

PERCEPTION OF E-COMMERCE BY YOUNG ADULTS IN VISEGRAD GROUP COUNTRIES

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ABSTRACT.

Background: The present young adult generation is one of the current drivers of e-commerce. Understanding where this generation finds out in a chosen country in comparison with most progressive countries in the field of e-commerce is the cornerstone for assessing market possibilities in a particular chosen country. **Aims:** This article analyses trends in online shopping behaviour among young adults in the Visegrad Group countries from 2012 to 2022. The research focuses on sociodemographic factors and their influence on online shopping. **Methods:** Primary data collected by Eurostat underwent systematic analysis using general scientific methods of economic analysis, and comparison. **Conclusions:** The results show a significant increase in online shopping among young adults in these countries, with Slovakia achieving the highest share. They also indicate that the impact of gender, age, education, and income on online shopping varies by country. **Implications:** These findings have important business implications and contribute to a better understanding of the online shopping behaviour of this target group.

Keywords: Young adults. Sociodemographic factors. E-commerce. Consumer behaviour.

JEL Classification: M31

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Introduction

Shopping preferences are of great importance in the marketing world, because they form consumer behaviour, mostly they stay relatively consistent in time, and are precious for market segmentation. In the last two decades, the economic rise has pushed consumption beyond the margin of simple survival necessities. Income per capita rose worldwide, which translates into stronger buying power. The decision process in buying goods and services includes multiple factors, that impact the final decision. The decision-making process has become much more complicated for consumers and much more crucial in comparison to the past. It can be described as mental processes leading to the choice of action from multiple scenarios. Each decision-making process leads to action or the creation of an opinion.

Analysis of young adult consumers has great importance in the field of consumer behaviour because of multiple reasons. During the transition from adolescence to early adulthood, young individuals search for the creation of their own singular identities, behaviour, attitudes, and values, which form their consumer patterns. They use their shopping to define and create their unique identities. Those patterns can be used as long as throughout their lives. Young people have the ability to impact the shopping behaviour of others, they act as agents of change, and they impact the culture and society. From the marketing standpoint, young adults are a special, standalone, specialized market segment that disposes of great consumer force. They stand as the important and key market for different goods and services. Marketers aim at those because young adults are considered potential long-term and loyal customers, considering their above-average lifelong income and their current state of transition, which is ideal timing for their change of behaviour (Grant and White. 2003).

Theoretical background

Consumer behaviour important for research is the decision-making of consumers. Consumers are exposed to many tasks in the process of decision-making (Abraham and Patro. 2014). The process of decision-making is therefore complicated. Many researchers in the field of social studies and psychology offered explanations of this process (Abraham and Patro. 2014). In current times decision-making for consumers is more complex and more important in comparison to the past (Yasin. 2009). That is caused by the confrontation of consumers with too many product options. Surrounded by overwhelming amounts of information and different options, consumers try to cope with this problem with specific methods of decision-making and by picking up specific buying strategies.

Bordeau et al. (2002) discussed the motivations of young people to use any products. They have hedonic and utilitarian motives to use the internet and mobile phones while considering those as the root of information, communication, fun, and alternative ways to shop. Mobile technologies, namely cellular phones and text messaging were significantly accepted and integrated into their day-to-day life. To this day there does not exist any description of processes leading to acceptance of mobile technology, therefore we do not have a deep overview of reasons leading to high usage, or opportunities to propose new technologies, that would support the lifestyle of young people. Young people are inclined to change and from a young age, they use new technologies.

A deep study of demographic factors impacting consumer behaviour in mobile shopping was made by Bigne et al. (2005) and identified variables impacting consumer behaviour. Young people spend much of their everyday life with their mobile phones in addition to educational, official, or functional purposes. They are knowledgeable about technologies, and innovative, and prefer to shop online using laptops or mobile phones. Their attitude to innovations and these different needs are the ones of main reasons for the rise in the count of laptops and mobile phones in households.

In preceding studies, we can observe limited research on sociodemographic factors on decision-making styles (CDMS) (Bakewell & Mitchell, 2004; Mitchell & Walsh, 2004; Wesley et al., 2006; Yasin, 2009). The emphasis in research on sociodemographic factors has been put on prioritising gender in devotion to age, income, or level of education (Wesley et al., 2006).

