# 

Volume 30, Issue 4, 2021

# CONTENTS

Riddhish N. Joshi, Yogesh C. Joshi – An Assessment of CETSCALE in Liberalised Economy	3
Mariya Georgieva, Evgeni Stanimirov – Marketing Projections of Socially Responsible Branding on Consumer Loyalty	23
Petar Peshev – Analyzing CFD Retail Investors' Performance in a Post MiFID II Environment	53
Juhee Singh Verma, Pritee Sharma – Vulnerability of Small Farmers to High Food Prices – A Case Study of Indian Farmers	74
Yuliia Sotnikova, Eka Stepanova, Nikita Nazarov, Andrey Semenchenko – Features of Creative Clusters Formation in Ukraine	89
Reshmi Banerjee, Avani Desai – A Study of Competencies and Challenges of Indian Women Entrepreneurs	105
Imad Kareem Alaamshani, Hanny Zurina Hamzah, Shivee Ranjanee Kaliappan, Normaz Wana Ismail – Impact of Trade Facilitation on Extensive Margin Yulia Sotnikova, Oleg Ivanisov, Olena Lebedynska,	131
Anastasiia Maliukina – Professional Mobility of Youth: Trends, Problems and Prospects Maria Bakalowa – Education and Migration: The	148
(Non)Return of Better Educated Migrants to Bulgaria	166
Mihaela Misheva – Return Migration and Institutional Change: The Case of Bulgaria	187
Summaries	203

Publication of this issue 4/2021 of Economic Studies journal is supported by the Bulgarian National Science Fund at Ministry of Education and Science.

ECONOMIC RESEARCH INSTITUTE AT BULGARIAN ACADEMY OF SCIENCES

#### **ECONOMIC STUDIES**

Volume 30 (4), 2021

To be cited as Economic Studies (Ikonomicheski Izsledvania), 30 (4), 2021.

#### Editorial Board

Prof. MITKO DIMITROV (Chief Editor) Prof. IVAN STOIKOV Prof. NENO PAVLOV Prof. DANIELA BOBEVA Prof. GEORGE SHOPOV Prof. HRISTINA NIKOLOVA Prof. ISKRA BALKANSKA Prof. PLAMEN TCHIPEV Prof. SPARTAK KEREMIDCHIEV Prof. STOYAN TOTEV Prof. ATYANA HOUBENOVA Prof. VASIL TSANOV Assoc. Prof. GRIGOR SARIISKI Assoc. Prof. VICTOR YOTZOV Assoc. Prof. VLADIMIR ZHECHEV

#### International Advisory Board

Prof. ANDRASH INOTAI (Hungary) Prof. ATANAS DAMIANOV Prof. BOIKO ATANASOV Prof. BRUNO DALLAGO (Italy) Prof. DIMITAR DIMITROV Prof. EVGENI STANIMIROV Prof. GABOR HUNIA (Austria) Prof. GHEORGHE ZAMAN (Romania) Prof. GEORGE PETRAKOS (Greece) Prof. NIKOLA VULCHEV Prof. MARIYANA BOZHINOVA Prof. RUSLAN GRINBERG (Russia) Prof. SAUL ESTRIN (UK) Prof. TAKI FITI (Macedonia) Prof. XAVIER RICHET (France)

DIANA DIMITROVA – journal secretary Text editor: Ilko Valkov

Address: Economic Research Institute at BAS, 3 "Aksakov" str., Sofia 1000, Bulgaria Chief Editor / Journal Secretary: (+359-2) 8104019, e-mail: econ.studies@iki.bas.bg

#### ISSN 0205-3292

© Economic Research Institute at the Bulgarian Academy of Sciences, 2021



Riddhish N. Joshi<sup>1</sup> Yogesh C. Joshi<sup>2</sup>

Volume 30 (4), 2021

# AN ASSESSMENT OF CETSCALE IN LIBERALISED ECONOMY<sup>3</sup>

The study aims to empirically assess the dimensionality, reliability and validity of the consumer ethnocentrism tendency scale (CETSCALE) in the liberalised economy, India. Data are collected using a structured questionnaire from urban and rural regions to evaluate the CETSCALE. A total of 900 valid responses were collected. The dimensionality, reliability and validity have been assessed for the urban sample of 455 and the rural sample of 445 separately, as well as for the collective sample of 900. It was established that CETSCALE is not unidimensional in India. It comprises two dimensions, termed as, protective ethnocentrism and patriotic ethnocentrism, in all three samples. The bi-dimensional CETSCALE is also found reliable and valid. The study advances the existing pool of information in the field of international economics, consumer psychology and global marketing. It also assists domestic producers to get an improved understanding of consumers' ethnocentric tendencies, which in turn would benefit them to choose superior marketing strategies and boost their sales. Progress of inland manufacturers will help the nation to grow and the overall quality of life of people will improve. The study will not only deliver certain social and policymaking insights to the domestic firms and Government but also to the foreign firms functioning or planning to operate in India. JEL: M31; F1; F10

## 1. Introduction

Globalisation unlocked and uncovered domestic and overseas marketers to superior market opportunity and additionally, it has presented consumers across the globe with an extensive amount of brand choices from inland and overseas (Lohano, 2014). Indian consumers, too, have a broader choice of merchandise at their disposal as economic liberalisation and privatisation, along with globalisation, have performed in unison to downfall the blockades and made the marketplace very competitive (Alfaro, Chari, 2009). In such progressively crowded marketplaces, it has become indispensable for firms to be ahead in the competition by assessing consumers' buying inspirations and increasing close relationships with them, particularly in countries dependent significantly on imported merchandise (Tsai, Yoo, Lee,

 <sup>&</sup>lt;sup>1</sup> Riddhish N. Joshi, Research Scholar in GH Patel PG Institute of Business Management, Sardar Patel University, Assistant Professor in S.R. Luthra Institute of Management, e-mail: riddhish2@gmail.com.
 <sup>2</sup> Dr. Yogesh C. Joshi, Director and Professor in GH Patel PG Institute of Business Management, Sardar Patel University, e-mail: joshiyogesh\_2000@yahoo.com.

<sup>&</sup>lt;sup>3</sup> Preliminary version of the article was presented and discussed as a report of the ANVESH Conference 2020, organized by Institute of Management, Nirma University, India.

2013). Consumer perception and attitudes towards domestic and overseas products, affect consumer buying motivation a lot (Erdogan, Uzkurt, 2010; Prendergast, Tsang, Chan, 2010) and behavioural intention has also been found to be one of the major predictors of behaviour (Chatterjee, Kar, Gupta, 2018).

India, as a growing country with vast market potential, has clutched the attention of abundant global businesses from all over the world (Kumar, 2009). The year 1991, observed a major transformation in the Indian economic scenario, wherein liberal trade policy, loosened Indian economic borders for foreign investments. Due to this, people of India are provided with more overseas product choices as compared to their previous experiences and the USA, China, Switzerland, Saudi Arabia, and UAE stay as the chief trading associates of India for the last few years (Narang, 2016). Remarkable variations in the preferences and likings in the consumption pattern of the Indian consumers were observed after the economy is liberalised (Kaur, Singh, 2007; Bhardwaj, Kumar, Kim, 2010; Gupta, 2011). Liberalisation and globalisation moulded a greater level of exposure to foreign countries and media among Indian consumers, which in turn carried western culture to India and caused a shift in lifestyle (Batra, Ramaswamy, Alden, Steenkamp, Ramachander, 2000; Bhardwaj et al., 2010). Conversely, contrary to the trend of globalisation since 2008, there are signs of increasing nationalism due to the economic crisis (Sharma, 2019) still in India, consumers are open to buying foreign products as far as it is easily available (Joshi, Joshi, 2018).

It is distinctly visible from India's international trade numbers that the from 2004-2005 consumption of imported non-oil goods has increased a lot and it was negatively contributing to trade balance, however, in 2015-2016, it got to the point that for the very first time, the deficit of oil products was less than the deficit of non-oil goods which in turn indicates that the consumption of foreign products has augmented a lot in India and an atmosphere of threat for domestic producers is created (Joshi, Joshi, 2017). In such a setting, it is imperative to recognise the inclination for merchandises made in-country over those made away and most of the researchers, study this tendency of a consumer with consumer ethnocentrism tendency scale (CETSCALE). The creators of this measuring instrument, Shimp and Sharma (1987), have recommended assessing this scale in other cultures/countries before applying the same. Douglas and Nijssen (2003) also pointed that international researchers should take extreme care while applying scales established in one country or in the context of other cultures, particularly as in the case constructs like CETSCALE where cultural context is different or macroeconomic factors are connected. It is significant to be familiar with the influence of consumer ethnocentrism because subliminally, it directs and translates the scale in other languages before using it.

Some researchers, earlier, have also studied the dimensionality of CETSCALE in India, but it had revealed mixed outcomes and as consumer ethnocentrism tendency is likely to vary over a period of time (Makanyeza, Du Toit, 2016), follow up researches are required to assess the same. Hence, it vital to empirically assess the consumer ethnocentrism tendency scale (CETSCALE) in the Indian context. It aids to discern the tendency of Indian consumers towards indigenous products. The objectives of the studies are to assess the dimensionality, reliability and validity of the CETSCALE empirically not only in the urban region but also in rural parts. The paper further covers a literature review, research methodology, outcomes and discussion, conclusion, limitations, and future scope of research.

### 2. Review of Literature

In the field of global marketing and consumer behaviour, the standpoints of the buyers toward domestic and foreign products have been the attention of interest for several years and the most prominent construct to study the same is consumer ethnocentrism (Okechuku, Onyemah, 1999; Kaynak, Kara 2002; Solomon, Russell-Bennett, Previte, 2012).

Shimp (1984), for the first time, coined the term "consumer ethnocentrism". According to him, corresponding to cultural outlooks and religious philosophy throughout the chief epoch of the initial childhood socialisation process, numerous parties that include peers, mass media and opinion leaders over and above the family unit to convey child with a nous of belongingness and identity impact the ethnocentric orientation of the child. People carry this orientation which was formed in childhood with minor changes into adulthood and it affects the ability of decision making of the person in all roles, including the role of a consumer (Sue, 2004). The idea of customer ethnocentrism is assessed to be a piece of one intricate and multi-layered consumer paradigm containing cognitive, affective, and normative angles toward foreign goods. Consumer ethnocentrism is intended to discover normative-based dogmas, as an element of the common consumer orientation towards foreign goods, that purchasing domestic goods is someway noble for the country, whereas buying foreign goods is unsafe to the economy of the country and fellow countryman and is unpatriotic.

Towards the end of the 1980s, Shimp and Sharma (1987) prolonged the discourse of ethnocentrism by examining whether these ethnocentric propensities stimulated a person's buying behaviours. They outlined it as convictions apprehended by customers concerning the correctness and goodness of buying overseas merchandise. Shimp and Sharma (1987) established a 17-item scale entitled the CETSCALE (Consumer Ethnocentrism Tendency Scale) to evaluate the degree of consumer ethnocentrism. As measured by the CETSCALE (Shimp, Sharma, 1987), consumers who score high in consumer ethnocentrism, favour to purchase homegrown instead of overseas goods and perceive indigenous merchandise as better to those manufactured in some other nation. More ethnocentric consumers tend to overemphasise goods from their own country over foreign goods (Klein, Ettenson, Morris, 1998; Balabanis, Mueller, Melewar, 2002; Kumar, Fairhurst, Kim, 2013), and it is very tough for manufacturers and marketers to convince and please consumer high on ethnocentrism (Shimp, Sharma, 1987).

At a global level, the assessment of the CETSCALE has been conducted by various researchers in various countries, as mentioned in Table 1. In the majority of the research conducted in America (Shimp, Sharma, 1987; Netemeyer, Durvasula, Lichtenstein, 1991; Grant, Wren, 1993; Hult, Keillor, 1994; Chakraborty, Allred, Bristol, 1996; Durvasula, Andrews, Netemeyer, 1997; Hult, Keillor, Lafferty, 1999), the CETSCALE is found unidimensional except the study conducted by Weber, Lambert, Conrad & Jennings (2015) who found the scale bi-dimensional in nature. CETSCALE is found unidimensional in some other countries like France (Netemeyer et al., 1991), Japan (Netemeyer et al., 1991; Hult et al., 1999), Sweden (Hult, Keillor, 1994; Hult et al., 1999), South Korea (Sharma, Shimp, Shin, 1995), Malta (Caruana, Magri, 1996), Bangladesh (Bandyopadhyay, Muhammad, 1999), Spain (Martínez, del Barrio García, Fernández, Zapata, Toledo, 2000), Iceland

(Bandyopadhyay, Saevarsdottir, 2001; Bandyopadhyay, 2012), Bosnia and Herzegovina (Vida, Dmitrović, Obadia, 2008) and Cyprus (Nadiri, Tümer, 2010).

Table 1

<b>C</b>				N. f
Sr.	Author(s) & Year	Country	Unidimensional?	
_ <u>N</u> 01			N7	Dimensions
1	Shimp & Sharma (1987)	USA	Yes	_
		USA	Yes	_
2	Netemeyer, Durvasula & Lichtenstein	France	Yes	_
	(1991)	West Germany	Yes	-
	a	Japan	Yes	-
3	Grant & Wren (1993)	USA	Yes	-
4	Hult & Keillor (1994)	USA	Yes	_
		Sweden	Yes	_
5	Sharma et al., (1995)	South Korea	Yes	_
6	Caruana & Magri (1996)	Malta	Yes	-
7	Chakraborty, Allred & Bristol (1996)	USA	Yes	—
8	Marcoux, Filiatrault & Cheron (1997)	Poland	No	3
9	Durvasula Andrews & Netemeyer (1997)	USA	Yes	_
		Russia	Yes	-
10	Mayondo & Tan (1999)	Malaysia	No	3
10		Hong Kong	No	4
		USA	Yes	—
11	Hult, Keillor & Lafferty (1999)	Sweden	Yes	-
		Japan	Yes	-
12	Bandyonadhyay & Muhammad (1909)	India	Yes	-
12	Bandyopadnyay & Munaniniad (1999)	Bangladesh	Yes	-
13	Martínez, del Barrio García, Fernández,	Spain	Ves	_
15	Zapata & Toledo (2000)	Spann	1 03	
14	Bandyopadhyay & Saevarsdottir (2001)	Iceland	Yes	-
		Czech Republic	No	2
15	Lindquist, Vida & Fairhurst (2001)	Poland	No	2
		Hungary	No	2
16	Supphellen & Rittenburg (2001)	Poland	Yes	_
17	Julie & Albaun (2002)	Hong Kong	No	2
18	Douglas & Nijssen (2003)	Holland	No	2
19	Acharya & Elliot (2003)	Australia	No	2
20	Bawa (2004)	India	No	4 and 3
21	Saffu & Walker (2005)	Russia	No	2
22	Upadhyay & Singh (2006)	India	No	4
22	Chryssochoidis, Krystallis & Perreas	Castor	N <sup>†</sup> -	2
23	(2007)	Greece	INO	2
24	Hsu & Nien (2008)	China	No	2
25	Vida Dmitrović & Obadia (2008)	Bosnia and	Ves	
25	vida, Dilitiovic & Obaula (2008)	Herzegovina	1 68	_
26	Khan & Rizvi (2008)	India	No	4
27	Wei, Wright, Wang & Yu (2009)	China	No	2
28	Nadiri and Tümer (2010)	Cyprus	Yes	_

CETSCALE dimensionality in various countries

- Economic Studies	(Ikonomicheski	Izsledvania),	30 (4), p.	3-22.
--------------------	----------------	---------------	------------	-------

Sr. №	Author(s) & Year	Country	Unidimensional?	No of Dimensions
29	Poon, Evangelista & Albaum (2010)	Australia	Yes	-
30	Teo, Mohamad & Ramayah (2011)	Malaysia	No	2
31	Singh & Dhiman (2012)	India	No	4
32	Strehlau, Ponchio & Loebel (2012)	Brazil	No	3
33	Wanninayake & Chovancova (2012)	Czech Republic	No	4
34	Bandyopadhyay (2012)	Iceland	Yes	-
35	Qing, Lobo & Chongguang (2012)	China	Yes	-
36	Jiménez-Guerrero, Gázquez-Abad & del Carmen Linares-Agüera (2014)	Germany	No	2
37	Weber, Lambert, Conrad & Jennings (2015)	USA	No	2
38	Cazacu (2016)	Moldova	No	4
39	Ghani and Mat (2017)	Malaysia	No	2

Source: Compilation by authors based on review of literature.

