FOOD PRIVATE LABELS AND UNIVERSITY STUDENTS: A CASE STUDY

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Abstract

When the share of food private labels increased, brand name companies tend to grow their promotional activities. The competitive fight between private labels and branded goods has started. The growing interest in food private labels in the food industry brings the necessity to focus on the private labels' strategy for all retail chains. The increasing popularity of private labels has caused researchers' interest in this field. The author's research focuses on the food private labels that are bought by the specific segment o full-time university students. The author investigates the categories and frequency of purchasing of the food private labels by full-time university students. The results of the author's research show that 90% of respondents are buying food private labels. And 86% of them are buying private labels more than once a week. The author revealed, based on the chi-square test, that the frequency of purchasing food private labels is independent on the gender and not independent on the average monthly family income at the 99% confidence level.

Key words: private label, food private label, university students

JEL Code: M14, M19

1   Introduction

The last decades have witnessed changes in retail chains across all over the world and mainly in developed countries. Private labels have become more critical in competitiveness fight. For a long time, lots of researches have called attention to the form of competition of private labels brands and national brand (Kim & Parker 1999, Grosso, & Castaldo 2015). Already in the beginnings of 1990s Kotler (1994, p. 449) stated that "the battle of the private label brands has been increasing." The building of strong brands has become a priority of the marketing strategies of any organization. The reason is that the brand is a primary point in differentiation between different competitors. The brand itself creates brand awareness and identification and

brings a certain level of satisfaction and quality of the product (Hollensen 2003, Hultman, Opoku, Salehi-Sangari, Oghazi, & Bui 2008).

As stated above, The Nielsen Company (2018) consumers have access to plenty of information. The result is changing their expectation and different shopping patterns. Private labels have become equivalent to other brands. Based on the research of the Nielsen Company, the value share of private labels is still growing. The following figure shows the situation in 2018. On average, the most significant share of private labels on the total retail share is in the European Union (overall 31.4 %). However, the penetration of private labels varies from country to country (Bergès-Sennou, Bontems & Réquillart 2004). Several states as the United Kingdom, Spain, and Germany, have the share of private labels higher than 40%. The highest percentage of private labels is in the United Kingdom (52.5%) (Wunsch, Nils-Gerrith. 2019).

Fig. 1: Global Private Label in World (share in %)
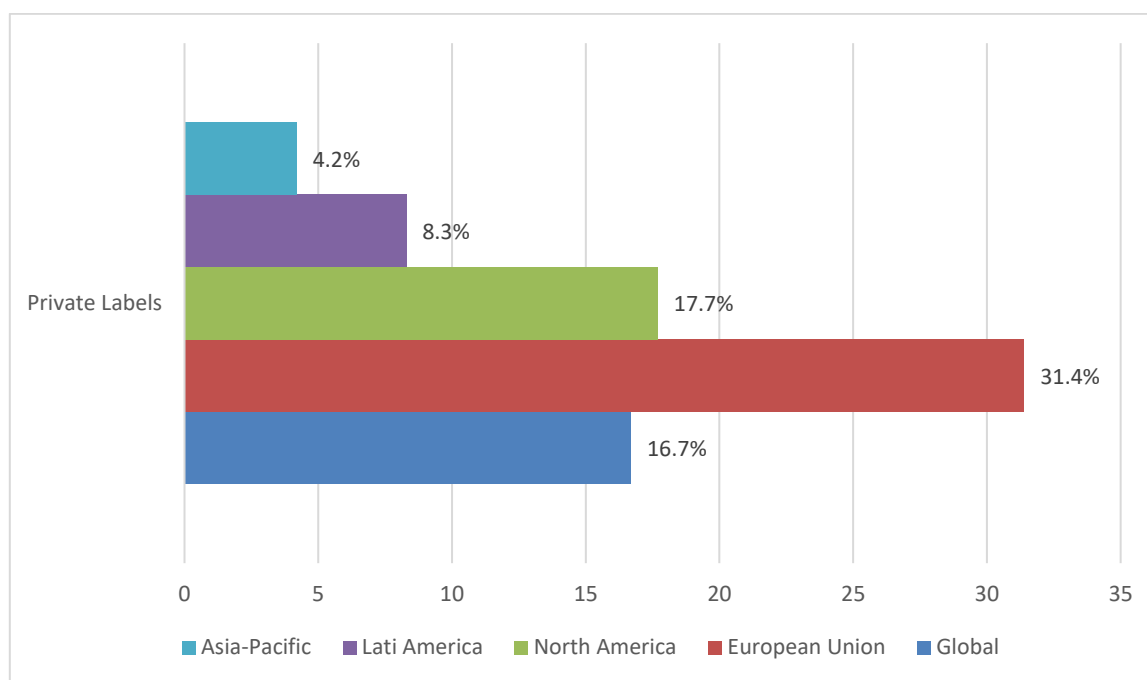
Source: The Nielsen Company (2018)

Private labels are connected mainly with food products. Therefore, lots of researches focus on food private labels (for example Ward, Shimshack, Perloff, & Harris 2002, Compagnoni 2010, Martinelli, Canio & Marchi, 2019, Janssen & Hamm 2014).