Gender. Singh, J., & Goyal, B. B. (2009) referred in the paper „Mobile Handset Buying Behaviour of Different Age and Gender Groups“, that differences between genders were very obvious in essential technical properties and branding. That is supposedly to lower knowledge of essential technical properties by female consumers. Though less important, differences between genders are present in the „value of the added function“ and „physical appearance“. Female customers probably due to their prevailing orientation on the „physical appearance“ of mobile phones do not consider a brand as important as their male counterparts. Some authors argue, that gender, age, and income do not have

much impact on decision-making process style. Anić et al. (2010) claim, that lower perfectionism is observable in the group of young females compared to a male group of similar age, which is in contradiction to other studies with a similar focus, which indicated, that female consumers tend to manifest higher level of perfectionism in comparison to male. In these studies, has been shown that female consumers have a higher interest in fashion, and with an excess of choice they feel more confused, they are also more susceptible to hedonistic preferences than males. Female consumers are more willing to spend more money on branded products and prefer renowned brands more than male consumers (Mitchell & Walsh, 2004; Mukherjee et al., 2012; Yasin, 2009). Walsh and Mitchell (2005) highlighted that females display higher interest in shopping in comparison to males. They spend more time in the process of shopping and are more engaged in detailed advertising materials, which exposes them to more information load, and that makes their shopping decision-making more difficult.

Age. Weiss (2003) found out, that younger customers have a tendency to impulsive decision-making and are less likely to be brand loyal in comparison to older customers. Anić et al. (2010, 2014) argue, that older customers are less impulsive than their younger counterparts because they carefully plan their shopping and are more focused on the budget. They are more precise in determining their needs and, therefore less susceptible to influences in the shop. These studies confirmed that rising age has negative implications on impulsive, carefree customer behaviour (IMP). Another study by Das, B., and Mohanty, S. (2007) indicates, that age plays one of the main roles in the decision about buying a product or service. Intelligent marketers should consider that the best outcomes of a product or service differ by the age of the targeted customer. Marketing work is easier, if analyses the thinking of consumers, and determines what exactly members of the targeted group want.

Education. Consumers with higher degrees of education manifest higher interest in new things, some authors (Kollat and Willett, 1967) however pointed out, that education level does not affect impulsiveness in buying. Vipul (2010) claims that highly educated customers can, in fact, be more impulsive because they have a better understanding of the product and a better ability in information seeking. Therefore, they are more influenced by information in the shop. Contrary to that Shukla et al. (2011) claimed, that lower-educated customers manifest more impulsive buying behaviour.

Income. The next sociodemographic factor, which has an impact is the income of the customer. Author Zeithaml (1985) suggested exactly that income has an impact on consumer behaviour. Involvement in the consumer decision-making process is significantly impacted by the level of disposable income, which has been stated by Prabhavathi et al. (2014). There are more studies, that confirm the statement, that the height of income positively impacts the awareness of consumers about novelty products (Goldsmith et al., 1998; Jordaan & Simpson, 2006).

According to a study by Abdol Razak Kamaruddin (2009) consumers aged 18-24 years are more inclined to shop by impulse. Shim (1996) observed differences between genders and found out, that „teenage“ boys are more utilitarian, while „teenage“ girls are more socially aware.

Group influences, which contain media, branding, and word of mouth have a significant impact on the decision-making process of consumers about shopping. Fatt Sian (2010) suggested that social networks, television, influencing public figures, and books influence the young generation, which leads to cultural changes, changed behaviour, and shifts in buying intentions, in particular when adapting to a different culture.

Young adults represent a recognized part of impulsive buyers. In fact, younger age has been often recognized as a significant factor (Amos et al., 2014; Kacen & Lee, 2002; Liao et al., 2009). This phenomenon finds support in wider behavioural literature. Young adults have a tendency to experience strong biological motors for new activities, while their ability to consider risks is not fully developed yet (Spear, 2000). Besides, their acts are directed by major material orientation or a lower ability to withhold impulses (Duarte et al., 2013; Kasser & Kanner, 2004).

Methodology

The analysis provided in this paper aims to identify shopping trends in e-commerce in the Visegrad group during the period of 2012 to 2022. Specifically, we aim to answer the following questions: (1) Does the e-commerce buying trends in the Visegrad group copy those of the European Union? (2) Are the countries of Visegrad group trendsetters in the European Union in regards to studied parameters? (3) Do countries of the Visegrad group attain their goals in an economic rise within e-commerce buys?

Variable EU 27 is defined as a group of member states of the European Union after the year 2020, namely Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland,

France, Germany, Greece, Hungary, Ireland, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain and Sweden.

Variable V4 or the Visegrad group formed itself on 15.2.1991 by signing the Visegrad declaration. Member states are the Czech Republic, Slovak Republic, Poland, and Hungary.

