

Consumer Confidence and Consumer Behaviour During The Covid-19 Pandemic

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Abstract

In this paper, issues of dependency between consumer confidence and consumer behaviour are considered. The authors focused on consumer sentiment and its relationship with the volume of purchased and consumed products, reflection on consumption, and socially responsible consumer behaviour. An important determinant of consumer confidence is the Covid-19 pandemic situation. To obtain answers to the research questions and verify the hypotheses, an online survey of Polish consumers was conducted in November and December 2020. The survey was carried out on a sample of 750 respondents selected using quota sampling. The selection was based on the population distributions according to the Polish Statistics Office - Statistics Poland by gender, age (18-65 years), and education of the respondents. The research results show that in a pandemic, both the tendencies to reduce consumption and to postpone purchases depend on consumer confidence. There is also a certain dependency between consumer sentiment and reflecting on consumption. At the same time, regardless of how the respondents assess their current and future financial situation, it does not affect socially responsible consumer behaviour.

Keywords: Consumer Confidence, Consumer Behaviour, Consumption, Covid-19

Introduction

The Covid-19 pandemic has left its mark on the functioning of the economy and the activities of market players on both the supply and demand sides (Liu et al., 2021; Zinecker et al., 2021). The occurrence of unexpected changes in the macroenvironment forces enterprises to take steps to adapt to the new situation, to consider changes in habits, and established forms of action. One of the key factors shaping the business environment is consumer behaviour. In turn, consumer behaviour may result from their perception of a new pandemic reality and the assessment of the possibility of purchasing goods in the near future. For this reason, it is interesting to investigate whether the Covid-19 pandemic influenced consumer sentiment, and thus consumer behaviour, both during and after the pandemic.

Consumer perceptions of the future are an indicator of consumer confidence, which reflects the degree to which people are optimistic and pessimistic about the future economic situation and how they will fare in the future (Solomon et al., 2016). People are inclined to make more discretionary purchases when their confidence in the economy is high. Available research confirms that consumer confidence influences changes in household expenditure. (Singal, 2012; Benhabib and Spiegel, 2019). Numerous studies show that consumer confidence plays a role in predicting consumer spending, and hence consumption (Bram and Ludvigson, 1998; Howery, 2001; Ludvigson, 2004, Dees and Brinca, 2013).

Consumer confidence is tested regularly over a long period, which allows comparing consumers' assessment of the economic situation in time and terms of geography. Consumer confidence is also called consumer sentiment (Loudon and Bitta, 1993) depending on the research institution. Considering the methodology of creating CCI (Consumer Confidence Index) and ICS (Index of Consumer Sentiment) indices, there are some differences in the way of determining the components of indices and the measurement methodology, they are not completely consistent (Curtin and Dechaux, 2015; OECD, 2021; The Conference Board, 2021).

Generally, CCI and ICS are based on the assessment that applies future developments of households' consumption and saving, based upon answers regarding their expected financial situation, their sentiment about the general economic situation, unemployment, and capability of savings. In this paper, it is assumed that consumer confidence and consumer sentiment are synonyms.

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Considering the global consumer sentiment in the time perspective, it can be stated that in the 21st century the indices decreased significantly twice in the years 2008-2010 and in the years 2020-2021 (IPSOS, 2021; OECD, 2021; PwC UK, 2021, Surveys of Consumers; 2021). The first collapse of the indices was caused by the financial crisis initiated in the United States. The second slump was caused by the Covid-19 pandemic. The long-term perspective shows that consumers are getting used to the situation and indices return to normal after each crisis. It is the same with the recent breakdown. At present, consumer sentiment is improving and is close to the long-term average, although negative consumer perceptions still outweigh positive ones.

Consumer confidence indexes of individual countries may differ from the global average. For example, at the turn of the century (1999–2004), a greater decline in consumer confidence was recorded in Poland than during subsequent crises (Statistics Poland, 2021). These years saw a slowdown in economic growth and an increase in the unemployment rate (Grala, 2018), which after a period of continuous growth resulted in a significant increase in consumer pessimism.

Consumer confidence is treated as a part of the socioeconomic characteristics of consumers (Solomon et al., 2016) and the financial situation of the household, employment status, age, education, occupation, and social position influence the perception of the economic situation. The PwC surveys of UK consumer sentiment (PWC UK, 2021) show that over the years (2008 to 2021) women have been more pessimistic in assessing the economic situation than men. Young people and people in retirement age have been slightly more optimistic than people in middle age. People who belong to the AB socioeconomic group (higher & intermediate managerial, administrative, professional occupations) and the C2 group (skilled manual occupations) have better-estimated health of the economy than people belonging to the C1 group (supervisory, clerical & junior managerial, administrative, professional occupations) and the DE group (semi-skilled & unskilled manual occupations, unemployed and lowest grade occupations). However, with the first wave of the pandemic, consumer confidence in C2 was the lowest.