According to Ward, Shimshack, Perloff, & Harris (2002), retailer chains have learned that food private labels provide higher profit than national brands. The gross margins on the private labels are 35% and more, and the average of other products is 25%. The profit of

supermarket chains rises from loyalty to private labels and a particular supermarket (Ward, Shimshack, Perloff, & Harris 2002).

2   Materials and methods

This paper presents a part of the author's research concerning private labels. The whole research focuses on the attitude of university students to private labels. This article focus on private labels in the food industry. This article aims to investigate which categories of food private labels are buying by the university students and the frequency of purchase of private labels in the segment of full time (present) university students. The author will investigate if there are any statistical differences based on gender and average income.

Based on the literature review author prepared a structured questionnaire for use in this research. The survey was divided into several sections. The first section of the questionnaire asked respondents about their preferences in the private labels sector, categories of private labels that are bought by students, frequency of buying private labels, and specific categories of food private labels. The second part was focused on the concrete types of retailers, where customers are purchasing private labels. The third section of the questionnaire sought to gain information on the motivation for buying private labels. The last part included personal data of the respondents – age, gender, number of family members, and the average monthly income.

As stated above, this article will analyse the part of the questionnaire that focused on the food private labels. The author gained 320 questionnaires. Unfortunately, 20 questionnaires were excluded due to incompleteness or other problem. For further analyses, the author will use 300 questionnaires.

For analysis of the primary data, the author will use following mathematical and statistical methods:

- absolute and relative frequencies,
- chi-square test.

The formula of the chi-square test follows.

$$\chi^2 = \sum_{i=1}^{k} \frac{(X_i - N_{Pi})^2}{N_{Pi}} \tag{(1)}$$

Using the chi-square test, the author tries to detect whether there are statistically significant differences in respondents' responses depending on gender or average monthly family income.

Therefore, the author has established the following research hypotheses in the university student's segment:

$H_1 0$: Frequency of buying food private labels is independent on the gender

$H_1 1$: Frequency of buying food private labels is not independent on the gender

$H_2 0$: Frequency of buying food private labels is independent on the average monthly family income

$H_2 1$: Frequency of buying food private labels is not independent on average monthly family income

3   Results and discussion

This part of the article analyses the outcomes of the author's research concerning the attitude of full time (present) students to the food private labels. This paper focuses primarily on the food private labels, categories that are buying by present students, and frequency of purchase food private labels by full-time students. The total number of respondents was 300. This part of the research analysis the answers of the full-time students. Since this research focuses on the segment of full time (present) students, all of these students belonged to the age group 18-24 years. The structure of the respondents is summarized in the following table.

Tab. 1: Structure of respondents

	Absolute frequency	Relative frequency (in %)		Absolute frequency	Relative frequency (in %)
Gender			Number of family members		
Male	126	42	1	20	7
Female	174	58	2	73	24
Average monthly income			3		
less than 10.000CZK	8	24	4	93	31
10.001 - 20.000 CZK	30	90	5	27	9
20.001 - 30.000 CZK	39	117	6	2	1
30.001 - 40.000 CZK	14	42			
40.000 CZK and more	9	27			

Source: Author's research

90% of all respondents answered that they are buying private labels, and 82% of respondents answered that they are buying food private labels. Following text summarized information gathered from those respondents that are buying food private labels. Totally 270 students stated that they are purchasing private labels. And food private labels are bought by 222 respondents.

The following figure shows the results of the frequency of buying food private labels.

Fig. 2: Frequency of buying food private labels (in %)
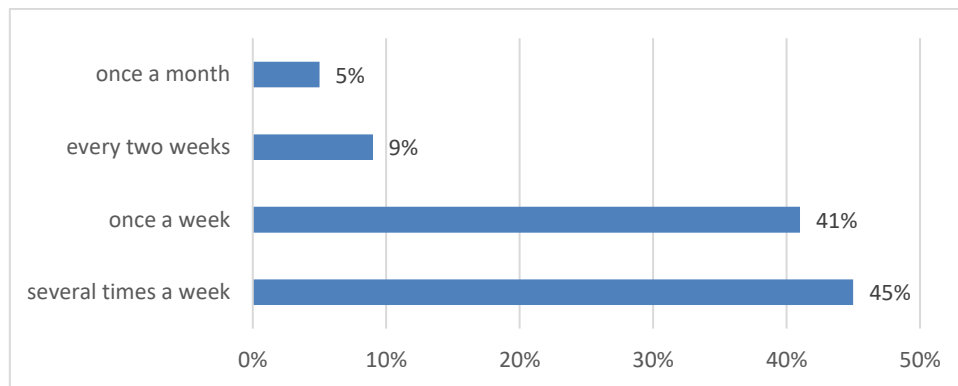
Source: author's research