We analyse the period of years 2012 to 2022 as the last published decade of data.

For analysis we use data available from Eurostat saved in databases “Internet purchases by individuals (until 2019)” (European Commission, Eurostat, 2023) and “Internet purchases by individuals (2020 onwards)” (European Commission, Eurostat, 2023).

To answer the research questions, in the paper, we use general scientific methods of economic analysis, namely the method of comparison, also methods of generalisation, systemisation, synthesis, analogy, and classification. These methods we used due to their clarity and the informative value they bring to the studied issue.

Results

The first indicator this paper is analysing is the share of individuals, who made their last online shopping in less than twelve months on the whole population.

Table 1. Individuals, who made their last online shopping in the last 12 months according to Eurostat (2023) (% share of all individuals).

Var	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
EU 27	40.54	43.12	46.20	49.22	51.16	53.90	56.14	59.79	64.74	67.11	67.98
Czechia	32.81	36.39	42.51	45.32	47.38	55.58	58.59	64.00	71.64	75.48	77.00
Hungary	25.21	28.85	32.52	35.79	38.84	38.56	41.16	49.18	60.02	66.01	70.32
Poland	30.33	31.64	34.19	36.90	41.91	44.98	47.78	53.95	60.93	61.17	64.58
Slovakia	44.73	44.48	48.12	49.63	56.34	58.53	59.00	60.18	62.45	75.32	76.72
Max	73.94	77.42	77.69	78.88	81.52	80.88	84.39	84.15	89.31	90.82	88.30
max country	Sweden	Denmark	Denmark	Denmark	Denmark	Sweden	Denmark	Denmark	Denmark	Denmark	Denmark

From the Eurostat data in Table 1, we see, that the share of such individuals in the observed decade rose steadily. On average EU 27 the share rose from 40,54% to 67,98%. Countries of the European Union with the highest share of online shopping are Sweden in 2012 and in the rest of the decade Denmark. In the case of premiant countries, the share of online shopping individuals rose from 73,94% to 90,82% in the year 2021, while in the last year of the observed decade, a slight decrease to 88,30% was recorded.

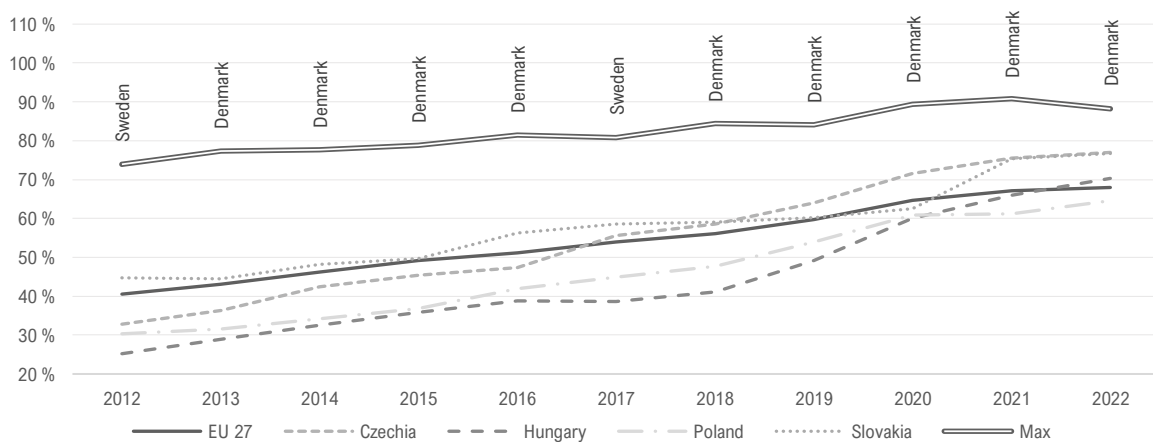


Figure 1. Individuals, who made their last online shopping in the last 12 months according to Eurostat (2023) (% share of all individuals).

Source: Own work according to Eurostat (2023) data

In the countries we observed, we recorded a rising trend in online shopping, as we can see in Figure 1. In the case of the Czech Republic growth starts at 32,81% and finishes at 77% in the year 2022. In Hungary, growth begins at 25,21% and stops at 70,32%. In Poland, the share of online shopping customers has risen from 30,33% to 64,58% and in the Slovak Republic, the share has risen from 44,73% to 76,72%. The steepest incline has been recorded in Hungary at 45,11%, followed by the Czech Republic with incline of 44,19%, next Poland with 34,25%, the Slovak Republic with 32,24%, and an average of the EU with a 27,44% incline. The average of the European Union 27 has been beaten at the end of the decade by the Czech Republic, Slovak Republic, and Hungary.