Durvasula et al. (1997) found CETSCALE unidimensional, while Saffu & Walker (2005) found it bidimensional in Russia. Acharya and Elliot (2003) found CETSCALE bidimensional, while Poon, Evangelista and Albaum (2010) found it unidimensional in Australia. Netemeyer et al. (1991) found CETSCALE unidimensional in West Germany while Jiménez-Guerrero, Gázquez-Abad and del Carmen Linares-Agüera (2014) found it bidimensional in Germany. Marcoux, Filiatrault and Cheron (1997) found CETSCALE three-dimensional, Lindquist, Vida and Fairhurst (2001) found it bidimensional, while Supphellen and Rittenburg (2001) found it unidimensional in Poland. Hsu & Nien (2008) and Wei, Wright, Wang & Yu (2009) found CETSCALE bidimensional while Qing, Lobo & Chongguang (2012) found it unidimensional in China. CETSCALE is found bidimensional or multidimensional in some countries like Malaysia (Mavondo, Tan, 1999; Teo, Mohamad, Ramayah, 2011; Abd Ghani, Mat, 2017), Hong Kong (Mavondo, Tan, 1999; Julie, Albaun. 2002), Czech Republic and Hungary (Lindquist, Vida, Fairhurst, 2001; Wanninayake, Chovancova, 2012), Holland (Douglas, Nijssen, 2003), Greece (Chryssochoidis, Krystallis, Perreas, 2007), Brazil (Strehlau, Ponchio, Loebel, 2012) and Moldova (Cazacu, 2016).

As far as studies conducted in India are concerned, only one study (Bandyopadhyay, Muhammad, 1999) found CETSCALE unidimensional. Rest all studies (Bawa, 2004; Upadhyay, Singh, 2006; Khan, Rizvi, 2008; Singh, Dhiman, 2012) reported CETSCALE as multidimensional.

The majority of the above studies lack Indian context and the Indian contextual studies either used revised scale (Sharma, 2015) or only focused on the urban consumer (Bawa, 2004; Upadhyay, Singh, 2006) or obtained data only from student sample (Upadhyay, Singh, 2006). Two out of three samples set in the study conducted by Bawa (2004) were also students. No earlier study has incorporated a sample with a diverse background. Moreover, an assessment of CETSCALE in rural India is never attempted. The paper not only assesses the consumer ethnocentrism tendency scale's dimensionality, reliability and validity on the diverse sample but also in rural as well as urban samples collectively and separately.

#### 3. Methodology

The objectives of this study are to evaluate the dimensionality, reliability and validity of the CETSCALE empirically in urban and rural regions separately as well as a collective sample. Based on objectives, the following hypotheses are proposed for all three samples.

H1: CETSCALE is unidimensional.

H2: CETSCALE is reliable.

**H3:** CETSCALE is valid.

The scale validation procedure is given by various researchers (Churchill, 1979; Hinkin, 1995; Hinkin, et al., 1997; Safu, Walker, 2006; Evanschitzky, Wangenheim, Woisetschläger, Blut, 2008; Pentz, Terblanche, Boshoff, 2013) and accordingly, validity testing of the CETSCALE is implemented in the present study. Descriptive research design is used. Non-probability convenience sampling technique was used to select the sample and a structured questionnaire was used to collect the data.

#### 3.1. Instrument design

To measure the consumer ethnocentrism tendency, CETSCALE, developed by Shimp and Sharma (1987) is a standard and widespread scale. As the study wanted to examine the psychometric properties of the scale, items to study consumer ethnocentrism tendency in urban and rural regions of India, were absorbed from an existing pool of studies (Shimp, Sharm, 1987; Bawa, 2004; Upadhyay, Singh, 2006) with slight modifications. The rough draft of the questionnaire containing 17 statements CETSCALE to study consumer ethnocentrism tendency of Indian consumers employing a seven-point Likert scale was prepared. It was considered suitable to cautiously revise and reproduce this scale according to the physiognomies of Indian consumers as this scale was originally designed in the cultural contexts of the USA. The items were administered to two experts involved in international business and two marketing professors to evaluate the content and they assessed each item for specificity, representativeness, and correctness. The final draft of the questionnaire in English was ready. It represents the tendency of Indian customers about the rightness, indeed goodness, of buying overseas merchandise. The instrument encompassed two sections. The first section included the 17 items of the CETSCALE as shown in Table 2 and the second part contained socio-demographic details like gender, age, occupation, education, income, and residence locality.

Then the measuring instrument was translated into Gujarati (local language) by a journalist fluent in both languages and back-translated in English by another journalist, fluent in both languages. Both questionnaires were supplied to a professor of English literature with excellent proficiency in the Gujarati language to judge the meaning compatibility. Post three rounds of corrections, the final Gujarati questionnaire was considered to adequately represent the English version on which it was based.

#### Table 2

CETSCALE statements as used in the present study

-	
No.	Items
CE1	Indian people should always buy Indian made products instead of imports.
CE2	Only those products that are unavailable in India should be imported.
CE3	Buy Indian made products. Keep India working.
CE4	Indian products, first, last, and foremost.
CE5	Purchasing foreign-made products is un-Indian.
CE6	It is not right to purchase foreign products, because it puts Indians out of jobs.
CE7	A real Indian should always buy Indian made products.
CE8	We should purchase products manufactured in India instead of letting other countries get
	rich off us.
CE9	It is always best to purchase Indian products.
CE10	There should be very little trading or purchasing of goods from other countries unless out
	of necessity.
CE11	Indians should not buy foreign products, because this hurts Indian business and causes
	unemployment.
CE12	Restrictions should be put on all imports.
CE13	It may cost me in the long-run, but I prefer to support Indian products.
CE14	Foreigners should not be allowed to put their products on our markets.
CE15	Foreign products should be taxed heavily to reduce their entry into India.
CE16	We should buy from foreign countries only those products that we cannot obtain within our
	own country.
CE17	Indian consumers who purchase products made in other countries are responsible for
	putting their fellow Indians out of work.

#### 3.2. Sampling and data collection

As a cross-sectional study, the data were obtained just once through both, online and offline mode, from Indian adult consumers from the western region of India. During the sample selection process, Gujarat state was divided into four geographical zones. The urban region of the most populous district for an urban sample and the rural region of the least populous district for the rural sample was chosen to have effective urban and rural representation.

The present study incorporates a total sample size of 900. This sample includes 455 samples from the urban regions and 445 samples from the rural regions. The sample size adequacy for CETSCALE assessment is supported by some earlier studies in the area of consumer ethnocentrism. Some are Shimp and Sharma (1987): sample size 145; Durvasula et al., (1997): sample size 204; Supphellen and Rittenburg, (2001): sample size 218; Bawa (2004): sample size 336; Upadhyay and Singh (2006): sample size 164; Saffu and Walker (2006): sample size 233; John and Brady (2011): sample size 273; Nadimi, Mansori & Ismail (2012): sample size 328; Plank and Lindquist (2015): sample size 276; Makanyeza and Du Toit (2016): sample size 305.

#### 3.3. Dimensionality

Exploratory factor analysis provides some evidence of the initial validity of measurement items (Ford, McCallum, Tait, 1986; Grover, 1993). An exploratory factor analysis was carried out to recognise the underlying factor structure. Kaiser's measure of eigenvalue larger than 1, no cross-loadings, item communalities and item loadings more than 0.5, were incorporated as retention rule (Hair, Black, Babin, Anderson, Tatham, 2006).

#### 3.4. Reliability

To evaluate the reliability of each sub-construct, cronbach's alpha, alpha when item deleted and the corrected item to total correlations are considered (Shimp, Sharma, 1987; Netemeyer et al., 1991; Luque-Martinez et al., 2000; Evanschitzky et al., 2008; Pentz et al., 2013). The following rule of thumb is followed while interpreting the value of cronbach's alpha (Cronbach, 1951; Nunnally; 1978), >0.90 = Excellent, <0.90 and >= 0.80 = Very good, <0.80 and >= 0.70 = Good, <0.70 and >= 0.60 = Acceptable, <0.60 and >= 0.50 = Poor, <0.50 = Not acceptable. Moreover, the deletion of items should not improve the value of the coefficient alpha (Aagja, Garg, 2010) and the item can be said to consistent with all other items of subscale if its corrected item to correlation is larger than the threshold level of 0.3 (Gliem, Gliem, 2003).

#### 3.5. Validity

The analysis is insufficient to irrefutably establish the proper dimensionality of the measures even after EFA delivers preliminary outcomes for the basic factor structure. Hence, confirmatory factor analysis (CFA) was executed to assess the general goodness-of-fit of all the dimensions, individually and jointly, to determine the validity of the measures (Panuwatwanich, Stewart, Mohamed, 2008; Byrne, 2013). To evaluate the important elements in the measurement theory, i.e. reliability, convergent and discriminant validity, CFA was implemented (Gerbing, Anderson, 1988; Hair, Anderson, Babin, Black, 2010). The criteria which are followed to accept a model fit are suggested by various researchers (Hooper, Coughlan, Mullen, 2008; Reisinger, Mavondo, 2007; Saffu, Walker, 2006; John, Brady, 2011). The criteria include the value of less than 5 for  $\chi 2$ /DF, values greater than 0.9 for various fit indices like Goodness-of-fit index (GFI), Adjusted goodness-of-fit index (AGFI), Incremental-fit index (IFI), normed fit index (NFI), comparative fit index (CFI) and Tucker Lewis index (TLI) while the values of Root Mean Square Error of Approximation (RMSEA) and standardised root mean square residual (SRMR) should be less than 0.08.

# 4. Results and Discussion

#### 4.1. Descriptive statistics

Out of 900 respondents, 455 are from the urban regions and 445 are from rural regions. The dispersion of all three samples on various demographic parameters is presented in Table 3.

Т	ał	bl	е	3

		Collective	Urban	Rural
C	haracteristics	sample (%)	sample (%)	Sample (%)
		n=900	n=455	n=445
Candan	Male	54.10	52.50	55.73
Gender	Female	45.90	47.50	44.27
	Minimum	18	19	18
Age (in years)	Average	31.85	32.24	31.45
	Maximum	74	74	72
	HSC or below	14.60	12.50	16.63
Highest	Diploma or Undergraduate	16.10	15.40	16.85
Educational	Graduate	29.60	28.40	30.78
Qualification	Post Graduate	37.60	40.90	34.16
	Doctorate	2.20	2.90	1.58
	Student	28.80	28.60	28.99
	Unemployed	4.40	2.60	6.29
Present	Salaried	30.40	32.70	28.09
Occupation	Self-employed	28.20	28.60	27.87
	Homemaker	5.00	3.70	6.29
	Retired	3.10	3.70	2.47
	Below ₹ 2,50,000	28.10	24.00	32.36
Annual Family	₹ 2,50,000 - ₹ 5,00,000	38.80	42.40	35.05
Income	₹ 5,00,001 - ₹ 10,00,000	23.60	24.60	22.47
	Above ₹ 10,00,000	9.60	9.00	10.12
Current Place of	Urban	50.60	100	0
Residence	Rural	49.40	0	100

Overview of Respondents' Demographic Information

Source: Primary data.

# 4.2. Dimensionality Assessment

To ascertain the basic factor structure, exploratory factor analysis is performed on the collective, urban and rural samples. Principle component analysis and varimax as the method of extraction and method of rotation, respectively, were considered. Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity are applied to assess the factorability of the data and to confirm sampling adequacy. As mentioned in Table 4, The KMO value of the variables is 0.962, 0.959 and 0.957 for collective, urban and rural samples, respectively, which specified sampling adequacy (George, Mallery, 2016). Bartlett's test of sphericity signifies that the data were approximately multivariate normal (George, Mallery, 2016; Pallant, 2013). Two factors were extracted (refer to Table 5) to assess the consumer ethnocentrism tendency of Indian consumers. This two-factor solution illuminated 67.138, 67.841 and 66.249 per cent of the total variance in a collective, urban and rural sample respectively.

# Table 4

		Collective Sample Url		Urban	Urban Sample		Sample
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.962		0.959		0.957	
Doutlatt's Test of	Chi-Square	11647.016		6054.728		5587.076	
Sphericity	Df	136		136		136	
Sphericity	Sig.	0.000		0.000		0.000	
		Factor1	Factor2	Factor1	Factor2	Factor1	Factor2
Eigenvalue	Eigenvalue		1.610	9.899	1.634	9.662	1.600
Variance Explained (%)		34.704	32.434	35.470	32.371	33.571	32.679
Cumulative Variance Explained (%)		34.704	67.138	35.470	67.841	33.571	66.249
No. of Items		8	9	8	9	8	9

# Underlying factor structure - Collective, Urban and Rural sample

#### Source: Primary data.

#### Table 5

Results of EFA of C	Collective, Urb	an and Rura	l sample

, I							
Factors	Colle	ctive Sample	Urb	an Sample	Ru	Rural Sample	
Factor1: Protective Ethnocentrism	Factor Loading	Communalities	Factor Loading	Communalities	Factor Loading	Communalities	
CE5	0.827	0.707	0.851	0.745	0.798	0.666	
CE14	0.816	0.749	0.809	0.751	0.814	0.718	
CE6	0.803	0.740	0.791	0.736	0.817	0.750	
CE12	0.796	0.690	0.810	0.711	0.778	0.665	
CE17	0.771	0.697	0.805	0.737	0.733	0.659	
CE7	0.707	0.704	0.720	0.712	0.687	0.694	
CE11	0.699	0.716	0.713	0.740	0.681	0.689	
CE15	0.678	0.622	0.679	0.640	0.675	0.604	
Factor 2: Patriotic Ethnocentrism	Factor Loading	Communalities	Factor Loading	Communalities	Factor Loading	Communalities	
CE3	0.869	0.755	0.864	0.746	0.872	0.760	
CE4	0.741	0.659	0.719	0.633	0.765	0.684	
CE1	0.723	0.592	0.724	0.593	0.722	0.590	
CE10	0.701	0.663	0.699	0.641	0.702	0.685	
CE2	0.695	0.550	0.704	0.558	0.685	0.540	
CE8	0.679	0.680	0.678	0.692	0.683	0.669	
CE9	0.674	0.668	0.666	0.661	0.687	0.676	
CE13	0.652	0.632	0.643	0.642	0.666	0.624	
CE16	0.647	0.589	0.665	0.593	0.633	0.588	

Source: Primary data.

As mentioned in Table 5, the factor loadings and item communalities were much greater than the cut-off value of 0.50 for all the seventeen variables. Component one encompassing eight variables was chiefly concerned with safeguarding and shielding India from foreign products

and businesses so it has been titled "Protective Ethnocentrism". Component two containing nine variables emphasises favouring and prioritising domestic products and business, so it was labelled as "Patriotic Ethnocentrism". So H1 is rejected and can be said that indicators do not converge to measure a single construct and represent different dimensions.

#### 4.3. Reliability Assessment

The reliability assessment of the two sub-constructs of the CETSCALE established that the Cronbach's alpha values of each sub-construct of CETSCALE are exceptional in all the three categories of a sample as the values are above 0.90 (refer to Table 6). The lowest value of corrected item-total correlation in factor 1 is 0.724, 0.737 and 0.708 for collective, urban and rural samples, respectively. The lowest value of corrected item-total correlation in factor 2 is 0.662, 0.664 and 0.661 for collective, urban and rural samples, respectively. These values indicated that statements are consistent with the remaining in each subscale as the values are much higher than the threshold level. Besides, the value of alpha coefficients of each subscale did not improve by deleting items. So, H2 has been failed to reject and thus, all 17 items are qualified for further analysis.

Table 6

Factors	Coefficient alpha scores				
Factors	Collective sample	Urban sample	Rural sample		
Protective Ethnocentrism	0.937	0.942	0.929		
Patriotic Ethnocentrism	0.924	0.923	0.925		

Coefficient alpha scores

Source: Primary data.

#### 4.4. Validity Assessment for each dimension individually

As the consumer ethnocentrism items are identified from the existing literature, the selection of the construct is reasonably validated. Furthermore, the content was validated by two experts involved in international business and two marketing professors. The EFA, presented above, provided a valuable insight into the dimensionality and initial validity of the measurement scales.

To deliver a base for successive model assessment and fine-tuning, the outcomes were later confirmed using CFA. These results were used to check the model fit acceptability, unidimensionality, convergent validity and reliability (O'Leary-Kelly, Vokurka, 1998; Fabrigar, Wegener, MacCallum, Strahan, 1999; Bagozzi, Yi, 1988; Hair, Black, Babin, Anderson, Tatham, 1998). So, CFA was carried out for both the constructs. The CMIN/DF is 3.066, 1.620 and 1.573 for collective, urban and rural samples, respectively, for factor 1. The CMIN/DF is 2.028, 2.942 and 2.702 for collective, urban and rural samples, respectively, for factor 2. As exhibited in Table 7, the values of various fit indices like GFI, AGFI, IFI, NFI, CFI and TLI are above the threshold value of 0.9 and the values of RMSEA and SRMR are below the threshold value of 0.08. The above result confirms the unidimensionality of the individual constructs.



