CHANGES IN CONSUMER BEHAVIOR IN THE CZECH REPUBLIC

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Abstract

The growth rate of the Czech economy is slowing down. Since the second half of 2017, GDP growth rate has never exceeded one percent. This is a consequence of many variables, such as the slowdown of the German economy, the trade wars of key economies or the exit of the UK from the EU. It can be expected that the economic downturn will bring about a decrease in the disposable income of the population. The theory presents this phenomenon as a negative demand shock with a potential threat of economic slowdown, leading to imminent changes in the consumption behaviour of the population. In particular, a reduction in the consumption rate and, conversely, an increase in the savings rate can be expected. Theoretically, changes should also be made in the structure of savings, where more risky and longer-term investment instruments should be replaced by more liquid and conservative ones. This paper aims to analyse the answers collected within a questionnaire survey, which was intended to find out whether the respondents are aware of the slowing pace of economic growth and whether they changed their consumer behaviour.

Key words: consumer behaviour; investment structure, demand shock

JEL Code: D14, E21, G51

Introduction

The economy of the Czech Republic is a small pro-export economy, which is largely tied to the economies of other EU countries, especially to the German economy. Such a degree of interconnection of economies causes the Czech economy to be strongly influenced by the fiscal, but also monetary policy of the EU countries. It also reflects the effects of economic developments originated in other economies. In recent years, GDP growth in the German economy has been oscillating on the edge between positive and negative results, which represents one of the factors that slow the economic growth in the Czech Republic. Other

factors are trade wars between key economies, Brexit and the application of protectionist measures on the world markets. All these factors have been running simultaneously and they first became apparent approximately in 2017. Since then, one of the issues constantly addressed in the serious general news has been represented by this particular negative situation, including the proposed solutions to these changes and their impacts. In a group of financially literate people, the economic slowdown should lead to a change in their consumption behaviour and, according to the economic theories, it should lead to a negative demand shock. It concerns mainly the changes in indebtedness, spending on leisure time and non-essentials. Financially literate residents could also be expected to have sufficient reserves and increase the liquidity of the reserves, as the economy at the peak of the business cycle poses a clearly higher risk of an employment loss or the income reductions than in times of the economic growth.

Using a questionnaire survey, the aim of this paper is to find out whether the respondents have noticed a slowing economy, if they are prepared for a possible decline in the economic performance and whether they subsequently changed their consumption behaviour, their reserves and savings situation.

1   Literature Review

The economic theory uses the indicator of marginal propensity to consume. This indicator shows how much of the extra earned unit of income the consumer spends to increase the consumption. A relatively unexplored area is the monitoring of changes in this indicator. Obviously, this indicator will be affected by many variables. Kichian & Mihic 2018 deals with the impact of wealth effects on marginal propensity to consume. Consumer behaviour is also influenced by the level of consumer's monthly earnings and the levels of financial literacy. Besides, some authors focus on the impact of different phases of the business cycle, such as e.g. Zhang 2019, who deals with Economic cycles in relation with the real estate economy. He examined the relationship between growth, urban structure and land value with different time-dependent exogenous shocks.

Sarmento, Marques & Galan-Ladero 2019 also analysed the changes in consumer behaviour during the economic recession and the subsequent economic recovery. They found out that in times of the economic slowdown, consumers are changing their purchasing behaviour. Consumers adapt to lower incomes and increase their social responsibility. They buy private label products, plan their purchases better and minimize the food waste.

Knudsen 2019 dealt with the behaviour of economic subjects during the Pre-recession period and monitored the impact of the subsequent recession on prepared or unprepared entities.

Consumer vulnerability resulting from the economic misconduct was recognized by Hogg, Howells & Milman 2006, who addressed the factors that affect consumer vulnerability in the Knowledge-Based Economy.

The impacts of macroeconomic effects on consumer behaviour were described by Abaidoo 2016. He focused on monitoring the changes in consumer behaviour in a state of expectations of the inflation growth or the uncertainty related to the implementation of future economic policies.

Frigerio, Ottaviani & Vandone 2019 studied these issues in terms of socio-demographic and economic factors. They conducted a meta-analytical study of the relationship between impulsivity and consumer over-indebtedness. They tried to find out if the people who tend to impulsive buying behaviour have generally larger unmanageable debts.

Li, Zhen & Dorfman 2019 has demonstrated the so-called lipstick effect, claiming that there are products that, due to the specificity of their demand elasticities, do not suffer from a decline in consumer demand during the recession.

Based on the literature review, it was decided to conduct a survey among a small sample of respondents and find out how the respondents in the Czech Republic prepare for the effects of the slowing economy.