Table 2. Share of individuals 16 to 24 years old who have been online shopping in last 12 months according to Eurostat (2023) (% of individuals aged 16 - 24 years).

Var	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
EU 27	50.71	53.86	57.31	62.22	63.15	67.11	68.56	73.32	77.01	79.73	79.94
Czechia	44.35	52.46	62.18	60.55	58.70	68.12	71.02	81.42	85.45	86.51	90.28
Hungary	27.87	38.88	46.72	49.04	54.72	56.53	59.79	61.10	77.54	78.58	81.13
Poland	48.79	49.30	52.01	57.90	56.79	63.59	65.38	74.70	77.82	79.25	79.93
Slovakia	64.22	65.13	65.38	67.15	77.04	79.17	82.18	83.02	78.78	88.39	94.78
Max	87.38	88.36	88.53	88.13	90.46	89.20	91.56	91.16	97.15	96.08	100.00
max country	Denmark	Denmark	Denmark	Denmark	Denmark	Netherlands	Denmark	Netherlands	Denmark	Denmark	Ireland

In the share of individuals 16 to 24 years old, who have been shopping online in the last 12 months, displayed in Table 2, the premiant countries of the European Union are Denmark, Netherlands, and Ireland in the range between 87,38% to 100% in case of Ireland in year 2022. The Visegrad countries recorded a growing trend during the observed period. The leader of growth in the Visegrad group is Hungary with an increase from 27,87% to 80,13%, which is a rise of 53,26%. This is followed by the Czech Republic with a growth of 45,93%, Poland with an increase of 31,14%, and the Slovak Republic closely behind with a growth of 30,56%

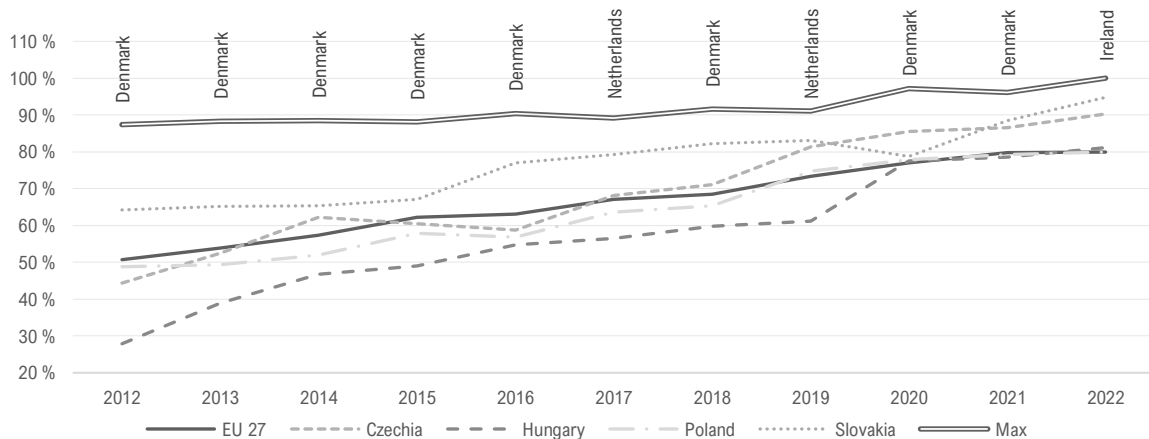


Figure 2. Share of individuals 16 to 24 years old who have been online shopping in last 12 months according to Eurostat (2023) (% of individuals aged 16 - 24 years)

Source: Own work according to Eurostat (2023) data

All of the countries of Visegrad four were able to reach above the average of European Union 27, as seen in Figure 2, and to have more steep growth, than the EU 27 average, which has been 29,23%. Slovak Republic is the leader of V4 in this regard.

Table 3. Share of individuals 25 to 34 years old who have been online shopping in last 12 months according to Eurostat (2023) (% of individuals aged 25 - 34 years).

