

Czech University of Life Sciences Prague

Faculty of Economics and Management

Department of Management



Bachelor Thesis

**Modern Consumer Psychology and Its Impact on
European Market**

Kseniia Golovina

© 2023 CULS Prague

BACHELOR THESIS ASSIGNMENT

Kseniia Golovina

Business Administration

Thesis title

Modern Consumer Psychology and Its Impact on the European Market

Objectives of thesis

This thesis was created to analyze psychology of customers and determine its mutual traits in Europe to distinguish and trace its impact on European economical, marketing and business trends. The main objective of this work is psychological analysis of consumer behavior and how it is interdependent with the economic, social, and cultural processes taking place in Europe.

Methodology

The bachelor thesis covers theoretical and practical parts. Theory consists of essential principles of consumer behavior, how and when do consumers make decision to buy products or services, and practical part will analyse the interdependency of different economic processes in Europe with psychology of consumers and its possible changes by using descriptive and comparative methods.

The proposed extent of the thesis

30-40 pages

Keywords

sales, management, consumer, economics, market, psychology, consumer behavior, Europe

Recommended information sources

- BECK, H. (2014). Behavioral Economics: Eine Einführung. Springer-Verlag. ISBN 9783658033675.
- CZARNECKA, B., & SCHIVINSKI, B. (2022). Individualism/collectivism and perceived consumer effectiveness: The moderating role of global–local identities in a post-transitional European economy. *Journal of Consumer Behaviour*, 21(2), 180– 196. <https://doi.org/10.1002/cb.1988>
- HATAYAMA, Yosuke (2019). The Fair Trade consumer as a citizen-consumer: civic virtue or alternative hedonism?. *Journal of Fair Trade*. Vol. 1(2):32–39. DOI: 10.13169/jfairtrade.1.2.0032
- SCHIFFMAN, L. G. (2008). *Consumer Behavior: A European Outlook*. Pearson Education. ISBN 9780273704010, 027370401X.
- SOLOMON, M. R. (2007). *Consumer behavior: buying, having, and being*. Upper Saddle River, N.J., Pearson Prentice Hall. ISBN-13: 9780134129938

Expected date of thesis defence

2022/23 SS – FEM

The Bachelor Thesis Supervisor

Jared Daniel Jacques

Supervising department

Department of Languages

Electronic approval: 11. 6. 2022

PhDr. Mgr. Lenka Kučírková, Ph.D.

Head of department

Electronic approval: 27. 10. 2022

doc. Ing. Tomáš Šubrt, Ph.D.

Dean

Prague on 14. 03. 2023

Declaration

I declare that I have worked on my bachelor thesis titled "Modern Consumer Psychology and Its Impact on European Market" by myself and I have used only the sources mentioned at the end of the thesis. As the author of the bachelor thesis, I declare that the thesis does not break the copyrights of any other person.

In Prague on 15.03.2023

Acknowledgment

Firstly, I would like to thank my whole family and especially my parents, my father Konstantin Golovin, and my mother Natalia Dildina, for their endless support, motivation, and help all the time I needed it on my way through the whole academic path. Without you, it would not be possible.

Many thanks to all my friends whom I met during my Erasmus+ program in Bielefeld, Germany during the summer semester of 2022. Thank you for showing me another way of living, lots of smiles and adventures, and especially, for helping me with my survey.

Also, I would like to thank my supervisor Ing. Daniel Jared Jacques for his advice and answers to all my questions about everything, and all other persons, for their advice and support during my work on the thesis.

Modern Consumer Psychology and Its Impact on European Market

Abstract

This thesis was created to analyze consumer psychology in the European market that took place in recent years. People's purchasing decisions were changing because of high inflation and the energy crisis in Europe. Other trends influenced the European market as well, e.g., environment-friendly goods, online shopping, and marketing on social media.

The first part of the literature review consists of essential principles of economics, consumer psychology, and factors affecting consumer behavior. The second part studies modern consumer buying tendencies and how the pandemic, high inflation rates, and energy crisis affected consumer behavior. The third part is about the European market and the current market situation related to e-commerce, the consequences of the pandemic, and consumer behavior in conditions of high inflation and energy crisis.

The practical part is based on own online survey, asking people how they react to current conditions of high inflation, energy crisis, and new consumer trends. Hypotheses related to consumer consumption during turbulent times in 2022 and online shopping after the pandemic were analyzed using observational, comparative, and experimental methods.

Keywords: consumer psychology, European market, online shopping, pandemic, inflation, energy crisis, e-commerce, turbulent times, consumer expenditure.

Moderní spotřebitelská psychologie a její dopad na evropský trh

Abstrakt

Tato bakalářská práce byla vytvořena za účelem analýzy spotřebitelské psychologie na evropském trhu v posledních letech. Nákupní rozhodnutí lidí se měnilo kvůli vysoké inflaci a energetické krizi v Evropě. Evropský trh ovlivnily i další trendy, např. ekologické zboží, online nakupování, marketing na sociálních sítích.

První část literárního přehledu se skládá ze základních principů ekonomie, spotřebitelské psychologie a faktorů ovlivňujících spotřebitelské chování. Druhá část se zabývá moderními nákupními tendencemi spotřebitelů a tím, jak pandemie, vysoká míra inflace a energetická krize ovlivnily spotřebitelské chování. Třetí část je o evropském trhu a současné situaci na trhu související s e-commerce, důsledky pandemie a chování spotřebitelů v podmínkách vysoké inflace a energetické krize.

Praktická část je založena na vlastním online průzkumu, který se ptá lidí, jak reagují na aktuální podmínky vysoké inflace, energetické krize a nové spotřebitelské trendy. Pomocí pozorovacích, srovnávacích a experimentálních metod byly analyzovány hypotézy týkající se spotřeby spotřebitelů v turbulentní době v roce 2022 a online nakupování po pandemii.

Klíčová slova: psychologie spotřebitele, evropský trh, online nakupování, pandemie, inflace, energetická krize, e-commerce, turbulentní doba, spotřebitelské výdaje.

Table of content

Introduction.....	10
1 Objectives and Methodology	11
1.1 Objectives.....	11
1.2 Methodology	11
2 Literature Review.....	12
2.1 Consumers and Consumer Psychology	12
2.1.1 Essence.....	12
2.1.2 Types of consumer buying behavior	17
2.1.3 Factors affecting Consumer Behavior.....	20
2.2 Modern consumer buying tendencies.....	22
2.2.1 Common trends in consumer behavior and psychology in recent years...	22
2.2.2 Trends during pandemics	26
2.2.3 Inflation affecting consumer behavior.....	27
2.2.4 Energy crisis and consumer behavior	29
2.3 European Market	31
2.3.1 Environment.....	31
2.3.2 Current situation.....	33
3 Practical Part.....	37
3.1 Survey with consumers	37
3.1.1 Participants of the survey.....	37
3.1.2 Results of the Survey	40
3.1.2.1 Online shopping.....	40
3.1.2.2 Sustainable, green products	42
3.1.2.3 Inflation and energy crisis effects.....	43
3.2 Consumer expenditure and e-commerce data analysis.....	56
4 Results and Discussion	61
5 Conclusion.....	64
6 References	65
7 Appendices	73
7.1 Appendix A	73

7.2	Appendix B	78
-----	------------------	----

List of pictures

Figure 1. Maslow's hierarchy of needs	13
Figure 2. The demand curve.	15
Figure 3. Types of consumer behavior.	19
Figure 4. Retail e-commerce sales worldwide from 2014 to 2026.	23
Figure 5. Instagram engagement evolution for all post types.	24
Figure 6. Internet users who bought or ordered goods or services for private use in the previous 12 months by age group, EU, 2011-2021.	26
Figure 7. Inflation rate in Europe, 2019-2023.	27
Figure 8. Average monthly electricity prices in selected European countries from January 2020 to January 2023	30
Figure 9. Evolution of median employment income, EU-27 (EUR)	33
Figure 10. GDP growth: strong recovery in 2020Q3 and Q4; growth normalizing in 2021	34
Figure 11. Retail e-commerce revenue in Europe from 2017 to 2025 (in billion US dollars)	35
Figure 12. Most popular online purchases of goods, EU, 2021	36
Figure 13. Age groups of participants of the survey	37
Figure 14. Gender groups.	38
Figure 15. Distribution of people who participated in the survey by country (in %).	38
Figure 16. Respondents divided by their occupation.	39
Figure 17. Distribution of people who participated in the survey by their monthly income (in %).	39
Figure 18. Percent of people who choose to shop online or offline.	40
Figure 19. The influence of age on online/offline shopping habit.	41
Figure 20. Answers to the question ‘During and after the COVID-19 pandemic, have you started buying more products online?’	41
Figure 21. How often people buy something they saw on social media.	42
Figure 22. Percentage of people who prefer to buy environment-friendly products.	43
Figure 23. The impact of inflation on interviewed people.	43
Figure 24. The impact of inflation on people with different incomes.	44

Figure 25. The impact of inflation on people from different European countries.....	45
Figure 26. How much time people usually spend deciding which product they want to buy.	45
Figure 27. The impact of the energy crisis on interviewed people.....	46
Figure 28. The impact of the energy crisis on people with different incomes.....	47
Figure 29. The impact of the energy crisis on different countries.....	48
Figure 30. The study of how people are more likely to purchase goods on sale.....	48
Figure 31. The intention of people to buy goods on sale by country.....	49
Figure 32. Percentage of people who postponed a purchasing decision at least once recently.....	50
Figure 33. Percentage of people who postponed a purchasing decision divided by their income.....	50
Figure 34. Frequency of using 'buy now, pay later' and installment payment options.....	51
Figure 35. Frequency of using the 'buy now, pay later' option installment payments depending on people's income.....	52
Figure 36. Percentage of people not using 'buy now, pay later' and installment payment options and who postponed a purchasing decision recently.....	52
Figure 37. People's intention to change or not change their spending behavior.....	53
Figure 38. Distribution of people wanting to change their spending behavior by their income.....	54
Figure 39. People who want to change their spending behavior by countries.....	54
Figure 40. The relationship between people affected by the energy crisis and their desire to change spending behavior.....	55
Figure 41. The relationship between people who were affected by inflation and their desire to change spending behavior.....	56
Figure 42. Consumer expenditure in European Union 12/2019-12/2022 (in billion EUR).	57
Figure 43. Spearman correlation coefficient formula.....	57
Figure 44. Result of analysis of consumer expenditure 2019Q4-2022Q4 using Spearman's method.....	58
Figure 45. Increase in cost of living due to energy crisis in 2022.....	59
Figure 46. Interdependence of people who care about the price of eco-friendly products and their age.....	75

Figure 47. Interdependence of people's gender and their willingness to buy eco-friendly products.....	76
Figure 48. Interdependence of people who care about the price of eco-friendly goods and their income.	76
Figure 49. How often people of different genders buy something they have seen on social media.....	77
Figure 50. People's likeliness to buy products on sale depending on their income.....	77
Figure 51. Calculation of Spearman correlation coefficient.....	78

List of tables

Table 1. Comparison of change in e-commerce retail and consumer expenditure by year.	60
--	----

Introduction

Consumer psychology is a critical aspect of the economy as it dictates trends that producers have to follow and defines how, when, and why people are making purchasing decisions. It can be influenced by different social and personal factors, innovative technologies, crises, market situations, and social and economic trends evolving in society. Engagement in consumer psychology topic is crucial for every producer, economist, and business. It is what explains what and why consumers will currently buy, how long this trend will be on the market, and how it will affect the market itself.

Recently a lot of occasions were affecting consumer behavior and purchasing decisions on the European market – pandemic and restrictions related to it, high inflation, the recently emerged energy crisis and parallelly with it other consumer trends not related to the financial situation. The pandemic severely affected the entire world, and its consequences are still perceptible, high inflation and the energy crisis have had a notable impact on the market and especially on consumer behavior. This is the reason this research was conducted – to analyze how these circumstances influenced consumer behavior – to discover whether people started spending less and whether it had other impacts on the European market in 2022.

An overwhelming majority of the European population uses mobile phones to have access to the Internet. 68 percent of individual consumers in the European Union bought goods online for private use at least one time. It is an 18,5 percent increase from 2017 (*Digital economy and society statistics - households and individuals, 2022*). That clearly shows that trend for online shopping is evolving, and it is a good opportunity for businesses to increase the sales and loyalty of their customers. Another main objective of this research paper is to test whether people started buying online more often after the pandemic.

Businesses' everyday task and problem is what to produce, for whom, and how to present it to their customers. Analysis conducted in this paper will provide businesses with several insights into this question regarding current consumer behavior and online shopping.

1 Objectives and Methodology

1.1 Objectives

This paper aims to study how consumer psychology and behavior affect the European market. The exact hypotheses were created to specify the objectives of the work:

- H1: People will spend less during turbulent times of economic uncertainty in 2022 (e.g., high inflation, energy crisis).
- H2: People started shopping online more often after the COVID-19 pandemic.

Other possible trends emerging in the European market will be analyzed.

1.2 Methodology

This research is based on qualitative and quantitative data obtained during market research. Further quantitative research is based on data gained with the help of observational and experimental strategical methods which were used during the test of hypotheses. The observational method was used during the survey, which helped to acquire quantitative data and contained a limited number of the most chosen and certain answers. Answers on the survey were limited for easier interpretation and work with the data. Data from the survey were compared, distributed, analyzed, and presented in a graphical approach using Microsoft Excel. During the test and analysis of hypothesis 1 experimental methodology was used – Spearman's correlation coefficient method was used to measure the relationship between household consumer expenditure and inflation. Comparative methods were used to discover the relationship between consumer expenditure and e-commerce revenues.

2 Literature Review

2.1 Consumers and Consumer Psychology

2.1.1 Essence

A consumer is a person or a company that purchases goods from another person or company. Consumers are the driving force of economics and play the most essential role in economic relations. If customers are willing to pay more for the good, it will force manufacturers to produce and supply more of this product. This is the basic rule of Economics: the law of supply and demand. (Smith, 1993).

This law explains how the market is working. The higher the price of a product – the more suppliers want to suggest this product on a market. This is, in fact, a law of supply. The law of demand works oppositely: the higher the price – the fewer customers want to buy this product. This law is basic and does not describe all possible situations in a market, but it can give an idea of how to work and interact with the market and customers (Gordon, 2022).

Scarcity

The law of demand shows that normally buyers want to pay as low as the possible price for the goods because their resources, namely, money are limited. And they are trying to get as many useful resources as possible at the lowest possible cost. This leads to the main economic problem – the scarcity of resources, while all human beings have unlimited wants. The question is: how to manage resources in the most efficient way to get more resources so more people can use them and satisfy their needs? Each country and society have to answer some questions that have been asked since the dawn of human civilization: “What and how to produce?” and “Who should get the goods produced?”

Maslow’s hierarchy of needs

At the first sight, it could seem that people only need a roof over their heads, food, and water, which sounds quite achievable for each society to provide to every member. But nature tells otherwise - always there will be a better way of living that can be achieved, better

housing, and better food; once people satisfy their current level of needs, there will be new ones, for example, in prestige, education, and self-realization. Those levels were discovered by Abraham Maslow and divided into the hierarchy of needs, which contains five distinct levels such as physiological needs, safety needs, love and belonging, esteem, and self-actualization. These levels are arranged in the sequence of increasing human needs, meaning that physiological needs are the very first and most basic needs and desires of a person, while self-realization is not the most essential one at all and only appears only after a person has satisfied the previous ones. Unsatisfied needs can make the person upset, disappointed, or angry or can even lead to illnesses (Maslow, 1943). **Figure 1** illustrates the significance of meeting basic needs first and the exact order in which the next needs can be satisfied.

Figure 1. Maslow's hierarchy of needs



Source: Mcleod, 2022.

1. Physiological needs.

This is the most fundamental level of needs required for human survival. On this level it is impossible to talk about a person's mission and way of self-realization, people do not even think about such things when they do not have food, water, or shelter. Fortunately, there are fewer and fewer people at this level because technologies are developing that allow

the production of more resources, and people are finding better methods of distributing those resources to the population (Mcleod, 2022).

2. Safety needs.

People want to feel safe and be sure in their next day on this level of needs. People want to feel physically safe – that no one will steal their belongings and kill them – as well as financially safe, that they will have enough money to meet their physiological needs. To satisfy this level of needs – police, schools, banks, and different types of employment were developed (Maslow, 2012).

3. Love and belongingness needs.

Once people obtain all they need to live a comfortable life, they start feeling a lack of intimacy and closeness. They want to love and be loved by another person. Loneliness, the desire to talk to someone heart to heart, to share experiences, and to be heard and understood – are the natural desire of human beings, and almost every person has ever experienced it (Mcleod, 2022).

4. Esteem needs.

The fourth level includes two types of esteem needs: inner esteem and respect from others. The first type means healthy self-esteem, a feeling of success, independence, and strength, while the second type stands for respect from other people, prestige, and status among others (Hopper, 2020).

5. Self-actualization needs.

This is the last level of needs in Maslow's hierarchy. This level can be satisfied only after satisfying previous ones, so it takes a lot of effort from individuals to get to this level. It is about self-realization, self-actualization, finding the right job which makes an individual happier, helps to unlock the full potential of a person and to achieve inner harmony in life (Hopper, 2020).

Every person has their way and methods of satisfying their needs. It takes a lot of time, resources, and effort for satisfying each next level of needs. This fact proves that the proper allocation of resources is an initial task for every society.

Demand curve

To satisfy customers' needs, it is essential to understand their logic and behavior. As already mentioned above, customers intend to save their resources (in the modern world, money) as much as possible to be able to get more resources. This fact is analyzed and described by the law of supply and demand. To better understand the willingness of customers to buy products or services, it is necessary to have a look at the demand curve. (Marshall, 1890). **Figure 2** below shows the relationship between the price of a good and the number of goods. This is an inversely proportional relationship – the higher the price, the less quantity will be purchased.

Figure 2. The demand curve.



Source: The Investopedia team, 2022.

Demand is determined by:

- Income. This is one of the most decisive determinants of demand. If the population or one person does not have the resources to buy, there is no option for the product to be sold (Amadeo, 2022).
- Taste and preferences. Another extremely important determinant that is hard to influence. Taste is a purely individual factor. Producers can just choose their target audience and try to predict and adjust to their preferences (Mahr, 2022).
- Prices of substitutes and complements. Substitutes are products that can replace the exact product. If the price of a substitute decreases – people will be willing to buy a cheaper substitute, so demand for our product will decrease. For example, if Starbucks increases the price of its coffee, customers will likely go to Costa Coffee because these companies offer nearly the same products, and for customers, almost nothing will change. If the

price of the substitute rises, demand for the product rises as well, because it is the cheapest option.

The different situation is with complement goods. Complements are the products or services that are usually bought together. When the price of complementary goods increases, demand for the product or service will decrease. For example, if gas prices rise (or continue to rise), people will be less willing to buy cars running on gas. So, if prices for complements decrease, it will positively affect demand for the product (Amadeo, 2022).

- Population. This point is very general in its description of one specific product or service, but it perfectly describes the situation in the entire market. Producers cannot sell a lot of their products if their target audience is not large enough. It can be easily noticed in the market of products/services for children or elderly people (Amadeo, 2022).
- Expectations. All markets are affected by expectations. If people expect an increase in prices soon, it will force them to buy more now. The real example was observed on August 31, 2022, in Germany, when the government's summer fuel discount expired (*Petrol and diesel fuel cost more in Germany again than in all neighbouring EU countries*, 2022). Car owners anticipated the price increase, so all gas stations were packed the day before the expiration of the discount (Mahr, 2022).

These five factors are the most important ones for determining demand. Producers and businesspeople have to be able to predict the changes in demand in order to offer their customers goods that they are willing to pay for. There is a study that can help producers with this challenging task. It is called consumer psychology.

Consumer psychology

Each company wants to have a high demand for the goods and services they are selling, moreover, it is their guarantee for staying on the market and having success. It is obvious that companies and businesspeople have to understand the needs and wants of their customers, including their psychology, in order to offer them products that are necessary for them and that people are willing to pay for.