2　Research Methods

The research dealt with a change in consumption behaviour and a change in savings due to the slowdown in economic growth. The aim was to use a questionnaire to determine whether the respondents noticed the fact that the economy is slowing down and whether they adapted their behaviour accordingly. This investigation was designed as primary research, using the data collection techniques, specifically written questioning. The author created his own questionnaire, which included both the socio-demographic questions as well as the questions concerning the monitoring of information about the development of the economy and its impacts on the life of the population. The main part of the questionnaire was intended to identify whether and how the respondents changed their consumption behaviour. The questionnaire was piloted on a 5-member sample. The piloting was carried out to eliminate

the risk of unintelligible or duplicated questionnaire items. Subsequently, the questionnaire was supplemented and refined on the basis of comments and suggestions. After completing the final version of the questionnaire by 100 respondents, the answers were entered into a database programme for carrying out a summative evaluation of answers and for elimination of errors in the calculations.

The research was conducted in February 2020 by the author of the article. 100 respondents took part in the survey. As the number of respondents is exactly one hundred, the individual percentages will not be reported when evaluating the aggregate results of all respondents in order to avoid a simple data duplication. There were 64 men and 36 women in the sample. The 18-25 age group included 7 respondents, the 26-35 age group contained 29 respondents, the 36-45 age group 28 respondents, and the 46-62 age group 31 respondents. Five respondents represented the 63-plus age group.

The largest group of respondents included the university educated people (59), the second largest group comprised the secondary-school educated respondents (38). Most respondents were employed, 58 full-time and 12 part-time. There were 11 respondents doing their own business. A monthly pension between CZK 20,001 and CZK 30,000 was reported by 37 respondents, a monthly pension between CZK 30,001 and CZK 40,000 by 23 respondents and the monthly pension of more than CZK 40,000 by 16 respondents.

The author is aware of the fact that the sample did not meet the parameters of a representative sample, and therefore it is not possible to generalize the research results to the whole population.

3   Study Results

The questionnaire was designed so that at the beginning of the survey it would be identified whether the respondent had noticed a slowing economic growth. Each of these options determined the following sequence of different questions. At any moment of the questionnaire survey, the aim was to comprehensively examine the behaviour of respondents according to their unique perceptions of the state of the economy.

The question whether the respondent had noticed a slowdown in the economy in recent years was a categorising question that divided the respondents into two groups, i.e. those who had noticed (53 respondents) and those who had not (47 respondents). For the sake of validity of our interpretations, only the respondents in each of the aforementioned groups,

i.e. 53 or 47 people, will be considered to represent one hundred percent when processing other questions.

3.1   The group of respondents who noticed a slowdown of the economy

As already mentioned, 53 respondents experienced an economic slowdown, and this number will be considered as 100% in this subchapter.

The first question for this group of respondents was asked in order to find out in which particular information channels they noticed the aforementioned change. The respondents were allowed to select multiple information channels. Most respondents, i.e. 41 (77.4%), learned about the slowdown via the Internet news. This category was followed by TV news, which was selected by 24 respondents (45.3%). 14 respondents (26.4%) recognized it at work, and 12 respondents (22.6%) reported being informed by their family members and friends. The radio news was stated by 9 respondents (17%). Other types of news feed were reported by less than 10% of respondents.

In the following question, 12 respondents (22.6%) stated that they recognized slowing down but did not worry about direct negative impacts on their household. However, other respondents fear some direct negative impacts. Their most frequent concerns are related to rising prices, as stated by 27 respondents (50.9%), 8 respondents (15.1%) commented on the income reduction and 6 respondents (11.4%) on the loss of their jobs.

In the next question, 24 respondents (45.3%) said that they had changed their consumption behaviour and 33 respondents (54.7%) had not.

The following question was answered only by those respondents who reported a change in their behaviour. Each of these 24 respondents was supposed to distribute 100 points among the categories in which they see the most significant changes of their consumption behaviour. These respondents mostly reported the changes of their behaviour in the category of reducing their food purchases in order to minimise the food wastage, by assigning 515 points (21.5%) to this option. Buying cheaper products obtained 429 points (17.9%), reduced spending in restaurants 302 points (12.6%), and reductions of the food purchases with the extra payment for the label 292 points (12.2%). All other options earned less than 10% of points.

Out of those 53 respondents who claimed to have noticed a change in the economic development, 23 (43.4%) changed their savings behaviour. 11 respondents (47.8%) reported an increase in the amount held at home in cash, while 7 respondents (30.4%) started to save

more on a savings account. The remaining 5 respondents (21.8%) moved their long-term investments into shorter-term forms of savings.

The remaining 30 respondents (56.6%) who claimed to have noticed the economic slowdown did not change their savings behaviour. Two of them (6.7%) explained it in terms of not being able to generate any savings, 22 respondents (73.3%) do not consider it necessary to change the current way of saving and 6 respondents (20%) do not consider it appropriate to make changes.