Var	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
EU 27	56.48	59.99	64.13	67.56	68.91	72.38	75.11	78.88	83.21	83.74	85.18
Czechia	52.71	56.30	63.19	66.95	71.98	78.14	81.31	86.46	91.17	93.47	96.26
Hungary	40.87	44.96	48.15	53.65	53.94	56.36	64.48	71.23	79.89	84.81	90.08
Poland	55.29	58.29	59.95	64.29	67.78	70.42	73.26	81.25	87.06	86.54	89.41
Slovakia	62.78	66.19	68.24	73.19	79.03	78.94	82.45	81.66	77.73	90.02	95.07
Max	88.79	90.09	92.22	92.95	90.55	92.65	93.74	95.21	96.29	95.85	96.26
max country	Germany	Germany	Germany	Germany	Germany	Germany	Netherlands	Germany	Germany	Denmark	Czechia

In the age range 25 to 34 premiant countries of EU27 are Germany, Netherlands, Denmark, and Czech Republic, as shown in Table 3. Germany has been a premiant country in years 2012 to 2017, 2019, 2020, Netherlands in 2018, Denmark in 2021, and Czech Republic in the end of observed decade, in year 2022. Premiant countries' share has moved in the range between 88,79% and 96,29%.

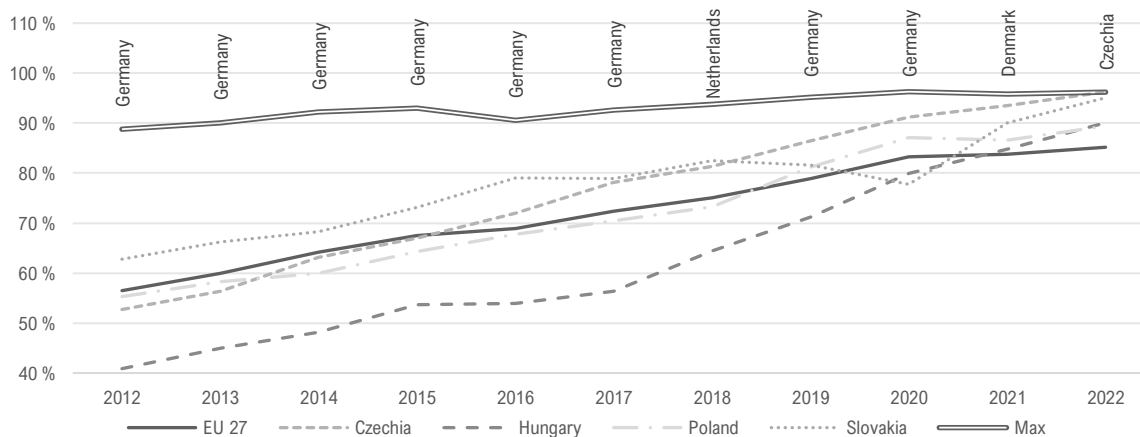


Figure 3. Share of individuals 25 to 34 years old who have been online shopping in last 12 months according to Eurostat (2023) (% of individuals aged 25 - 34 years).

Source: Own work according to Eurostat (2023) data

As we can observe in Figure 3, the steepest rise in the age category 25 – 34 has been recorded in Hungary with a rise from 40,87% to 90,08% with 49,21% growth. The Czech Republic followed with a growth of 43,55% from 52,71% to 96,26%, which made it a premiant country in EU27. With the steepness of growth by 34,12 Poland and the Slovak Republic follow with growth by 32,29% to 95,07% share. Observed countries of the Visegrad group overcome the average of EU27.

We calculated a new indicator, which is the difference in the percentual share of all individuals who have been shopping in the last 12 months and the percentual share of individuals who have been shopping in the last 12 months aged 16 to 24, displayed in the following Table 4.

Table 4. Difference in percentual share of all individuals who have been shopping in last 12 months and percentual share of individuals who have been shopping in last 12 months aged 16 to 24.

Var	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
EU 27	-10.17	-10.74	-11.11	-13.00	-11.99	-13.21	-12.42	-13.53	-12.27	-12.62	-11.96
Czechia	-11.54	-16.07	-19.67	-15.23	-11.32	-12.54	-12.43	-17.42	-13.81	-11.03	-13.28
Hungary	-2.66	-10.03	-14.20	-13.25	-15.88	-17.97	-18.63	-11.92	-17.52	-12.57	-10.81
Poland	-18.46	-17.66	-17.82	-21.00	-14.88	-18.61	-17.60	-20.75	-16.89	-18.08	-15.35
Slovakia	-19.49	-20.65	-17.26	-17.52	-20.70	-20.64	-23.18	-22.84	-16.33	-13.07	-18.06

All of the values are negative, which means that the share of individuals shopping online aged 16 to 24 is higher than a share of individuals without age limitations.