To deal with this task, it is necessary to guess customers' thoughts and predict their preferences and wishes. Nevertheless, it sounds exceedingly difficult and probably even

impossible if imagine that each company or producer in the world has to deal with this problem, it is quite an achievable goal considering that evolution ordered that such an aspect as predictability is especially important for the human psyche. Therefore, people can predict other people's behavior and try to manipulate it in some way. This is called psychology. In business terms, it is known as consumer psychology, and it studies how individuals and companies are making the decisions to buy goods or services, which selection methods they use before buying, and how they feel or think about purchasing (Cherry, 2021). Furthermore, it also studies the way of persuading people to purchase a good.

2.1.2 Types of consumer buying behavior

Consumer buying behavior depends on the product or service that the consumer needs, which is obvious because behavior and attitude differ at the moment of buying, for example, apples and cars. Most likely, customers will spend more time thinking about and analyzing different options before buying cars than apples and will feel and think differently about the purchase, and this is exactly consumer buying behavior. The theory of consumer buying behavior was perfectly described by Henry Assael (Assael, 1974) and used for understanding customers.

These are the main types of factors forcing customers to buy one or another product or service:

- Personal factors. These factors are extremely hard to influence because they depend only on individual preferences. However, personal taste can change throughout life.
- Social factors. This category includes the whole person's environment – family, friends, school or university, work, social media, news, and education that person received. To manipulate these factors, the factors themselves have to be changed.
- Psychological factors. Category of individual reactions and attitudes to various products. It all depends on each person's perception and way of thinking (Radu, 2022).

Types of consumer behavior

As mentioned previously, consumer behavior depends mainly on the product that the consumer wants to buy. Meaning, first of all, the price and also the personal preferences.

The higher the price and the more customers are interested in what they are buying, the more emotionally and financially involved they will be in the process of buying. Producers have to understand which type of behavior their customers usually have when buying their goods to be able to run a working marketing strategy and to know what to change if the demand is not strong enough. (Assael, 1974)

1. Complex buying behavior.

This type of behavior appears when customers are planning to make a big purchase and spend a lot of money. Not only that case but also when the purchase has a high personal value for the customer or involves considerable risk. Expensive purchases do not usually happen often, so customers are highly involved in the purchase and do extensive research in advance to be familiar with the topic. In the case of personal preference or experience, brands can also be a good reason for the customer to prefer one product over another. In this case, the customer will spend a lot of time analyzing all feasible options and will ask for advice from friends, family, or experts because of the uncertainty. An example is buying a car or a house. People usually do not choose this kind of purchase at first glance; they spend time on research to evaluate all risks before making their final decision (JP Arnaud-Marquez, 2022).

2. Dissonance reducing buying behavior.

Is remarkably similar to complex buying behavior because it also happens during less-frequently done purchases, and the biggest problem for this type is connected to the fear of regretting this decision afterward and making the wrong choice. This very often happens when the market is full of comparable products and the visible differences between them are small. The importance of the brand is lower here. Because of this fear, customers are highly involved in this purchase and also spend tons of time thinking about what to choose. A typical example can be the choice of shade of color for the walls at home during renovation or the choice of wedding rings (Grayson, Hibbard and Kotler, no date).

3. Habitual buying behavior.

This is the most common behavior that we face in everyday life. This type is characterized by a low level of involvement in the buying process and also has low brand loyalty because usually this kind of product is offered by many brands and has minor differences that do not make a lot of sense for the customer, so the customer prefers the brand

with the cheapest price. This kind does not show a significant difference in choice of brand, so customers do not pay attention to brands. This kind of behavior can be easily traced during everyday purchases in the grocery store when people are buying food or personal care items, for example, tea, bread, or shampoo (Baldocchi, 2022).

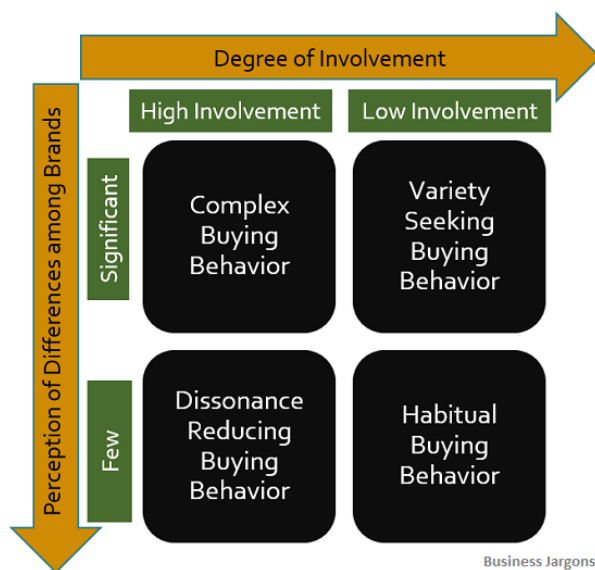
4. Variety seeking buying behavior.

This type of behavior differs from others at the point of motivation. The motivation for choosing another product is coming not because of dissatisfaction with the previous choice but because the customer is looking for something new, in other words, because of boredom and a willingness to experiment. This type has the lowest level of involvement and brand loyalty because of the desire to find something new, and everything else does not matter to the customer. In this case, brands can play a crucial role because, in the position of seeking variety, customers can feel the desire to try out contemporary brands that they have never tried before. A good example of a product can be a different scent of shower gel, the color of nail polish, or shower gel (JP Arnaud-Marquez, 2022).

Based on the previous research, types of consumer behavior can be divided into two broad categories which are presented in **Figure 3**:

- By degree of involvement: high or low,
- By preference of brands: significant or few (Radu, 2022).

Figure 3. Types of consumer behavior.



Source: Types of Consumer Behavior, no date.

This typology can help companies and businesspeople understand how to influence customers based on their purchasing habits. It can give an idea to the marketing department of a company about how to make an effective advertisement campaign.

For example,

- When customers have complex buying behavior, it is better to improve the quality-price ratio or add unique features to products that other companies cannot offer. Also, a rational decision can be made by building a good before-buy service that can help customers with the choice and will educate them in the chosen field. This service will build trust in the company, and most likely, customers will choose this brand.
- For reducing the fear of regret for Dissonance reducing buying behavior customers, it is better to provide high-quality after-purchase customer care with the possibility of exchanging the product for another one (if it is possible for this type of product).
- Companies should run regular advertisements to remind their customers about themselves when dealing with customers with habitual buying behavior, so customers will remember this brand among tens of others.
- To stand out from other products and brands for customers with variety seeking buying behavior, brands better have new features and varieties that other brands do not have to attract the attention of customers to a new variety.

2.1.3 Factors affecting Consumer Behavior

In order to increase sales and revenues, producers have to understand what affects consumers' choices and how they can influence them. Consumer behavior factors are the criteria by which marketers identify their target market, including whether consumers shop frequently or infrequently, and whether they research what they want to buy or buy on a fleeting desire. Knowing what influences customers to buy enables marketers to connect with them emotionally and develop a lasting relationship, which in turn gives them the extra advantage of receiving recommendations from their family and friends. This kind of information provides a great strategy for reaching profitability. Personal, psychological, and

social are the three main groups of factors (Brown, 2006). Another key factor is the economy, which affects the consumer's economic situation and the opportunity to purchase products.

- Personal factors.

Personal factors are the most significant of all. Among them are age, sex, occupation, lifestyle, place of domicile, and economic conditions. Age can be an indicator of the consumer's life stage, such as being a student, a young professional, in a family-raising stage, or retired, which can affect their spending habits and purchasing decisions. People of different ages will not purchase the same things, teenagers are interested in purchasing computer games, while middle-aged consumers tend to buy properties, vehicles, or investment products. As consumers age, their health concerns may change, affecting their demand for certain products, such as healthcare products and services. Age can also be related to a consumer's income level, as people generally earn more as they progress in their careers. Younger consumers are generally more familiar and comfortable with technology, which can impact their preferences for products or services. Personal factors are given, and producers and firms cannot affect them, they can only choose the social group to which they want to sell their products and make them more suitable and interesting for this particular group (Grayson, Hibbard and Kotler, no date).

- Psychological factors.

Inner characteristics and behavior shape one's personality. This distinguishes a person. People's behavior is influenced by their personal characteristics. However, establishing a reliable link between individual personality and behavior type is difficult. Human psychology is a key factor influencing consumer behavior, although it is difficult to quantify. Several psychological factors influence consumer behavior, for example, motivation. Motivation refers to the inner driving force that directs human activities toward satisfying needs on any level (Maslow, 1943) or achieving a specific goal. Several motives, not just one, take part in every decision-making process. When it comes to measuring or analyzing motives, one thing to consider is that they frequently operate only on a subconscious level. Another factor is perception, it is a process of selecting, processing, and interpreting environmental information to make it meaningful. (Stávková, Toufarová and Stejskal, 2008). Consumer skills and knowledge are linked to learning and predicting behavioral changes. Skills, personal experience, and knowledge consumers obtained through their life experience

will certainly cause a difference in consumer behavior, so it is becoming a significant factor in consumer behavior. As a result, in order to modify consumer behavior towards a certain product, adequate information must be provided. Learning can occur through a simple link between an impulse and its reaction, or a complex collection of cognitive operations.

- Social factors.

People are very social, which implies that their purchasing decisions are influenced to some extent by those around them. As a result, social factors such as family and social groups to which a person belongs impact consumer purchasing behavior. The social role of a person can also play a crucial role, which can tacitly allow or not allow the purchase of certain products. People belonging to one social group are more likely to have a certain consumer pattern as they have common activities, and they need certain goods. For example, tennis players are more likely to buy tennis balls and students more often buy notebooks than other social groups (Bettman, 1986).

2.2 Modern consumer buying tendencies.

2.2.1 Common trends in consumer behavior and psychology in recent years

Businesses must keep up with all the news and trends that the population follows in order to provide requested goods promptly. To solve this problem, it is necessary to do specific research. It can be done by the company itself or by using other appropriate research with relevant information. A new challenge arises at this step – consumer preferences and trends are changing nowadays faster than ever before.

Consulting companies do this research for information purposes for other companies and individuals, sometimes they also publish it online for free so anyone can get access to it and use it for their purposes. Nearly the same research did Forbes when interviewed its members of the Forbes Business Council about their professional opinion regarding consumer trends following in 2021. (*15 Customer Behavior Trends Emerging This Year*, 2021)

This research has been done in 2021, which is not very recent; however, it can give an idea of what is going to be in trend and how to adjust to it. Here are some of the most important ones that touch consumer behavior and psychology:

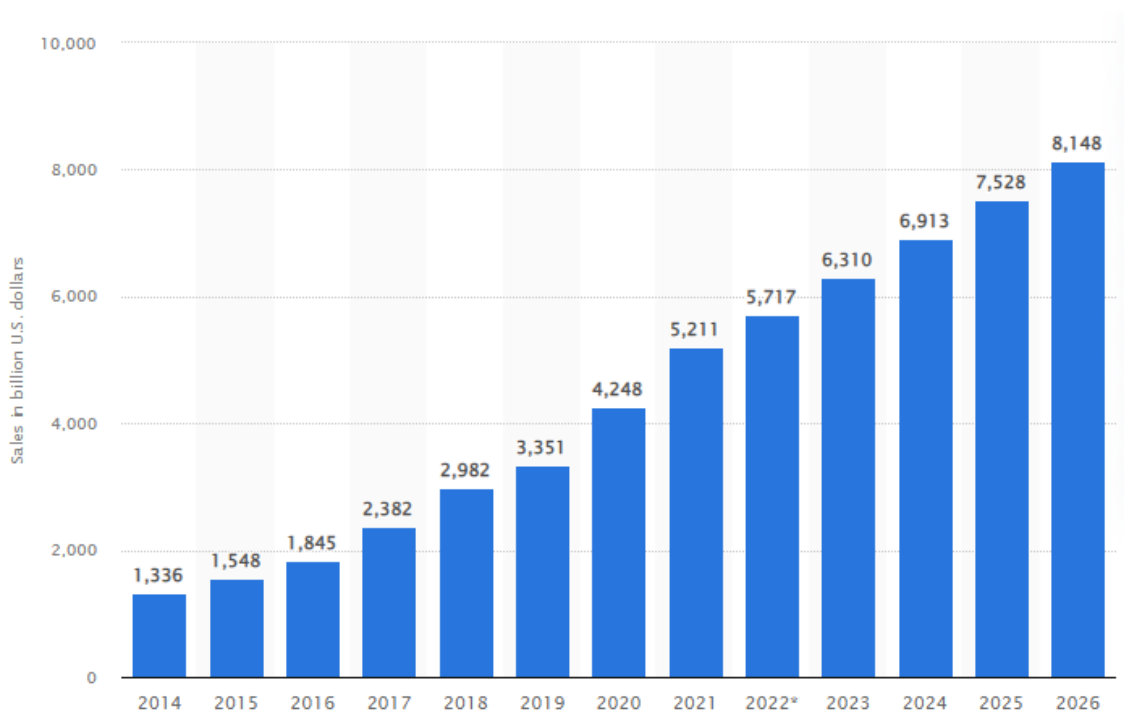
1) Focus on really important things.

This trend is about the fact that people will be more conscious of their spending and will probably begin to refuse unnecessary purchases. This trend is coming after the COVID-19 pandemic and because of the just-started energy crisis and rising inflation (*Building a value-based budget*, no date). This is primarily about saving money, but also in fashion clothes and house interiors are becoming more minimalistic recently.

2) Online shopping.

Statistics report that online shopping and e-commerce are increasing each year significantly, especially big growth in 2020 and 2021 during the COVID-19 pandemic, and even in 2022 it was still increasing. **Figure 4** demonstrates that. In 2022, e-commerce retail sales worldwide were about 5,717 billion US dollars, the forecast expects sales in 2026 to be 8,148 billion US dollars, which means 42,5 percent growth (Chevalier, 2022).

Figure 4. Retail e-commerce sales worldwide from 2014 to 2026.



Source: Chevalier, 2022.

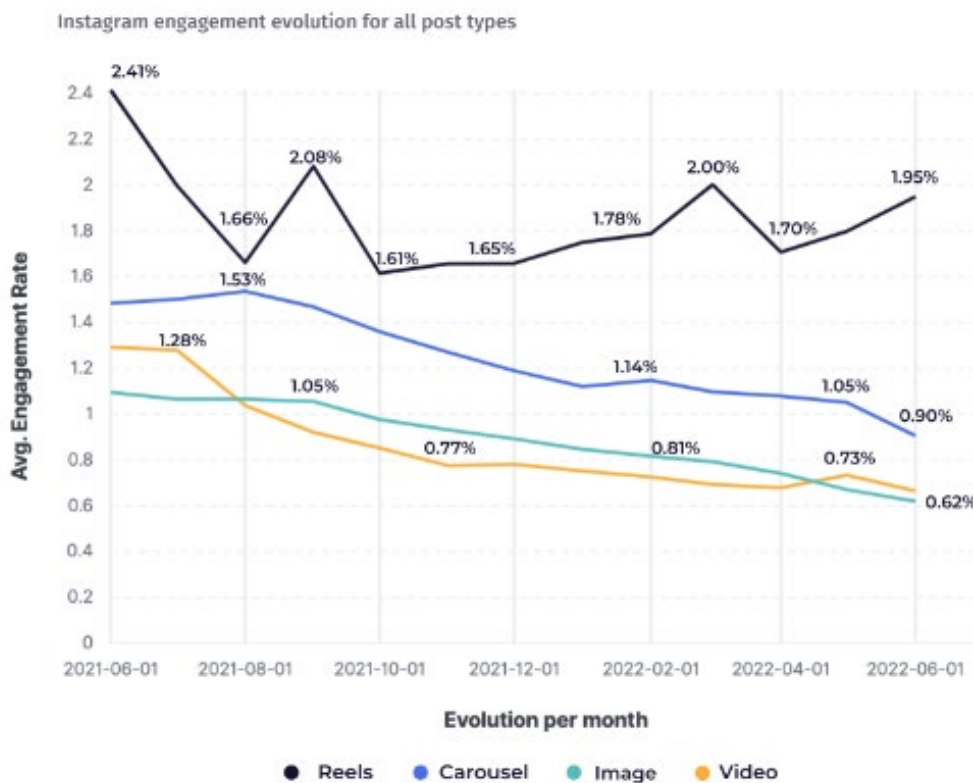
3) Content marketing in social media.

One of the fastest developing trends is that big and small companies are trying to do content marketing because it is now one of the most effective ways to sell the product and

tell customers about the company as well. Potential customers are able to see some features of the product, guides on how to apply and use it in different ways, how it looks in use, and so on in the social media channels of the company and will be more decisive about whether to buy the product or not (*15 Customer Behavior Trends Emerging This Year*, 2021). Lack of information can be one of the reasons why customers are unsure about the product, and it is in the company’s best interests to increase awareness of the brand.

Instagram is one of the most used apps in the world (Curry, 2023). When Instagram Reels were introduced, it drew far more people’s attention than usual stories or moreover posts. And now it has billions of views every day – Instagram Reels have an average engagement rate of 1.95% and an average view rate of 2.54% (Cucu, 2022). **Figure 5** shows that Reels have much higher engagement. It became the latest content branch, and now it is easier to promote the company or goods through social media, especially through video content. The head of Instagram, Adam Mosseri, said: “Instagram is no more a photo-sharing app” (Clark, 2021). Since Instagram has a considerable influence on social media, a new era of content just started. And it is becoming even easier to promote with its help.

Figure 5. Instagram engagement evolution for all post types.



Source: Cucu, 2022.

4) Green products.

The most widespread trends are coming from the problems that must be solved. This case is one of them. Every person who has a TV or mobile phone with internet access, probably already knows about the scale of the problem of environmental pollution. More people are trying to find green products with minimum waste and with some parts made from recycled resources. Also, many companies are trying to produce such products. Globally, for 60 percent of the customers, sustainability is one of the most important purchase criteria, and one-third of the customers are willing to pay up to 25 percent more for sustainable products. (Simon-Kucher & Partners, 2021). It makes companies create more sustainable production, which has a double benefit because customers are willing to buy sustainable products and are willing to pay more for them.

5) Value-based spending.

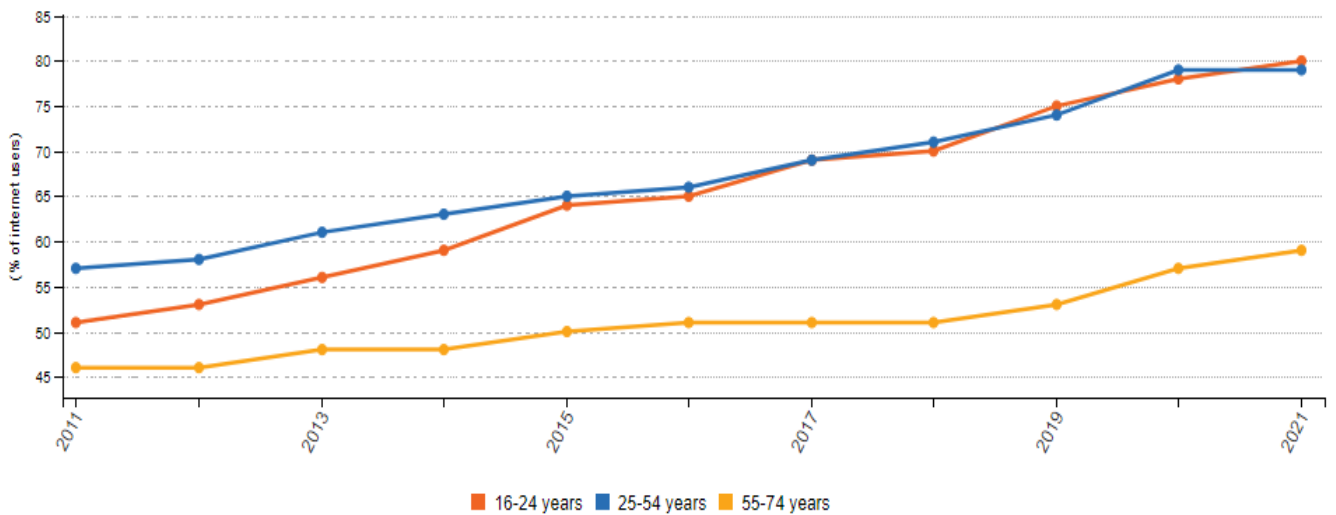
This type of spending can be characterized as supporting producers with similar values (for example, cruelty-free – cosmetics that have not been tested on animals) and practicing conscious consumption. This has a financial influence on businesses – companies that do not adhere to accepted ethical or philosophical norms or global trends in society risk being forced out of the market. Currently, in the European market, there is a wide variety of brands and firms that people can choose from, meaning people can always find an alternative product from a brand with similar values. The overall increase in living standards gives consumers the opportunity to choose between the brands and select the ones with similar values and goals. Thus, consumers can purchase not just the cheapest product but can choose from alternative brands that they want to support.