Research by Teresiene et al. (2021) showed that there is a relationship between the development of the Covid-19 pandemic and consumer confidence. Given the number of confirmed cases of COVID-19, the number of deaths caused by COVID-19, and the mortality rate of COVID-19 infections, the researchers found that in the short term, the pandemic significantly affected the consumer confidence index. However, in the long term, the impact of the pandemic on consumer confidence in the Eurozone was not noticeable. Interestingly, research by Ambrocio (2020) suggests that the decline in consumer sentiment was more influenced by the measures taken to contain the spread of the coronavirus than by the pandemic itself.

The study aimed to determine whether possible changes in consumer sentiment resulting from the outbreak of the Covid-19 pandemic had an impact on consumer behaviour. The dependency between consumer confidence and consumer behavior included the following dimensions:

- current consumption behavior (indications during pandemic) and declared consumption behavior in the future, as well as the current assessment of the economic situation and future estimates,
- attitudes towards purchasing and consumption of goods, and real behavior,
- the scale and quality of consumption concerning the trends of modern consumption: overconsumption, socially responsible consumption.

Therefore, the following research questions were posed:

1. Has the COVID-19 change in consumer confidence reduced consumption during the pandemic?
2. Has the consumer sentiment resulting from the pandemic caused consumers to reflect on the problem of consumption?
3. Has consumer confidence resulting from the pandemic influenced socially responsible consumer behaviour?

The analysis of the literature allowed for the adoption of three research hypotheses:

- H1. There is a dependency between consumption volume and consumer confidence.
- H2. There is a dependency between consumer sentiment and consumer reflection on consumption.
- H3. There is a dependency between consumer confidence and socially responsible consumer behaviour.

Research Method

To obtain answers to the research questions and verify the hypotheses, an online survey was conducted in November and December 2020. The survey was carried out on a sample of 750 respondents selected using quota sampling. Selection was based on the population distributions according to the Polish statistical office – Statistics Poland - by gender, age (18-65 years) and education of the respondents (Eurostat, 2018; Statistics Poland, 2020).

Eight questions from Table 1 were selected to determine consumer confidence. The selection of questions was guided by the methodology used by Statistics Poland. The questions concerned the general economic situation of the country as well as the economic situation, expenses, and savings of households now and in the future.

Table 1: Consumer sentiment during the Covid-19 pandemic (respondent indication in presents)

Q1. Please specify whether in the period from March 2020 (from the beginning of the Covid-19 pandemic) to the present day, in your opinion,	
a. the economic situation of the country has	
deteriorated	95.9
not changed	3.7
improved	0.4
b. your financial situation has	
deteriorated	37.7
not changed	51.1
improved	11.2
Q2. Please specify whether, in your opinion, in the next 6 months	
a. the economic situation in the country will	
deteriorate	85.3
not change	9.5
improve	5.2
b. your financial situation will	
deteriorate	44.0
not change	45.6
improve	10.4
Q3. Please specify whether in the period from March 2020 to the present	
a. your household's expenses have	
decreased	36.0
not changed	29.3
increased	34.7
b. your household's savings have	
decreased	42.5
not changed	34.7
increased	19.8
Q4. Please specify whether, in your opinion, in the next 6 months	
a. your household's expenses will	
decrease	24.3
not change	38.8
increase	36.9
b. your household's savings will	
decrease	49.2
not change	35.3
increase	15.5

Source: own research.

Consumer behaviour was identified through the questions presented in Tables 2 and 3. These tables also show the percentage distribution of answers to individual questions.

Table 2: Consumer reflections on the purchase of goods during a pandemic (percentages of responses)

Do you agree with the statement:	Definitely not	Probably not	Probably yes	Definitely yes
Q5a. During a pandemic, our household lives more economically - we reduce consumption.	6.5	39.6	42	11.9
Q5b. In a pandemic situation, it is worth postponing investment purchases (apartment, car).	5.5	30	41.2	23.3
Q5c. During the pandemic, I wondered about the problem of over-purchasing and consuming goods	8.3	19.9	42.3	29.6

Q5d After the pandemic is over, I will buy fewer goods than before the pandemic.	8.1	40.7	40.7	10.5
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Source: own research.

Table 3: Consumer behaviour during the Covid-19 pandemic to the pre-pandemic period (percentages of responses)

Specification	I do not take such actions	I do it less often	No change	I do it more often
Q6a. I give up shopping and put it off for later.	11.3	2.9	43.2	42.5
Q6b. I throw away expired, uneaten food products.	22.4	16.8	56	4.8
Q6c. I share or give unused products to others.	29.1	2.1	56.4	12.4
Q6d. I buy mainly to support the seller or the producer.	21.5	2.3	33.3	42.9

Source: own research.