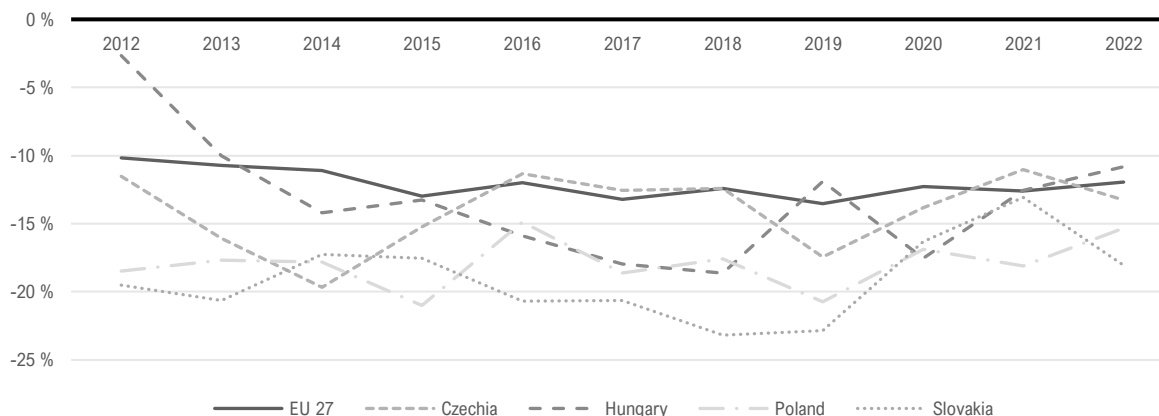


Figure 4. Difference in percentual share of all individuals who have been shopping in last 12 months and percentual share of individuals who have been shopping in last 12 months aged 16 to 24.

Source: own data

The average of the European Union is, as we can observe in Figure 4, within the band from -13,53 to -10,17. This indicator has been at its highest in years 2012 and 2013 in Hungary, where it has risen above the difference of EU 27 states in years 2019 and 2022. In the Czech Republic, the value of indicator lowered under the value of EU 27 in the years 2016, 2017, 2018, and 2021. All other values of the indicator were lower than values of EU 27 values. This means that the generation aged 16 – 24 uses online shopping more than the population without age boundaries.

A very similar indicator is the difference in the percentual share of individuals, who were shopping online in less than 12 months without age boundaries and the percentual share of individuals who were online shopping in less than 12 months aged 25 to 34 years, which values follow in Table 5.

Table 5. Difference in percentual share of all individuals who have been shopping in last 12 months and percentual share of individuals who have been shopping in last 12 months aged 25 to 34.

Var	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
EU 27	-15.94	-16.87	-17.93	-18.34	-17.75	-18.48	-18.97	-19.09	-18.47	-16.63	-17.20
Czechia	-19.90	-19.91	-20.68	-21.63	-24.60	-22.56	-22.72	-22.46	-19.53	-17.99	-19.26
Hungary	-15.66	-16.11	-15.63	-17.86	-15.10	-17.80	-23.32	-22.05	-19.87	-18.80	-19.76
Poland	-24.96	-26.65	-25.76	-27.39	-25.87	-25.44	-25.48	-27.30	-26.13	-25.37	-24.83
Slovakia	-18.05	-21.71	-20.12	-23.56	-22.69	-20.41	-23.45	-21.48	-15.28	-14.70	-18.35

All of the gathered values are negative, which means that the share of individuals who were online shopping in the last 12 months aged 25 to 34 is higher than the share of individuals who were online shopping in the last 12 months without age boundaries.

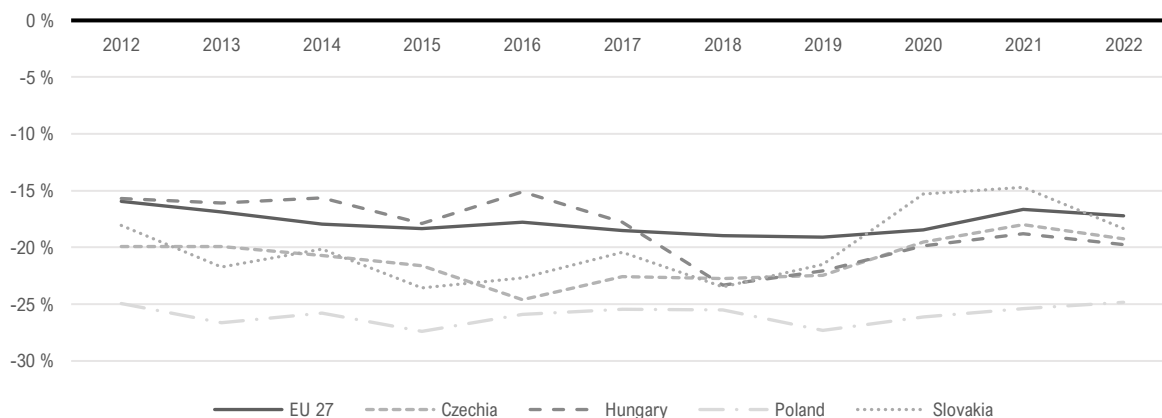


Figure 5. Difference in percentual share of all individuals who have been shopping in last 12 months and percentual share of individuals who have been shopping in last 12 months aged 25 to 34.

