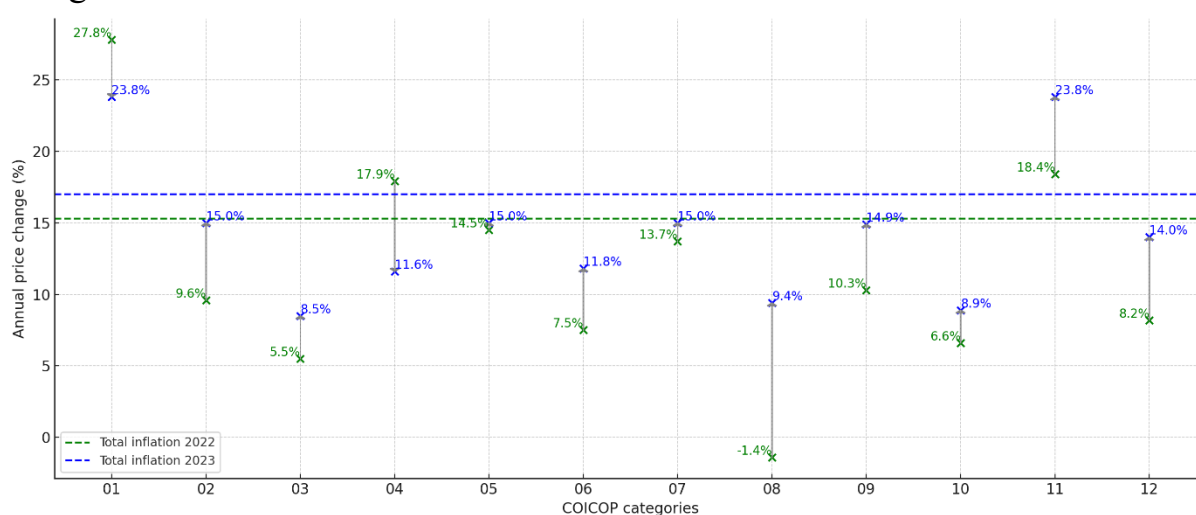
	2020	2021	2022	2023	2024
Food and non-alcoholic beverages	4,7	0,8	<b>17,0</b>	<b>11,8</b>	-2,3
Alcoholic beverages, tobacco and narcotics	7,6	8,4	6,1	6,6	5,1
Clothing and footwear	3,7	6,5	<b>18,5</b>	11,1	2,5
Housing, water, electricity, gas and other fuels	3,2	-0,1	<b>20,4</b>	<b>28,0</b>	5,1
Furnishings, household equipment and routine household maintenance	2,8	3,3	11,7	7,5	0,6
Health	2,5	3,6	8,2	8,9	4,3
Transport	-0,4	8,8	<b>18,7</b>	-1,1	1,9
Communications	-3,5	-0,7	1,0	3,7	1,6
Recreation and culture	2,2	2,2	11,7	10,2	3,9
Education	3,7	2,4	3,9	7,0	8,1
Restaurants and hotels	4,6	3,5	<b>21,0</b>	<b>14,6</b>	7,9
Miscellaneous goods and services	3,5	3,4	10,1	9,4	3,3

Source: Own processing based on data from Eurostat, 2025

The 'Transport' category is characterised primarily by extreme fluctuations – following relatively stable values in previous years, a sharp increase of 18.7% was recorded in 2022, which was then replaced by a decline of -1.1% in 2023. This indicates the volatility of fuel prices and transportation costs.

Overall, it can be concluded that inflation in the Czech Republic had the most severe impact on housing, energy, and services, thereby increasing pressure on household expenditures. The high inflation rates in 2022 and 2023 significantly affected a broad range of consumer categories, deepening the financial burden, particularly for more vulnerable segments of the population.

During the analysed period, Hungary recorded the highest rate of inflation among the V4 countries in the core expenditure categories, with the most significant price increases occurring in 2022 and 2023 (Figure 4). These years were characterised by exceptionally strong price growth across the majority of COICOP categories, which had a substantial impact on the spending behaviour of Hungarian households.



Note: 01 Food and non-alcoholic beverages, 02 Alcoholic beverages, tobacco and narcotics, 03 Clothing and footwear, 04 Housing, water, electricity, gas and other fuels, 05 Furnishings, household equipment and routine household maintenance, 06 Health, 07 Transport, 08 Communications, 09 Recreation and culture, 10 Education, 11 Restaurants and hotels, 12 Miscellaneous goods and services

**Figure 4 Year-on-year changes in household consumption prices by COICOP category in Hungary in 2022 and 2023**

Source: Own processing based on data from Eurostat, 2025

The sharpest rise in prices was observed in the category "Food and non-alcoholic beverages", where prices increased by 27.8% in 2022 and by 23.8% in 2023. These figures represent the highest food price increases within the entire V4 region and highlight the acute vulnerability of the population to inflation in essential goods.