# Table 7

Summary of fit Indices, reliability and convergent validity

		Collectiv	Collective sample		Urban sample		Rural sample	
Category	Indicator	Protective	Patriotic	Protective	Patriotic	Protective	Patriotic	
		Ethnocentrism	Ethnocentrism	Ethnocentrism	Ethnocentrism	Ethnocentrism	Ethnocentrism	
	GFI	0.992	0.994	0.991	0.981	0.992	0.983	
Absolute fit	AGFI	0.969	0.978	0.969	0.938	0.969	0.942	
indices	RMSEA	0.048	0.034	0.037	0.065	0.036	0.062	
	SRMR	0.015	0.013	0.013	0.023	0.016	0.021	
	IFI	0.996	0.997	0.998	0.989	0.998	0.991	
Incremental	NFI	0.994	0.997	0.994	0.984	0.994	0.986	
fit indices	CFI	0.996	0.997	0.998	0.989	0.998	0.991	
	TLI	0.989	0.992	0.994	0.972	0.993	0.975	
Composite Reliability (CR)		0.937	0.921	0.942	0.920	0.931	0.924	
Average Variance Extracted (AVE)		0.651	0.566	0.671	0.563	0.628	0.575	

Source: Primary data.

The reliability and convergent validity of the model were assessed through composite reliability (CR) and average variance extracted (AVE). Bagozzi and Yi (1988) suggested 0.70 and 0.50 as the minimum value of CR and AVE. Table 7 summarises the value of CR and AVE for both the constructs in all three samples. Values of CR symbolise that these factors have sufficient internal consistency and were adequate in their representation of the construct. The AVE value of both specifying that more variance was captured by the variables within each factor and shared more variance in the factor than with the other factor.

#### 4.5. Validity Assessment for both dimensions together

After executing confirmatory factor analysis for each construct individually, CFA was further conducted on both the constructs together to test the model fit. In the combined model, the CMIN/DF is 4.193, 2.894 and 3.118 for collective, urban and rural samples, respectively. The model fit values such as GFI, AGFI, IFI, NFI CFI, TLI, RMSEA and SRMR, as mentioned in Table 8, meet the threshold values (Bagozzi, Yi, 1988; Hair, Black, Babin, Anderson, 2015) and signifies the model fit of the overall bi-dimensional model for all three samples.





Table 8

Figure 2

	T		1	1
Category	Indicator	Collective sample	Urban sample	Rural sample
	GFI	0.942	0.936	0.931
Absolute fit indiges	AGFI	0.904	0.895	0.885
Absolute in indices	RMSEA	0.068	0.065	0.069
	SRMR	0.037	0.038	0.038
	IFI	0.966	0.971	0.965
Incremental fit indices	NFI	0.959	0.956	0.949
incremental fit indices	CFI	0.966	0.971	0.965
	TLI	0.951	0.957	0.948

Summary of Fit Indices

Source: Primary data.

According to Table 9, the CR and AVE value in all the three samples are well above the threshold values, i.e. 0.70 and 0.50, respectively, which symbolises the sufficient internal consistency and adequateness in their representation of the construct, however, the issues are there with discriminant validity as the square root of AVE of protective ethnocentrism is marginally less than its correlation with patriotic ethnocentrism and value of AVE is less than the value of MSV in all the three samples, however, model fit can still be accepted with weak discriminant validity if other parameters are fulfilled (Watson et al., 1995). So, H3 has been failed to reject.

Table 9

	Collective sample		Urban sample		Rural sample	
Indicators	Protective	Patriotic	Protective	Patriotic	Protective	Patriotic
	Ethnocentrism	Ethnocentrism	Ethnocentrism	Ethnocentrism	Ethnocentrism	Ethnocentrism
Composite Reliability (CR)	0.936	0.911	0.941	0.908	0.930	0.914
Average Variance Extracted (AVE)	0.646	0.535	0.667	0.528	0.624	0.544
Maximum Shared Variance (MSV)	0.753	0.753	0.754	0.754	0.751	0.751
Square root of AVE	0.804	0.732	0.817	0.727	0.790	0.738
Correlation	0.868		0.868		0.867	

Convergent and discriminant validity

Source: Primary data.

# 5. Conclusions

The study advances the contemporary body of knowledge in the field of international marketing, behavioural economics, and consumer psychology. It exhibited that the construct of consumer ethnocentrism has two dimensions in India. The dimensions are termed as protective ethnocentrism and patriotic ethnocentrism. Earlier research presented mixed conclusions about the dimensionality of the construct of consumer ethnocentrism. Similar to the present study, some other studies conducted earlier, in various other countries, also found CETSCALE bidimensional, however, this is the first study conducted in India where CETSCALE is found bidimensional. The paper, hence, adds to the knowledge gap in present consumer ethnocentrism literature in India by assessing dimensionality, reliability and validity of the consumer ethnocentrism tendency scale. The superlative part of the present study is that it captured the acumens from diverse sample sets and also unlike former studies that incorporated a rural sample. The bidimensional CETSCALE is reliable and valid as a measure of consumer ethnocentrism tendency and can be used to study the same in India. It delivers national and international researchers, marketers, policymakers and companies a valuable instrument to study and analyse the consumer attitude towards inland and overseas products.

#### 6. Policy Implications

As the obtained outcomes of this research, in a great sense can facilitate the Government for effective policymaking and Indian companies to do a better market analysis. It will assist them in deciding their key bases for segmentation and target market, product designing and/or redesigning, branding and marketing activities, reshaping offerings, marketing mix, specific promotional message and media strategy and distribution strategy. The findings of this research can also empower international companies, decision-makers and marketing managers to feel a beat of Indian consumers by understanding the true nature of consumer ethnocentrism in India. India is an emerging and a key marketplace for most of the global companies, they cannot afford to make errors while devising their strategies in India. These multinational corporations can have a healthier decision making in the area of strategic segmentation and target market, geographical area selection for manufacturing unit and opening retail outlets, product modification required, communication message requirements, possibility and essentiality of strategic alliance, acquisition or merger opportunity etc.

#### 7. Limitations and Future Scope of Research

The study validates CETSCALE with a varied sample set, however, the use of a convenient sampling technique partially limited the exposure of several sections of consumers. The self-reported nature of data collection may also have affected the understanding of a few respondents. The present study limits validation of CETSCALE and future researchers can extend the application of this bidimensional CETSCALE to measure the ethnocentrism tendency of Indian consumers and the same can be clubbed with other constructs in the field of consumer attitude and consumer psychology. Future researchers may also check the validity of the CETSCALE with specific product category which may exhibit different results. Besides, as consumer ethnocentrism tendency is unlikely to be static over a period of time, the validation of the CETSCALE can be assessed in other parts of the country as well as again after some years. The study can lead to a better understanding of the phenomenon and can offer strategic and real-world insights for companies to develop and preserve their market shares and cultivate effective marketing strategies.

#### References

- Aagja, J. P., Garg, R. (2010). Measuring perceived service quality for public hospitals (PubHosQual) in the Indian context. – International Journal of Pharmaceutical and Healthcare Marketing.
- Abd Ghani, N. H., Mat, N. K. N. (2017). Malaysian consumers ethnocentrism: the measurement scale and index. – International Review of Management and Marketing, 7(1).
- Acharya, C., Elliott, G. (2003). Consumer ethnocentrism, perceived product quality and choice An empirical investigation. Journal of International Consumer Marketing, 15(4), p. 87-115.
- Alfaro, L., Chari, A. (2009). India transformed? Insights from the firm-level 1988-2005 (No. w15448). National Bureau of Economic Research.
- Anderson, W. T., Cunningham, W. H. (1972). Gauging foreign product promotion. Journal of Advertising Research, 12(1), p. 29-34.

- Bagozzi, R. P., Yi, Y. (1988). On the evaluation of structural equation models. Journal of the academy of marketing science, 16(1), p. 74-94.
- Balabanis, G., Diamantopoulos, A. (2004). Domestic country bias, country-of-origin effects, and consumer ethnocentrism: a multidimensional unfolding approach. – Journal of the academy of marketing science, 32(1), p. 80-95.
- Balabanis, G., Diamantopoulos, A., Mueller, R. D., Melewar, T. C. (2001). The impact of nationalism, patriotism and internationalism on consumer ethnocentric tendencies. – Journal of international business studies, 32(1), p. 157-175.
- Balabanis, G., Mueller, R., Melewar, T. C. (2002). The human values' lenses of country of origin images. – International Marketing Review.
- Bandyopadhyay, S. (2012). Ethnocentrism in Icelandic consumers and its consequences. International Business & Economics Research Journal (IBER), 11(3), p. 307-314.
- Bandyopadhyay, S., Muhammad, M. (1999). Consumer Ethnocentrism in South East Asia. Lamar University.
- Bandyopadhay, S., Saevarsdottir, K. (2001). Ethnocentrism in Icelandic consumers and its impact on the evaluation of imported products. – In: International Business Track. Decision Sciences Institute Annual Meeting, San Francisco, CA.
- Bannister, J. P., Saunders, J. A. (1978). UK consumers' attitudes towards imports: The measurement of national stereotype image. European Journal of marketing, 12(8), p. 562-570.
- Batra, R., Ramaswamy, V., Alden, D. L., Steenkamp, J. B. E., Ramachander, S. (2000). Effects of brand local and nonlocal origin on consumer attitudes in developing countries. – Journal of consumer psychology, 9(2), p. 83-95
- Bawa, A. (2004). Consumer ethnocentrism: CETSCALE validation and measurement of extent. Vikalpa, 29(3), p. 43-58.
- Berkman, H. W., Gilson, C. C. (1978). Consumer behavior: Concepts and strategies. Encino.
- Bhardwaj, V., Kumar, A., Kim, Y. K. (2010). Brand analyses of US global and local brands in India: The case of Levi's. – Journal of Global Marketing, 23(1), p. 80-94.
- Byrne, B. M. (2013). Structural equation modeling with Mplus: Basic concepts, applications, and programming. Routledge.
- Caruana, A. (1996). The effects of dogmatism and social class variables on consumer ethnocentrism in Malta. Marketing Intelligence & Planning.
- Cazacu, S. (2016). Preference for domestic goods: a study of consumer ethnocentrism in the Republic of Moldova. – Ecoforum Journal, 5(1).
- Chakraborty, G., Allred, A. T., Bristol, T. (1996). Exploring consumers' evaluations of counterfeits: The roles of country of origin and ethnocentrism. – ACR North American Advances.
- Chatterjee, S., Kar, A. K., Gupta, M. P. (2018). Success of IoT in smart cities of India: An empirical analysis. – Government Information Quarterly, 35(3), p. 349-361.
- Churchill Jr., G. A. (1979). A paradigm for developing better measures of marketing constructs. Journal of marketing research, 16(1), p. 64-73.
- Chryssochoidis, G., Krystallis, A., Perreas, P. (2007). Ethnocentric beliefs and country-of-origin (COO) effect. European journal of marketing.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. Psychometrika, 16(3), p. 297-334.
- Durvasula, S., Andrews, J. C., Netemeyer, R. G. (1997). A cross-cultural comparison of consumer ethnocentrism in the United States and Russia. – Journal of International Consumer Marketing, 9(4), p. 73-93.
- Douglas, S. P., Nijssen, E. J. (2002). Examining the Construct Validity of the CETSCALE in the Netherlands. Working Paper, Stern School of Business, New York.
- Douglas, S. P., Nijssen, E. J. (2003). On the use of "borrowed" scales in cross-national research. International Marketing Review.

- Erdogan, B. Z., Uzkurt, C. (2010). Effects of ethnocentric tendency on consumers' perception of product attitudes for foreign and domestic products. – Cross Cultural Management: An International Journal.
- Etzel, M. J., Walker, B. J. (1974). Advertising strategy for foreign products. Journal of Advertising Research, 14(3), p. 41-44.
- Evanschitzky, H., Wangenheim, F. V., Woisetschläger, D., Blut, M. (2008). Consumer ethnocentrism in the German market. International Marketing Review.
- Fabrigar, L. R., Wegener, D. T., MacCallum, R. C., Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research. – Psychological methods, 4(3), p. 272.
- Field, A. P. (2005). Is the meta-analysis of correlation coefficients accurate when population correlations vary?. Psychological methods, 10(4), p. 444.
- Ford, J., McCallum, R., Tait, M. (1986). The application of factor analysis in psychology: A critical review and analysis. – Personnel Psychology, 39, p. 291-314.
- Gaedeke, R. (1973). Consumer attitudes toward products made in developing countries. Journal of Retailing, 49(2), p. 13-24.
- George, D., Mallery, P. (2016). IBM SPSS statistics 23 step by step: A simple guide and reference. Routledge.
- Gerbing, D. W., Anderson, J. C. (1988). An updated paradigm for scale development incorporating unidimensionality and its assessment. – Journal of marketing research, 25(2), p. 186-192.
- Gliem, J. A., Gliem, R. R. (2003). Calculating, interpreting, and reporting Cronbach's alpha reliability coefficient for Likert-type scales. Midwest Research-to-Practice Conference in Adult, Continuing, and Community Education.
- Grant, E. S., Wren, B. M. (1993). Student ethnocentrism: Its relevance to the globalisation of marketing education. – Marketing Education Review, 3(1), p. 10-17.
- Grover, V. (1993). An empirically derived model for the adoption of customer-based interorganizational systems. – Decision sciences, 24(3), p. 603-640.
- Good, L. K., Huddleston, P. (1995). Ethnocentrism of Polish and Russian consumers: are feelings and intentions related. – International Marketing Review.
- Gupta, N. (2011). Globalisation does lead to change in consumer behavior: an empirical evidence of impact of globalisation on changing materialistic values in Indian consumers and its aftereffects. – Asia Pacific Journal of Marketing and Logistics, 23(3), p. 251-269.
- Hair, J. F., Anderson, R. E., Babin, B. J., Black, W. C. (2010). Multivariate data analysis: A global perspective (Vol. 7).
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., Tatham, R. L. (1998). Multivariate data analysis (Vol. 5, No. 3, pp. 207-219). Upper Saddle River, NJ: Prentice hall.
- Hair, J. F., Anderson, R. E., Tatham, R. L., William, C. (1998). Black (1998). Multivariate data analysis, 5, 87-135.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E. (2015) Multivariate Data Analysis, 7th ed., Pearson, New Delhi.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., Tatham, R. L. (2006). Multivariate data analysis (Vol. 6).
- Hinkin, T. R. (1995). A review of scale development practices in the study of organisations. Journal of management, 21(5), p. 967-988.
- Hinkin, T. R., Tracey, J. B., Enz, C. A. (1997). Scale construction: Developing reliable and valid measurement instruments. – Journal of Hospitality & Tourism Research, 21(1), p. 100-120.
- Hooper, D., Coughlan, J., Mullen, M. (2008, September). Evaluating model fit: a synthesis of the structural equation modelling literature. – In: 7th European Conference on research methodology for business and management studies, pp. 195-200.
- Hsu, J. L., Nien, H. P. (2008). Who are ethnocentric? Examining consumer ethnocentrism in Chinese societies. – Journal of Consumer Behaviour: An International Research Review, 7(6), p. 436-447.