Source: own data

The average of the European Union stays in the band from -19,09 to 15,94, as we can observe in Figure 5. An indicator shows, that similarly to the previous indicator, in Hungary it has been higher as EU 27 in years from 2012 to 2017. The value of the indicator has been higher than EU 27 in the Slovak Republic in the years 2020 and 2021. All other values of the indicator are always lower than EU 27. The lowest value of indicator has been during the whole analysed time period in Poland in bad between -27,30 to -24,83, which means, that generation aged 25 to 34 uses internet shopping more often than the population without age boundaries in Poland.

Another calculated indicator is the difference between percentual share of individuals who were online shopping in less than 12 months aged 16 to 24 years and percentual share of individuals who were online shopping in less than 12 months aged 25 to 34 years. Values are depicted in Table 6.

Table 6. Difference in percentual share of individuals who were online shopping in less than 12 months aged 16 to 24 years and percentual share of individuals who were online shopping in less than 12 months aged 25 to 34 years.

Var	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
EU 27	-5.77	-6.13	-6.82	-5.34	-5.76	-5.27	-6.55	-5.56	-6.20	-4.01	-5.24
Czechia	-8.36	-3.84	-1.01	-6.40	-13.28	-10.02	-10.29	-5.04	-5.72	-6.96	-5.98
Hungary	-13.00	-6.08	-1.43	-4.61	0.78	0.17	-4.69	-10.13	-2.35	-6.23	-8.95
Poland	-6.50	-8.99	-7.94	-6.39	-10.99	-6.83	-7.88	-6.55	-9.24	-7.29	-9.48
Slovakia	1.44	-1.06	-2.86	-6.04	-1.99	0.23	-0.27	1.36	1.05	-1.63	-0.29

From the calculation, there are positive values and negative values. While positive values express more frequent usage of online shopping by the generation aged 16 to 24, negative values express more frequent usage of online shopping by the generation aged 25 to 34. Higher frequency of online shopping by the 16- to 24-year-old generation, can be observed in Hungary in years 2016 and 2017 and in the Slovak Republic in years 2012, 2017, 2019, and 2020. In all other countries and all other years, more frequent usage of online shopping by the generation aged 25 to 34 is observable.

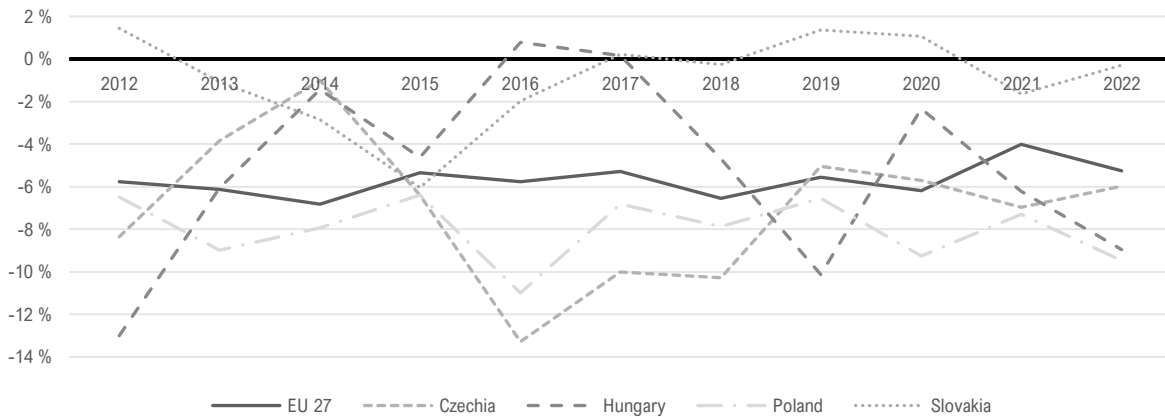


Figure 6. Difference in percentual share of individuals who were online shopping in less than 12 months aged 16 to 24 years and percentual share of individuals who were online shopping in less than 12 months aged 25 to 34 years.