Value based budgeting and conscious consumption are focused on spending money on what is important to the consumer, people start to think more about what they buy and why. Hence, purchases of unnecessary or meaningless products will decrease, and this trend will make companies do more intense research before launching their products (Wong, 2019). The trend for minimalism started several years ago and is becoming more widespread, it stands for having less furniture, less overloaded designs, and fewer accessories in everyday outfits, which is affecting demand for these products (Weinswig, 2016).

2.2.2 Trends during pandemics

The COVID-19 pandemic was unpredicted and unexpected in psychological terms for most consumers. The reason is that society was not ready for it because of the feeling of safety that emerged after the development of medicine and the belief in antibiotics and other medications. Because it was unexpected and people were not ready for such events, their anxiety arose, and they began making unreasonable purchases like buying lots of toilet paper (Lingqvist, Nordigården and Vainberg, 2021), sugar, oil, and essential items. On the other hand, according to Eurostat, in 2020, the number of people shopping online increased by 4 percent (*E-commerce statistics for individuals*, 2022). **Figure 6** shows how often different age groups shop online.

Figure 6. Internet users who bought or ordered goods or services for private use in the previous 12 months by age group, EU, 2011-2021.



Source: E-commerce statistics for individuals, 2022.

In 2021, B2C (Business-to-Consumer) E-Commerce gross merchandise value in Europe was \$878.6 billion, by the end of 2022, it is expected to be \$1010 billion and in 2026, it is estimated to be around \$1564.9 billion (*Europe B2C e-Commerce Market Opportunities Report 2022*, 2022). In March 2021, the European Commission released the results of the survey conducted at the end of 2020 that showed the impact of the COVID-19 pandemic on consumer behavior in Europe and consumption patterns. It shows that 81 percent of consumers tend to buy products, especially groceries, in nearby stores, which can be explained by the restrictions during the pandemics when people were allowed to buy

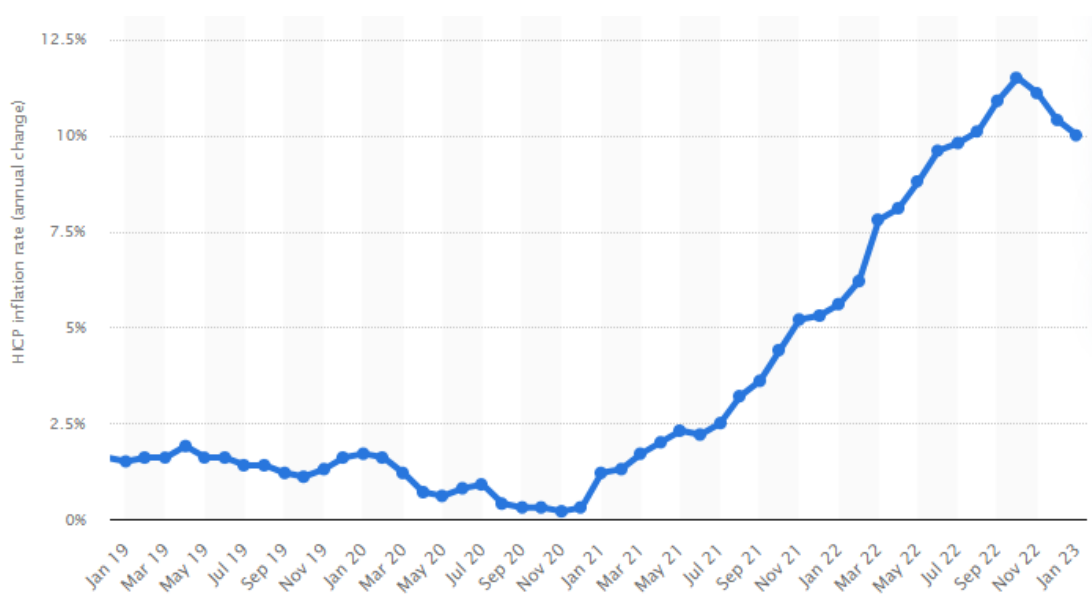
groceries only in the nearby stores, and support local retailers and producers, while at the same time still preferring to shop online from bigger retailers – 71 percent shopped online. Another insight is that 67 percent of people tend to buy greener, higher quality, more durable products and are willing to pay more for them. Around 42 percent of consumers postponed major purchasing decisions, which was motivated by the fact that people felt less secure about the future and their income, which led to saving more money (*New consumer survey shows impact of COVID-19, 2021*). These trends are practically the same as those that Forbes (*15 Customer Behavior Trends Emerging This Year, 2021*) have predicted, meaning the trend for buying more sustainable and durable products of higher quality and shopping online is becoming more common. Those trends emerged before the pandemic and were even more deeply implemented into society’s mindset and habits.

2.2.3 Inflation affecting consumer behavior.

When the prices of goods and services rise, this is referred to as inflation. This means that for the same amount of money today, consumers can get fewer items tomorrow (*What is inflation?*, no date).

Inflation started slowly increasing from January 2021 and reached its maximum of 11,5 percent in October 2022, which started slowly decreasing after its maximum (see **Figure 7**).

Figure 7. Inflation rate in Europe, 2019-2023.



Source: Inflation rate of the European Union 1997-2023, 2023.

Inflation can have different effects on consumer behavior and businesses and households (Juster *et al.*, 1972), but the most crucial effect is reduced purchasing power for consumers, especially, those with lower income (Öner, 2010). A decrease in purchasing power is a reduction in the number of goods and services that a consumer can purchase for the same amount of money. It occurs when the prices of goods and services are visibly increasing, and consumers notice the effects on their budget. Prices are increasing not only for single types of goods, like only for food or vehicles but for all the goods or services on a market. Consumers will have to spend more money on the same products. The standard of living can significantly decrease, especially for vulnerable groups of consumers, for example, those with low income, and it can lead to even worse consequences as producers will suffer a big loss in revenues as the demand will decrease (de Vries, 2013).

Phenomena that may arise due to inflation:

- Changes in spending patterns.

Inflation can cause consumers to shift their spending from non-essential to essential items and cause people to buy fewer items. which results from the fact that people during high inflation will be more selective in what they are buying, and more than half of consumers, 51 percent, are learning all about the product in detail to make sure they are paying for the best product and are completely satisfied with a purchase (Draxl, 2022).

- Changes in borrowing behavior.

Inflation affects borrowing behavior – consumers are less likely to take loans because interest rates on loans during high inflation are also rising (Malmendier and Nagel, 2016). High inflation rates can discourage borrowing, while moderate inflation can lead to increased borrowing because people are expecting interest rates to go higher. It also affects the availability of credit and leads to stricter credit standards and higher interest rates. A study by the IMF found that inflation expectations play a crucial role in determining borrowing behavior and that central banks can help manage inflation expectations and try to encourage sustainable borrowing behavior with effective monetary policy (International Monetary Fund, 2018).

- Delayed purchasing.

Inflation can cause consumers to delay large purchases such as homes, land, furniture, and vehicles because they expect prices to rise further (Jin, 2018). As in the previous examples, people try to save more money. However, for such large purchases as property,

consumers prefer to take a loan, which means that in a situation of high inflation, their interest rate will most likely rise because banks must compensate for their losses and future losses. After all, fewer people will take loans, and the interest rates will also rise if they do not have a fixed one. This fact discourages consumers from making large purchases, which in turn affects market prices (Blake, 1999).

- Increased savings.

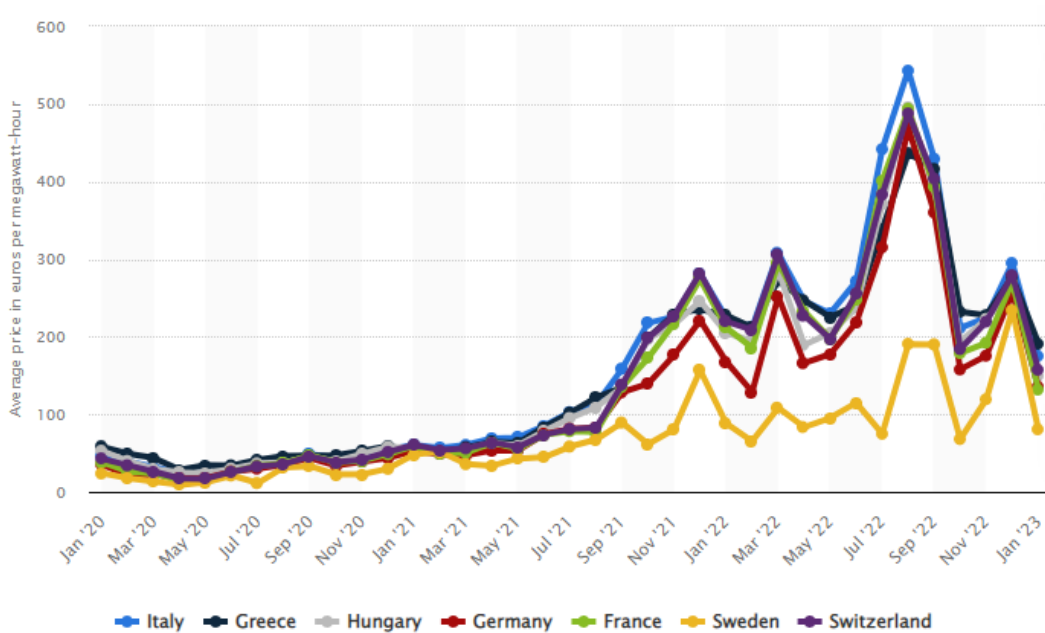
Inflation can cause consumers to save more as a hedge against future price increases. Inflation can create uncertainty and financial instability, motivating people to save more to prepare for future challenges. The Federal Reserve Bank of St. Louis report cites a study by economist Robert E. Lucas, Jr. which found that households in Brazil saved a significantly larger portion of their income during a period of high inflation in the 1980s. High inflation can also make saving more attractive as a means of earning a return on investment (Burger and Mudd, 1977).

2.2.4 Energy crisis and consumer behavior

The energy crisis in Europe refers to a situation when there is a shortage of energy supplies or an increase in the cost of energy. The energy crisis in Europe emerged at the beginning of 2022 and worsened after the war started in Ukraine (Zettelmeyer *et al.*, 2022). Energy prices were unprecedentedly high, unpredictable, and highly volatile. The European Union decided to significantly decrease its level of dependency on Russian gas because Russia was trying to manipulate the EU with gas. Before it, around 45 percent of imported gas to the European Union was imported from Russia, which led to an immediate increase in prices when the EU decided to cut imports of Russian gas because other available suppliers could offer gas and liquefied natural gas for a more expensive price. By September 2022, Europe could manage to reduce the import of Russian gas to 14 percent (*EU action to address the energy crisis*, no date). But still, in August 2022, electricity prices reached their historical maximum. However, in October 2022, prices nearly halved and did not significantly rise in November. It was first of all because of the warm weather, which decreased the demand for energy and heating (Wenz, Levermann and Auffhammer, 2017). **Figure 8** shows the average prices for energy in European countries from January 2020 until January 2023. Italy has seen a historical maximum for electricity prices, while Sweden has not seen a significant rise because a large part of its source of electricity is hydropower and

nuclear energy. Later, prices in January 2023 were nearly the same as in September 2021, which can tell about positive dynamics in dealing with the crisis, at least in the short term, as it is hard to predict them (*Monthly electricity prices in selected EU countries 2020-2023, 2023*).

Figure 8. Average monthly electricity prices in selected European countries from January 2020 to January 2023



Source: Monthly electricity prices in selected EU countries 2020-2023, 2023.

As it is a crisis, it must affect consumer behavior because of the overall anxiety of society and its worry about the future and their financial situation. Some of the potential impacts of an energy crisis on consumer behavior are similar to the general trends during any kind of crisis, for example, changes in spending patterns in favor of more durable and sustainable products and increased savings (Hass, Bagley and Rogers, 1975). Particularly, these trends tend to arise during energy crises:

- Changes in spending patterns.

Consumers are more likely to purchase items with a high energy efficiency rating and prefer renewable energy sources such as solar, wind, or hydropower over other non-renewable sources. Additionally, consumers might prefer products and services with lower

energy intensity, such as electric vehicles or public transportation for long-distance travel (Belk, Painter and Semenik, 1981).

- Increased conservation (savings).

Consumers may adopt more energy-efficient practices, such as using energy-saving light bulbs, reducing their use of heating, and cooling systems, turning off the lights, and unplugging devices that are not currently in use (Mills and Schleich, 2012).

Government assistance or assistance from the EU itself can be another way to help during an energy crisis. The European Commission released a toolkit of business-supporting policies that EU nations can employ, including various kinds of financial support - energy vouchers, tax relief, subsidies, bill credits, and financial support for renewable energy and energy efficiency initiatives. It also introduced information and advisory services, like guidance aimed at raising knowledge of how to save more energy. Most recently, an emergency mechanism was approved, allowing EU nations to temporarily establish a price for the delivery of electricity to small and medium-sized enterprises to further assist businesses that are suffering from high energy prices (*Coping with the crisis*, no date). Overall, an energy crisis in Europe can have a significant impact on consumer behavior as consumers adjust their spending and behavior in response to changes in energy availability and cost. Because it will affect manufacturing companies, which typically have high energy consumption in production, the price of the product will be affected. Prices higher than equilibrium will reduce purchasing power to some extent, potentially slowing down the economy and decreasing living standards.

In general, it can be stated that in crisis situations, consumer behavior is generally easy to predict. People tend to keep their incomes and cut expenses out of fear of uncertainty and economic decline in one area or another.

2.3 European Market

2.3.1 Environment

“The single market of the European Union is also usually called the European market. It ensures the free movement of people, goods, capital, and services, and the right of EU

citizens to live, work, study, and do business in any European country” (*Single market | European Union*, no date). The EU promotes free trade, retail business, and economic transactions among its members by removing technical, legal, and administrative obstacles (*Single market | European Union*, no date). The EU includes 27 countries currently, the last country to join the EU was Croatia in 2013 (*EU country profiles | European Union*, no date). The European market extends to the European Economic Area (EEA) and the European Free Trade Association (EFTA). The EEA includes all members of the European Union and Iceland, Liechtenstein, and Norway. The EEA allows its countries to enter the single European market (*Countries in the EU and EEA - GOV.UK*, no date). The EEA agreement requires the adoption of some EU rules, like the unrestricted flow of commodities, services, people, and capital among the member states. It also includes collaboration in other spheres, for example, by following some policies that include research and development, education, social policy, the environment, consumer protection, company law, statistics, tourism, and culture (*The Basic Features of the EEA Agreement | European Free Trade Association*, no date). EFTA was established to have connections with the European Commission and later to establish trade relationships. EFTA consists of Iceland, Liechtenstein, Norway, and Switzerland (*The European Free Trade Association*, no date). Because of that, Switzerland is also considered to be part of the European market, although it is not in the EU or EEA but in the EFTA. The United Kingdom decided to leave both the EU and EEA in 2020 (Kenton, 2022).

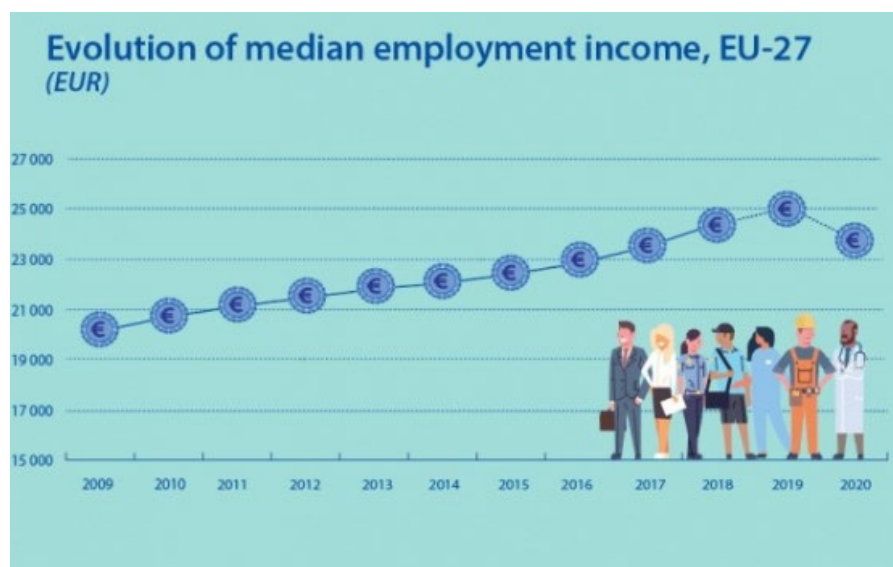
The European market has specific features that the European Union implemented. For example, the EU has approved a standardization system. Some regulations and standards are voluntary, others are recommended or mandatory. Technical requirements are usually mandatory, but harmonized standards are usually voluntary (*Standards in Europe - Your Europe*, no date). For example, in October 2022, the Council of the European Union approved the “common charger directive.” It says that starting in December 2024, all new cellphones, tablets, and headphones have to have one type of charger – USB-C. It was implemented to decrease the amount of electronic waste and to make a life of a usual consumer a bit easier because carrying two or three types of chargers can be exhausting (*Common charger: EU ministers give final approval to one-size-fits-all charging port - Consilium*, 2022). Since then, all producers exporting their electronic devices to the European Union have to switch to USB-C port if they did not do so before. This is an example of a technical requirement.

2.3.2 Current situation

The current situation in the European market is heavily impacted by three factors that took place in recent years – pandemics, high inflation, and energy crisis. However, the EU and governments of the EU states are taking valuable steps to overcome the consequences, but it takes much more time to recover the economic system after them.

The COVID-19 pandemic has had an enormous impact on the entire world. A lot of businesses had to close because of lockdowns. The entertainment, hotel, and restaurant industries were affected the most, as for them it was impossible to work. One of the important consequences is job loss. Around 5.7 million people lost their jobs in the European Union during the first wave of the COVID-19 pandemic (Baczynska, 2021). Also, except for job loss, people had fewer working hours, which led to a decrease in employment income (see **Figure 9**), which fell by 4.8 percent in 2020 (*Impact of COVID-19 on employment income - advanced estimates*, no date).

Figure 9. Evolution of median employment income, EU-27 (EUR)

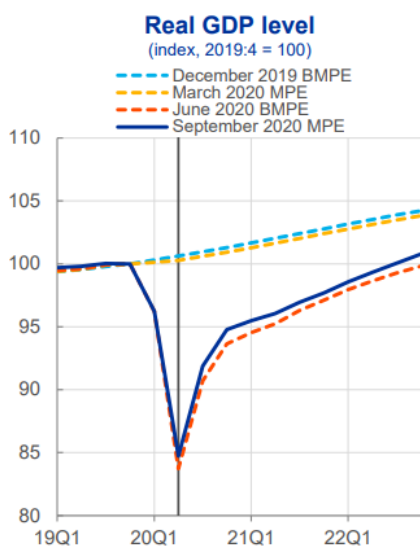


Source: *Impact of COVID-19 on employment income - advanced estimates*, no date.

People who lost their job or had less income due to absence or fewer working hours will surely decrease their spending, which resulted in an economic slowdown, which was exacerbated by the lockdown when people were limited in their free movement and restaurants, hotels, retail, entertainment, and travel industries were closed. It slowed down the economy and led to a decrease in GDP for all the countries in the Euro area (*Impact of*

COVID-19 on employment income - advanced estimates, no date). However, in the third quarter of 2020, when the main relaxation of restrictions happened, the GDP of the Euro area significantly grew. **Figure 10** demonstrates that.