For further analysis, it was assumed that the individual characteristics of consumer behaviour are represented by the following questions:

- contemporary and future consumption scale Q5a, Q5b and Q6a,
- consumer reflection on consumption: Q5c and Q5d,
- socially responsible consumer behaviour: Q6b, Q6c and Q6d.

The dependency between variables related to consumer confidence and variables in consumer behaviour was examined. The chi-square test of independence was used in the analysis. Due to the distribution of responses, not all relationships were identifiable. The assessment of the economy on a macro scale, both during the pandemic and its future condition, was negative, while a much greater variation in responses occurred in the assessment of the economic condition of the respondents' households. When asked about the general situation of the country now and in the future, most of the respondents (95.5% and 85.3%, respectively) assessed that the situation had worsened and will continue to worsen. At the same time, only 0.4% and 5.2% of the consumers expressed a positive assessment of the current and future economic situation of Poland. Such a distribution of responses made it impossible to investigate the dependency between these variables (Q1a and Q2a) and variables related to consumer behaviour.

Results of the research and Discussion

The relationships between the variables analysed for the verification of the research hypotheses are presented in Table 4. In the case of three groups of variables describing consumer behaviour (Q5a, Q5b, Q5c) there was a complete relationship, in the case of the next three groups (Q5c, Q5d, Q6b) there was a partial, but still a high relationship, and in the case of the three other groups of variables (Q6b, Q6c, Q6d) there was medium or low dependency.

Table 4: Dependencies between variables according to the Chi-square test of independence

Specification	Q5a	Q5b	Q5c	Q5d	Q6a	Q6b	Q6c	Q6d
Q1b	$\chi^2=44,42701$ $p=,00000$	$\chi^2=44,18568$ $p=,00000$	$\chi^2=5,322208$ $p=,50320$	$\chi^2=9,320509$ $p=,15634$	$\chi^2=40,98762$ $p=,00000$	$\chi^2=5,555740$ $p=,47475$	$\chi^2=3,709274$ $p=,71595$	$\chi^2=8,364525$ $p=,21259$
Q2b	$\chi^2=52,29097$ $p=,00000$	$\chi^2=37,81557$ $p=,00000$	$\chi^2=18,94005$ $p=,00427$	$\chi^2=34,35802$ $p=,00001$	$\chi^2=35,81351$ $p=,00000$	$\chi^2=13,69496$ $p=,03324$	$\chi^2=9,499736$ $p=,14736$	$\chi^2=9,774376$ $p=,13448$
Q3a	$\chi^2=78,05275$ $p=,00000$	$\chi^2=13,90458$ $p=,03072$	$\chi^2=43,25909$ $p=,00000$	$\chi^2=36,38319$ $p=,00000$	$\chi^2=37,58625$ $p=,00000$	$\chi^2=10,02828$ $p=,12347$	$\chi^2=4,555631$ $p=,60193$	$\chi^2=6,870318$ $p=,33301$
Q3b	$\chi^2=29,09138$ $p=,00006$	$\chi^2=33,96095$ $p=,00001$	$\chi^2=11,40321$ $p=,07669$	$\chi^2=32,41505$ $p=,00001$	$\chi^2=38,10819$ $p=,00000$	$\chi^2=25,14801$ $p=,00032$	$\chi^2=7,664094$ $p=,26376$	$\chi^2=5,633700$ $p=,46545$
Q4a	$\chi^2=66,66626$ $p=,00000$	$\chi^2=47,41456$ $p=,00000$	$\chi^2=34,21262$ $p=,00001$	$\chi^2=42,42403$ $p=,00000$	$\chi^2=58,38610$ $p=,00000$	$\chi^2=16,56744$ $p=,01101$	$\chi^2=17,48681$ $p=,00765$	$\chi^2=18,91633$ $p=,00431$
Q4b	$\chi^2=39,30614$ $p=,00000$	$\chi^2=26,80015$ $p=,00016$	$\chi^2=21,31728$ $p=,00161$	$\chi^2=34,28321$ $p=,00001$	$\chi^2=39,24496$ $p=,00000$	$\chi^2=12,49863$ $p=,05173$	$\chi^2=3,023466$ $p=,80590$	$\chi^2=2,012594$ $p=,91854$

Note: Null hypotheses were rejected in cases where the p -value ≤ 0.05 . In all cases $df=6$.

Source: own research.

Table 5: Dependency between consumer confidence and consumer behaviour in the context of the verification of research hypotheses

Consumer confidence - spheres of dependency	Components of consumer behaviour	Hypothesis verified	Dependency
contemporary and future consumption scale	Q5a, Q5b, Q6a	H1	Full
consumer reflection on consumption	Q5c, Q5d	H2	Partial
socially responsible consumer behaviour	Q6b, Q6c, Q6d	H3	No dependency

Source: own research.