Source: own data

In Poland has the generation gap been in favour of the generation aged 25 to 34 throughout the whole observed period. It also has been deeper than average EU 27. In the Czech Republic, the course of the indicator has been volatile, however in favour of the 25 to 34 generation.

Discussion

In this paper we analysed trends in online shopping behaviour within young adults in Visegrad group countries between years 2012 and 2022 included. Research focused on sociodemographic factors and its impact on online shopping.

Author Diaz-Gutierrez et al. (2023) in their study divided participants into five groups based on their current and in future awaited changes in shopping behaviour, who shown different trends in online and brick-and-mortar store activities of various goods. Outcomes has shown that more participants rose their online shopping activities in contrast with those participants who reduced their activities in brick-and-mortar stores during the COVID-19 pandemic, which induces, that online shopping has shown rising trend just like in our analysis, however it did not replaced shopping in brick-and-mortar shops.

Consumers in online space are influenced by many factors, most frequently mentioned factor is income. Hypothesis, that the higher income consumers achieve, the more they participate in online shopping and vice-versa was confirmed in study by Mehorotra et al. (2020), in which sex does not seem to be main factor influencing online shopping, because in their study men and women shown almost the same rate in using online shopping. Moreover, higher level educated consumers use online shopping more frequently, because authors assume, higher level educated consumers have more knowledge about online shopping.

Edmonds (2010) found out, that collage students within age range 18-30 are more inclined to online shopping then older generations despite they do not have equivalent amount of finance. Likewise, Lester et al. (2006) observed that millennials are more active in relation to online activities i.e. online purchasing and online shopping.

According to Hadler et al. (2021) online shopping is very widely used and positively perceived in between young people. Specifically in this study in connotation with grocery shopping. It has been pointed out by authors, that physical shopping is still mostly widespread form of shopping.

In study by Jindal et al. (2019) has been shown that younger age group age 15 to 30 exhibited positive attitude to online shopping, what has shown in our analysis as well.

Different demographic factors like sex, age, marital status, occupation and income were identified in study by Chincholkar a Sonwaney (2022) as significant factors in product selection by consumers in online shopping.

In work by Hossain et al. (2022) authors discovered that men and mainly married men with higher education level and higher-level work position consumers tend to shop online more. It has been found by authors, that age and income level of consumers did not influence their behaviour while online

shopping, which is in contrast to our outcomes, which show influence of income height and age structure.

Daana et al. (2023) study has pointed out that sex, work specialization and family income does not have significant influence on online shopping behaviour of consumers.

We can conclude that sex, age, education level and income play significant role in online shopping, which is confirmed by Howe and Strauss (2000), that generation differences has become one of significant gaps, because with generational change, the society values changed as well.

Conclusion

The outcome of this paper allows us a deeper understanding of sociodemographic factors impacting online shopping of young adults. Our analysis revealed that the generation aged 16 to 24 and the generation aged 25 to 34 are active users of this modern form of shopping. We found out, that generation aged 25 – 34 participates with higher frequency in the population than the generation aged 16 to 24. This phenomenon can be partially explained by their higher economic activity, however, causes other than this fact shall be a matter of further research.

An interesting finding of this paper is, that the Czech Republic grabbed the leading position of EU27 in online shopping in the category of 25 to 34 years in 2022. This implies the dynamic character of the online market and perhaps induces an impact factor on young customers. Parallel to this, countries of the Visegrad group (Czech Republic, Hungary, Poland, and Slovak Republic) are above average in both age categories, which implies wide support for online shopping in this region.

Partially volatile usage of internet shopping shows the fluid nature of this industry. This fact can be ascribed to multiple factors, including changes in consumer preferences and competition within the market.

The most interesting result is that the generation gap in online shopping is the biggest in Poland. This could serve as a motor for future research in the field of consumer behaviour differences between generations, and our conclusion supports the need for research into such dynamics. Further research is needed to explore the underlying causes behind the generational differences in online shopping, especially to better understand the evolving consumer behaviour dynamics.

While our study offers significant insights, it is limited to the Visegrad group and may not fully represent the broader European context, which is also a motive for further research.

In summary, our findings provide insight into multiple factors impacting the online shopping of young adults and showcase its national and generational differences, which could be of great importance for future marketing strategies and research. This paper contributes to understanding the national and generational differences in online shopping, providing valuable insights for e-commerce strategists and researchers.

As the e-commerce landscape continues to evolve, our findings lay the groundwork for future studies to delve deeper into the dynamic interplay of sociodemographic factors and online shopping trends.

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