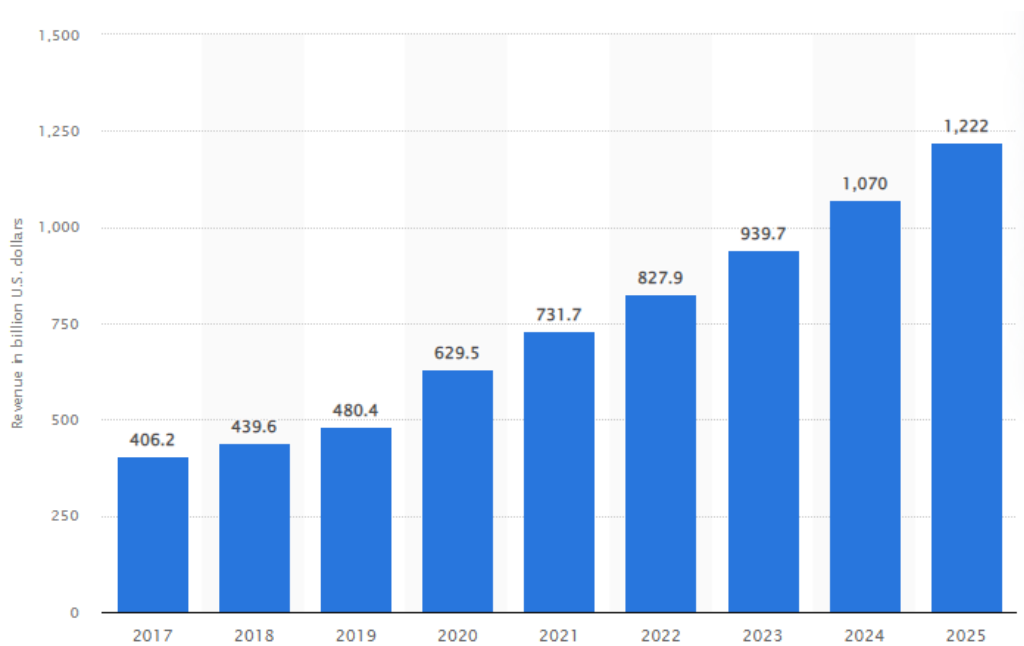
Figure 10. GDP growth: strong recovery in 2020Q3 and Q4; growth normalizing in 2021



Source: Smets, 2020.

Another significant change during the COVID-19 pandemic was in online commerce. Consumers started shopping online much more often than before because non-essential retail shops, for example, clothes shops, were closed due to restrictions. Thus, online shopping was the only option for both customers and sellers. In **Figure 11**, there is a change in the trend for retail revenues in e-commerce in 2020. It can be justified by the growth of e-commerce due to the shift from shopping offline to shopping online because of restrictions. In 2020, the growth of e-commerce was by nearly a third – 31.03 percent per year, in previous years growth was around 9 percent. Growth in 2021 was not that significant, 16.23 percent, but it was still higher than average growth prior to the pandemic. It could be a sign that many people still prefer to shop offline, but also it is possible that a lot of people switched from face-to-face shopping to online shopping after they tried online shopping during the pandemic, and found it more convenient (Beyrouthy, 2022).

Figure 11. Retail e-commerce revenue in Europe from 2017 to 2025 (in billion US dollars)



Source: Beyrouthy, 2022.

The pandemic has changed shopping behavior and habits in previous years. More consumers tend to shop online. The leading category by a wide margin is fashion (clothes, shoes, and accessories) at 68 percent followed by food delivery at 31 percent, and furniture or home accessories with 29 percent of people who bought them online (*Online shopping ever more popular - Eurostat, 2022*). **Figure 12** illustrates the most popular categories for online shopping in 2021.

Figure 12. Most popular online purchases of goods, EU, 2021



Source: Online shopping ever more popular - Eurostat, 2022.

To sum up, current academic research proves hypothesis 1 that most consumers will pursue spending less and increasing their savings. Their spending habits will most likely be affected by the energy crisis and inflation as they are turbulent times. It can lead to the fact that people will "think twice" before buying something or they can delay larger purchases. One of the consequences of the pandemic found in academic research and official statistics could be that people started shopping online more often and maybe even leave this habit after the restrictions were relaxed. It proves Hypothesis 2.

3 Practical Part

3.1 Survey with consumers

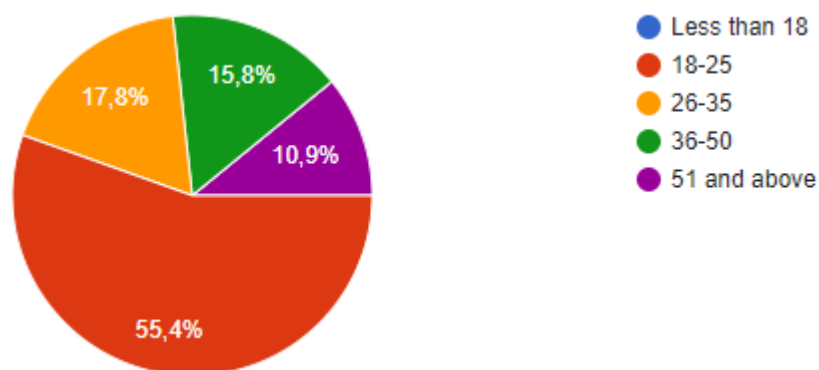
To test hypotheses 1 and 2, and other trends evolving in the European market, the survey was conducted. The survey includes sixteen questions about consumers and their individual reactions to crises and modern trends, for example, environment-friendly products and content marketing in social media. This research is essential for studying modern consumer psychology and how it affects the market and businesses. The goal of the survey was to get responses from people living in different countries of the European market and study their behavioral patterns and responses to crises, how they react and deal with them, and find dependencies and correlations. Overall, 202 answers were collected. All the answers of respondents are available in the additional file **Appendix A1**.

3.1.1 Participants of the survey

- Age.

People of different ages participated in the survey, except people less than 18 years old. The biggest age group of this survey is from 18 to 25 years old – 55.4 percent of people (112 answers), the second biggest group – 17.8 percent – people 26-35 years old (36 answers), 15.8 percent – 36-50 years old (32 answers) and 10.9 percent of people were more than 51 years old (22 answers), **Figure 13** graphically shows the age groups of participants.

Figure 13. Age groups of participants of the survey.

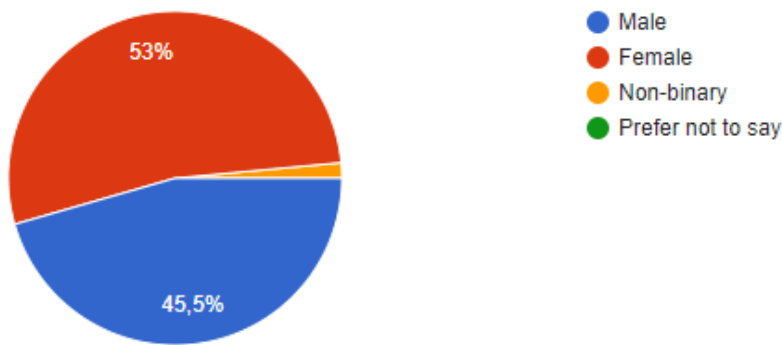


Source: own research.

- Gender.

All the people did not mind telling their gender, in the survey participated 53 percent of females (107 answers), 45.5 percent were male (92 answers), and 1.5 percent of people with non-binary gender (3 answers). It is illustrated in **Figure 14**.

Figure 14. Gender groups.

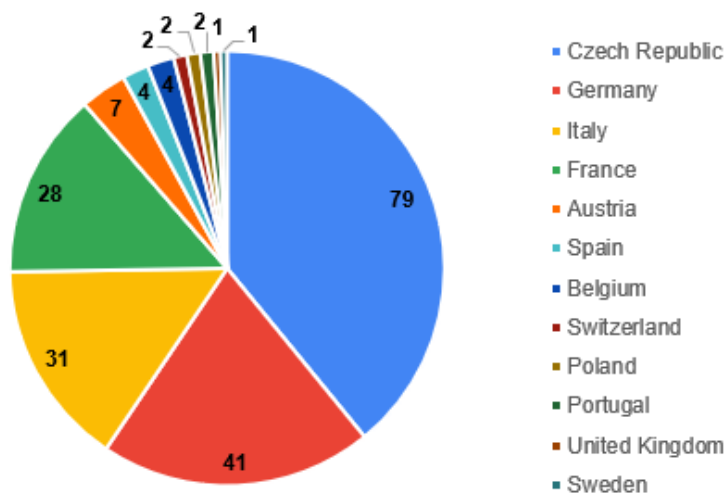


Source: own research.

- Country.

Most of the respondents are from the Czech Republic (79 answers), Germany (41 answers), Italy (31 answers), and France (28 answers). Also, seven people were from Austria, four people from Spain and Belgium, two people from Switzerland, Poland, and Portugal, and 1 person from the United Kingdom and Sweden. Data received from people from these countries will be considered even if it cannot represent the trend in their country.

Figure 15. Distribution of people who participated in the survey by country (in %).

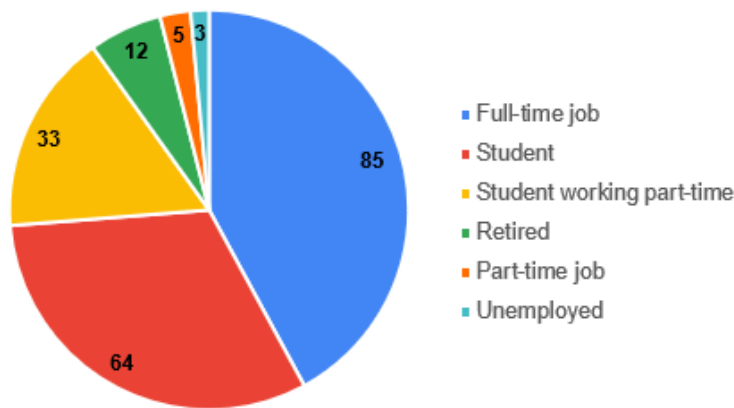


Source: own research.

- Occupation.

Most of the interviewed people had a full-time job (85 answers), the second biggest group of people were students without work (64 answers), then students working part-time (33 answers), retired people (12 answers), and two the most minor groups – people having a part-time job (5 answers) and unemployed people (3 answers) – see **Figure 16**.

Figure 16. Respondents divided by their occupation.

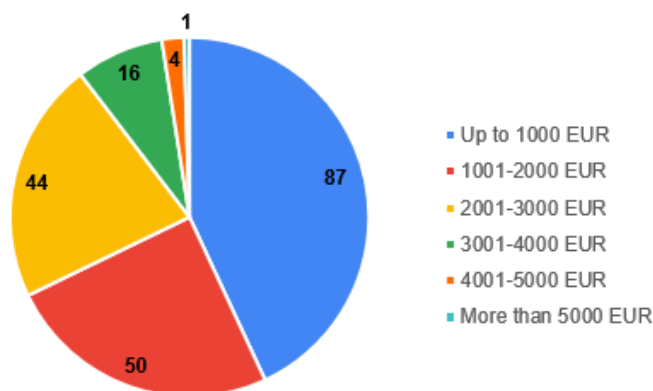


Source: own research.

- Monthly income.

Respondents had different incomes but most of the people had income up to 1000 euros (43,1 percent of answers), people with income from 1000 to 2000 euros (50 answers), from 2000 to 3000 euros (44 answers), from 3000 to 4000 euros (16 answers), 4 people were with income 4000-5000 euros and only 1 person with income more than 5000 euros per month.

Figure 17. Distribution of people who participated in the survey by their monthly income (in %).



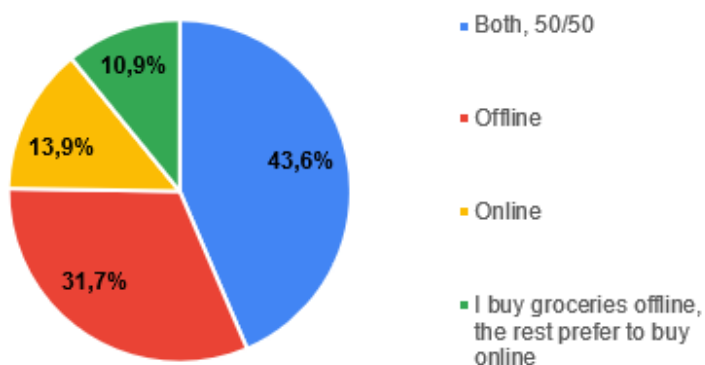
Source: own research.

3.1.2 Results of the Survey

3.1.2.1 Online shopping

In this section, the data gained from the survey will be analyzed to get the results which can reject or not hypothesis 2: “People started shopping online more often after the COVID-19 pandemic”. The first question regarding consumer behavior is ‘Do you prefer shopping online or offline?’ Most consumers prefer to combine both methods. In total, around 68.4 percent of consumers purchase some goods online, and 31.7 percent prefer to shop offline. It is seen in **Figure 18** that most consumers prefer to purchase at least some goods online which is an argument for proving hypothesis 2 right.

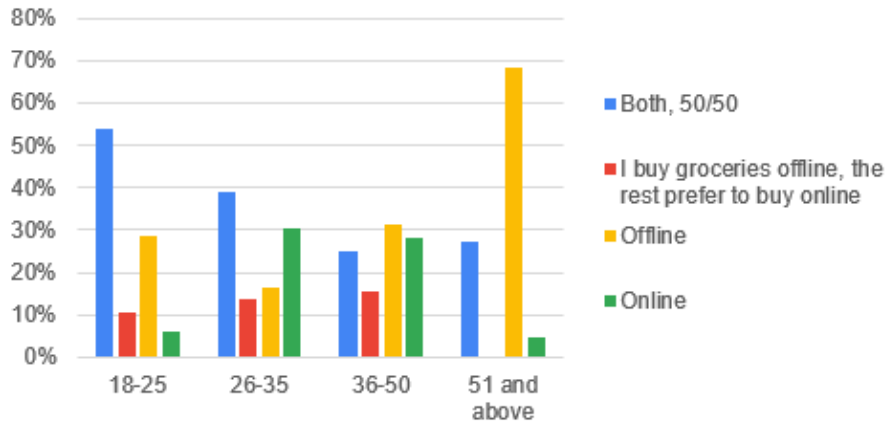
Figure 18. Percent of people who choose to shop online or offline.



Source: own research.

However, after putting data from the previous question divided by the age of people, it can be stated that most people from the age group 18-25 prefer to combine online and offline shopping. People from the age group 26-35 prefer to shop both online and offline (39 percent), but also 31 percent of them prefer to shop fully online. People 36-50 years old prefer to shop offline (31 percent), online (28 percent), and both (25 percent), which does not make a significant difference, so it can be stated that people of age 35-50 prefer to shop online and offline equally. People of age 51 and above definitely prefer to shop offline (68 percent). **Figure 19** shows that younger people prefer to shop online or online and offline, but as people get older, they prefer to shop offline. However, the total trend for shopping online has a place to be in society.

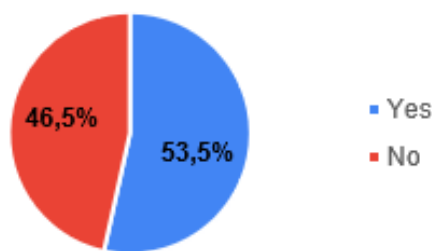
Figure 19. The influence of age on online/offline shopping habit.



Source: own research.

During the COVID-19 pandemic most of the shops with non-essential goods were closed, so people were not able to go shopping for these goods. It could lead to an increase in demand for online shopping. The answers to this question help to prove hypothesis 2: “People started shopping online more often after the COVID-19 pandemic” as more than half of consumers assert that they started shopping online more often (see **Figure 20**).

Figure 20. Answers to the question ‘During and after the COVID-19 pandemic, have you started buying more products online?’

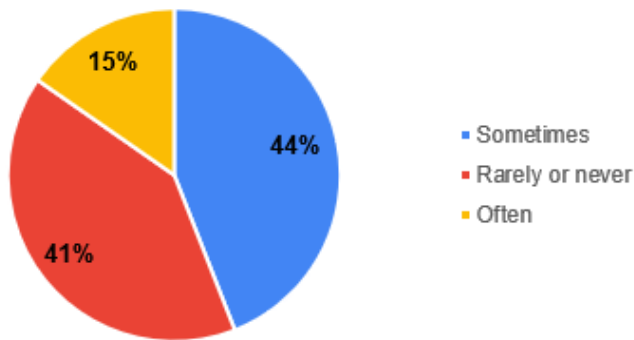


Source: own research.

Another trend was content marketing and using social media as a tool for increasing awareness of the brand and sales. **Figure 21** shows how often people purchase something that they have seen on social media. 59 percent of people systematically (sometimes or often) purchase goods that they have seen on social media (Instagram, Facebook, Telegram, etc.).

Females tend to buy products that they have seen on social media slightly more often, but the difference is small and not significant (see **Appendix B, Figure 49**).

Figure 21. How often people buy something they saw on social media.



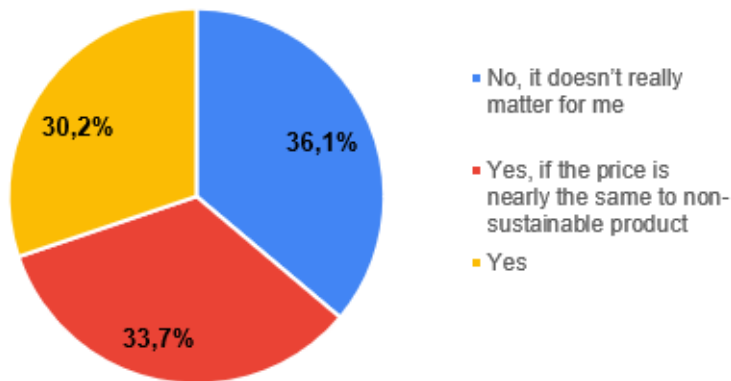
Source: own research.

3.1.2.2 Sustainable, green products

Another trend to prove is whether people start to prefer more sustainable, eco-friendly, and cruelty-friendly goods over ones that do not have these features. Almost two-thirds of people prefer to buy environment-friendly products, but for more than half of these people, the price of these products matters more than their way of production. However, it does not have an interdependence with income (see **Appendix A, Figure 48**), but another interdependence was found with age – older people do not usually care about this kind of product (see **Appendix A, Figure 46**). The impact of gender was not found (see **Appendix A, Figure 47**).

Analysis and **Figure 22** show that most people care about the environment and prefer to purchase eco-friendly products, however, more than half of people who care – do it only if the price is the same as for non-sustainable goods. It confirms that people are cautious about their budget and do not want to overspend. It can be an indirect confirmation of hypothesis 1.

Figure 22. Percentage of people who prefer to buy environment-friendly products.

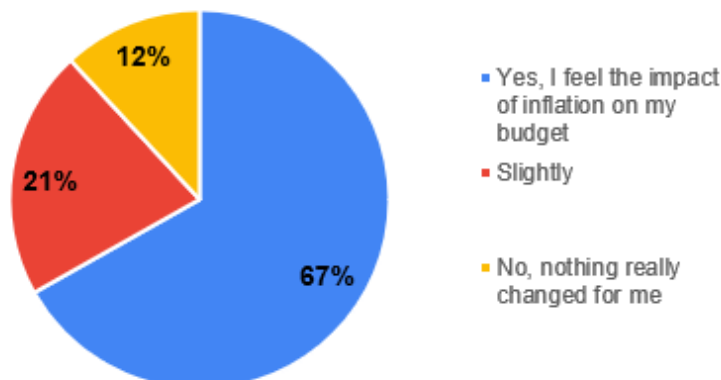


Source: own research.

3.1.2.3 Inflation and energy crisis effects

Residents of European countries faced enormous inflation and high electricity prices recently. First, the impact of inflation was analyzed to make a valuable step in testing hypothesis 1, and it reports that 88 percent of people felt at least any impact of the inflation, and it affected the budget of 67 percent of interviewed people, it can be seen in **Figure 23**. People's budgets were affected, and it can cause a change in their consumer behavior to spend less money if they can.