Similarly pronounced price surges were observed in the category "Restaurants and hotels", where prices rose by 18.4% in 2022 and by 23.8% in 2023. These figures indicate a substantial increase in service prices, likely reflecting the secondary effects of rising costs in food, energy, and wages within the sector. The category "Housing, water, electricity, gas and other fuels" experienced inflation

rates of 17.9% in 2022 and 11.6% in 2023, representing a significant burden for ordinary households, particularly in terms of long-term fixed expenditures.

**Table 4 Household consumption categories according to the COICOP classification in Hungary**

	2020	2021	2022	2023	2024
Food and non-alcoholic beverages	7,2	3,4	<b>27,8</b>	<b>23,8</b>	0,8
Alcoholic beverages, tobacco and narcotics	7,3	11,5	9,6	15,0	4,1
Clothing and footwear	0,0	0,2	5,5	8,5	4,4
Housing, water, electricity, gas and other fuels	1,5	2,0	<b>17,9</b>	11,6	1,1
Furnishings, household equipment and routine household maintenance	2,1	4,9	<b>14,5</b>	<b>15,0</b>	2,4
Health	3,9	4,7	7,5	11,8	7,3
Transport	-1,8	12,1	<b>13,7</b>	<b>15,0</b>	0,8
Communications	0,7	-1,7	-1,4	9,4	8,6
Recreation and culture	1,4	2,4	10,3	<b>14,9</b>	5,6
Education	3,7	3,9	6,6	8,9	6,8
Restaurants and hotels	5,9	5,5	<b>18,4</b>	<b>23,8</b>	7,9
Miscellaneous goods and services	3,2	4,2	8,2	14,0	8,4

*Source: Own processing based on data from Eurostat, 2025*

In comparison with the other V4 countries, Hungary exhibited the highest levels of inflation in both food and services, with figures for several categories in 2022 and 2023 being the highest within the entire group. This development indicates a more pronounced inflationary shock, which likely had the most severe impact on Hungarian households and their consumption capacities.

## Conclusion

The analysis indicates that the intensity and specific characteristics of inflationary impacts varied across the V4 countries, depending on factors such as economic structure, price levels, policy responses, and the degree of energy dependence. All four countries experienced the most significant inflationary pressures during 2022 and 2023, with the highest year-on-year increases recorded in essential expenditure categories – namely food, housing, energy, transport, and services related to restaurants and hotels.

Hungary recorded the highest inflation among the V4 countries, particularly in the categories of food and services. The Czech Republic experienced a notable rise in prices within the housing and energy sectors. Poland was characterised by a highly dynamic development in the areas of transport and housing, while price increases in other categories were somewhat more balanced. Slovakia registered the highest values in core expenditure areas such as food, housing, and energy.

Based on the analysed data, it can be concluded that inflation in the V4 countries had significant economic and social impacts on households, particularly in areas of inelastic consumption such as food, housing, energy, and transport. The studies by Rabbi et al. (2025) and Śmiech et al. (2025) confirm that the sharp rise in prices within these segments disproportionately affected low-income households, which have limited capacity to offset rising costs through savings or investment. As a result, households were compelled to reallocate their

expenditures in favour of essential needs, potentially leading to reduced spending on education, healthcare, culture, and leisure activities.

In the long term, these developments may contribute to increased social inequality and a deterioration in quality of life, particularly for vulnerable groups such as pensioners, families with children, the unemployed, and low-wage earners (Cao et al., 2021). In some cases, this may even lead to deepening poverty and social exclusion. These findings underscore the necessity of well-targeted public policies aimed at ensuring the affordability of basic necessities, supporting household incomes, and enhancing household resilience to inflationary shocks.

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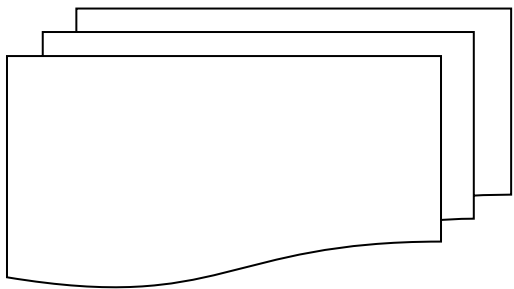


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### **1.1 Title of the subchapter, numbered (Times new roman, 14 pt, bold)**

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## **Conclusion (Times new roman, 14 pt, bold)**

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