- Hult, G. T. M., Keillor, B. D. (1994). The Impact Of A Social Desirability Bias On Consumer Ethnocentrism Research: A Cross-National Perspective. – Journal of Marketing Management (10711988), 4(2).
- Hult, G. T. M., Keillor, B. D., Lafferty, B. A. (1999). A cross-national assessment of social desirability bias and consumer ethnocentrism. – Journal of Global Marketing, 12(4), p. 29-43.
- Jiménez-Guerrero, J. F., Gázquez-Abad, J. C., del Carmen Linares-Agüera, E. (2014). Using standard CETSCALE and other adapted versions of the scale for measuring consumers' ethnocentric tendencies: An analysis of dimensionality. – BRQ Business Research Quarterly, 17(3), p. 174-190.
- Julie, H. Y., Albaum, G. (2002). Sovereignty change influences on consumer ethnocentrism and product preferences: Hong Kong revisited one year later. – Journal of Business Research, 55(11), p. 891-899.
- John, A., Brady, M. P. (2011). Exploration of the dimensionality of the consumer ethnocentric tendencies scale in Mozambique. Journal of African Business, 12(1), p. 114-132.
- Joshi, R. N., Joshi, Y. C. (2017). Consumption of Made in India products: Perception and Intention. In: Gujarati, H., Vala, V. (eds.). Proceedings of Enhancing Economic Productivity Competitiveness through Financial and Monetary Reforms. Ahmedabad, India: Gujarat Technological University, pp. 11-26.
- Joshi, R. N., Joshi, Y. C. An Empirical Study of Expectations Model of Economic Nationalism Among Millennials in South Gujarat. GH Patel Postgraduate Institute of Business Management, 21.
- Kaur, P., Singh, R. (2007). Uncovering retail shopping motives of Indian youth. Young consumers.
- Kaynak, E., Kara, A. (2002). Consumer perceptions of foreign products. European Journal of marketing.
- Khan, M. N., Rizvi, S. R. (2008). Consumer ethnocentrism: relevance and implications for marketers. ICFAI Journal of Consumer Behavior, 3(1).
- Klein, J. G., Ettenson, R., Krishnan, B. C. (2006). Extending the construct of consumer ethnocentrism: when foreign products are preferred. – International Marketing Review.
- Klein, J. G., Ettenson, R., Morris, M. D. (1998). The animosity model of foreign product purchase: An empirical test in the People's Republic of China. – Journal of marketing, 62(1), p. 89-100.
- Kumar, N. (2009). How emerging giants are rewriting the rules of M&A. Harvard Business Review, 87(5), p. 115.
- Kumar, A., Fairhurst, A., Kim, Y. K. (2013). The role of personal cultural orientation in consumer ethnocentrism among Indian consumers. – Journal of Indian business research.
- Lindquist, J. D., Vida, I., Plank, R. E., Fairhurst, A. (2001). The modified CETSCALE: validity tests in the Czech Republic, Hungary, and Poland. – International Business Review, 10(5), p. 505-516.
- Lohano, R. (2014). Consumer Ethnocentrism and Willingness to Buy: Analysing the Role of Three Demographic Factors in Karachi. IBT Journal Of Business Studies (JBS), 10(2).
- Makanyeza, C., Du Toit, F. (2016). Measuring consumer ethnocentrism: An assessment of reliability, validity and dimensionality of the CETSCALE in a developing market. – Journal of African Business, 17(2), p. 188-208.
- Marcoux, J. S., Filiatrault, P., Cheron, E. (1997). The attitudes underlying preferences of young urban educated Polish consumers towards products made in western countries. – Journal of International Consumer Marketing, 9(4), p. 5-29.
- Markin, R. J. (1974). Consumer behavior; a cognitive orientation [by] Rom J. Markin, Jr.
- Martínez, T. L., del Barrio García, S., Fernández, J. S., Zapata, J. Á. I., Toledo, L. D. (2000). Estudio de Egresados. Universidades, p. 5-565.
- Mavondo, F. T., Tan, A. (1999). Reconceptualising the CETSCALE (consumer ethnocentric tendency scale). – In: Aust NZ Marketing Academy Conf. 99. University of NSW.

- Nadimi, I., Mansori, S., Ismail, Z. M. M. (2012). Global replication of CETSCALE: A study of the Iranian market. – Journal of Targeting, Measurement and Analysis for Marketing, 20(3-4), p. 261-268.
- Nadiri, H., Tümer, M. (2010). Influence of ethnocentrism on consumers' intention to buy domestically produced goods: an empirical study in North Cyprus. – Journal of Business Economics and Management, 11(3), p. 444-461.
- Narang, R. (2016). Understanding purchase intention towards Chinese products: Role of ethnocentrism, animosity, status and self-esteem. – Journal of Retailing and Consumer Services, 32, p. 253-261.
- Netemeyer, R. G., Durvasula, S., Lichtenstein, D. R. (1991). A cross-national assessment of the reliability and validity of the CETSCALE. Journal of marketing research, 28(3), p. 320-327.
  Nunally, J. C. (1978). Psychometric theory (2th edition). McGraw-Hill. New York, NY.
- Okechuku, C., Onyemah, V. (1999). Nigerian consumer attitudes toward foreign and domestic products. – Journal of international business studies, 30(3), p. 611-622.
- O'Leary-Kelly, S. W., J. Vokurka, R. (1998). The empirical assessment of construct validity. Journal of operations management, 16(4), 387-405.
- Pallant, J. (2013). SPSS survival manual. McGraw-Hill Education (UK).
- Panuwatwanich, K., Stewart, R. A., Mohamed, S. (2008). The role of climate for innovation in enhancing business performance. – Engineering, Construction and Architectural Management.
- Pentz, C., Terblanche, N. S., Boshoff, C. (2013). Measuring consumer ethnocentrism in a developing context: An assessment of the reliability, validity and dimensionality of the CETSCALE. – Journal of Transnational Management, 18(3), p. 204-218.
- Plank, R. E., Lindquist, J. D. (2015). Exploring the CETSCALE in Soviet Armenia. In: Global Perspectives in Marketing for the 21st Century. Springer, Cham, pp. 113-118.
- Poon, P., Evangelista, F., Albaum, G. (2010). Attitudes of migrants towards foreign-made products: an exploratory study of migrants in Australia. Journal of Consumer Marketing.
- Prendergast, G. P., Tsang, A. S., Chan, C. N. (2010). The interactive influence of country of origin of brand and product involvement on purchase intention. Journal of Consumer Marketing.
- Qing, P., Lobo, A., Chongguang, L. (2012). The impact of lifestyle and ethnocentrism on consumers' purchase intentions of fresh fruit in China. Journal of Consumer Marketing.
- Reisinger, Y., Mavondo, F. (2007). Structural equation modeling: Critical issues and new developments. – Journal of travel & tourism marketing, 21(4), p. 41-71.
- Saffu, K., Walker, J. H. (2005). An assessment of the consumer ethnocentric scale (CETSCALE) in an advanced and transitional country: The case of Canada and Russia. – International Journal of Management, 22(4), p. 556.
- Saffu, K., Walker, J. (2006). An assessment of the CETSCALE in a developing country: the Ghana case. Journal of African Business, 7(1-2), p. 167-181.
- Schooler, R. D., Wildt, A. R. (1968). Elasticity of product bias. Journal of Marketing research, 5(1), p. 78-81.
- Schooler, R. (1971). Bias phenomena attendant to the marketing of foreign goods in the US. Journal of international business studies, p. 71-80.
- Sharma, R. (2019). No Country for Strongmen: How India's Democracy Constrains Modi. Foreign Aff., 98, 96.
- Sharma, S., Shimp, T. A., Shin, J. (1994). Consumer ethnocentrism: A test of antecedents and moderators. – Journal of the academy of marketing science, 23(1), p. 26-37.
- Shimp, T. A. (1984). Consumer ethnocentrism: The concept and a preliminary empirical test. Advances in Consumer research, 11(1).
- Shimp, T. A., Sharma, S. (1987). Consumer ethnocentrism: construction and validation of the CETSCALE. – Journal of marketing research, 24(3), p. 280-289.
- Singh, A. I., Dhiman, M. (2012). An evaluation of ethnocentric scale (CETSCALE) among indian consumers of imported foods. Indian Manag. Stud. J, 16, p. 1-18.

- Solomon, M., Russell-Bennett, R., Previte, J. (2012). Consumer Behaviour. Pearson Higher Education AU.
- Steenkamp, J. B. E., Baumgartner, H. (1998). Assessing measurement invariance in cross-national consumer research. – Journal of consumer research, 25(1), p. 78-90.
- Strehlau, V. I., Ponchio, M. C., Loebel, E. (2012). An Assessment of the consumer ethnocentric scale (CETSCALE): evidences from Brazil. – Brazilian business review, 9(4), p. 103-126.
- Sue, D. W. (2004). Whiteness and ethnocentric monoculturalism: making the" invisible" visible. American Psychologist, 59(8), p. 761.
- Supphellen, M., Rittenburg, T. L. (2001). Consumer ethnocentrism when foreign products are better. Psychology & Marketing, 18(9), p. 907-927.
- Sharma, P. (2015). Consumer ethnocentrism: Reconceptualization and cross-cultural validation. Journal of International Business Studies, 46(3), p. 381-389.
- Teo, P. C., Mohamad, O., Ramayah, T. (2011). Testing the dimensionality of Consumer Ethnocentrism Scale (CETSCALE) among a young Malaysian consumer market segment. – African Journal of Business Management, 5(7), p. 2805.
- Tsai, W. S., Yoo, J. J., Lee, W. N. (2013). For love of country? Consumer ethnocentrism in China, South Korea, and the United States. – Journal of Global Marketing, 26(2), p. 98-114.
- Upadhyay, Y., Singh, S. K. (2006). Preference for domestic goods: A study of consumer ethnocentrism. - Vision, 10(3), p. 59-68.
- Vida, I., Dmitrović, T., Obadia, C. (2008). The role of ethnic affiliation in consumer ethnocentrism. European journal of marketing.
- Vida, I., Fairhurst, A. (1999). Factors underlying the phenomenon of consumer ethnocentricity: evidence from four central European countries. – The International Review of Retail, Distribution and Consumer Research, 9(4), p. 321-337.
- Wanninayake, W. M. C., Chovancová, M. (2012). Consumer ethnocentrism and attitudes towards foreign beer brands: With evidence from Zlin Region in the Czech Republic. – Journal of Competitiveness.
- Watson, D., Weber, K., Assenheimer, J. S., Clark, L. A., Strauss, M. E., McCormick, R. A. (1995). Testing a tripartite model: I. Evaluating the convergent and discriminant validity of anxiety and depression symptom scales. – Journal of abnormal psychology, 104(1), p. 3.
- Wei, Y., Wright, B., Wang, H., Yu, C. (2009). An Evaluation of the Consumer Ethnocentric Scale (CETSCALE) Among Chinese Consumers. – International Journal of Global Management Studies, 1(1).
- Weber, M. J., Lambert, J. T., Conrad, K. A., Jennings, S. S. (2015). Consumer ethnocentrism and tendencies to protect Wisconsin-made cheese products. – Academy of Marketing Studies Journal, 19(3), p. 149.
- Witkowski, T. H. (1998). Consumer ethnocentrism in two emerging markets: Determinants and predictive validity. Advances in consumer research, 25(1).



Mariya Georgieva<sup>1</sup> Evgeni Stanimirov<sup>2</sup>

Volume 30 (4), 2021

# MARKETING PROJECTIONS OF SOCIALLY RESPONSIBLE BRANDING ON CONSUMER LOYALTY

The current market reality is strongly influenced by the development of the concepts of "sustainable development" and "Experience economy". The latter forms a new business model – B2H (Business to human) – a human-centered business. Together with the increasing percentage of sophisticated customers, this is becoming a serious challenge for the businesses. In this context, socially responsible branding is positioned as a relevant tool that serves, on the one hand, to satisfy the pursuit of social, economic and environmental justice, and on the other hand, makes the relationship "company-client" to be a form of experience beyond the rational framework of market exchange. The study presents an author's model of the marketing projections of the application of socially responsible branding. In a mirror perspective - in terms of end-users and business, the relationships between the individual constructs of the model have been empirically tested with an emphasis on exploring the possibilities of socially responsible branding to influence the level of consumer loyalty, which is often considered a priority goal for companies. In conclusion, specific arguments are formulated for the practical applicability and significance of such a study.

JEL: M31

#### Introduction

More and more economic experts and analysts unite around the understanding that in the 21<sup>st</sup>-century conditions of the market environment and the behaviour of market participants are highly subject to and influenced by the development of two concepts – the concept of "Experience Economy" (Pine, Gilmore, 1998, p. 97-105) and the concept of "Sustainable development". The latter is invariably on the agenda of the World Economic Forum in Davos, where leaders around the world seek effective solutions to achieve a stable balance between economic, social and environmental goals, the balanced trinity of which is the basis of the concept of sustainable development. This process quite naturally leads to a modification of the behaviour of market participants. On the one hand, companies strive to

<sup>&</sup>lt;sup>1</sup>Chief Assistant Prof. Mariya Georgieva, PhD,University of Economics – Varna, "Marketing" Department, phone: 0895-619983, e-mail: m.georgieva@ue-varna.bg.

<sup>&</sup>lt;sup>2</sup> Prof. Evgeni Stanimirov, PhD, University of Economics – Varna, "Marketing" Department, e-mail: stanimirov@ue-varna.bg.

Georgieva, M., Stanimirov, E. (2021). Marketing Projections of Socially Responsible Branding on Consumer Loyalty.

"produce sustainably" and behave as good corporate citizens - companies that do well and at the same time strive to do good. On the other hand, this behaviour can be seen as a consequence of the desire to serve a specific market segment with serious potential for development - the market of sophisticated customers. The basic premise is that "sophisticated" customers have a high ethical consciousness expressed in affinity for "sustainable consumption". They are: more educated (Hirschman, 1980, p. 283-295); have wide access to information, as a result of which they are better informed (Alba, Hutchinson, 1987, p. 411-454); are significantly more experienced in making purchases (Sproles, Geistfeld, Badenhop, 1978, p. 88-103); more competent in their consumer choices (Feick, Price, 1987, p. 83-97); more value-oriented (Feick, Price, 1987, p. 83-97). These are consumers who are looking for value beyond the classic four-dimensional form of marketing. Determining for the behaviour of this segment, and in particular for shaping this decision to purchase, is the content and quality of experience that users get from the brand, not just the product or service (Pine, Gilmore, 1998, p. 97-105). It is this philosophy that underlies the concept of the "Experience economy". The projection of the above in the context of sustainable development suggests that consumers will switch to brands whose purchase allows commitment to the realization of "sustainability" to be an intense experience as much as possible.

This poses a serious challenge to companies – not just to offer excellent products and services, but to "make the world a better place". The practical approach to achieve this is related to the integration of the concept of Corporate Social Responsibility (CSR) in the overall corporate strategy of business organizations. "In the business world, good is associated with CSR" (Kotler, Lee, 2011, p. 2) and it is defined as "the next big challenge for branding" (Kotler, Pfoertsch, 2006, p. 300), which led to the emergence of the category "Socially responsible branding" (SRB).

In its essence, SRB is ideologically in line with the philosophy of "Experience economy" and "sustainable development". It is a crossroads between the pursuit of social, economic and environmental justice and the desire for the relationship "company-client" to be a form of experience beyond the rational framework of market exchange.

In this context, SRB is a kind of balance between the interests and goals of both parties – corporate companies on the one hand and "sophisticated" consumers on the other hand. SRB identifies and differentiates companies that produce "sustainably" and at the same time serves as information for "sophisticated" customers about market offers corresponding to their high criteria when they choose a product.

SRB distinguishes those relationships in the market in which an active process of creating, sharing and experiencing value between companies and customers exists. This makes it a source of sustainable competitive advantage for business organizations. The latter can also be justified by the significant number of positive marketing effects of the implementation of SRB. The most significant of these is associated with the highly positive effect of SRB on gaining and maintaining customer loyalty. As an impact in three key areas – the value of the brand, company reputation and level of customer satisfaction, SRB influences customer loyalty, as it is defined as one of the effects that keeping consumers has on the market

and financial results of business organizations. Loyal customers buy more, share favourable information about the company and its products, they are significantly less susceptible to the influence of competitors, they are less sensitive to changes in price levels and they require less financial resources for their service.<sup>3</sup>

The above said gives reason to believe that the problems associated with the study of the relationship and interdependence between "socially responsible branding" and "consumer loyalty" are relevant and significant. **The aim of the study** is, based on the analysis of various theoretical formulations to define the essence of the "SRB" category and to derive a model of marketing projections of SRB on consumer loyalty by proposing, justifying and testing research tools to empirically verify the relevance of this model on the market of carbonated soft drinks in Bulgaria.

#### Literary Review in the Context of the Researched Issues

#### Socially responsible branding

In the specialized marketing literature, there is no clearly formulated definition of what is meant by SRB (Vallaster, Lindgreen, Maon, 2012, p. 56).<sup>4</sup> Some authors (Stanimirov, Zhechev, 2013, p. 182) define it as a kind of branding; others more generally point out that in the process of SRB, ethical brands are created that "do not harm the public good, but seek to contribute to its maintenance" (Fan, 2005, p. 341-350). Following the concept of sustainable development, NIELSEN experts define these brands as "sustainable".

Based on an analysis of existing theoretical formulations, the authors of the study identify two points of view on the nature of the "SRB" category. According to the first, the starting point for formulating a definition of SRB is the conceptual essence of Carroll's pyramid (Carroll, Buchholtz, 2003, p. 40)<sup>5</sup>, or a brand can be defined as socially responsible if it identifies a company that has made a profit legally and ethically (including producing sustainably) and spends this profit in a way that is in the public interest (most often by engaging in one/several corporate social initiatives).