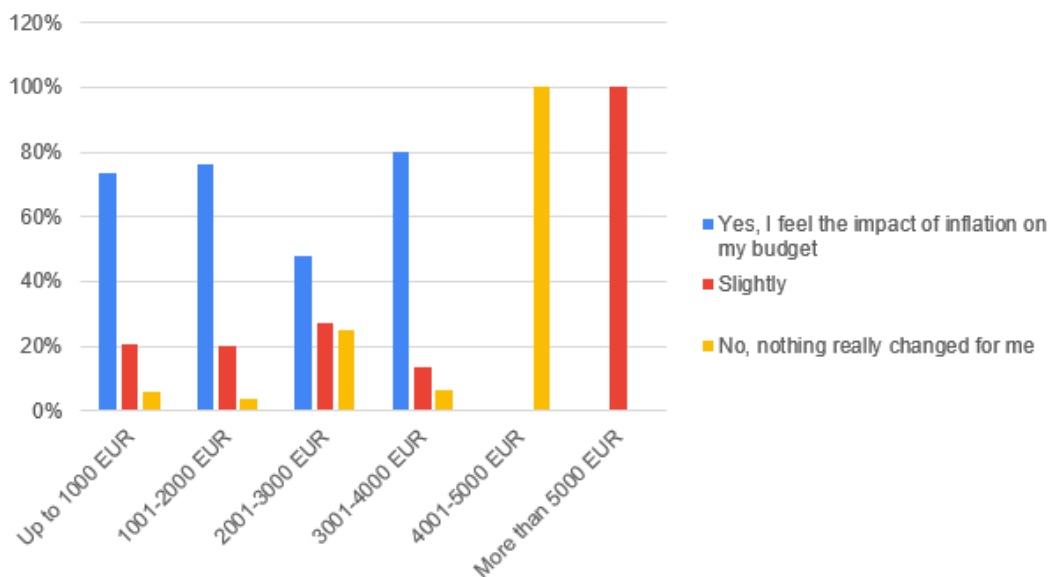
Figure 23. The impact of inflation on interviewed people.



Source: own research.

Figure 24 is about the impact of inflation on people with different incomes, which demonstrates that inflation heavily impacted most people, but people with higher incomes felt it less. It cannot represent the whole situation because not so many people participated in the survey with income of more than four thousand euros per month, however, it can tell the trend that people with a monthly income of more than 4000 euros were impacted less than people with lower income.

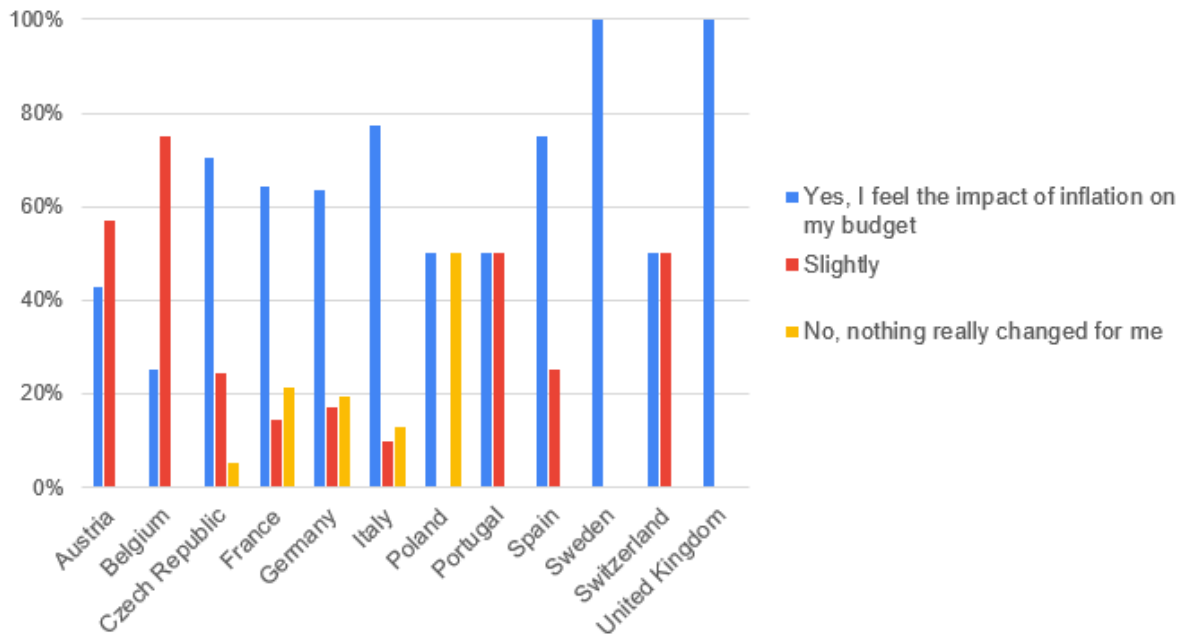
Figure 24. The impact of inflation on people with different incomes.



Source: own research.

This is the continuation of research about the impact of inflation on people, this chart shows the results of the survey from respondents from different countries. Most of the interviewed people were from four countries – the Czech Republic, France, Germany, and Italy. Results are certain that more than 60 percent of residents of these countries feel the impact of inflation on their budgets, especially in the Czech Republic and Italy. Results from other countries are not that representative and cannot say about the whole situation in their countries, but the trend is noticeable – inflation has a significant impact on people in the whole European market. The graphical representation is in **Figure 25**.

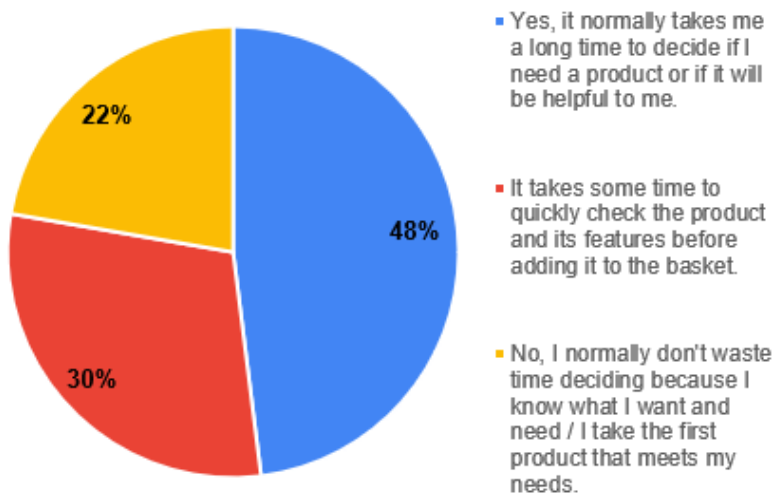
Figure 25. The impact of inflation on people from different European countries.



Source: own research.

Dealing with unreasonable prices for goods, people could start thinking more carefully about what they are buying. Almost half of people usually spend a lot of time deciding which product they want to get. Only 22 percent do not spend time deciding what they want or need (see **Figure 26**).

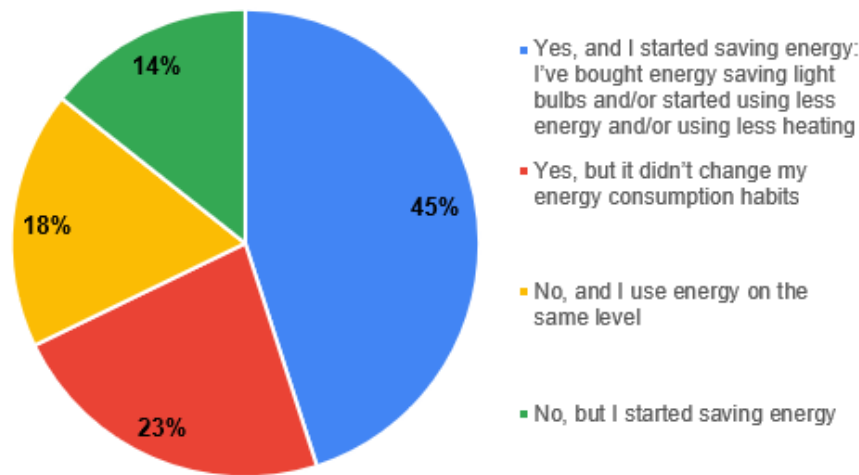
Figure 26. How much time people usually spend deciding which product they want to buy.



Source: own research.

The next question in the survey was about the impact of the energy crisis and the measures people take to decrease their expenses connected with it. Overall, 68 percent of people can tell that they have noticed the effect of the energy crisis, and 32 percent of people say that they do not see the changes. 59 percent of people shifted their energy consumption habits to save more energy, and 41 percent of people the energy at the same level as before. It is a direct confirmation of Hypothesis 1 as it states that 45 percent of people who were affected started saving energy and 14 percent of those who were not affected by the energy crisis still started saving energy, the graphical representation is in **Figure 27**.

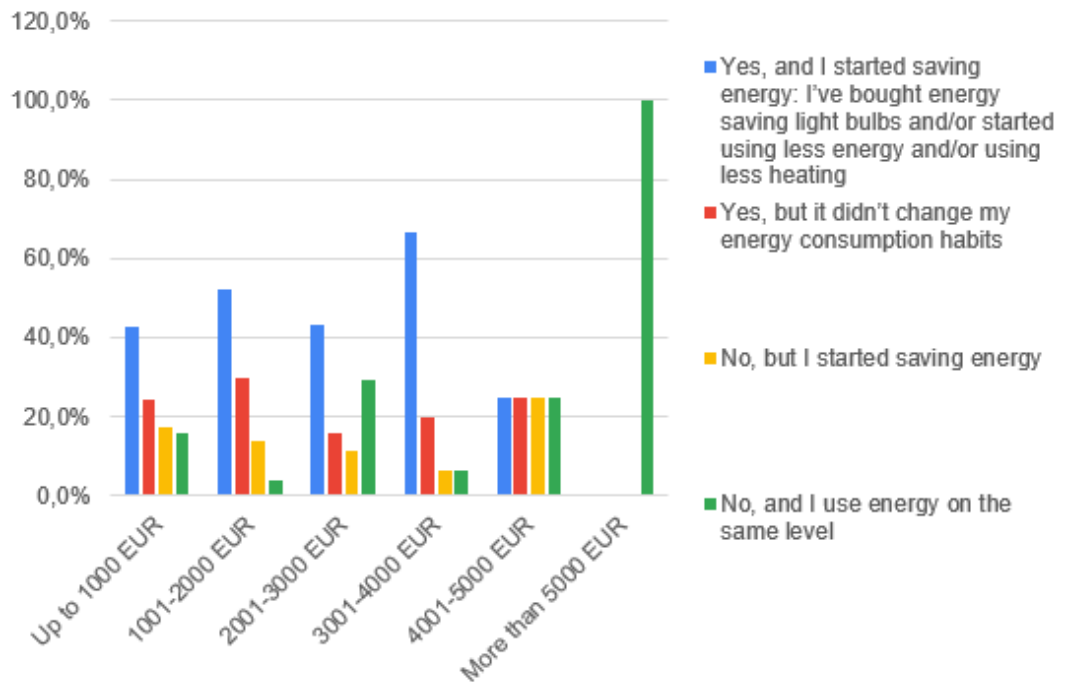
Figure 27. The impact of the energy crisis on interviewed people.



Source: own research.

Figure 28 shows the reaction of people with different incomes to the energy crisis. Most of the people in all income groups felt the impact and started saving energy this year. The group of people with an income of more than five thousand euros per month is not representative, as only one person participated in the survey with this income. It demonstrates that the energy crisis influences all the people despite their level of income which is another pro-argument for Hypothesis 1.

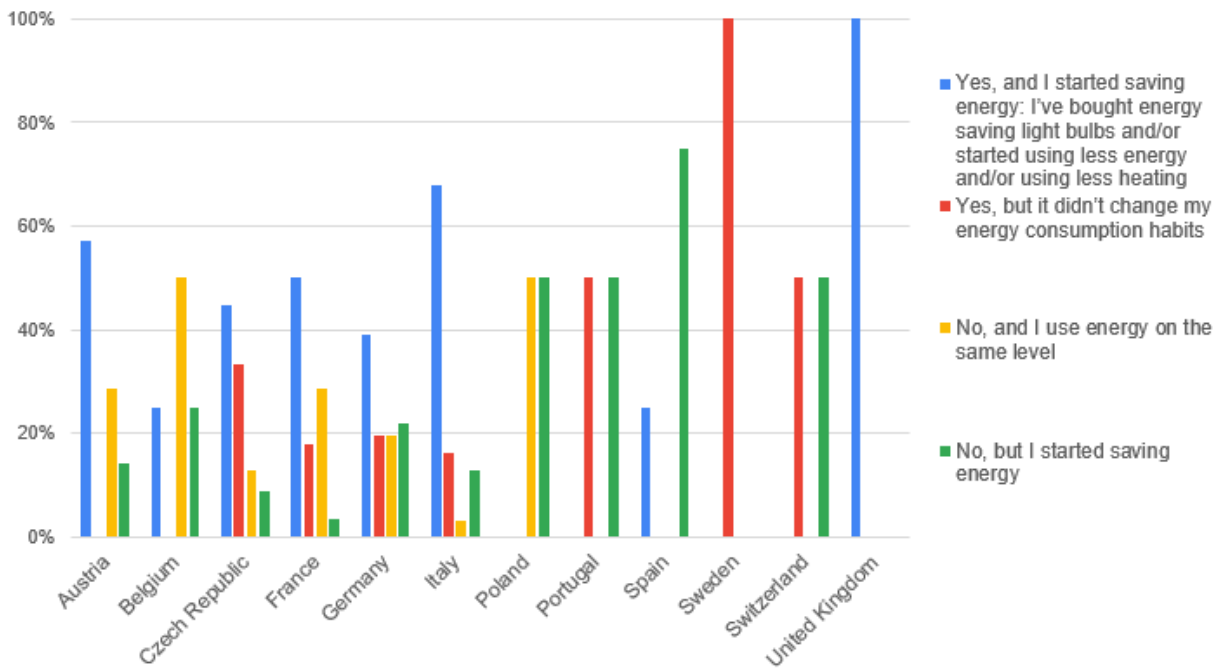
Figure 28. The impact of the energy crisis on people with different incomes.



Source: own research.

To discover the consequences of the energy crisis on different countries, data from the survey were analyzed. Residents of most countries were affected by the energy crisis. The most precise data is from four countries – the Czech Republic, France, Germany, and Italy, as most of the interviewed people were living there. Residents of Italy implemented some measures to reduce the impact of high energy prices more often than in other countries. In the Czech Republic, more people were affected, but fewer people took some measures regarding decreasing the costs of energy. France was affected a bit more than Germany, but still, most of the residents were affected. The trend in other countries says that they were also affected, except Poland, Spain, and Sweden (the information cannot represent the whole situation in these countries). This analysis shows that the whole European Union is under the influence of an energy crisis and no country can avoid it at all, it can be seen in **Figure 29**.

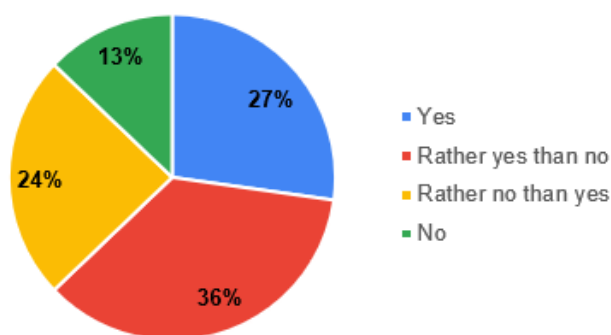
Figure 29. The impact of the energy crisis on different countries.



Source: own research.

Soaring prices for energy and high inflation can induce some people to buy more goods on sale, especially those with lower income, so they can hold their living standards. The study and **Figure 30** show that almost two-thirds (63 percent) of people are more likely to purchase products on sale even if they did not plan to, it is unclear whether people do it due to unstable times, however, it is still a high percentage which can be a secondary argument for the Hypothesis 1. Correlation with income was not found (see **Appendix A, Figure 50**).

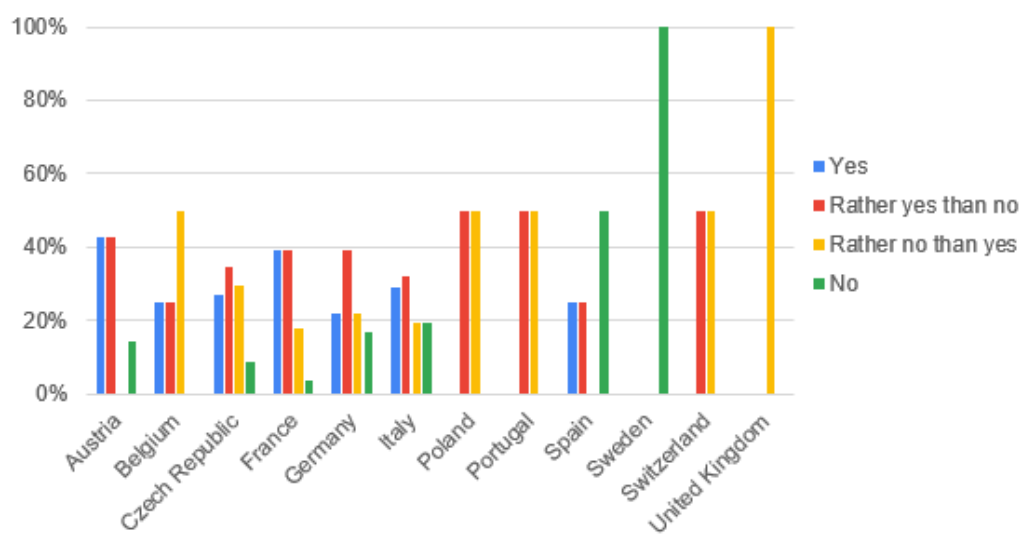
Figure 30. The study of how people are more likely to purchase goods on sale.



Source: own research.

Figure 31 shows the distribution of people’s answers by the country where they are living. Residents of Austria, the Czech Republic, France, and Italy are more likely to purchase goods on sale than residents of other countries. However, people asked from Belgium and Spain (in each four people interviewed), Sweden and the United Kingdom (in each one person) will not buy goods on sale if they did not plan to buy them before they saw a sale.

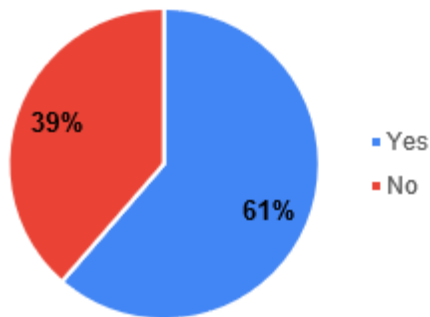
Figure 31. The intention of people to buy goods on sale by country.



Source: own research.

As a consequence of high inflation and the energy crisis people’s purchasing power most likely will decrease and people can delay larger purchases like electronics, property, and vehicles because they are uncertain about their financial situation and in general, and hope that it will improve in the future, and right now it is better to save money. More than 60 percent of the people postponed one of the purchases at least once recently (see **Figure 32**). It is one of the consequences of turbulent times and one of the methods to spend less money, it is another argument for proving Hypothesis 1 right.

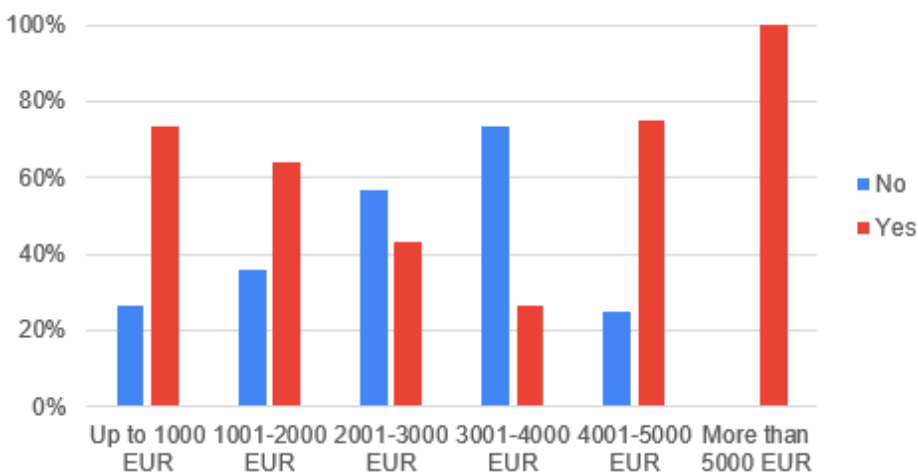
Figure 32. Percentage of people who postponed a purchasing decision at least once recently.