As we can see, most of the respondents are buying food private products once a week and several times a week (86 % of respondents). As stated in the part Material and methods, the author will test by chi-square test the following hypotheses:

H_10: Frequency of buying food private labels is independent on the gender

H_11: Frequency of buying food private labels is not independent on the gender

H_20: Frequency of buying food private labels is independent on the average monthly family income

H_21: Frequency of buying food private labels is not independent on average monthly family income

First of all, the author tested the null hypothesis: The frequency of purchase food private labels is independent on the gender at the 99% confidence level.

Results of the Chi-Square Test for the first hypothesis
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-----------------------------------------------------------
Chi-Square      Df      P-Value
-----------------------------------------------------------
24.32           1       0.1345
-----------------------------------------------------------
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The results of the Chi-Square Test for the first hypothesis proved that the Frequency of buying food private labels is independent on the gender at the 99% confidence level. Since the P-value of this test is greater than 0.01, we can reject the null hypothesis.

The results of the Chi-Square Test for the second hypothesis follows. Since the P-value of this test was less than 0.01, we can reject the null hypothesis at the 99% confidence level.

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-----------------------------------------------------------
Chi-Square      Df      P-Value
-----------------------------------------------------------
25.67            4      0.003201
-----------------------------------------------------------
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Based on the Chi-Square Test results, we can state that frequency of buying food private labels is independent on the gender and not independent o on average monthly family income at the 99% confidence level. The detailed analysis revealed that families with lower incomes are buying more frequently food private labels than families with higher average monthly income.

Respondents were asked where they are buying private labels, and they should mark concrete retailers, where they are purchasing private labels. The following graph summarized the answer of respondents.

**Fig. 3: Division of retailers, where students are buying food private labels (in %)**
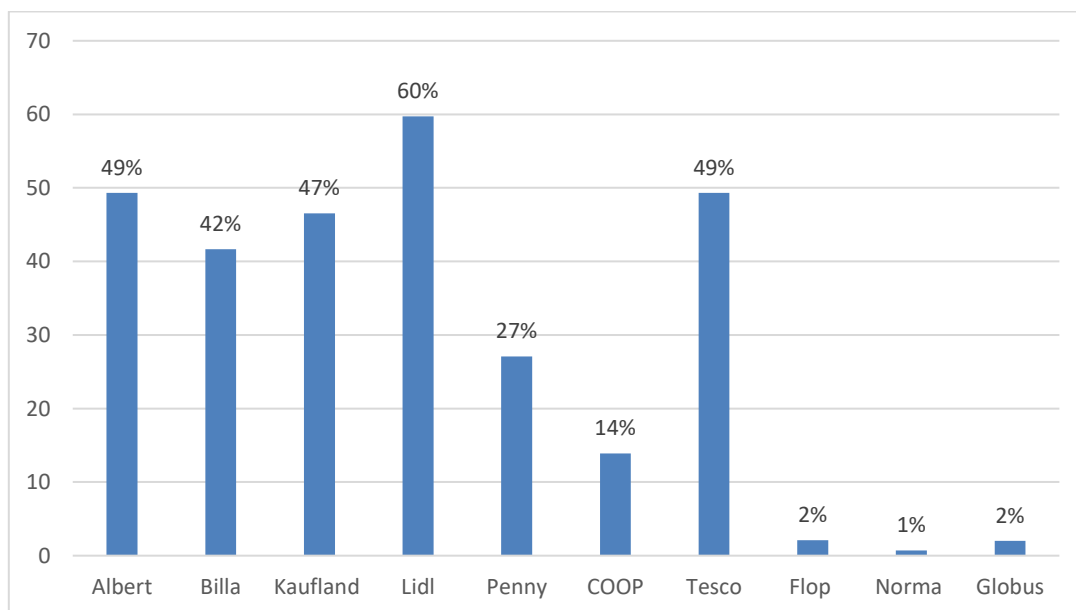
Source: author's research

More than 50 % of respondents are buying private labels in Lidl. Nearly 50%, 49% of full-time students are buying private labels in Albert and Tesco, 47% of students are purchasing private labels in Kaufland. More than 40% of respondents are buying private labels in Billa (42% of respondents). Least consumers (less than 2%) are purchasing private labels in Flop, Norma, and Globus.

In the second part of the questionnaire author focus on the specific categories of food private labels are bought by students.