The second point of view does not contradict the above said, but rather gives a different perspective on the content of the "SRB" category. The phraseological-semantic analysis of the term shows that SRB is a process of creating and managing brands by following the principles of CSR; it is a form of integration of branding and the CSR ideology. Brands that are characterized as socially responsible are those that identify the fulfilment of

<sup>&</sup>lt;sup>3</sup> Adapted from Kotler, F. Marketing Management. (Upravlenie na marketinga. Klasika i stil, Sofia, 2005, p. 54.)

<sup>&</sup>lt;sup>4</sup> The essence and effects of corporate social responsibility (CSR) have been studied and described by a number of specialists in the field of marketing and management. However, the manifestation of CSR in branding is still considered "unexplored matter" which, to some extent, explains the lack of a unified, scientifically based definition of SRB.

<sup>&</sup>lt;sup>5</sup> Interested persons' theory is the base of one of the most popular and widely applicable understandings of the nature of CSR – the Carroll's pyramid which views Corporate Social Responsibility as a set of economic, legal, ethical and philanthropic responsibilities.

Georgieva, M., Stanimirov, E. (2021). Marketing Projections of Socially Responsible Branding on Consumer Loyalty.

commitments on the economic, legal, ethical and philanthropic responsibility of the company, which, according to Carroll, together represent CSR. So far, the two points of view overlap. The new element in the formulation of the definition of SRB comes from the understanding of brands as a set of certain associations. Based on this and based on the consideration of CSR as a concern for increasing well-being, improving the quality of life and ensuring the interests of all stakeholders (owners, suppliers, employees, customers, local community, society as a whole and the environment) such brands can be defined as socially responsible that due to well-formulated and implemented positional strategy, maintain homogeneous and stable position/image in the minds of each of these parties and is associated with the implementation of their interests and expectations (Figure 1):

Figure 1





\* In real market conditions, the satisfaction of the interests of all interested parties to the same extent is practically impossible (often, in order to protect the interests of one party, it is necessary to deliberately ignore the interests of another one). This means that in defining the nature of SRB we are dealing with "level"/"degree" of SRB, or in other words, there is a lower or higher degree/level of overlapping of the initially conflicting interests of the six groups of interested parties. *Source: The figure is derived by the authors.* 

- for the owners (the company), the socially responsible brand is associated mainly with the fulfilment of economic responsibilities;
- for the suppliers, it is important that the brand is associated with reliability and correctness in the partnership with the company;
- for employees, the socially responsible brand is the one that communicates the observance of the legal responsibilities of the company and guarantees the provision of a good working environment and working conditions;

- for the customers and especially for the segment of the "sophisticated" customers, such brand is socially responsible which can satisfy their striving to sustainable consumption; the brand that carries associations of ethics and social engagement of the company it identifies; the brand that distinguishes those market offers in which the company and customers actively experience the process of creating and sharing value;
- for the local community, society as a whole and the environment associations for a socially responsible brand are connected to the implementation of economic, legal, ethical and philanthropic responsibilities of the company.

Based on the above, we can say that the brands created and managed with the presumption of social responsibility promote and support the public pursuit of social, economic and environmental sustainable development by integrating the concept of sustainability in their image and striving to implement it effectively (Nieto, 2009, p. 29). Therefore, they do not just identify the product and its characteristics, but become communicators of the valuesprofessed by the company, ambassadors of important causes for society, which business organizations defend alongside their corporate interests. These brands are characterized as socially responsible, as a new generation of brands which Kotler (2010) calls "brands with a civic position."

Socially responsible brands are the basis for the creation of a new branch of modern marketing – the branch of "brand citizenship". We can consider it as part of corporate citizenship; as a form of commitment to social norms and values, to nature, state, society and its problems in the process of creating and managing brands.

According to Kotler, the committing to "brand citizenship", to creating and maintaining socially responsible brands, gives us confidence that the future value proposition in marketing, formulated in the spirit of "Experience economy" and "sustainable development", as "providing of meaning" (Kotler, Kartajaya, Setiavan, 2010, p. 39) will actually and effectively be realized by the companies on the market.

## Model of marketing projections of SRB on consumer loyalty

Systematizing the marketing projections of SRB is not an easy task from a research point of view. The theoretical review made by the authors shows that there is a complex combination of logically substantiated and empirically confirmed relationships and interactions between the SRB category and other marketing constructs. However, we can conclude that by having an impact in three main areas – brand value, corporate reputation and level of customer satisfaction, SRB influences customer loyalty and this is one of the most important marketing effects of its application.

The model of marketing influence of SRB on consumer loyalty is presented in Figure 2.<sup>6</sup> The relationship of key importance for tracking the interactions between the individual

<sup>&</sup>lt;sup>6</sup> This figure is created by the author. It is constructed on the basis of an overview of a wide range of specialized literature sources, providing theoretical and empirical justification of the relationships illustrated.

Georgieva, M., Stanimirov, E. (2021). Marketing Projections of Socially Responsible Branding on Consumer Loyalty.

constructs of the presented model is that between SRB and the value of the brand. Marketing research confirms that the application of CSR in branding (SRB) leads to increasing the value of the brand, directly or indirectly, by having a beneficial effect on the formation of brand associations, creating a positive brand image and brand identity. The relevance of this relationship is further confirmed in the context of the "Experience economy".

Figure 2



Model of marketing influence of SRB on consumer loyalty

Legend: The three types of arrows denote the three directions of influence of SRB on consumer loyalty: (1) first direction – a thick, bold arrow; (2) second direction – a normal arrow; (3) third direction – dotted arrow.

Source: The figure is derived by the authors.

The high value of the brand is essential for the good market performance of the companies; it has a number of positive effects, one of the most significant of which is related to gaining and maintaining consumer loyalty.

In addition to the value of the brand, SRB has a direct impact on the constructs "customer satisfaction" and "corporate reputation". The latter is crucial for the performance of companies, and in particular of the brand. Consumer loyalty is formed and maintained as a result of the good performance of the brand and depending on the level of customer satisfaction.

Based on the presented model of marketing projections, the influence of SRB on the formation and maintenance of customer loyalty can be conditionally distinguished in three areas:

# First direction: by direct/indirect impact on the value of the brand:

- A number of scientific studies confirm that the application of SRB has a direct impact on the value of the brand and leads to its increase (Lai, Chiu, Yang, Pai, 2010, p. 460, 465; Melo, Galan, 2011, p. 428).
- SRB creates strong, favourable and unique associations for the brand, which respectively has a positive impact on its image (Keller, 1993, p. 1-22). The attractive brand image, formed as a result of SRB effects, leads to an increase in the value of the brand (Nan, Heo, 2007, p.71<sup>7</sup>;Berry, 2000, p. 128-137).
- It is important to note that associations alone also have a direct effect on the formation of brand value (Crimmins, 1992, p. 11-20). Falkenberg (1996) argues that forming favourable associations and positive feelings among target consumers leads to an increase in brand worth. The contribution of the associations to the increase of the value of the brand can be considered in the following directions: 1) the associations create a basis for product differentiation; 2) associations create motives for purchase; 3) the associations help the customers to remember, process, interpret and remember information that is important for the respective brand; 4) the associations create a positive attitude towards the brand (Stanimirov, Zhechev, 2013, p. 120-121; Brestnicka, 2004, p. 111-113).
- SRB has a direct impact on brand identity and helps to increase its attractiveness (Lundmark, Elsalhy, 2009, p. 21-22). On the one hand, a more attractive identity increases the chances of forming a more attractive brand image, and on the other hand, it results in a higher brand value.
- The overall manifestation of the considered constructs and the proven interactions between them lead to an increase in the value of the brand. The high value of the brand is desirable and valuable for companies because of the number of positive effects it brings:
- There is a positive relationship between the value of the brand and the market share of the brand (However, there are areas of business in which this relationship is an exception an example is the fashion industry) (Agarwal, Rao, 1996, p. 237-247). The higher value results in a larger market share for the brand, which leads to the formation of a larger market share for the company holding the brand.
- There is a positive relationship between brand value and consumer perceptions of brand quality (Dodds, Monroe, Greal, 1991, p. 307-319). Based on the formulations of the index models for measuring customer satisfaction (Swedish, American and European

<sup>&</sup>lt;sup>7</sup> Some authors believe that in the formation of brand value, the influence of SOB is much stronger when it happens through brand associations and brand image, compared to the case of direct interaction.

# Georgieva, M., Stanimirov, E. (2021). Marketing Projections of Socially Responsible Branding on Consumer Loyalty.

models) we can say that the perceived quality is a construct that has a direct impact on the level of customer satisfaction and has an indirect influence on loyalty. As a rule, the perception of high quality results in increased customer satisfaction and loyalty. However, Stanimirov (2010) points out that a situation is possible in which customers are highly loyal to a brand that is characterized by perceived low quality and vice versa – the fact that a brand has a perceived high quality does not necessarily mean that it will be liked and preferred by consumers.

- There is a positive relationship between brand value and consumer evaluation of brand extensions (Aaker, Keller, 1990, p. 27-41).
- There is a positive relationship between brand value and consumers' price insensitivity (Erdem, Swait, Louviere, 2002, p. 1-19).
- There is a positive relationship between brand value and brand resilience in crises (Dawar, Pilluta, 2000, p. 215-226). This predetermines the relatively more stable market position of the companies that own these brands.
- There is a positive relationship between the value of the brand on the one hand and consumer preferences and the intention to buy the brand on the other hand (Cobb-Walgren, Ruble, Donthu, 1995, p. 2-40).
- There is a positive relationship between the value of the brand and the level of consumer loyalty (Stanimirov, Zhechev, 2013, p. 36). When customers perceive the value of a brand as high, the likelihood that they will repurchase increases (Kotler, Armstrong, 2008). It is economically justified and reasonable to say the opposite as well: the more loyal customers a brand has, the more its value grows.

## Second direction: by influencing the level of consumer satisfaction:

The specialized literature on marketing describes different approaches through which SRB influences consumer satisfaction (Luo, Bhattacharya, 2006, p. 1-18). According to the most common of them, SRB contributes to the creation of high levels of customer identification with the company, which creates the opportunity for a more complete satisfaction of consumer needs and desires, and this results in increased customer satisfaction (Bhattacharya, Sen, 2003, p. 76-88) and consumer perceptions of brand value (Keller, 1993, p. 1-22).

Theory and practice prove that customers identify with a particular company when they believe that its characteristics are compatible with their personal beliefs, understandings, norms and values; when they are internally convinced that identification with the relevant organization will increase their self-esteem and self-respect (Scott, Lane, 2000, p. 43-62).

The more socially responsible the company is in its actions, including in the process of creating and managing its brands, the more satisfied are the "sophisticated" consumers. This is also determined by the fact that the pursuit of "sustainable" consumption is given the opportunity for practical realization in the conditions of "sustainable" production, which companies "corporate citizens" exercise. In this case, customers tend to identify with the organization and the brands it offers in the market, as SRB meets their expectations by giving them the opportunity to express themselves (Hsu, 2012, p. 194). In the context of the

concepts of "Experience economy" and "Sustainable development", the effect of the latter is multiplied – through SRB, consumers "experience" their contribution to the creation and sharing of value.

The high level of consumer satisfaction formed this way has a favourable effect on the level of consumer loyalty. An argument in support of this statement is the fact that consumer satisfaction, although indirect, is one of the "most powerful indicators of customer loyalty" (Georgieva, Tonkova, Stanimirov, 2008, p. 173). Kotler (2000) emphasizes that "the key to retaining consumers is in their satisfaction." Mladenova (2000) specifies that the probability of a customer to buy the company product/brand again is determined by the degree of his/her satisfaction, obtained as a result of his/her initial experience with this product/brand. The consumers who are satisfied will continue to buy the products of the company, they will tell their acquaintances about the satisfaction of the use of the said products; they will pay attention to competitive offers to a lesser extent and will be interested in the new products that the company offers on the market (Mladenova, 2000, p. 173).

The opposite statement is also true – the higher the level of loyalty, the greater the customer satisfaction will be. However, the identification of the satisfied consumer with the loyal one is not always reasonable (Zhelev, 2000, p. 84).<sup>8</sup>

In addition to the level of consumer loyalty, satisfaction has a direct positive impact on corporate reputation (Jones, 2005, p. 10-32)<sup>9</sup>, which has a crucial role in the performance of the company/brand.

# <u>Third direction</u>: by influencing the company reputation and the performance of the company/brand:

The application of CSR in branding (SRB) can be seen as a form of strategic investment aimed at creating and maintaining corporate reputation (McWilliams, Siegel, Wright, 2006, p. 1-18). A large number of studies in the field of marketing confirm the positive impact of CSR on corporate reputation (Garberg, Fombrun, 2006, p. 329-346; Ahearne, Bhattacharya, Gruen, 2010, p. 574-585).

Creating a favourable corporate reputation is one of the key factors for achieving sustainable competitive advantage of the organization (Sanchez, Sotorrio, 2007, p. 337) and for achieving a better performance of the company/brand in the market. The good corporate reputation serves as a promise and guarantees the quality of the products and services offered by the company; it attracts and maintains a more skilled workforce because it

<sup>&</sup>lt;sup>8</sup> Zhelev specifies that there are situations in which dissatisfied customers of a company continue to be loyal to it because they either have no alternative offers, or believe that alternative suppliers cannot offer them something better. Reverse situations are possible as well in which highly satisfied users of one company switch to other suppliers, as they expect even better parameters of the offers and even greater realized benefits from the purchase of the product of the company.

<sup>&</sup>lt;sup>9</sup> Jones also focuses on the opposite direction of impact "corporate reputation  $\rightarrow$  customer satisfaction  $\rightarrow$  brand value". The author points out that satisfaction generates brand value only when the expectations of all stakeholders are met. Jones points out that for all stakeholders basic is the expectation of a good corporate reputation. When it exists, consumers are satisfied, and this results in an increase in the value of the brand.

Georgieva, M., Stanimirov, E. (2021). Marketing Projections of Socially Responsible Branding on Consumer Loyalty.

corresponds to higher employee self-esteem (Roberts, Dowling, 2002, p. 1077-1093). Barnett (2008) draws our attention to the beneficial effect that corporate reputation has on the financial performance of the company/brand. In terms of costs, a good company reputation creates trust between the company and stakeholders, leading to a reduction in the share of transaction costs and a reduction in transaction risk. In terms of revenue, a good company reputation creates a favourable investment climate, opportunities to realize price premiums and conditions for attracting new customers, as well as maintaining the loyalty of current ones.

As a result of the positive impact of SRB on corporate reputation, companies/brands demonstrate better market performance, part of which is related to maintaining a loyal customer base.

The presented three directions of influence of SRB on the consumer loyalty give a relatively complete idea of the variety of marketing influences of its application.

Traditionally, for the majority of companies on the market, loyalty in the "companycustomer" relationship is considered a desirable goal.<sup>10</sup> Business organizations create, develop and maintain relationships with their customers while striving to meet their requirements and build long-term partnerships, the practical implementation of which is sought in the formation of a sustainable preference for the product/brand, repeated purchases and recommendations – components inherent in loyalty. The latter is established as a particularly valuable asset in the business world due to the influence its high level has on the lifetime value of customers on the one hand, and on the other hand – due to the many positive effects on the market and financial results of companies.

# *Consumer loyalty*

In order to fully prove the importance of consumer loyalty, it is necessary to clarify its conceptual nature. In the specialized literature on marketing, related to the study of consumer loyalty, there are different opinions on how to define it. According to one of the widely accepted approaches, loyalty can be considered as a one-dimensional or multidimensional construct, depending on the number of dimensions used for its measurement and evaluation (Stanimirov, 2010, p. 131-132).

The authors of the study adhere to the understanding of loyalty as a multidimensional, and more precisely, a three-dimensional construct consisting of behaviour, knowledge (evaluation) and emotion (East, Gendall, Hammond, Lomax, 2005, p. 10-27).

The most significant characteristic of the three-dimensional model is related to the fact that it presents consumer loyalty as a behavioural-relational phenomenon in which the relational aspect is expressed through two independent elements – emotions and knowledge

<sup>&</sup>lt;sup>10</sup> Scientific precision requires specifying that not all companies are oriented towards maintaining relational exchange, respectively to building and maintaining consumer loyalty. There are businesses and situations where transactional exchange is preferred. In CSR-oriented companies, the aim is for long-term partnerships as only in their continuum the socially responsible behaviour of business organizations can be effectively implemented and bring benefits to all stakeholders.

(evaluation). Knowledge is associated with the formation of psychological preference for the product/service based on accumulated information about the price and characteristics of this product/service, as well as based on positive thoughts and beliefs associated with it (Roy, 2011, p. 114).