Source: own research.

People’s responses were put in order depending on their income. The results of this analysis can be divided into two parts. The first part with people’s income up to four thousand euros shows that with increasing income, people tend to delay their purchases less often than people with lower income. Secondly, people with a monthly income of more than four thousand euros tend to delay larger purchases more often, however, this group contains only five people, so analysis from this survey of this group cannot represent purchasing patterns of all the people belonging to the group. If more people participated in the survey, the results could be different, so the results from this group cannot be taken for sure. The graphical representation is in **Figure 33**.

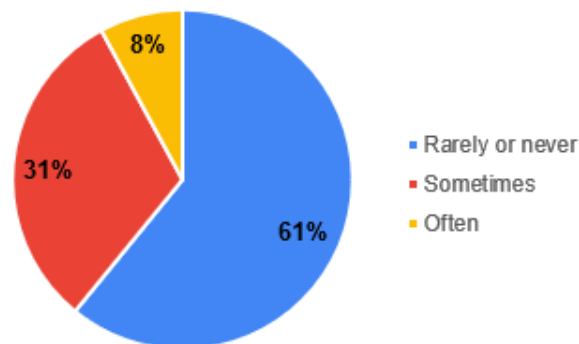
Figure 33. Percentage of people who postponed a purchasing decision divided by their income.



Source: own research.

Uncertainty about the future and complicated market situations are leading to saving behavior patterns in society. However, a complicated situation in the country or the EU does not mean that people's pure desire is purchasing fewer goods or goods with lower quality. In case customers are not financially ready yet to make a purchase or are unsure for some reason, companies launched the 'buy now, pay later' service or installment payment plan to increase sales. This analysis shows if it is successful (see **Figure 34**). Most of the people do not usually use these options (61 percent), almost a third of the people use them sometimes and only 8 percent of respondents use them often. At first sight, it can seem like it is not a quite widespread practice, however, it can allow companies to increase their sales, as in total 39 percent of people use it with different frequency. One of the reasons why people are not using these options can be that they are unsure about their financial situation if their energy bills will increase even more or whether inflation will become higher.

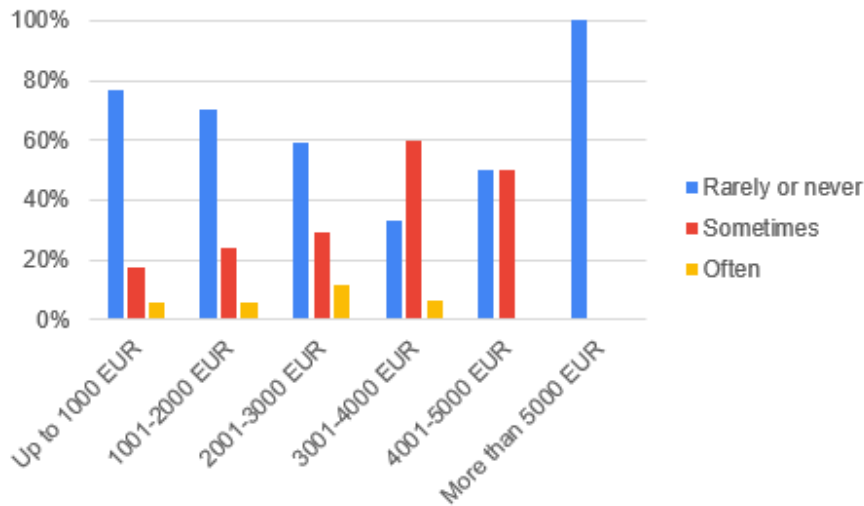
Figure 34. Frequency of using 'buy now, pay later' and installment payment options.



Source: own research.

Additional analysis and **Figure 35** show that people with lower income usually use these options even less often, which suggests that the general financial situation can be a reason for postponing the purchase as people who have less money less often use these options. It can also indicate that people are cautious about their future financial situation and prefer to pay immediately for their purchases. It can also be an indicator that even if the debt is divided into parts, people do not want to spend their money out of the intention to save.

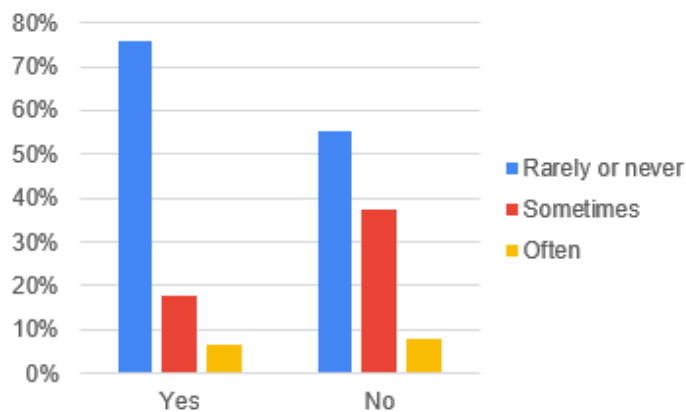
Figure 35. Frequency of using the 'buy now, pay later' option installment payments depending on people's income.



Source: own research.

Figure 36 shows the percentage of people who use or do not use these functions and postponed a large purchasing decision. It confirms that people prefer to pay for their purchases immediately because of increased anxiety about the financial situation recently triggered by high inflation and the energy crisis in the EU. Consumer behavior now stands for budgeting and not creating additional debts, it has to be taken into consideration by sellers, and it is another fact that proves hypothesis 1 right.

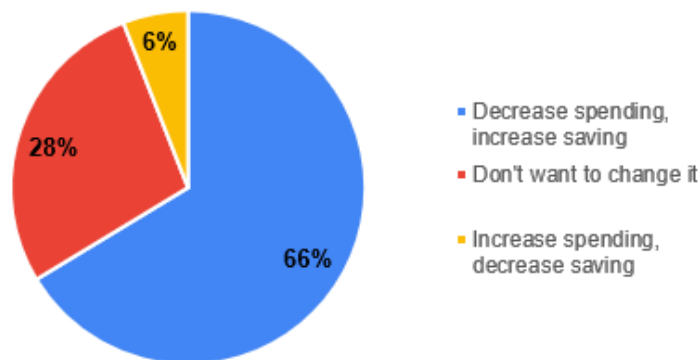
Figure 36. Percentage of people not using 'buy now, pay later' and installment payment options and who postponed a purchasing decision recently.



Source: own research.

Analysis of people’s intention to change or not change their spending behavior shows that two-thirds of people want to decrease their spending to have more savings. 28 percent of people do not want to change their spending behavior and only 6 percent want to spend more money. It can be a consequence of COVID-19 when people lost their jobs or had fewer working hours, hence, got paid less, or decreased purchasing power due to high inflation when people have to spend more money to buy the same goods or energy crisis which leads to the fact that people have to spend a higher percentage of their monthly income on energy. Inflation affected 67 percent of people and the energy crisis affected 68 percent of people, which were probably a more vulnerable group of inhabitants to this high inflation – two-thirds of residents. Despite the fact that the decision to decrease spending can be for different reasons, anyway, it is direct evidence for Hypothesis 1 that during turbulent times people tend to spend less. See **Figure 37**.

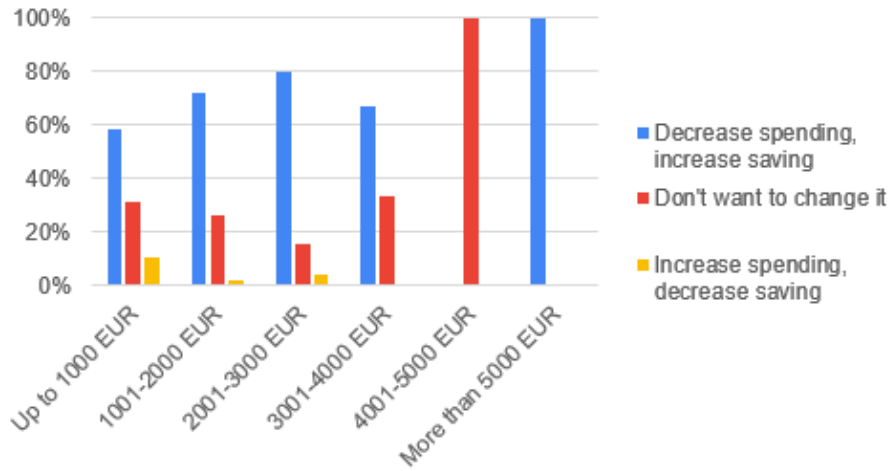
Figure 37. People's intention to change or not change their spending behavior.



Source: own research.

This research shows that there is no clear dependence on income – all people want to save more money despite their income. It is probably a result of a series of obstacles European residents faced in the last couple of years. It affected all the people but to a different extent, as only one group who do not want to change their spending behavior, which, however, is not representative as only five people participated in the survey with income of 4000-5000 euros per month (see **Figure 38**). None of the particular groups wanted to spend more, which signifies that only some independent people want to spend more. This proves one more time that people tend to spend less during challenging times.

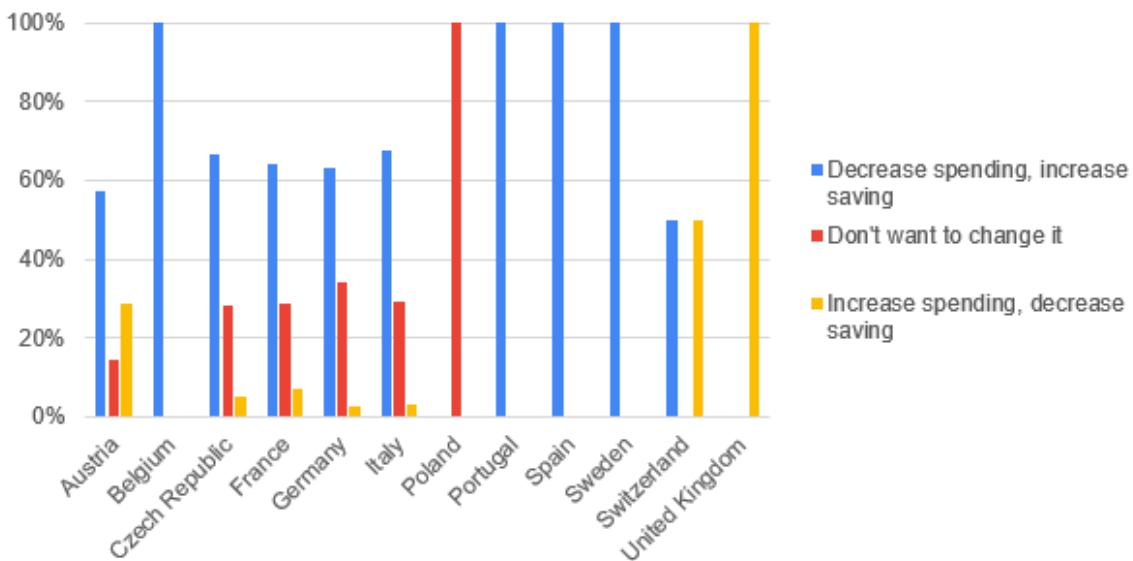
Figure 38. Distribution of people wanting to change their spending behavior by their income.



Source: own research.

The distribution by countries (see **Figure 39**) shows that residents of most of the countries want to shift their spending behavior to spend less. However, residents of Austria, Poland, Switzerland, and the UK were affected less because the rate of people wanting to decrease their degree of spending is less than in other countries. It can be caused by several factors, such as the national government's response to particular challenges, and the stability of the economy of their country. However, most countries want to spend less money.

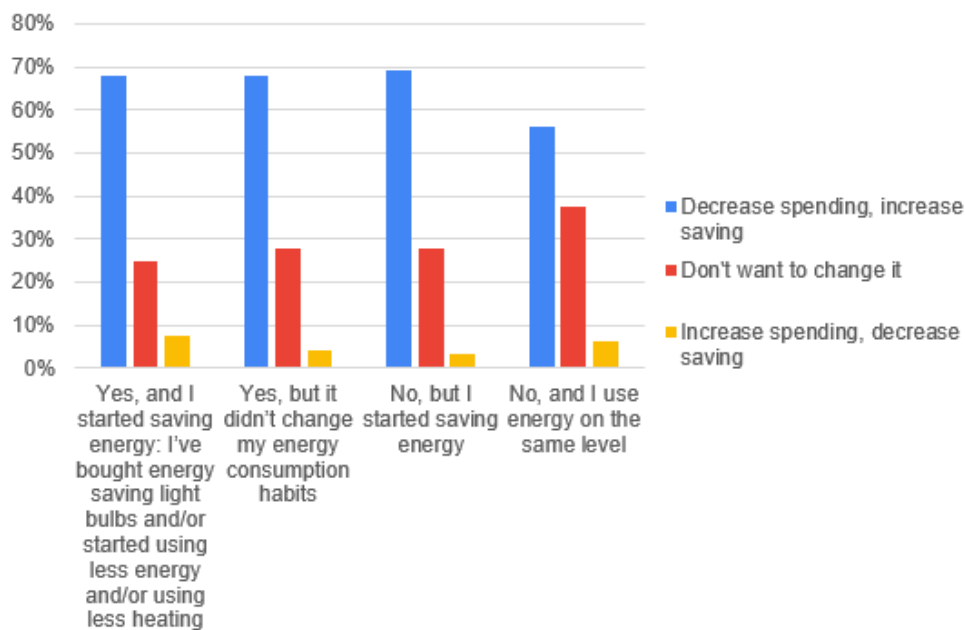
Figure 39. People who want to change their spending behavior by countries.



Source: own research.

The relationship between people who were affected by the energy crisis and their willingness to change or not their purchasing behavior is represented in **Figure 40**. It almost does not relate to each other, only people who were not affected by the energy crisis and use energy at the same level usually want to decrease their spending less often than others. People who were not affected by the energy crisis usually do not want to change their spending behavior as they have no premises for doing so. However, those who were affected by the energy crisis and have already seen the consequences generally prefer to shift their spending habits to save more money more often. Still, their willingness to change their spending behavior and the scale of saving can differ as people having their homes heated from the use of electricity are affected more severely than others. This is a natural people's reaction – those who do not have a reason to save, are not going to save.

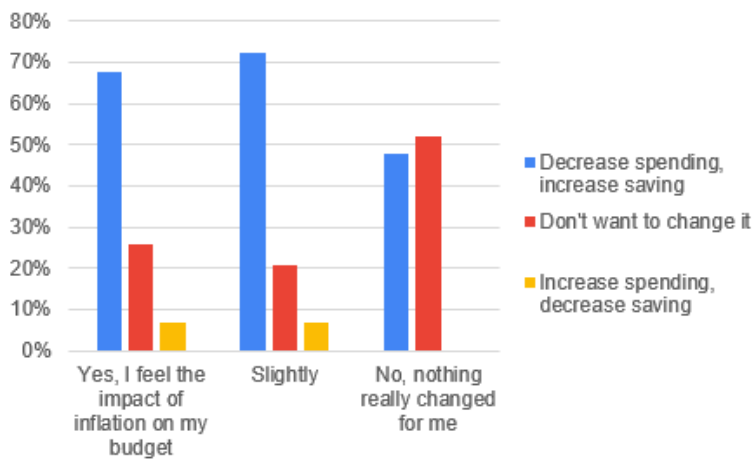
Figure 40. The relationship between people affected by the energy crisis and their desire to change spending behavior.



Source: own research.

A similar analysis was conducted with the influence of inflation and the results are almost the same – people affected by high inflation have the desire to save more often than those who did not have the impact of inflation on their budget. Illustrated in **Figure 41**.

Figure 41. The relationship between people who were affected by inflation and their desire to change spending behavior.

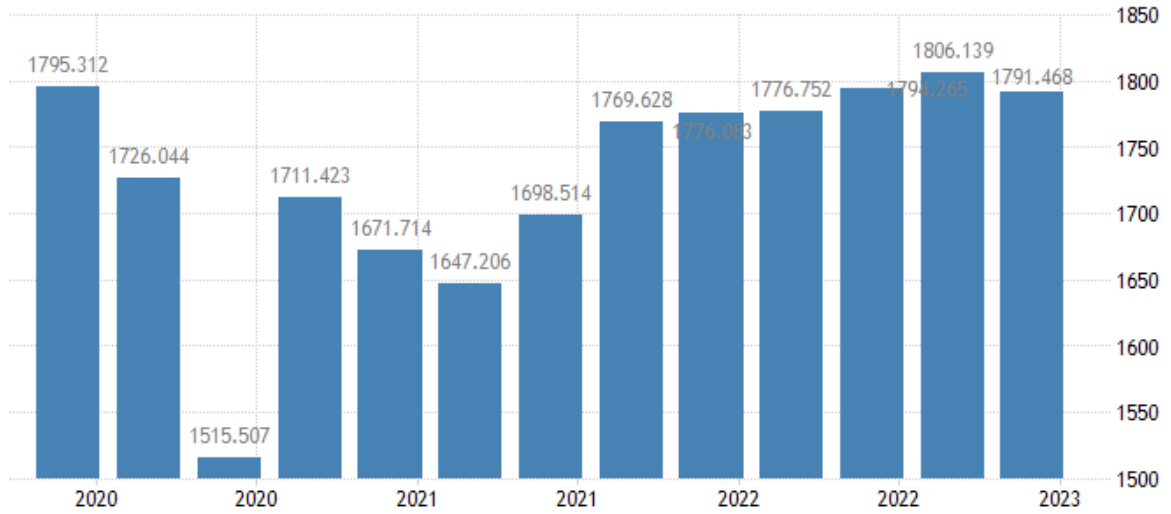


Source: own research.

3.2 Consumer expenditure and e-commerce data analysis

Consumer expenditure is analyzed with the purpose of proving wrong or right the hypotheses. First of all, general consumer expenditure has to be analyzed starting with the beginning of 2020 before the pandemic started. In the 2019Q4 consumer expenditure was 1795,312 Billion EUR. In the first quarter of 2020, consumer expenditure was 1726,044 billion EUR while in the second quarter of 2020, it decreased by 210 billion EUR which is around 12 percent. In the third quarter, the situation stabilized, and expenditure was roughly the same as in the first quarter, however, after that it started decreasing for two quarters which can be explained by the fact that in 2020Q3 most of the lockdown restrictions were relaxed and people wanted to buy goods which they could not buy for some months. However, next two quarters it was again decreasing, most likely because people wanted to save more money because some people lost their jobs and had fewer working hours during the lockdown in 2020Q2. Starting with 2021Q2 people began spending more money and already in 2021Q3 consumer expenditure was almost at the pre-pandemic level. During 2021 and 2022 years, according to Eurostat, consumer expenditure was at the pre-pandemic level and was pretty stable, even reaching its maximum in 2022Q3, it is illustrated in **Figure 42** (*European Union Consumer Spending*, no date).

Figure 42. Consumer expenditure in European Union 12/2019-12/2022 (in billion EUR).



Source: European Union Consumer Spending, no date.

To test the hypotheses, the study of the actual consumer expenditure level has to be done, but not only the actual consumer spending level but also the inflation has to be taken into consideration, which was different during these years and months and its highs affected the actual consumer spending. Spearman's correlation coefficient was used because it measures the strength and direction of association between two ranked variables and how they covary. It was chosen as this method works not only with a linear relationship between variables but also with monotonic functions (Ramzai, 2020). Spearman's correlation coefficient was used to discover the relationship between inflation and consumer expenditure. **Figure 43** is a formula of the Spearman correlation coefficient formula.