The conducted analysis confirms hypothesis **H1**. In a pandemic, both the tendencies to reduce consumption and to postpone purchases (including purchases of capital goods) depend on all factors that contribute to consumer confidence. This result is in line with previous research showing that a change in consumer confidence affects market behaviour. Consumers become thrifter, and purchases decrease. This also partially confirms the dependency between consumer confidence and the use of price promotions, which was the result of another part of the research described here. Concerns about the pandemic and uncertainty about the future that affects household finances are expressed, at least temporarily, with reduced consumption.

Hypothesis **H2** cannot be unequivocally confirmed. It is true that in the case of most of the factors that determine consumer confidence, there is a correlation between these factors and the reflection on consumption. Therefore, it cannot be said that the deteriorating financial situation forces consumers to wonder whether their consumption is excessive. This result is interesting because, during the pandemic, consumers limited their purchases of elective goods, as demonstrated by numerous studies (Hacioglu Hoke et al., 2020; KPMG International, 2020; Liu et al., 2020; Stanciu et al., 2020). As a result of research conducted among metropolitan consumers by PwC (2020), changes in consumption patterns were observed in many aspects, including, inter alia, declines in purchases of clothing and footwear, sports, and recreational equipment, and eating in restaurants. As the results of this study show, a large group of respondents during the pandemic more often thought about the problem of excessive consumption and decided to buy less after the threat ceased, it was, respectively, 71.9% and 60.2% of the respondents. However, purchasing considerations were only partially related to consumer confidence.

It should be noted that women support the reduction in consumption more often than men after the end of the pandemic ($\chi^2 = 19.76397$, $df = 3$, $p = 0.00019$). At the same time, there is a statistically significant correlation between the tendency to reflect on consumption and the age of the respondents ($\chi^2 = 37.82663$, $df = 12$, $p = 0.00016$). The group most often reflecting on the effects of excessive consumption, limiting consumption now, and declaring it to be limited in the future, are people aged 26 to 55. Both younger respondents (18-25 years) and older respondents (56-65) showed a less propensity to limit consumption.

It can be concluded that consumer confidence resulting from the development of the pandemic is not related to their approach to socially responsible consumption. Hence, hypothesis **H3** was not confirmed. Regardless of how the respondents assess their current and future financial situation, it does not affect their approach to dispose of uneaten food products. There is also no clear link between consumer sentiment and sharing products with others or buying goods to support producers or sellers. As respondents engaged more in socially responsible behaviour during the pandemic, this result can be considered positive. It points out that responsible consumption does not depend on changes in the financial situation of households. At the same time, a large group of respondents is wondering about contemporary consumption - so it can be concluded that some of them probably undertake activities related to these reflections.

Conclusion and limitations

The analysis of the dependence of the household situation as a component of consumer confidence and selected aspects of consumer behaviour was carried out. The results of the analysis of Polish consumers showed a dependence between the assessment of the current and future economic situation of household goods and the contemporary and future consumption scale, a partial dependence between the perception of the economic situation on a micro-scale with consumer reflection on consumption, and no dependence between the perception of the household situation and socially responsible consumer behaviour. In the research hypotheses, the terms consumer confidence and consumer sentiment were used, however, it should be noted that the research covered selected components of consumer confidence, the assessment of the current and future economic condition of the country and the assessment of the current and future situation of the household. This is a limitation of the research. However, the research conducted by the authors included changes in consumer behaviour during the covid-19 pandemic, and the dependency analysis presented in the article was part of the project.

A limitation of the research conducted was the inability to include in the analyses the consumer assessment of the current and future economic situation of the country. The evaluation of the economic situation appears in most consumer confidence indicators, and although the researchers took it into account, the distribution of these variables made it impossible to investigate the dependence on consumer behaviour (most respondents agreed on the negative evaluation of the national economy during the pandemic). However, it should be noted that Hampson et al. (2021) distinguish between national consumer confidence and personal consumer confidence when examining consumer sentiment. The authors define national consumer confidence as an individual's perception about the recent and future macroeconomic climate and personal consumer confidence as an individual's perception about changes in their recent and future personal financial situation. According to this approach, national consumer confidence is an external stimulus while personal consumer confidence is a cognitive evaluation of the self-relevance of national consumer confidence (Hampson et al., 2021). Therefore, personal consumer confidence is a mediator between national consumer confidence and the ultimate behaviour of consumers. From this perspective, it can be concluded that the lack of assessment of the country's economic situation in the analysis was not a significant limitation.

Certainly, the time in which the research was carried out influenced the perception of the economic condition and the perception of the situation of the household by the respondents. At the time of the research was carried out, the consumer mood in Poland was worse than it is now, because Poles got used to the limitations of the pandemic and the epidemiological situation is now better than during the study period. It would be worth repeating the research on a sample with a comparable structure, which would confirm the conclusions drawn.

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