The differentiation of emotion as an independent component in the formation of consumer loyalty is reasonable and has its own scientific argumentation. Stanimirov (2010) notes that in order to create and maintain loyalty, on the one hand, it is necessary to achieve a certain degree of customer satisfaction, and on the other hand, to create an emotional connection with the product/brand used by the customer. Dimova (2013) adds that if there is no emotional connection with the products/brands, and they are purchased by customers only on the basis of rational choice, "then you cannot rely on repurchase." Kehayova (2009) explains this phenomenon by the fact that consumers "experience the consumption as well". A thesis around which the philosophy of the "Experience economy" is built.

Referring to the above said, proponents of three-dimensional model unite around the view that reporting on the impact of all three components (knowledge, emotion and behaviour) in the context of loyalty allows a more effective forecast of the prospects of consumer behaviour, and in particular of the intention of customers to make recommendations and make repeat purchases (Roy, 2011, p. 112). The authors of the study adhere to this position, assuming that SRB has a favourable marketing influence on the three dimensions of consumer loyalty. The authors defend the thesis that in all three directions of the model of marketing influence of SRB, the latter has a favourable impact on loyalty, expressed in repeated purchases, recommendations and formed preferences.

#### **Research Methodology**

The relevance of the presented thesis is a subject of empirical testing on the market of carbonated soft drinks in Bulgaria. The choice of the object of study is determined by the following reasons: (1) According to the National Statistical Institute in Bulgaria, there is a steady trend of growth in the consumption of carbonated soft drinks per household member - from 50.9 litres in 2010 to 65.3 litres in 2017. These data give grounds to assume that in this market, there are conditions for the formation of consumer loyalty (i.e. repurchases of certain brands and a high degree of probability of recommendations); (2) The market leader in carbonated soft drinks in Bulgaria with a market share of almost 50% (Coca-Cola) is among the companies that are a benchmark in the exercise of socially responsible behaviour worldwide; (3) The companies producing carbonated soft drinks implement CSR and make the effects of the use of this concept visible to the end-user through the production of highquality products, use of recyclable, recycled and/or biodegradable packaging; engagement with social causes important to society and the environment, charity events and care for society. All this, on the one hand, allows the pursuit of sustainability to be practically implemented, even on a daily basis, and on the other hand, it makes consumers active participants in the process of creating and sharing value by creating an "experience" for them beyond product consumption.

Georgieva, M., Stanimirov, E. (2021). Marketing Projections of Socially Responsible Branding on Consumer Loyalty.

The chosen object of study is unconventional in terms of the alleged discrepancy between the socially responsible practices of companies and the usefulness/harmfulness of the products they produce and sell and the likelihood that consumers will consciously show consistency in the consumption of the latter. However, this makes the results of the research interesting from a marketing point of view.

In addition to the nature of the object of study, the design of the research methodology takes into account some other specifics:

**First.** The empirical testing of the interrelations of the model of the marketing projections of SRB on the consumer loyalty is realized under a proven hypothesis for the presence of a segment of "sophisticated" consumers on the market of carbonated soft drinks in Bulgaria. In another study, the authors apply a procedure of profiling users of this market by using the original author's model – "SMF", developed by the example of the RFM method(Stanimirov, Georgieva, 2019, p. 3-17).

The results show that on the market of carbonated soft drinks in Bulgaria, there is a segment composed of a significant percentage of consumers who are identified as "sophisticated". They have a strong ethical awareness and ethical consumer behaviour and constitute the more profitable part of the market, which is an argument for companies to seek to effectively manage relationships with this segment of consumers and, in particular, to create and maintain their loyalty. Moreover, it is considered that due to the conceptual correspondence precisely in the segment of "sophisticated" consumers, SRB would have the most significant impact on the level of loyalty.

**Second.** Consumer loyalty is operationalized through: (1) repeated purchases; (2) recommendations made and (3) brand preference.

It is important to clarify that both in repeated purchases and in the recommendations made, the degree of correlation between the brand that consumers like the most and the one that they actually buy/recommend the most is studied. This decomposition of the components "repeated purchases" and "recommendations" is necessary because of the sometimes objectively (due to the presence or absence of certain factors – financial, personal, situational) existing situation of "gap between consciousness and behaviour" among consumers. In other words, consumer affinity to the brand is not always characterized by a corresponding manifestation of positive psychological predisposition in real behavioural actions. In this regard, Keller (2008) differentiates "behavioural loyalty" from "psychological attachment".

The third component of the operationalization of loyalty – the expressed preference for the brand, emphasizes loyalty as an evaluation process. The preference is formed on the basis of the comparison of competing brands according to certain criteria (such as level of sustainability in production; involvement in corporate social initiatives, etc.). The superiority of a brand by certain criteria provokes positive emotions among consumers and makes it preferred to other alternatives on the market. Positive emotions are an important component of consumer loyalty (in line with the three-dimensional approach to clarifying its nature).

To objectify the dimensions of this third component of the operationalization of consumer loyalty in the course of the study, three coefficients were applied: coefficient of attachment; switching coefficient and budget coefficient (Knox, Denison, 2000, p. 35).

**Third.** The authors of the study point out that the intensity and straightforwardness of the relationships discussed in the model of marketing projections of SRB on consumer loyalty depends on the socio-cultural context (Malai, 2011, p. 168) as well as on the presence and manifestation of a set of factors, differentiated as an individual, contextual and others. However, they are subject of discussion in other studies of one of the authors and remain outside the scope of the present study.

**Fourth.** The research is realized from a mirror perspective – from the point of view of the producers/bottlers of carbonated soft drinks in Bulgaria, and from the point of view of the consumers of these drinks. This perspective naturally presupposes double testing of the formulated research hypotheses, once in the context of business organizations – manufacturers and once in the customer context.

The main hypotheses that this study analyses consider both direct and indirect influence of SRB on brand loyalty and are presented as follows:

H1: SRB has a direct impact on the level of consumer loyalty.

**H.1.1.** There is a statistically significant relationship between SRB and consumer loyalty in the form of repeated purchases.

**H.1.2.** There is a statistically significant relationship between SRB and consumer loyalty in the form of recommendations.

**H.1.3.** There is a statistically significant relationship between SRB and consumer loyalty in the form of a formed preference.

H2: SRB has an indirect influence on the level of consumer loyalty.

H.2.1. There is a statistically significant relationship between SRB and brand image.

**H.2.2.** There is a statistically significant relationship between SRB and the level of satisfaction.

**H.2.3.** There is a statistically significant relationship between SRB and brand reputation.

**H.2.4.** There is a statistically significant relationship between the three components of indirect influence – image, satisfaction, reputation.

**H.2.5.** There is a statistically significant relationship between satisfaction and repeated purchases as a form of loyalty.

**H.2.6.** There is a statistically significant relationship between satisfaction and loyalty in the form of recommendations made regarding both the most liked and the most frequently purchased brand.

**H.2.7.** There is a statistically significant relationship between satisfaction and loyalty in the form of preference.

Georgieva, M., Stanimirov, E. (2021). Marketing Projections of Socially Responsible Branding on Consumer Loyalty.

**H.2.8.** There is a statistically significant relationship between the image of the most liked brand and repeated purchases as a form of loyalty.

**H.2.9.** There is a statistically significant relationship between the image of the most liked brand and loyalty in the form of recommendations made regarding both the most liked and the most frequently purchased brand.

**H.2.10.** There is a statistically significant relationship between the image of the most liked brand and loyalty in the form of preference.

**H.2.11.** There is a statistically significant relationship between the image of the most frequently purchased brand and repeated purchases as a form of loyalty.

**H.2.12.** There is a statistically significant relationship between the image of the most frequently purchased brand and the loyalty in the form of recommendations made regarding both the most liked and the most frequently purchased brand.

**H.2.13.** There is a statistically significant relationship between the image of the most frequently purchased brand and loyalty in the form of preference.

**H.2.14.** There is a statistically significant relationship between the reputation of the most liked brand and repeat purchases as a form of loyalty.

**H.2.15.** There is a statistically significant relationship between the reputation of the most liked brand and loyalty in the form of recommendations made regarding both the most liked and the most frequently purchased brand.

**H.2.16.** There is a statistically significant relationship between the reputation of the most liked brand and loyalty in the form of preference.

**H.2.17.** There is a statistically significant relationship between the reputation of the most frequently purchased brand and repeated purchases as a form of loyalty.

**H.2.18.** There is a statistically significant relationship between the reputation of the most frequently purchased brand and loyalty in the form of recommendations made regarding both the most liked and the most frequently purchased brand.

**H.2.19.** There is a statistically significant relationship between the reputation of the most frequently purchased brand and loyalty in the form of preference.

**H3:** SRB has an indirect impact on the level of consumer loyalty, expressed in the form of repeated purchases, by building a favourable image.

**H4:** SRB has an indirect impact on the level of consumer loyalty, expressed in the form of repeated purchases, by increasing the level of satisfaction.

**H5:** SRB has an indirect impact on the level of consumer loyalty, expressed in the form of repeated purchases, by forming a positive reputation.

**H6:** SRB has an indirect impact on the level of consumer loyalty, expressed in the form of recommendations made, by building a favourable image.
**H7:** SRB has an indirect impact on the level of consumer loyalty, expressed in the form of recommendations made, by increasing the level of satisfaction.

**H8:** SRB has an indirect impact on the level of consumer loyalty, expressed in the form of recommendations made, by forming a positive reputation.

**H9:** SRB has an indirect impact on the level of consumer loyalty, in the form of a formed preference, by building a favourable image

**H10:** SRB has an indirect impact on the level of consumer loyalty, expressed in the form of a formed preference, by increasing the level of satisfaction.

**H11:** SRB has an indirect impact on the level of consumer loyalty, expressed in the form of a formed preference, by forming a positive reputation.

Proving or rejecting the listed hypotheses requires gathering primary information, sufficient in terms of volume and quality. The method of data collection applied is a survey, whereas for two types of respondents, two separate questionnaires were produced. End users are reached through an online research platform, where an electronic version of the survey is generated. After a positive answer to the filtering question "Do you consume carbonated soft drinks?" the size of the sample ended in 276 respondents. In this sense, the results of the study are relevant for the studied population.

The data from the business represented by producers/bottlers of carbonated soft drinks are collected through a direct personal survey. An expert assessment was formed by implementing a model of non-random sample "based on the respondents", which consist of 13 respondents.

Both the consumer-oriented and the business-oriented surveys have been developed in a way that allows for a structured survey as a descriptive method for collecting primary data with a high degree of similarity between the two surveys, but at the same time taking into account the specific aspects for each of the two groups of respondents.

The statistical processing of the collected primary information is performed via the software products MS Excel 2007 and SPSS 17.0. The data from the empirical study are processed using a combination of statistical methods, including descriptive, correlation, regression and  $\chi^2$  analysis. Conclusions and summaries are formulated and visualized by tabular tools and are the subject of subsequent discussion.

### Discussion of the Results of the Empirical Research

The conducted tests for the presence and strength of dependence between the variables of the model of the marketing projections of SRB on the consumer loyalty can be conditionally differentiated in two directions:

- direct influence of SRB on consumer loyalty;
- indirect influence of SRB on consumer loyalty in the commented three aspects.

Georgieva, M., Stanimirov, E. (2021). Marketing Projections of Socially Responsible Branding on Consumer Loyalty.

The interpretation and analysis of the results of the conducted tests allow the main research hypotheses to be proved or rejected, respectively.

Table 1 summarizes the results of the conducted strong (regression analysis) and weak tests ( $\chi^2$  test) to diagnose the direct impact of SRB on consumer loyalty. SRB is considered equivalent to the activities of the company in the field of CSR. The impact of SRB has been tested against all operationalizing loyalty variables – repeated purchases; recommendations made (both for the most liked brand and for the most frequently purchased brand) and preference (measured by attachment coefficient, switching coefficient and budget coefficient).

Table 1

Variables tested	riables tested $\mathbf{R} = \mathbf{R}^2$		Sig	$\chi^2$	
variables tested	ĸ	ĸ	big.	Cramer's V	Sig.
* The analyze	ed dependences ar	e statistically s	significant	$at \alpha = 0.1$	
SRB <> Consumer loyalty (repeated purchases)	,534	,285	,000	,333	,000
SRB <> Consumer loyalty (recommendations for the most frequently purchased brand)	,624	,389	,000	,339	,000
SRB <> Consumer loyalty (recommendations made of the most liked / preferred brand)	,637	,405	,000	,353	,000
SRB <> Consumer loyalty (brand preference) (Coefficient of attachment)	,401	,161	,000	,251	,872
SRB <> Consumer loyalty (brand preference) (Switching coefficient)	The model is not adequate as the significance level is $>\alpha=0,05$		,436	The two variab independent of other, since Pear squire (,521) >0	les are f each son Chi α=0,05
SRB <> Consumer loyalty (brand preference) (Budget coefficient)	The model is no as the significan $>\alpha=0,0$	t adequate ce level is 5	,386	,362	,011

Direct influence of SRB on consumer loyalty

The data in Table 1 show that SRB has a direct impact on the level of consumer loyalty. It is strongest in terms of recommendations regarding the most liked/preferred brand (coefficient of determination -0,405), the weakest is the influence of SRB on the formation of preference as a form of loyalty (when testing the first relationship, the coefficient of determination is only 0,161, for the other two connections the model is not adequate). This gives grounds to confirm the hypotheses that there is a statistically significant relationship between 1) SRB and consumer loyalty in the form of repeated purchases as well as between 2) SRB and consumer loyalty in the form of recommendations made. However, the hypothesis that SRB has a direct impact on consumer loyalty in the form of a formed preference is rejected.

The hypothesis that SRB also indirectly affects the level of consumer loyalty has been proven by a series of tests (strong and weak), the results of which are summarized in Table 2.

# Table 2

					2
Variables tested	R	$\mathbb{R}^2$	Sig.	<u>γ</u> Cramer's V	Sig
* The analyzed deman	lanaan ana ata	tiaticalle aice	ificant at a		Sig.
Internative and the second sec	iences are sia	the brond inte	ijicani ai a -	- 0.1	
	ce of SKB off	ine orang ima	ge		
brand	,438	,192	,000	,215	,000
SRB $>$ Image of the most frequently	,424	,180	,000	,194	,000
SRB $\diamond$ Image of the most liked / preferred brand compared to other brands on the market	,425	,180	,000	,271	,000
SRB <> Image of the most frequently purchasedbrand in comparison with other brands on the market	,419	,176	,000	,241	,000
Influence of	SRB on const	umer satisfact	ion		
SRB <> Satisfaction with the most frequently purchasedbrand	,598	,358	,000	,372	,000
Influence of SI	R on the ren	itation of the	brand	l	
SRB <> Reputation of the most liked /	,523	,274	,000	,277	,000
SRB $\leq$ Reputation of the most frequently purchasedbrand	,497	,247	,000	,246	,000
* The analyzed depende	ncas ara statis	tically signifi	cant at $a=0$	05	
Ine unutyzeu uepenue	$agga \sim Satisf$	Eaction		.05	
Image of the most liked / preferred brend	$lage \sim Satisf$	action			
Satisfaction with the most frequently purchasedbrand	,428	,183	,000	,342	,000
Image of the most frequently purchasedbrand Satisfaction with the most frequently purchasedbrand	,383	,147	,000	,311	,000
Image of the most liked / preferred brand compared to other brands on the market Satisfaction with the most frequently purchasedbrand	,415	,172	,000	,303	,000
Image of the most frequently purchasedbrand in comparison with other brands on the market > Satisfaction with the most frequently purchasedbrand	,433	,188	,000	,277	,000
Sa	atisfaction $\diamond$	Image			
Satisfaction with the most frequently purchasedbrand $>$ Image of the most liked / preferred brand	,428	,183	,000	,342	,000
Satisfaction with the most frequently purchasedbrand > Image of the most frequently purchasedbrand	,383	,147	,000	,311	,000
Satisfaction with the most frequently purchasedbrand <> Image of the most liked / preferred brand compared to other brands on the market	,415	,172	,000	,303	,000
Satisfaction with the most frequently purchasedbrand <> Image of the most frequently purchasedbrand compared to other brands on the market	,433	,188	,000	,277	,000

Indirect influence of SRB on consumer loyalty in three directions

Georgieva, M	1., Stanimirov,	<i>E</i> .	(2021).Marketing	Projections	of	Socially	Responsible	Branding	on
Consumer Lo	yalty.								