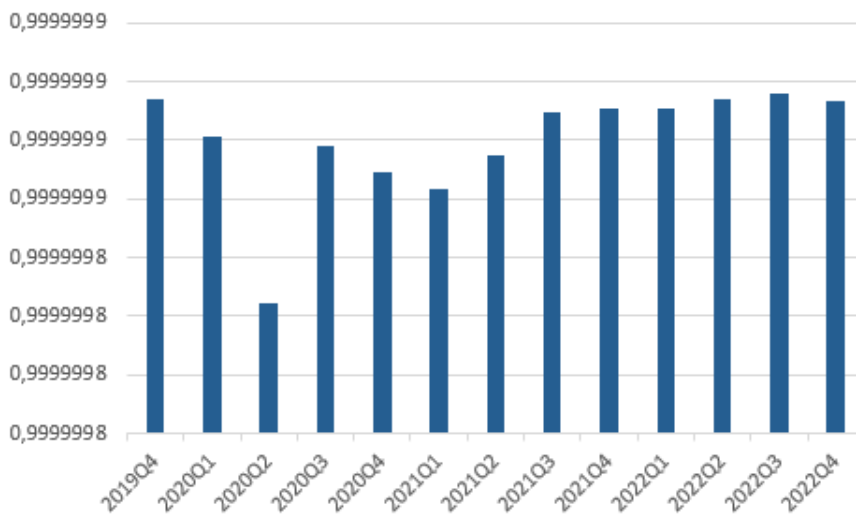
Figure 43. Spearman correlation coefficient formula.

$$r_R = 1 - \frac{6\sum_i d_i^2}{n(n^2 - 1)}$$

Source: Bhat, no date.

The test shows the results remarkably close to +1, the lowest value was in 2020Q2, and the highest was during 2022Q3 (see calculations in **Appendix B, Figure 51**). Detailed calculations can be found in the additional file **Appendix B1**. A graphical representation of the results is in **Figure 44**.

Figure 44. Result of analysis of consumer expenditure 2019Q4-2022Q4 using Spearman's method.

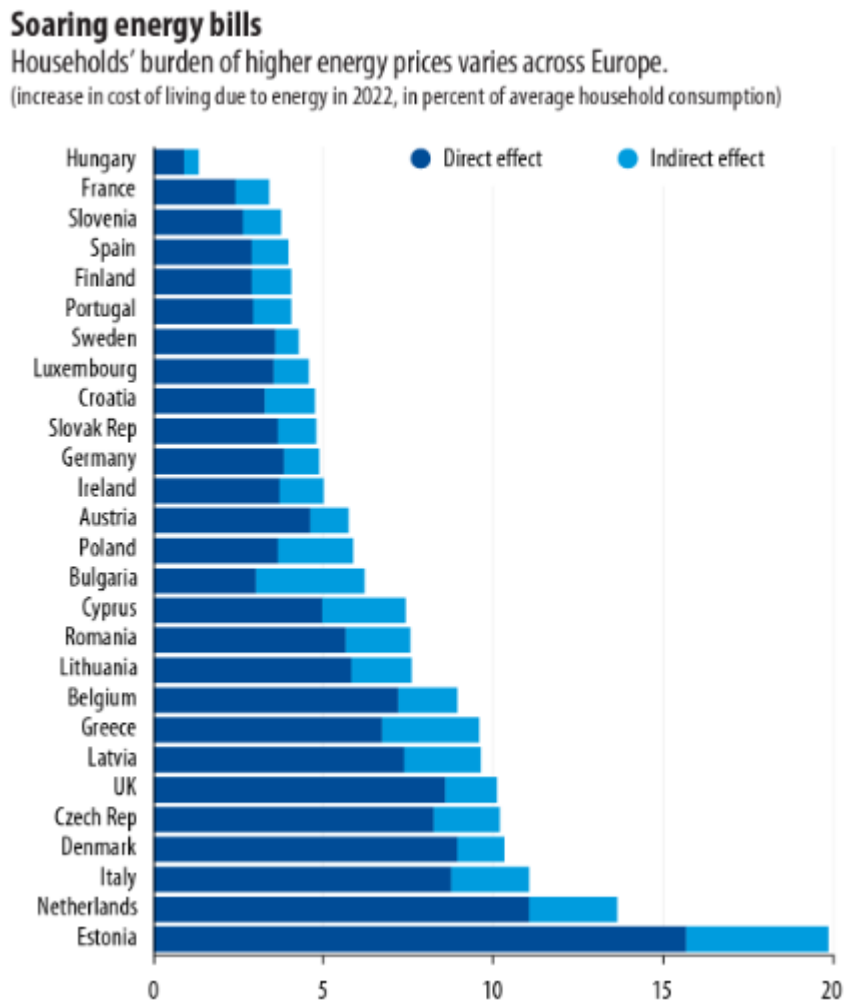


Source: own research.

Results of the Spearman correlation coefficient show that the ρ value coefficient is close to +1. It means that there is a strong positive relationship between consumer expenditure and inflation. However, it does not mean that inflation is the cause of increased consumer expenditure. According to PwC analysis of their survey conducted in December 2022, half of the consumers are extremely or overly concerned about their personal financial situation and 96 percent of consumers want to decrease their spending, 42 percent of consumers expect that they have to significantly decrease their total spendings (Durand-Hayes *et al.*, 2023). Consumer expenditure during the third quarter of 2022 reached the historical maximum, which may be caused by the increase in tourism. According to the Eurostat, tourism in Europe in 2022 was close to the pre-pandemic 2019 year, the difference was -5,6 percent. Most of the tourist flow was in the second half of the year, it can be assumed that tourism was one of the reasons for the increase in consumer consumption expenditure in 2022 (*Tourism in 2022 approaches pre-pandemic levels*, 2023). Another reason for the increase in consumer expenditure can be an increase in energy prices. The cost of energy increased in all European countries differently, but in most of the countries, it affected the cost of living by 5 percent or more, six countries – by 10 percent and more, it is represented in **Figure 45** (Celasun and Iakova, 2022). Households that expect an increase in inflation soon usually purchase durable goods by 8 percent more often (Acunto, Hoang and Weber, 2015). It was confirmed by the European Central Bank which reported that in the second half of the year, demand for durable goods increased, which caused an increase in

consumer expenditure as durable goods are usually more expensive (Bobasu and Gareis, 2022). Taking these factors all together they could have an impact on total consumer expenditure in Europe in 2022.

Figure 45. Increase in cost of living due to energy crisis in 2022.



Source: Celasun and Iakova, 2022.

Testing hypothesis 2 requires additional analysis of e-commerce in Europe. Retail e-commerce revenue (Beyrouthy, 2022) and consumer expenditure (*European Union Consumer Spending*, no date) were analyzed to compare the changes in both e-commerce retail in Europe and total consumer expenditure to test Hypothesis 2 and discover whether people started shopping online more often or they shifted part of their spendings online and it did not affect the total spendings. **Table 1** contains the conducted analysis, and it shows that in 2020 total consumer expenditure decreased by 7 percent, but e-commerce retail

increased by 31 percent which proves that people shifted some of their spending to online shopping. The share of e-commerce in total consumer expenditure in 2019 was 6,7 percent which increased by 2020 to 9,5 percent, in 2021 – 10,6 percent, and in 2022 it was 11,5 percent. It proves that Hypothesis 2 failed to reject because people indeed started shopping online more often, nonetheless, it did not affect the total consumer expenditure, which means that people shifted part of their purchases from offline to online.

Table 1. Comparison of change in e-commerce retail and consumer expenditure by year.

Year	E-commerce retail	Change in %	Total consumer expenditure	Change in % (spending)
2019	480,4	9%	7133,755	2%
2020	629,5	31%	6624,688	-7%
2021	731,7	16%	6891,431	4%
2022	827,9	13%	7168,624	4%
2018	439,6		7026,04	

Source: own research.

4 Results and Discussion

This research aimed to analyze two main hypotheses:

- Hypothesis 1: People will spend less during turbulent times of economic uncertainty in 2022 (e.g., high inflation, energy crisis).
- Hypothesis 2: People started shopping online more often after the COVID-19 pandemic.

Two other minor trends were analyzed: the trend for environment-friendly goods and the trend for promoting products on social media and how common these trends are.

Hypothesis 1 analysis started with the review of current academic research that supports the hypothesis, then the survey was conducted to discover consumers' reactions to current challenging times, the results state that most people were affected by both inflation and the energy crisis and most of the people want to spend less due to these reasons. The data from the survey conflicts with the data about consumer consumption expenditure in Europe which declares that during 2022 consumer spending level did not decrease and was nearly on the same level as before the pandemic, reaching its historical maximum in 2022Q3. However, the Spearman correlation coefficient was positive and very close to +1 which denotes that consumer expenditure has a strong positive relationship with inflation and during high inflation times (2022Q3 – inflation is 10,9 percent) people may spend more because of their fear of even higher inflation which leads to the minor tendency for purchasing durable goods in the second half of 2022. Tourism in the second half of the year can also be a reason for such high total expenditure because it was the first year after the pandemic when most of the pandemic-related restrictions were removed. The energy crisis was another cause of increased consumer expenditure because residents of most countries had to pay at least 5 percent more for energy.

Tourism was more of a kind of psychological need for consumers who were locked up by restrictions for a long time and was not directly related to the turbulent times, just as a consequence; unprecedentedly high inflation, the trend for durable goods, and unexpected energy crisis were direct reasons why consumers spent more. Spending more than expected is a normal, usual cause for spending less in the future. Hypothesis 1 was supported by theoretical facts, answers from the own survey, and a survey conducted by PwC, however, in this particular case it was not supported by real consumer consumption. However, both

surveys were held at the end of 2022/at the beginning of 2023 which means that consumers' intention to spend less can relate only to 2023. Still, hypothesis 1 was supported only partially by people's honest intention to spend less, but the real data about consumption makes hypothesis 1 be rejected.

However, even though the process of proving this hypothesis was controversial as most of the facts were supporting hypothesis 1, the fact that consumers spent more during 2022 has a positive effect, because spending money by consumers and businesses is what forces the economy to grow. It will lead to emerging of new working places, faster recovery, and general economic wealth.

The limitation during the test of hypothesis 1 was the fact that Eurostat does not publish detailed data about consumer expenditure of the current year immediately, which is why the exact reasons for increased expenditure were unknown, only assumptions were made.

Hypothesis 2 was also supported by academic research, and it has shown that e-commerce revenues had a significant increase during 2020 and the increase in 2021 and 2022 was still more significant than before the pandemic. This fact strongly supports Hypothesis 2. The results of the survey showed that more than half of the people started shopping online more often during and after the pandemic, and most people combine online and offline shopping. The last analysis was a comparison of the increase in online shopping and total consumer consumption. The result showed that the positive change in e-commerce revenues in 2020 was more than 30 percent and the increase in 2021 and 2022 was higher than the increase during the years before the pandemic (16 and 13 percent respectively). Also, the increase in e-commerce was even though the total consumer expenditure in 2020 and 2021 had decreased in comparison to 2019. It means that online shopping does not depend on consumer expenditure, and it was increasing recently, especially during and after the pandemic, which demonstrates that people shifted some of their regular purchases from offline to online. All these facts above prove that Hypothesis 2 failed to be rejected.

Hypothesis 2, however, did not affect consumer expenditure which cannot lead to the direct effect of economic growth, it can still create more working places, as more delivery workers will be demanded, which can help people to get a job or a side job. Still, there is a possibility that the trend can change in the future and online shopping will cause more expenditure.

Other minor trends were analyzed – the trend for environment-friendly goods and the trend for content marketing and how common is it. The results were gained totally through

the survey and people's answers say that most of them generally would prefer to buy eco-friendly and sustainable goods (74 percent), but more than half of the people who support do it only if the price is nearly the same as for non-sustainable goods. It can be caused by the fact of current uncertain financial times. People prefer to buy something cheaper in some cases when it is not critically conflicts with their values. It leads to a different insight – people's intention to buy environment-friendly goods is not strong enough to prefer it in all cases. However, it can also depend on the severity of the financial crisis. But the actual impact of this trend on the European market and the European climate is hard to overestimate. If people will be more conscious about what they are buying and will reduce various kinds of waste, it will have a strongly positive impact on the market, because it will reduce the total cost of recycling waste. Concerning the purchases of goods that consumers saw on social media – most people do purchase goods that they have seen on social media from time to time, but still, this trend is relatively new to be expanded to all consumer groups. It can and will have a positive result on the market because businesses have another way of marketing and promoting their brand and products.

5 Conclusion

The results of current research show that current times are turbulent and challenging and it affects every person and every business as the European market is under the influence of several difficulties that the European economy is facing. It includes the consequences of the pandemic, high inflation, and the recently emerged energy crisis. The population of the European Union is unsure about their financial situation which leads to different reactions from consumers. The current situation is unique in a way that the population has never faced such circumstances of this severity and in this order in the modern world. The best way to understand better consumer psychology and consumer needs is to carefully observe every, even minor, consumer tendency. Businesses are the first ones who have to understand consumer intentions to react on time to their requests, even if they can seem unlogic at the first sight. One of the consumers' requests is online shopping. More people use an option of online shopping for different reasons, but this trend is evolving faster than ever before, which means that businesses have to adapt and provide the opportunity for online purchases as it is a new must-have.

Further research can be conducted after Eurostat will publish the holistic detailed overview of categories on which consumers spend the most. This possible research will help economists to understand what the reasons for increased consumer expenditure during turbulent times can be.

6 References

- 15 Customer Behavior Trends Emerging This Year* (2021). Available at: <https://www.forbes.com/sites/forbesbusinesscouncil/2021/03/15/15-customer-behavior-trends-emerging-this-year/?sh=2a3691f614d9> (Accessed: 24 October 2022).
- Acunto, F.D.', Hoang, D. and Weber, M. (2015) 'Inflation Expectations and Consumption Expenditure *'. Available at: https://economics.nd.edu/assets/178277/paper_07102015.pdf (Accessed: 14 March 2023).
- Amadeo, K. (2022) *5 Determinants of Demand With Examples and Formula*. Available at: <https://www.thebalancemoney.com/five-determinants-of-demand-with-examples-and-formula-3305706> (Accessed: 24 February 2023).
- Assael, H. (1974) 'Product classification and the theory of consumer behavior', *Journal of the Academy of Marketing Science*. [Preprint].
- Baczynska, G. (2021) *EU study finds COVID-19 has already wiped out 6 million jobs | Reuters*. Available at: <https://www.reuters.com/article/us-health-coronavirus-eu-jobs-idUSKBN2B31J3> (Accessed: 22 February 2023).
- Baldocchi, M. (2022) *The 4 types of consumer behavior | LinkedIn*. Available at: <https://www.linkedin.com/pulse/4-types-consumer-behavior-marco-baldocchi/> (Accessed: 24 February 2023).
- Belk, R., Painter, J. and Semenik, R. (1981) 'Preferred Solutions to the Energy Crisis as a Function of Causal Attributions', *Journal of Consumer Research*, 8(3), p. 306. Available at: <https://doi.org/10.1086/208869>.
- Bettman, J.R. (1986) 'Consumer Psychology', *Annual Review of Psychology*, 37(1), pp. 257–289. Available at: <https://doi.org/10.1146/annurev.ps.37.020186.001353>.
- Beyrouthy, L. (2022) *Retail e-commerce revenue in Europe from 2017 to 2025*. Available at: <https://www.statista.com/forecasts/715663/e-commerce-revenue-forecast-in-europe> (Accessed: 22 February 2023).
- Bhat, A. (no date) *Spearman correlation coefficient: Formula + Calculation*. Available at: <https://www.questionpro.com/blog/spearmans-rank-coefficient-of-correlation/> (Accessed: 13 March 2023).
- Blake, D. (1999) 'Annuity Markets: Problems and Solutions.', *The Geneva Papers on Risk and Insurance. Issues and Practice*, 24(3), pp. 358–375. Available at: <http://www.jstor.org/stable/41952484>. (Accessed: 14 February 2023).

Bobasu, A. and Gareis, J. (2022) 'The impact of higher energy prices on services and goods consumption in the euro area', *Journal of Monetary Economics* [Preprint]. Available at: <https://doi.org/xx.xxxx/xxxxxx>.

Brown, A. (2006) 'Chapter 6 Class Notes'. Available at: <http://www1.udel.edu/alex/chapt6.html> (Accessed: 5 February 2023).

Building a value-based budget (no date). Available at: <https://www.truist.com/money-mindset/principles/budgeting-by-values/building-a-values-based-budget> (Accessed: 24 February 2023).

Burger, A.E. and Mudd, D.R. (1977) *The FOMC in 1976: Progress Against Inflation*. Available at: <https://core.ac.uk/download/pdf/6958728.pdf> (Accessed: 15 February 2023).

Celasun, O. and Iakova, D. (2022) *Helping Europe's Households*. Available at: <https://www.imf.org/en/Publications/fandd/issues/2022/12/helping-europe-households>-Celasun-Iakova (Accessed: 14 March 2023).

Cherry, K. (2021) *What Is Consumer Psychology?*, <https://www.verywellmind.com/what-is-consumer-psychology-2794899>. Available at: <https://www.verywellmind.com/what-is-consumer-psychology-2794899> (Accessed: 23 October 2022).

Chevalier, S. (2022) *Retail e-commerce sales worldwide from 2014 to 2026*. Available at: <https://www.statista.com/statistics/379046/worldwide-retail-e-commerce-sales/> (Accessed: 4 February 2023).

Clark, M. (2021) *Head of Instagram says Instagram is no longer a photo sharing app*. Available at: <https://www.theverge.com/2021/6/30/22557942/instagram-no-longer-photo-app-video-entertainment-focus> (Accessed: 24 February 2023).

Common charger: EU ministers give final approval to one-size-fits-all charging port - Consilium (2022). Available at: <https://www.consilium.europa.eu/en/press/press-releases/2022/10/24/common-charger-eu-ministers-give-final-approval-to-one-size-fits-all-charging-port/> (Accessed: 20 February 2023).

Coping with the crisis (no date). Available at: https://energy.ec.europa.eu/topics/markets-and-consumers/action-and-measures-energy-prices/coping-crisis_en (Accessed: 19 February 2023).

Countries in the EU and EEA - GOV.UK (no date). Available at: <https://www.gov.uk/eu-eea> (Accessed: 21 February 2023).

Cucu, E. (2022) *Instagram Reels Insights: An Analysis of 352.612 Instagram Reels*. Available at: <https://www.socialinsider.io/blog/instagram-reels-insights/#2> (Accessed: 4 February 2023).

Curry, D. (2023) *Most Popular Apps (2023)*. Available at: <https://www.businessofapps.com/data/most-popular-apps/> (Accessed: 24 February 2023).

Digital economy and society statistics - households and individuals (2022). Available at: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Digital_economy_and_society_statistics_-_households_and_individuals (Accessed: 14 March 2023).

Draxl, L. (2022) *Understanding inflation and its effects on consumer behavior*.

Durand-Hayes, S. et al. (2023) *Global Consumer Insights Survey 2023: Frictionless retail and other new shopping trends | PwC*. Available at: <https://www.pwc.com/gx/en/industries/consumer-markets/consumer-insights-survey.html> (Accessed: 14 March 2023).

E-commerce statistics for individuals (2022). Available at: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=E-commerce_statistics_for_individuals (Accessed: 5 February 2023).

EU action to address the energy crisis (no date). Available at: https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/eu-action-address-energy-crisis_en (Accessed: 18 February 2023).

EU country profiles | European Union (no date). Available at: https://european-union.europa.eu/principles-countries-history/country-profiles_en (Accessed: 19 February 2023).

Europe B2C e-Commerce Market Opportunities Report 2022 (2022). Available at: <https://www.businesswire.com/news/home/20221019005857/en/Europe-B2C-e-Commerce-Market-Opportunities-Report-2022-Market-is-Expected-to-Grow-by-14.96-to-Reach-1010.0-Billion-in-2022---Forecasts-to-2026---ResearchAndMarkets.com#:~:text=The%20B2C%20market%20in%20Europe,Europe%20promises%20to%20be%20attractive.> (Accessed: 5 February 2023).

European Union Consumer Spending (no date). Available at: <https://tradingeconomics.com/european-union/consumer-spending> (Accessed: 9 March 2023).

Gordon, J. (2022) *Law of Supply and Demand - Explained - The Business Professor, LLC*. Available at: https://thebusinessprofessor.com/en_US/economic-analysis-monetary-policy/law-of-supply-and-demand-definition (Accessed: 28 February 2023).

Grayson, K.A., Hibbard, J.D. and Kotler, P. (no date) *Marketing - The marketing actors*. Available at: <https://www.britannica.com/topic/marketing/The-marketing-actors> (Accessed: 24 February 2023).

Hass, J.W., Bagley, G.S. and Rogers, R.W. (1975) 'Coping with the energy crisis: Effects of fear appeals upon attitudes toward energy consumption.', *Journal of Applied Psychology*, 60(6), pp. 754–756. Available at: <https://doi.org/10.1037/0021-9010.60.6.754>.