Fig. 4: Categories of food private labels buying by university students (in %)
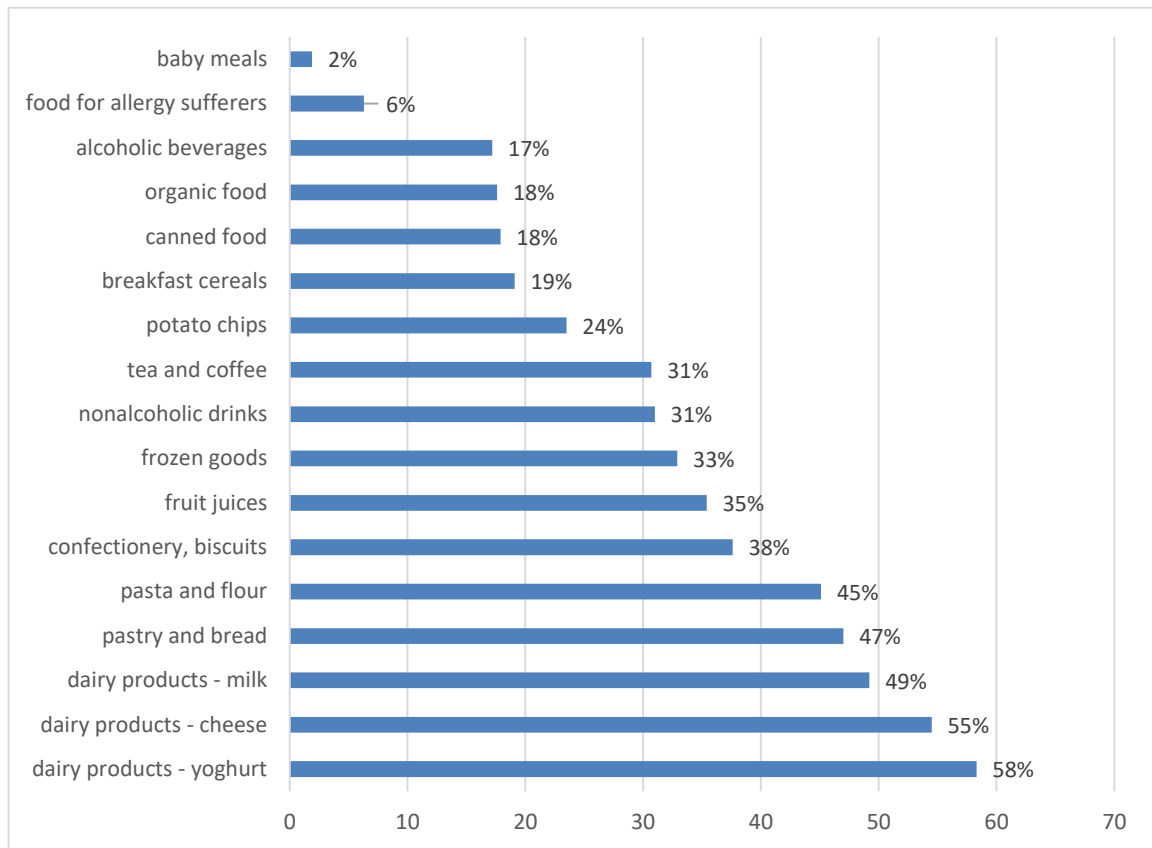
Source: author's research

As we can see from figure 4, students in the sector of food private labels are buying mainly diary products. Concretely cheeses and yogurts are bought by more than 50 % of respondents, and nearly 50% (49.2%) of students are buying milk in the sector of the food private labels. Diary products are followed by pastry and bread (47%), pasta and flour (45.2%). Since respondents are students, therefore, the baby meal is not an essential product for this segment. More than 30% of respondents stated that they are buying tea and coffee, non-alcoholic drinks, frozen goods, fruit juices, and confectionery and biscuits.

Conclusion

Private labels represent an essential factor for competitiveness for a long time. The global share of private labels is 16.7 %, but in the European Union, the share of private labels is 31.4 % and has been still increasing (The Nielsen Company 2018). Therefore, the author's research focused on the food private labels and the specific segment of university students. Author research aimed to investigate which categories of food private labels are bought by university students,

the frequency of purchasing private labels, etc. Author's research revealed that 90% of respondents are buying food private labels. 86% of them are buying private labels at least once a week. More than 50 % of respondents are buying dairy products. As expected, since the research sample was full-time university baby meals is buying only 2%, less than 6% of respondents stated that they are buying food for allergy sufferers. This fact corresponds with the percentage of allergy suffers in the population, which is around 5 %.

Since the private labels are today connected not only with the food products but also with drugstore goods and cosmetics, further author's research will focus on these types of products.

Acknowledgment

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