Variables tested	bles tested R R <sup>2</sup>		Sig	$\chi^2$		
			8.	Cramer's V	Sig.	
Satis	sfaction $<>$ Re	eputation				
Satisfaction with the most frequently purchasedbrand <> Reputation of the most liked / preferred brand	,594	,353	,000	,436	,000	
Satisfaction with the most frequently purchasedbrand <> Reputation of the most frequently purchasedbrand	,574	,329	,000	,368	,000	
Rep	utation <> Sat	isfaction				
Reputation of the most liked / preferred brand Satisfaction with the most frequently purchasedbrand	,594	,353	,000	,436	,000	
Reputation of the most frequently purchasedbrand $>$ Satisfaction with the most frequently purchasedbrand	,574	,329	,000	,368	,000	
Sat	tisfaction <> I	Loyalty			•	
Satisfaction with the most frequently purchasedbrand <> Consumer loyalty (repeated purchases)	,513	,264	,000	,328	,000	
Satisfaction with the most frequently purchasedbrand <> Consumer loyalty (recommendations made regarding the most frequently purchasedbrand)	,615	,379	,000	,445	,000	
Satisfaction with the most frequently purchasedbrand <> Consumer loyalty (recommendations made regarding the most liked / preferred brand)	,601	,361	,000	,432	,000	
Satisfaction with the most frequently purchasedbrand <> Consumer loyalty (brand preference) (attachment coefficient)	,138	,019	,022	The two vari independent other, since P squire (,966)	tables are t of each earson Chi $>\alpha=0.05$	
Satisfaction with the most frequently purchasedbrand <> Consumer loyalty (brand preference) (Switching coefficient)	The mode adequate significanc >α=0	el is not as the e level is ,05	,325	The two vari independen other, since P squire (,683)	tables are t of each earson Chi $>\alpha=0,05$	
Satisfaction with the most frequently purchasedbrand <> Consumer loyalty (brand preference) (Budget coefficient)	The model is not adequate as the significance level is $>\alpha=0.05$		,392	The two vari independen other, since P squire (,436)	tables are t of each earson Chi $>\alpha=0.05$	
	Image <> L	oyalty				
Image of the most liked / preferred brand Consumer loyalty (repeated purchases)	,391	,153	,000	,242	,000	
Image of the most liked / preferred brand Consumer loyalty (recommendations regarding the most frequently purchasedbrand)	,414	,172	,000	,281	,000	
Image of the most liked / preferred brand Consumer loyalty (recommendations made regarding the most liked / preferred brand)	,400	,160	,000	,278	,000	
Image of the most liked/ preferred brand Consumer loyalty (brand preference) (attachment coefficient)	The mode adequate significanc $>\alpha=0$	el is not as the e level is ,05	,054	The two vari independent other, since P squire (,983)	tables are t of each earson Chi $>\alpha=0.05$	
Image of the most liked / preferred brand <>	The mode	el is not	,244	The two vari	ables are	

– Economic Studies	(Ikonomicheski Izsledvar	nia), 30 (4), p.	. 23-52.
--------------------	--------------------------	------------------	----------

Variables tested	n tasta 1 D D <sup>2</sup>		Sig	$\chi^2$		
	К	K	Sig.	Cramer's V	Sig.	
Consumer loyalty (brand preference) (Switching coefficient)	adequate significanc >α=0	adequate as the significance level is $>\alpha=0.05$		independen other, since P squire (,999	t of each earson Chi ) >α=0,05	
Image of the most liked / preferred brand Consumer loyalty (brand preference) (Budget coefficient)	The mode adequate significanc >α=0	The model is not adequate as the significance level is $>\alpha=0.05$		The two vari independent other, since P squire (,701)	tables are t of each earson Chi $>\alpha=0.05$	
Image of the most often purchased brand Consumer loyalty (repeated purchases)	,404	,163	,000,	,259	,000	
Image of the most frequently purchasedbrand Consumer loyalty (recommendations made regarding the most frequently purchasedbrand)	,392	,154	,000	,259	,000	
Image of the most frequently purchasedbrand Consumer loyalty (recommendations made regarding the most liked / preferred brand)	,360	,129	,000	,242	,000	
Image of the most frequently purchasedbrand Consumer loyalty (brand preference) (Coefficient of attachment)	The mode adequate significanc >α=0	el is not as the e level is ,05	,309	The two vari independent other, since Po squire (,735)	t of each earson Chi $>\alpha=0,05$	
Image of the most frequently purchasedbrand Consumer loyalty (brand preference) (Switching coefficient)	The model is not adequate as the significance level is $>\alpha=0.05$		,140	The two vari independent other, since Posquire (,980)	ables are t of each earson Chi $>\alpha = 0.05$	
Image most often purchased brand Consumer loyalty (brand preference) (Budget coefficient)	The model is not adequate as the significance level is $>\alpha=0.05$		,139	,365	,007	
Image of the most liked / preferred brand compared to other brands on the market Consumer loyalty (repeated purchases)	,384	,148	,000	,257	,000	
Image of the most liked / preferred brand compared to other brands on the market Consumer loyalty (recommendations regarding the most frequently purchasedbrand)	,327	,107	,000	,261	,000	
Image of the most liked / preferred brand compared to other brands on the market Consumer loyalty (recommendations made regarding the most liked / preferred brand)	,326	,106	,000	,246	,000	
Image of the most liked / preferred brand compared to other brands on the market Consumer loyalty (brand preference) (attachment coefficient)	The model is not adequate as the significance level is $>\alpha=0.05$		,828	.319	0.038	
Image of the most liked / preferred brand compared to other brands on the market Consumer loyalty (brand preference) (Switching coefficient)	The model is not adequate as the significance level is $>\alpha=0.05$		,268	The two vari independen other, since P squire (,876)	t ables are t of each earson Chi $>\alpha=0.05$	
Image of the most liked / preferred brand compared to other brands on the market Consumer loyalty (brand preference) (Budget coefficient)	The model is not adequate as the significance level is $>\alpha=0.05$		,318	The two vari independent other, since P squire (,702	t ables are t of each earson Chi $) > \alpha = 0,05$	
Image of the most frequently purchasedbrand compared to other brands on the market $\sim$ Consumer loyalty (repeated purchases)	,401	,161	,000	,233	,000	
Image of the most frequently purchasedbrand	,338	,115	,000	,232	,000	

Georgieva, M.	, Stanimirov,	Е.	(2021).Marketing	Projections	of	Socially	Responsible	Branding	on
Consumer Loyo	alty.								