Hopper, E. (2020) 'Maslow's Hierarchy of Needs Explained'. Available at: http://www.christianworldmedia.com/client/docs/603_1585079540_17.pdf (Accessed: 24 February 2023).

Impact of COVID-19 on employment income - advanced estimates (no date). Available at: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Impact_of_COVID-19_on_employment_income_-_advanced_estimates (Accessed: 22 February 2023).

Inflation rate of the European Union 1997-2023 (2023). Available at: <https://www.statista.com/statistics/685943/cpi-inflation-rate-europe/> (Accessed: 9 March 2023).

International Monetary Fund (2018) *World Economic Outlook: Challenges to Steady Growth*. Washington, DC.

Jin, C. (2018) 'Research on Consumers' Delayed Purchase', in *Proceedings of the 2018 2nd International Conference on Education Science and Economic Management (ICESEM 2018)*. Paris, France: Atlantis Press. Available at: <https://doi.org/10.2991/icesem-18.2018.213>.

JP Arnaud-Marquez (2022) *Understanding the 4 types of consumer purchasing behavior*. Available at: <https://www.loopreturns.com/blog/4-types-consumer-purchasing-behavior/> (Accessed: 24 February 2023).

Juster, F.T. *et al.* (1972) 'Inflation and the Consumer', *Brookings Papers on Economic Activity*, 1972(1), p. 71. Available at: <https://doi.org/10.2307/2534115>.

Kenton, W. (2022) *European Economic Area (EEA) Agreement Definition*. Available at: <https://www.investopedia.com/terms/e/european-economic-area-eea-agreement.asp> (Accessed: 19 February 2023).

- Lingqvist, O., Nordigården, D. and Vainberg, G. (2021) *Beyond COVID-19: The new consumer behavior is sticking in the tissue industry*. Available at: <https://www.mckinsey.com/industries/paper-forest-products-and-packaging/our-insights/beyond-covid-19-the-new-consumer-behavior-is-sticking-in-the-tissue-industry> (Accessed: 5 February 2023).
- Mahr, N. (2022) *Determinants of Demand | Overview, Shifters & Examples*. Available at: <https://study.com/academy/lesson/determinants-demand-overview-shifters-examples.html> (Accessed: 24 February 2023).
- Malmendier, U. and Nagel, S. (2016) ‘Learning from Inflation Experiences’, *The Quarterly Journal of Economics*, 131(1), pp. 53–87. Available at: <https://doi.org/10.1093/qje/qjv037>.
- Marshall, A. (1890) *Principles of Economics. An introductory volume*. 8th edn, *The Online Library of Liberty*. 8th edn. Liberty Fund, Inc. Available at: <http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:Enquiries+Concering+Human+Uderstanding#1>.
- Maslow, A.H. (1943) *A Theory of Human Motivation*. Washington, DC: American Psychological Association.
- Maslow, A.H. (2012) *Maslow’s Hierarchy of Needs*. Available at: <https://www.researchhistory.org/2012/06/16/maslows-hierarchy-of-needs/> (Accessed: 24 February 2023).
- Mcleod, S. (2022) *Maslow’s Hierarchy of Needs - Simply Psychology*. Available at: <https://www.simplypsychology.org/maslow.html> (Accessed: 24 February 2023).
- Mills, B. and Schleich, J. (2012) ‘Residential energy-efficient technology adoption, energy conservation, knowledge, and attitudes: An analysis of European countries’, *Energy Policy*, 49, pp. 616–628. Available at: <https://doi.org/10.1016/j.enpol.2012.07.008>.
- Monthly electricity prices in selected EU countries 2020-2023 (2023) Statista Research Department*.
- New consumer survey shows impact of COVID-19 (2021)*. Available at: https://ec.europa.eu/commission/presscorner/detail/hu/ip_21_1104 (Accessed: 5 February 2023).
- Öner, C. (2010) *Inflation: Prices on the Rise*. Available at: <https://www.imf.org/external/pubs/ft/fandd/basics/inflat.htm#:~:text=In%20an%20inflatio>

nary%20environment%2C%20unevenly,payers%20of%20fixed%20interest%20rates.

(Accessed: 13 February 2023).

Online shopping ever more popular - Eurostat (2022). Available at:

<https://ec.europa.eu/eurostat/web/products-eurostat-news/-/ddn-20220202-1> (Accessed: 23 February 2023).

Petrol and diesel fuel cost more in Germany again than in all neighbouring EU countries

(2022). Available at: https://www.destatis.de/EN/Press/2022/09/PE22_N057_611.html

(Accessed: 15 March 2023).

Radu, V. (2022) *Consumer behavior in marketing - patterns, types, segmentation*.

Available at: <https://www.omniconvert.com/blog/consumer-behavior-in-marketing-patterns-types-segmentation/> (Accessed: 24 February 2023).

Ramzai, J. (2020) *Clearly explained: Pearson V/S Spearman Correlation Coefficient*.

Available at: <https://towardsdatascience.com/clearly-explained-pearson-v-s-spearman-correlation-coefficient-ada2f473b8> (Accessed: 13 March 2023).

Simon-Kucher & Partners (2021) *Recent Study Reveals More Than a Third of Global Consumers Are Willing to Pay More for Sustainability as Demand Grows for*

Environmentally-Friendly Alternatives. Available at:

<https://www.businesswire.com/news/home/20211014005090/en/Recent-Study-Reveals-More-Than-a-Third-of-Global-Consumers-Are-Willing-to-Pay-More-for-Sustainability-as-Demand-Grows-for-Environmentally-Friendly-Alternatives> (Accessed: 4 February 2023).

Single market | European Union (no date). Available at: [https://european-](https://european-union.europa.eu/priorities-and-actions/actions-topic/single-market_en)

[union.europa.eu/priorities-and-actions/actions-topic/single-market_en](https://european-union.europa.eu/priorities-and-actions/actions-topic/single-market_en) (Accessed: 19 February 2023).

Smets, F. (2020) 'The impact of COVID-19 on the euro area economy and the related

policy response', *European Central Bank. CSO Seminar Series* [Preprint]. Available at:

www.ecb.europa.eu (Accessed: 22 February 2023).

Smith, A. (1993) *Wealth of Nations*. Oxford, England: Oxford Paperbacks.

Standards in Europe - Your Europe (no date). Available at:

https://europa.eu/youreurope/business/product-requirements/standards/standards-in-europe/index_en.htm (Accessed: 20 February 2023).

Stávková, J., Toufarová, Z. and Stejskal, L. (2008) 'Factors influencing consumer

behaviour'. Available at: <http://www.agriculturejournals.cz/pdfs/age/2008/06/04.pdf>

(Accessed: 5 February 2023).

The Basic Features of the EEA Agreement | European Free Trade Association (no date). Available at: <https://www.efta.int/eea/eea-agreement/eea-basic-features> (Accessed: 21 February 2023).

The European Free Trade Association (no date). Available at: <https://www.efta.int/about-efta/european-free-trade-association> (Accessed: 21 February 2023).

The Investopedia team (2022) *Demand: How It Works Plus Economic Determinants and the Demand Curve*. Available at: <https://www.investopedia.com/terms/d/demand.asp#toc-determinants-of-demand> (Accessed: 24 February 2023).

Tourism in 2022 approaches pre-pandemic levels (2023). Available at: [https://ec.europa.eu/eurostat/web/products-eurostat-news/w/DDN-20230118-1#:~:text=The%20EU%20tourism%20industry%20seems,in%202019%3B%20%2D5.6%25\).](https://ec.europa.eu/eurostat/web/products-eurostat-news/w/DDN-20230118-1#:~:text=The%20EU%20tourism%20industry%20seems,in%202019%3B%20%2D5.6%25).) (Accessed: 14 March 2023).

Types of Consumer Behavior (no date). Available at: <https://businessjargons.com/types-of-consumer-behavior.html> (Accessed: 24 February 2023).

de Vries, J. (2013) *Consumption and the World of Goods, Consumption and the World of Goods*. Available at: <https://doi.org/10.4324/9781315004006>.

Weinswig, D. (2016) *Millennials Go Minimal: The Decluttering Lifestyle Trend That Is Taking Over*. Available at: <https://www.forbes.com/sites/deborahweinswig/2016/09/07/millennials-go-minimal-the-decluttering-lifestyle-trend-that-is-taking-over/?sh=673795af3755> (Accessed: 5 February 2023).

Wenz, L., Levermann, A. and Auffhammer, M. (2017) 'North–south polarization of European electricity consumption under future warming', *Proceedings of the National Academy of Sciences of the United States of America*, 114(38), pp. E7910–E7918. Available at: <https://doi.org/10.1073/PNAS.1704339114>.

What is inflation? (no date). Available at: https://www.ecb.europa.eu/ecb/educational/explainers/tell-me-more/html/what_is_inflation.en.html (Accessed: 15 February 2023).

Wong, K. (2019) *How to Be a More Conscious Consumer, Even If You're on a Budget*, *The New York Times*. Available at: <https://www.nytimes.com/2019/10/01/smarter-living/sustainable-shopping-conscious-consumer.html#:~:text=Conscious%20consumption%20is%20an%20umbrella,way%20to%20consume%20more%20consciously>. (Accessed: 5 February 2023).

Zettelmeyer, J. *et al.* (2022) *Beating the European energy crisis*. Available at:
<https://www.imf.org/en/Publications/fandd/issues/2022/12/beating-the-european-energy-crisis-Zettelmeyer#:~:text=Europe's%20energy%20system%20faces%20an,effects%20for%20households%20and%20businesses>. (Accessed: 15 February 2023).

7 Appendices

7.1 Appendix A

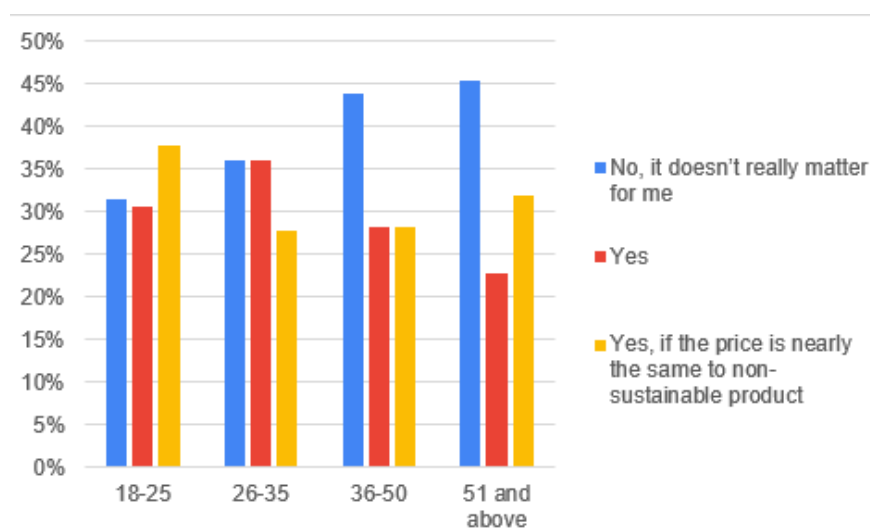
Questions of the survey:

- 1) How old are you?
 - Less than 18
 - 18-25
 - 26-35
 - 36-50
 - 51 and above
- 2) What is your gender?
 - Male
 - Female
 - Non-binary
 - Prefer not to say
- 3) In which European country do you live right now?
- 4) What is your current occupation?
 - Student
 - Student working part-time
 - Part-time job
 - Full time job
 - Unemployed
 - Retired
- 5) What is your income?
 - Up to 1000 EUR
 - 1001 – 2000 EUR
 - 2001 - 3000 EUR
 - 3001 – 4000 EUR
 - 4001 – 5000 EUR
 - More than 5000 EUR

- 6) Do you prefer shopping online or offline?
- Online
 - Offline
 - Both, 50/50
 - I buy groceries offline, rest prefer to buy online
- 7) Do you prefer to buy more sustainable, environment-friendly, cruelty-friendly brands?
- Yes
 - No, it does not really matter to me
 - Yes, if the price is nearly the same as a non-sustainable product
- 8) After the COVID-19 pandemic, have you started buying more products online?
- Yes
 - No
- 9) Have inflation affected you?
- Yes, I feel the impact of inflation on my budget
 - Slightly
 - No, nothing really changed for me
- 10) Have an energy crisis affected you?
- Yes, and I started saving energy: I have bought energy-saving light bulbs and/or started using less energy and/or using less heating
 - Yes, but it didn't affect my energy consumption habits
 - No, but I started saving energy
 - No
- 11) Do you spend a lot of time deciding whether to buy a regular product or not?
- Yes, usually it takes some time for me to decide if I need this product or if it's useful for me
 - It takes some time to quickly check the product and its features before adding it to the basket
 - No, usually I don't spend a lot of time deciding, I know what I want and need/take the first product satisfying my needs
- 12) Do you often buy products that you have noticed on social media?
- Often
 - Sometimes

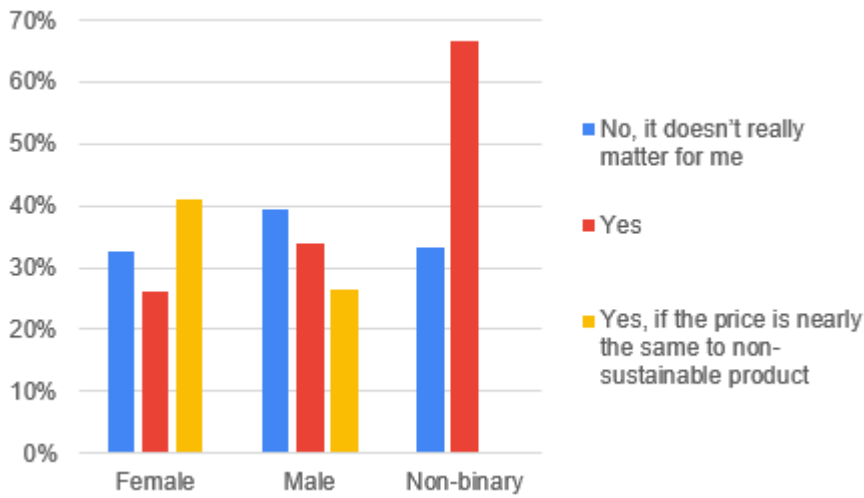
- Rarely or never
- 13) Are you more likely to purchase a product on sale even if you didn't plan to buy it?
- Yes
- Rather yes than no
- Rather no than yes
- No
- 14) Have you postponed any major purchasing decisions at least once in the last few years?
- Yes
- No
- 15) How often do you use the 'buy now, pay later' option?
- Often
- Sometimes
- Rarely or never
- 16) How do you plan to change your spending and saving behavior?
- Increase spending, decrease saving
- Decrease spending, increase saving
- Don't want to change it

Figure 46. Interdependence of people who care about the price of eco-friendly products and their age.



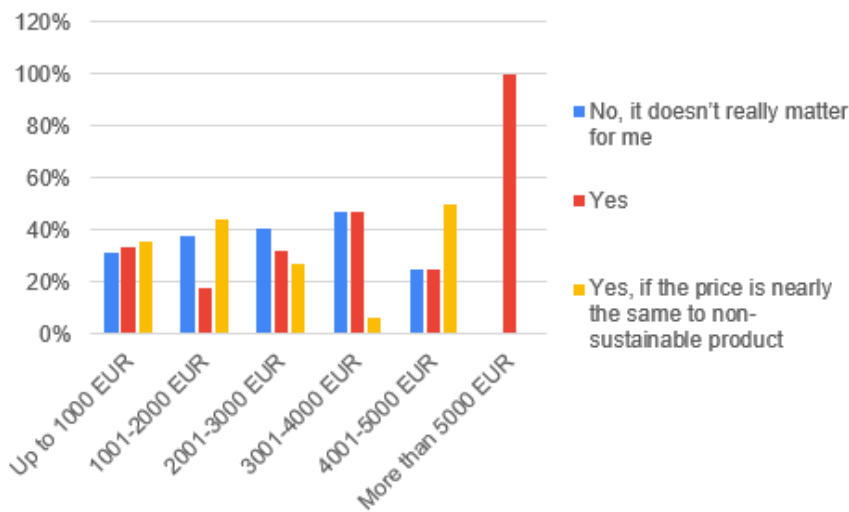
Source: own research.

Figure 47. Interdependence of people's gender and their willingness to buy eco-friendly products.



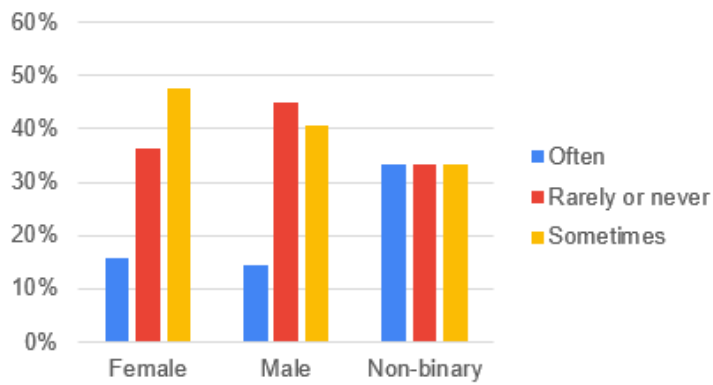
Source: own research.

Figure 48. Interdependence of people who care about the price of eco-friendly goods and their income.



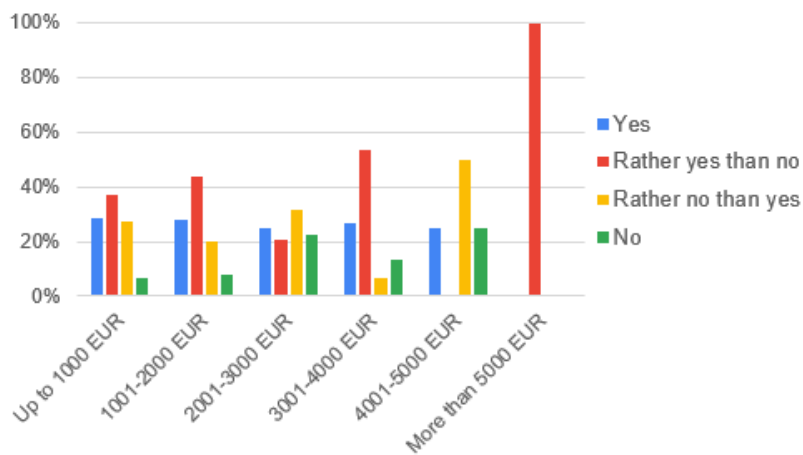
Source: own research.

Figure 49. How often people of different genders buy something they have seen on social media.



Source: own research.

Figure 50. People's likeliness to buy products on sale depending on their income.



Source: own research.

7.2 Appendix B

Figure 51. Calculation of Spearman correlation coefficient.

	Cons exp		inflation		d	d^2		ρ value
2019Q4	1795,312	2	1,6%		9	7	49	2019Q4 0,999999894
2020Q1	1726,044	8	1,2%		10	2	4	2020Q1 0,999999881
2020Q2	1515,507	13	0,8%		11	2	4	2020Q2 0,999999824
2020Q3	1711,423	9	0,3%		12	3	9	2020Q3 0,999999878
2020Q4	1671,714	11	0,3%		13	2	4	2020Q4 0,999999869
2021Q1	1647,206	12	1,7%		8	4	16	2021Q1 0,999999863
2021Q2	1698,514	10	2,2%		7	3	9	2021Q2 0,999999875
2021Q3	1769,628	7	3,6%		6	1	1	2021Q3 0,99999989
2021Q4	1776,083	6	5,3%		5	1	1	2021Q4 0,999999891
2022Q1	1776,752	5	7,8%		4	1	1	2022Q1 0,999999891
2022Q2	1794,265	3	9,6%		3	0	0	2022Q2 0,999999894
2022Q3	1806,139	1	10,9%		1	0	0	2022Q3 0,999999896
2022Q4	1791,468	4	10,4%		2	2	4	2022Q4 0,999999894
							102	
	$r_R = 1 - \frac{6\sum_i d_i^2}{n(n^2-1)}$							

Source: own research.