The respondents who perceived the economic slowdown were further asked whether they sought expert advice on how to change their behaviour. 26 respondents (49%) said they did not consider it necessary to seek for professional advice, 19 respondents (35.9%) were convinced that they had sufficient education and experience and did not need advice. Expert advice from a financial advisor was requested by 6 respondents (11.3%) and two respondents (3.8%) sought the advice on the Internet.

21 respondents (39.6%) had a financial reserve to cover the loss of income for more than 7 months, 13 respondents (24.5%) for 4-6 months, and 12 respondents (22.7%) mentioned 1-3 monthly salaries. 6 respondents (11.3%) were without any reserve and one respondent (1.9%) stated having a sufficient passive income.

3.2   The group of respondents who did not notice a slowdown of the economy

In the following subchapter, the results of the answers provided by the respondents who have not yet noticed the fact that the Czech economy is slowing down will be presented. There were 47 respondents in the whole group.

All 47 respondents have the opportunity to watch some type of news. 43 of them (91.4%) watch the news, but they did not register any information on the economic development, 2 respondents (4.3%) said that they had no time to watch the news and 2 respondents (4.3%) did not see any reason why they should watch the news.

Provided that the respondents noticed the information about slowing down of economy, 20 respondents (42.6%) would try to reduce their expenditures compared to the current situation, 8 respondents (17%) would try to stabilize their current incomes. 19 respondents (40.4%) consider it unnecessary to change their consumption behaviour.

Hypothetically, if these respondents registered the information, 24 respondents (51.1%) would save without change and 23 respondents (48.9%) would change their savings behaviour. Among them, 11 respondents (47.8%) would increase the amount they hold at home, 6 respondents (26.1%) would stop investing in long-term investments, 4 respondents

(17.4%) would move long-term investments into a more liquid form, and the remaining 2 respondents (8.7%) would increase the savings rate on the savings account. The respondents who would not change their behaviour in the area of savings stated the following reasons: 14 respondents (58.3%) do not consider it necessary to change the existing way of saving, 6 respondents (25%) even consider it inappropriate. The remaining 4 respondents (16.7%) are not able to generate savings in the current situation.

The last question for all respondents who did not take notice of the information concerning a slowing economy was about the reserves they had. Thanks to their reserves, 18 respondents (38.3%) would overcome the period without seven or more monthly incomes, 9 respondents (19.1%) had a reserve for 4-6 months, and 14 respondents (29.8%) for the period 1-3 months. 3 respondents (6.4%) admitted having no reserves. Sufficient passive income was ensured by 3 respondents (6.4%).

Discussion

The respondents' answers to individual questions were listed in the previous chapter. Now the results will be confronted with the recommendations of experts and the author of this paper. The first important question was focused on the fact whether the respondents noticed a slowing economic growth. This observation was reported only by 53% of respondents. This result is really not good because both of the most frequently used news websites in the Czech Republic regularly publish this report on their main pages, even several times per month. In addition, reports and news on the Czech Television and the radio stations deal with this phenomenon. The fact that this information was not noticed only by 47% of respondents suggests that the need for being informed is not too high in the sample of respondents. However, this attitude exposes a significant proportion of respondents to the risks arising from the ignorance of the development, as they will not be able to adapt to changing circumstances in time. A total of 28 respondents (59.6%) would change their behaviour in some way if they knew there was a risk of an economic slowdown. However, as they did not register this information, they could not adapt their behaviour in time.

In accordance with the author's expectations, the Internet (77.4% of respondents) and television news (45.3% of respondents) are the most widely used information channels for the respondents who have seen a change in the economic development. The fact that 26.4% of respondents recognized worsening of the economic performance in their jobs, for example a

decrease in orders, can be considered as a confirmation of the economists' claims about a slowing economy.

Informed respondents are relatively well prepared for a potential economic slowdown. Most of them (54.7%) have not changed their consumption behaviour and are concerned mainly about the price growth (50.9% of respondents). The respondents who have changed their behaviour have done so in particular through their effort to reduce the food waste, opting for cheaper holidays and carrying out cuts in restaurant spending, which is exactly in line with the economic theory that attributes high values of elasticity to holidays and restaurants. This also fully corresponds to the conclusions of Sarmento, Marques & Galan-Ladero 2019, who reached the same findings.

The questionnaire also contained a comparative question focusing on the financial reserves. This question was asked to all respondents and its aim was to determine whether there exists a difference between the reserves held by the informed respondents and the uninformed ones. A loss of income for more than 7 months would be covered by a reserve in the case of 21 informed (39.6%) and 18 uninformed respondents (38.3%). The financial reserve to cover the loss of 4-6 monthly salaries was admitted by 13 informed (24.5%) and 9 uninformed respondents (19.1%), and finally 12 informed (22.7%) and 14 uninformed respondents (29.8%) would be able to cover the loss of 1-3 monthly salaries. There were 6 informed (11.3%) and 3 uninformed respondents (6.4%) completely without a reserve. Passive income was secured by 1 informed (1.9%) and 3 uninformed respondents (6.4%). In order to compare the results of this comparative question better, the results are shown in the following Table Tab. 1.

Tab. 1: Creation of reserves of both groups of respondents

	Informed respondents	Uniformed respondents
Without any reserve	11,3%	6,4%
Reserve for 1-3 months	22,7%	29,8%
Reserve for 4-6 months	24,5%	19,1%
Reserve for 7 months and longer	39,6%	38,3%
Sufficient passive income	1,9%	6,4%
Sum	100%	100%

Source: Author

The results show that the differences in the creation of reserves between the informed and uninformed respondents are negligible. Experts usually recommend a reserve to overcome the loss of more than six monthly incomes. In both groups, approximately 39% of all respondents have almost equal amount of this reserve, and other categories of reserves are relatively comparable. Therefore, it is not possible to claim that the respondents who do not search for the information about the economic development have a less responsible approach to the creation of financial reserves.

Conclusion

The results show that almost half of the respondents do not monitor the information on the development of key factors that can have a very significant impact on their quality of life. Respondents would usually change their behaviour if they obtained the information about the upcoming change. However, as they do not notice this information, they do not have the opportunity to prepare for a change. It is surprising that although the information on a slowing economy is free and obtainable on the broadest Internet platforms and in other media, yet a significant number of respondents have not taken any notice of it. This can be largely due to the data overload experienced by the respondents or owing to a complete lack of interest in this type of information.

The creation of the respondents' reserves can be evaluated positively, with almost 40% of them meeting the level recommended by experts, and only about 10% of respondents living without a financial reserve.

During the preparation of this paper, the issues of monitoring the information and the creation of reserves were significantly gaining in importance, due to the coronavirus infection. If the people followed objective information sources and had sufficient financial reserves, then the unexpected situation was relatively solvable for them as they were able to prepare for it in time, and thus to overcome any reduction or loss of income. Conversely, if the respondents did not use reliable information sources, they could either be under the influence of misleading information or, on the contrary, they were not able to prepare adequately for the situation due to not having any information at all. If the respondents did not have a financial reserve and their employer was forced to reduce the employees' salaries or even dismiss them because of the state of emergency, they could find themselves in a difficult situation.

It is therefore clear that paying sufficient attention to serious general news reports together with the provision of liquid financial reserves are important not only in the case of changes in the phases of the economic cycle, but also with regard to other influences.

References

Abaidoo, R. (2016). Inflation expectations, economic policy ambiguity and micro-level consumer behavior. *Journal of Financial Economic Policy,* 8 (3), 377-396. doi: 10.1108/JFEP-12-2015-0074, WOS: 000388988700006.

Frigerio, M., Ottaviani, C. & Vandone, D. (2020). A meta-analytic investigation of consumer over-indebtedness: The role of impulsivity. *International Journal of Consumer Studies,* 00, 1-15. doi: 10.1111/ijcs.12570, WOS: 000512729200001.

Hogg, M.K., Howells, G. & Milman, D. (2007). Consumers in the Knowledge-Based Economy (KBE): What creates and/or constitutes consumers vulnerability in the KBE? *Journal of Consumers Policy*, 30, 151-158. doi: 10.1007/s10603-007-9030-9.

Kichian, M. & Mihic, M. (2018). How important are wealt effects on consumption in Canada? *Canadian Journal of Economics,* 18, 784-798. doi: 10.1111/caje.12338, WOS: 000440404900003

Knudsen, E.S. (2019) Bad weather ahead: Pre-recession characteristics and severity of recession impact. *Journal of Business Research,* 104, 118-130. doi: 10.1016/j.jbusres.2019.05.031, WOS: 000484647500009.

Li, W., Zhen, Ch. & Dorfman, J.H. (2019) Modelling with flexibility through the business cycle: using a panel smooth transition model to test for the lipstick effect. *Applied Economics.* doi: 10.1080/00036846.2019.1693701.

Sarmento, M., Marques, S. & Galan-Ladero, M. (2019). Consumption dynamics during recession and recovery: A learning journey. *Journal of Retailing and Consumer Services,* 50, 226-234. doi: 10.1016/j.jretconser.2019.04.021, WOS: 000471928200025.

Zhang, W.B. (2019). Economic Cycles and Urban Growth with Land Value and Land Rent. *Malaysian Journal of Economic Studies,* 56(2), 267-277. doi: 10.22452/MJES.vol56no2.5, WOS: 000500914900005.

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