Variables testedRRR2Sig.Cramer's VSig.compared to other brands on the market $\diamond$ Consumer loyalty (recommendations made regarding the most frequently purchasedbrand),001,000,213,000Image of the most frequently purchasedbrand,301,091,000,213,000compared to other brands on the market $\diamond$ ,301,091,000,213,000Consumer loyalty (recommendations made regarding the most fiked / preferred brand)The model is not adequate as the significance level is $\sim$ ,358The two variables are independent of each other, since Pearson Chi squire (150 ) >=005Image of the most frequently purchasedbrand compared to other brands on the market $\diamond$ The model is not adequate as the significance level is $\sim$ ,358The two variables are independent of each other, since Pearson Chi squire (150 ) >=005Image of the most frequently purchasedbrand consumer loyalty (brand preference)The model is not adequate as the significance level is $\sim$ ,433The two variables are independent of each other, since Pearson Chi squire (154 ) >=005Reputation of the most liked / preferred brand $\diamond$ Consumer loyalty (brand preference),471,222,000,337,000Reputation of the most liked / preferred brand $\diamond$ Consumer loyalty (promendations made regarding the most liked / preferred brand),517,267,000,381,000Reputation of the most liked / preferred brand $\diamond$ Consumer loyalty (brand preference),120,014,047,047The two variables are independent of each other, since Pearson Chi squire (,543 ) >=-0.05 <t< th=""><th></th><th colspan="2"></th><th></th><th colspan="4"><math>\gamma^2</math></th></t<>					$\gamma^2$			
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Variables tested	R	$\mathbb{R}^2$	Sig.	Cramer's V	Sig.		
regarding the most frequently purchasedbrand compared to other brands on the market $\diamond$ Consumer loyalty (recommendations made regarding the most liked / preferred brand),001,000,213,000Image of the most liked / preferred brand compared to other brands on the market $\diamond$ Consumer loyalty (brand preference) (Switching coefficient)The model is not adequate as the significance level is $\diamond a$ $= 0.05$ The two variables are independent of each other, since Pearson Chi squire (,150) > $= 0.05$ Image of the most frequently purchasedbrand consumer loyalty (brand preference) (Switching coefficient)The model is not adequate as the significance level is $\diamond a$ $= 0.05$ The two variables are independent of each other, since Pearson Chi squire (,130) > $= 0.05$ Image of the most frequently purchasedbrand consumer loyalty (brand preference) (Budget coefficient)The model is not adequate as the significance level is $\diamond a$ $= 0.05$ The two variables are independent of each other, since Pearson Chi squire (,134) > $= 0.05$ Reputation of the most liked / preferred brand $\diamond$ Consumer loyalty (repeated purchasedbrand) e Consumer loyalty (recommendations made regarding the most liked / preferred brand) $\diamond$ Consumer loyalty (brand preference) $1.20$ $1.10$ $0.000$ $3.31$ $0.000$ Reputation of the most liked / preferred brand) $\diamond$ Consumer loyalty (brand preference) $1.20$ $1.20$ $0.000$ $3.321$ $0.000$ Reputation of the most liked / preferred brand $\diamond$ Consumer loyalty (brand preference) $1.20$ $0.014$ $0.047$ The two variables are independent of each other, since Pearson Chi squire (,164) $> $	compared to other brands on the market <> Consumer loyalty (recommendations made							
$ \begin{array}{  lmage of the most frequently purchasedbrand compared to other brands on the market \sim Consumer loyalty (recommendations made regarding the most frequently purchasedbrand compared to other brands on the market \sim Consumer loyalty (protap deference) (attachment coefficient) The model is not adequate as the significance level is \sim a adoption \sim b adequate as the significance level is \sim a adoption \sim b add \sim c consumer loyalty (recommendations made .471 .222 .000 .347 .000 .331 .000 regult (recommendations made .517 .267 .000 .381 .000 regult (recommendations made .517 .267 .000 .381 .000 regults are independent of each other, since Parson Chi siquire (.134) .>e=0.05 $	regarding the most frequently purchasedbrand)							
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Image of the most frequently purchasedbrand							
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	compared to other brands on the market $>$	201	001	000	212	000		
regarding the most frequently purchasedbrand compared to other brands on the market $\sim$ Consumer loyalty (krand preference) (suitachment coefficient)The model is not 	Consumer loyalty (recommendations made	,301	,091	,000	,213	,000		
$\begin{array}{  l l l l l l l l l l l l l l l l l l $	regarding the most liked / preferred brand)							
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Image of the most frequently purchasedbrand	The mode	el is not		The two vari	ables are		
Consumer loyalty (brand preference)significance level is> $\alpha$ .944other, since Pearson Chi squire (150)> $\alpha = 0.05$ Image of the most frequently purchasedbrand compared to other brands on the market $\sim$ (Switching coefficient)The model is not adequate as the significance level is> $\alpha$ .358The two variables are independent of each other, since Pearson Chi squire (909)> $\alpha = 0.05$ Image of the most frequently purchasedbrand compared to other brands on the market $\sim$ adequate as the significance level is> $\alpha = 0.05$ The two variables are independent of each other, since Pearson Chi squire (134)> $\alpha = 0.05$ Reputation of the most liked / preferred brand $\sim$ Consumer loyalty (recommendations made regarding the most liked / preferred brand $\sim$ Consumer loyalty (recommendations made regarding the most liked / preferred brand $\sim$ Consumer loyalty (pard preferred brand $\sim$ Consumer loyalty (brand preference) (attachment coefficient).517 $,267$ .000.331 $,000$ Reputation of the most liked / preferred brand $\sim$ Consumer loyalty (brand preference) (attachment coefficient).517 $,267$ .000.381 $,000$ Reputation of the most liked / preferred brand $\sim$ Consumer loyalty (brand preference) (attachment coefficient).120 $,120$ .014 $,047$ The two variables are independent of each other, since Pearson Chi squire (.161)> $\alpha = 0.05$ Reputation of the most liked / preferred brand $\sim$ Consumer loyalty (brand preference) (Budget coefficient).120 $,120$ .014 $,047$ .047Reputation of the most liked / preferred brand $\sim$ Consumer loyalty (brand preference) (Budget coefficient)	compared to other brands on the market $>$	adequate	as the		independent	t of each		
(attachment coefficient)Commer = 0.05squire $(.150) > a=0.05$ Image of the most frequently purchasedbrand compared to other brands on the market $>$ adequate as the significance level is> $a$ The model is not adequate as the significance level is> $a$ The two variables are independent of each other, since Pearson Chi squire $(.190) > a=0.05$ Image of the most frequently purchasedbrand consumer loyalty (brand preference) (Budget coefficient)The model is not adequate as the significance level is> $a=0.05$ The two variables are independent of each other, since Pearson Chi squire $(.134) > a=0.05$ Reputation of the most liked / preferred brand $< Consumer loyalty (repeated purchasedbrand)consumer loyalty (recommendations maderegarding the most liked / preferred brand< Consumer loyalty (brand preference)$	Consumer lovalty (brand preference)	significance	level is> $\alpha$	,944	other, since Pe	earson Chi		
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	(attachment coefficient)	= 0.0	)5		squire (.150	$>\alpha = 0.05$		
$\begin{array}{c} \mbox{compared to other brands on the market } \\ \mbox{commer loyalty (brand preference)} \\ \mbox{(Switching coefficient)} & = 0.05 \\ \mbox{index} \\ \mbox{index} \\ \mbox{consumer loyalty (brand preference)} (Budget coefficient) \\ \mbox{consumer loyalty (brand preference)} (Budget coefficient) \\ \mbox{regarding the most liked / preferred brand} \\ \mbox{consumer loyalty (recommendations made regarding the most liked / preferred brand \\ \mbox{consumer loyalty (recommendations made regarding the most liked / preferred brand \\ \mbox{consumer loyalty (recommendations made regarding the most liked / preferred brand \\ \mbox{consumer loyalty (recommendations made regarding the most liked / preferred brand \\ \mbox{consumer loyalty (recommendations made regarding the most liked / preferred brand \\ \mbox{consumer loyalty (recommendations made regarding the most liked / preferred brand \\ \mbox{consumer loyalty (recommendations made regarding the most liked / preferred brand \\ \mbox{consumer loyalty (trand preferrence)} \\ \mbox{(statchment coefficient)} & \mbox{tiked / preferred brand \\ \mbox{consumer loyalty (brand preferrence)} \\ \mbox{(switching coefficient)} & \mbox{tiked / preferred brand \\ \mbox{consumer loyalty (brand preferrence)} \\ \mbox{(switching coefficient)} & \mbox{tiked / preferred brand \\ \mbox{consumer loyalty (brand preferrence)} \\ \mbox{(switching coefficient)} & \mbox{tiked / preferred brand \\ \mbox{consumer loyalty (brand preferrence)} \\ \mbox{(switching coefficient)} & \mbox{timed preference)} \\ (switching coeff$	Image of the most frequently purchasedbrand	The mode	el is not		The two vari	ables are		
Consumer loyalty (brand preference) (Switching coefficient)significance level is>a = 0.05.358 (squire (.909) > a=0.05)Image of the most frequently purchasedbrand consumer loyalty (brand preference) (Budget Consumer loyalty (prepated purchases)The model is not adequate as the significance level is>a.439The two variables are independent of each other, since Pearson Chi squire (.134 ) > a=0.05Reputation of the most liked / prefered brand $\sim$ Consumer loyalty (recommendations made regarding the most fiked / preferred brand $\sim$ Consumer loyalty (recommendations made regarding the most liked / preferred brand $\sim$ Consumer loyalty (recommendations made regarding the most liked / preferred brand $\sim$ Consumer loyalty (recommendations made regarding the most liked / preferred brand $\sim$ Consumer loyalty (treated purchasedbrand).000.347.000Reputation of the most liked / preferred brand $\sim$ Consumer loyalty (treated brand) (attachment coefficient).120.014.047The two variables are independent of each other, since Pearson Chi squire (.716 ) > a=0.05Reputation of the most liked / preferred brand $\sim$ Consumer loyalty (brand preference) (Switching coefficient)The model is not adequate as the significance level is > a=0.05.198The two variables are independent of each other, since Pearson Chi squire (.716 ) > a=0.05Reputation of the most liked / preferred brand $\sim$ Consumer loyalty (brand preference) (Switching coefficient).120.014.047Reputation of the most liked / preferred brand $\sim$ Consumer loyalty (brand preference) (Switching coefficient).120.014.047R	compared to other brands on the market $>$	adequate	as the		independent	t of each		
(Switching coefficient)negenteter()negenteter()squire (1909) > $\alpha = 0.05$ Image of the most frequently purchasedbrand compared to other brands on the market $<$ Consumer loyalty (brand preference) (Budget is $\geq a = 0.05$ The model is not adequate as the significance levelsquire (134) > $\alpha = 0.05$ Reputation of the most liked / preferred brand $< >$ Consumer loyalty (repeated purchases) $4711$ $222$ $,000$ $,347$ $,000$ Reputation of the most liked / preferred brand $< >$ Consumer loyalty (recommendations made regarding the most liked / preferred brand $< >$ Consumer loyalty (recommendations made regarding the most liked / preferred brand $< >$ Consumer loyalty (brand preference) (attachment coefficient) $,120$ $,014$ $,047$ The two variables are independent of each other, since Pearson Chi squire ( $,134$ ) > $\alpha = 0.05$ Reputation of the most liked / preferred brand $< >$ Consumer loyalty (brand preference) (attachment coefficient)The model is not adequate as the significance level is $> \alpha = 0.05$ The two variables are independent of each other, since Pearson Chi squire ( $,134$ ) > $\alpha = 0.05$ Reputation of the most liked / preferred brand $< >$ Consumer loyalty (brand preference) (Switching coefficient)The model is not adequate as the significance level is $> \alpha = 0.05$ The two variables are independent of each other, since Pearson Chi squire ( $,134$ ) > $\alpha = 0.05$ Reputation of the most liked / preferred brand $< Consumer loyalty (brand preference)$ (Budget coefficient)The model is not adequate as the significance level is $> \alpha = 0.05$ $,312$ $,000$ Reputation of the most	Consumer lovalty (brand preference)	significance	level is>a	,358	other since P	earson Chi		
$\begin{array}{ c c c c c } \hline \begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	(Switching coefficient)	= 0.0	)5		squire (.909)	$\geq \alpha = 0.05$		
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Image of the most frequently purchasedbrand	The mode	l is not		The two vari	ables are		
Consumer loyalty (brand preference) (BudgetReputation of the most liked / preferred brand $\sim$ Consumer loyalty (repeated purchases)A11A122A130Interpretence of the result	compared to other brands on the market $>$	adequate	as the		independent	t of each		
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Consumer loyalty (brand preference) (Budget	significan	ce level	,439	other since P	earson Chi		
Reputation $>$ LoyaltyReputation $>$ LoyaltyReputation of the most liked / preferred brand $>$ Consumer loyalty (recommendations made regarding the most liked / preferred brand $>$ Consumer loyalty (recommendations made regarding the most liked / preferred brand $>$ Consumer loyalty (recommendations made regarding the most liked / preferred brand $>$ Consumer loyalty (recommendations made regarding the most liked / preferred brand $>$ Consumer loyalty (recommendations made regarding the most liked / preferred brand $>$ Consumer loyalty (brand preferred brand $> Consumer loyalty (brand preferred brand> Consumer loyalty (brand preferred brand)The model is notadequate as thesignificance level is> a=0,05The two variables areindependent of eachother, since Pearson Chisquire (.534) >a (.433) >a=0,05Reputation of the most frequentlypurchasedbrand > Consumer loyalty(recommendations made regarding the mostfrequently purchasedbrand > Consumer loyalty(recommendations made regarding the most$	coefficient)	is>a=0	0.05		squire (134)	$a > \alpha = 0.05$		
Reputation of the most liked / preferred brand $\diamond$ Consumer loyalty (repeated purchases) $,471$ $,222$ $,000$ $,347$ $,000$ Reputation of the most liked / preferred brand $\diamond$ Consumer loyalty (recommendations made regarding the most frequently purchasedbrand) $,492$ $,242$ $,000$ $,373$ $,000$ Reputation of the most liked / preferred brand $\diamond$ Consumer loyalty (recommendations made regarding the most liked / preferred brand $\diamond$ Consumer loyalty (brand preference) (attachment coefficient) $,1120$ $,014$ $,047$ The two variables are independent of each other, since Pearson Chi squire ( $,716$ ) $\diamond =0.05$ Reputation of the most liked / preferred brand $\diamond$ Consumer loyalty (brand preference) (switching coefficient)The model is not adequate as the significance level is $> a=0.05$ The two variables are independent of each other, since Pearson Chi squire ( $,534$ ) $\geq a=0.05$ Reputation of the most liked / preferred brand $\diamond$ Consumer loyalty (brand preference) (Budget coefficient)The model is not adequate as the significance level is $> a=0.05$ The two variables are independent of each other, since Pearson Chi squire ( $,643$ ) $\geq$ $a=0.05$ Reputation of the most frequently purchasedbrand $\diamond$ Consumer loyalty (recommendations made regarding the most frequently purchasedbrand) $,516$ $,267$ $,000$ $,322$ $,000$ Reputation of the most frequently purchasedbrand $\diamond$ Consumer loyalty (recommendations made regarding the most frequently purchasedbrand) $,478$ $,229$ $,000$ $,325$ $,000$ Reputation of the most frequently purchasedbrand $\diamond$ Co		anutation $\bigtriangleup$	Lovalty		squire (,154)	j = u = 0,05		
Reputation of the most liked / preferred brand $\sim$ Consumer loyalty (recommendations made regarding the most liked / preferred brand $\sim$ Consumer loyalty (recommendations made regarding the most liked / preferred brand $\sim$ Consumer loyalty (recommendations made regarding the most liked / preferred brand $\sim$ Consumer loyalty (recommendations made regarding the most liked / preferred brand $\sim$ Consumer loyalty (recommendations made regarding the most liked / preferred brand $\sim$ Consumer loyalty (brand preferred brand)The model is not adequate as the significance level is<	Penutation of the most liked / preferred brand		Loyany					
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\bigcirc$ Consumer levelty (repeated purchases)	,471	,222	,000	,347	,000		
Reputation of the most frequently purchasedbrand egarding the most frequently purchasedbrand $\sim$ Consumer loyalty (recommendations made regarding the most liked / preferred brand $\sim$ Consumer loyalty (recommendations made regarding the most liked / preferred brand $\sim$ Consumer loyalty (brand preferred brand $\sim$ Consumer loyalty (recommendations made regarding the most frequently purchasedbrand $\sim$ Consumer loyalty (recommendations made regarding the most frequently purchasedbrand $\sim$ Consumer loyalty (brand preferred brand),516 ,267,267 ,000,000 ,3	Consumer royarty (repeated purchases)							
Consumer loyalty (recommendations made regarding the most frequently purchasedbrand),492,242,000,573,000Reputation of the most liked / preferred brand $\diamond$ Consumer loyalty (recommendations made regarding the most liked / preferred brand $\diamond$ Consumer loyalty (brand preferred brand $> \alpha = 0,05$ The model is not adequate as the significance level is $> \alpha = 0,05$ The two variables are independent of each other, since Pearson Chi squire (.643 ) > $\alpha = 0,05$ Reputation of the most frequently purchasedbrand $\diamond$ Consumer loyalty (recommendations made regarding the most frequently purchasedbrand $\diamond$ Consumer loyalty (recommendations made regarding the most frequently purchasedbrand $\diamond$ Consumer loyalty <br< td=""><td>Reputation of the most fixed / preferred brand <math>\bigcirc</math> Consumer levelty (recommon define mode</td><td>402</td><td>242</td><td>000</td><td>272</td><td>000</td></br<>	Reputation of the most fixed / preferred brand $\bigcirc$ Consumer levelty (recommon define mode	402	242	000	272	000		
regarding the most frequently purchasedbrand)Image of the most liked / preferred brand $\sim$ Consumer loyalty (recommendations made regarding the most liked / preferred brand $\sim$ Consumer loyalty (brand preferred brand $\sim$ Consumer loyalty (recommendations made regarding the most frequently purchasedbrand $\sim$ Consumer loyalty (recommendations made regarding the most frequently purchasedbrand $\sim$ Consumer loyalty (recommendations made regardin	Consumer loyalty (recommendations made recording the most frequently numbered hand)	,492	,242	,000	,575	,000		
Reputation of the most liked / preferred brand $\diamond$ Consumer loyalty (brand preferred brand $\diamond$ Consumer loyalty (brand preferred brand $\diamond$ Consumer loyalty (brand preferred brand 	Deputation of the most liked (medamed hand							
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Reputation of the most fixed / preferred brand $\hat{c}$	517	2(7	000	291	000		
Regarding the most fixed / preferred brand $\diamond$ Consumer loyalty (brand preferred) (attachment coefficient),120,014,047The two variables are independent of each other, since Pearson Chi squire (,716) > $\alpha=0,05$ Reputation of the most liked / preferred brand $\diamond$ Consumer loyalty (brand preference) (Switching coefficient)The model is not adequate as the significance level is > $\alpha=0,05$ ,198The two variables are independent of each other, since Pearson Chi squire (,716) > $\alpha=0,05$ Reputation of the most liked / preferred brand $\diamond$ Consumer loyalty (brand preference) (Budget coefficient)The model is not adequate as the significance level is > $\alpha=0,05$ ,312The two variables are independent of each other, since Pearson Chi squire (,534) > $\alpha=0,05$ Reputation of the most frequently purchasedbrand $\diamond$ Consumer loyalty (recommendations made regarding the most frequently purchasedbrand $\diamond$ Consumer loyalty (recommendations made regarding the most frequently purchasedbrand $\diamond$ Consumer loyalty (recommendations made regarding the most frequently purchasedbrand $\diamond$ Consumer loyalty (recommendations made regarding the most frequently purchasedbrand $\diamond$ Consumer loyalty (recommendations made regarding the most liked / preferred brand),516 ,267,267 ,000,322 ,000,000Reputation of the most frequently purchasedbrand $\diamond$ Consumer loyalty (recommendations made regarding the most liked / preferred brand),478 adequate as the state,111The two variables are independent of each other, since Pearson Chi squire (,643) > a=0,05Reputation of the most frequently purchasedbrand $\diamond$ Consumer loyalty (recomm	Consumer loyalty (recommendations made recording the most liked (meeting d brond)	,517	,207	,000	,381	,000		
Reputation of the most liked / preferred brand $\diamond$ Consumer loyalty (brand preference) (attachment coefficient),120,014,047Intervolvation of the search other, since Pearson Chi squire (,716) > $\alpha$ =0,05Reputation of the most liked / preferred brand 	regarding the most fixed / preferred orand)				The two yar	ables are		
$ \begin{tabular}{ c c c c c } \hline \begin{tabular}{ c c c c } \hline \end{tabular} tabu$	Reputation of the most liked / preferred brand				independent	t of each		
(attachment coefficient)The model is not adequate as the significance level is > $\alpha = 0.05$ The two variables are independent of each other, since Pearson Chi squire (,534 ) > $\alpha = 0.05$ Reputation of the most liked / preferred brand $\sim$ Consumer loyalty (brand preference) (Budget coefficient)The model is not adequate as the significance level is > $\alpha = 0.05$ ,198The two variables are independent of each other, since Pearson Chi squire (,534 ) > $\alpha = 0.05$ Reputation of the most liked / preferred brand $\sim$ Consumer loyalty (brand preference) (Budget coefficient)The model is not adequate as the significance level is > $\alpha = 0.05$ ,312The two variables are independent of each other, since Pearson Chi squire (,643 ) > $\alpha = 0.05$ Reputation of the most frequently purchasedbrand $<$ Consumer loyalty (recommendations made regarding the most frequently purchasedbrand $<$ Consumer loyalty (recommendations made regarding the most liked / preferred brand),516,267,000,322,000Reputation of the most frequently purchasedbrand $<$ Consumer loyalty (recommendations made regarding the most liked / preferred brand),478,229,000,325,000Reputation of the most frequently purchasedbrand $<$ Consumer loyalty (recommendations made regarding the most liked / preferred brand)The model is not adequate as the state,111The two variables are independent of each other, since Pearson Chi squire (,643 ) > $\alpha = 0,05$ Reputation of the most frequently purchasedbrand $<$ Consumer loyalty (recommendations made regarding the most liked / preferred brand)The model is not 	<> Consumer loyalty (brand preference)	,120 ,014 ,047	other since Pearson Chi					
Reputation of the most liked / preferred brand $\diamond$ Consumer loyalty (brand preference) (Switching coefficient)The model is not adequate as the significance level is $> \alpha = 0.05$ The two variables are independent of each other, since Pearson Chi squire (,534 ) > $\alpha = 0.05$ Reputation of the most liked / preferred brand $\diamond$ Consumer loyalty (brand preference) (Budget coefficient)The model is not adequate as the significance level is $> \alpha = 0.05$ ,198The two variables are independent of each other, since Pearson Chi squire (,534 ) > $\alpha = 0.05$ Reputation of the most liked / preferred brand $\diamond$ Consumer loyalty (brand preference) (Budget coefficient)The model is not adequate as the significance level is $> \alpha = 0.05$ ,312The two variables are independent of each other, since Pearson Chi squire (,643 ) > $\alpha = 0.05$ Reputation of the most frequently purchasedbrand $\diamond$ Consumer loyalty (recommendations made regarding the most frequently purchasedbrand),516,267,000,322,000Reputation of the most frequently purchasedbrand $\diamond$ Consumer loyalty (recommendations made regarding the most liked / preferred brand),478,229,000,325,000Reputation of the most frequently purchasedbrand $\diamond$ Consumer loyalty (recommendations made regarding the most liked / preferred brand)The model is not adequate as the state as the<	(attachment coefficient)				squire (.716) > $\alpha$ =0.05			
Reputation of the most liked / preferred brand $\diamond$ Consumer loyalty (brand preference) (Switching coefficient)In the model as the adequate as the significance level is $> \alpha = 0.05$ In the model is not adequate as the significance level is $> \alpha = 0.05$ In the model is not squire (.534) > \alpha = 0.05Reputation of the most liked / preferred brand $\diamond$ Consumer loyalty (brand preference) (Budget coefficient)The model is not adequate as the significance level is $> \alpha = 0.05$ The two variables are independent of each other, since Pearson Chi squire (.543) > $\alpha = 0.05$ Reputation of the most frequently purchasedbrand $\diamond$ Consumer loyalty,481,231,000,326,000Reputation of the most frequently purchasedbrand $\diamond$ Consumer loyalty (recommendations made regarding the most frequently purchasedbrand),516,267,000,322,000Reputation of the most frequently purchasedbrand $\diamond$ Consumer loyalty (recommendations made regarding the most liked / preferred brand),478,229,000,325,000Reputation of the most frequently purchasedbrand $\diamond$ Consumer loyalty (recommendations made regarding the most liked / preferred brand),478,229,000,325,000Reputation of the most frequently purchasedbrand $\diamond$ Consumer loyalty (brand adequate as the adequate as the,111The two variables are independent of each		The mode	l is not		The two vari	ables are		
$ \begin{tabular}{ c c c c c } \hline \begin{tabular}{ c c c c c } \hline \begin{tabular}{ c c c c c c } \hline \begin{tabular}{ c c c c c c c } \hline \begin{tabular}{ c c c c c c c c } \hline \begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	Reputation of the most liked / preferred brand	adequate	as the		independent	t of each		
(Switching coefficient)arguinteametric verticsother, since reason child squire (,534 ) > $\alpha = 0.05$ Reputation of the most liked / preferred brand $\diamond$ Consumer loyalty (brand preference) (Budget coefficient)The model is not adequate as the significance level is > $\alpha = 0.05$ The two variables are independent of each other, since Pearson Chi squire (,643 ) > $\alpha = 0.05$ Reputation of the most frequently purchasedbrand $\diamond$ Consumer loyalty (recommendations made regarding the most frequently purchasedbrand $\diamond$ Consumer loyalty (recommendations made regarding the most liked / preferred brand),516,267,000,322,000Reputation of the most frequently purchasedbrand $\diamond$ Consumer loyalty (recommendations made regarding the most liked / preferred brand),478,229,000,325,000Reputation of the most frequently purchasedbrand $\diamond$ Consumer loyalty (recommendations made regarding the most liked / preferred brand)The model is not adequate as the,111The two variables are independent of eachReputation of the most frequently purchasedbrand $\diamond$ Consumer loyalty (brand independent $\diamond$ Consumer loyalty (brand,478,229,000,325,000	<> Consumer loyalty (brand preference)	significanc	e level is	,198	other, since Pearson Chi			
Reputation of the most liked / preferred brand $\diamond$ Consumer loyalty (brand preference) (Budget coefficient)The model is not adequate as the significance level is $> \alpha = 0,05$ The two variables are independent of each other, since Pearson Chi squire (,643 ) > $\alpha = 0,05$ Reputation of the most frequently purchasedbrand $\diamond$ Consumer loyalty (recommendations made regarding the most frequently purchasedbrand $\diamond$ Consumer loyalty (recommendations made regarding the most liked / preferred brand),516,267,000,322,000Reputation of the most frequently purchasedbrand $\diamond$ Consumer loyalty (recommendations made regarding the most liked / preferred brand),478,229,000,325,000Reputation of the most frequently purchasedbrand $\diamond$ Consumer loyalty (recommendations made regarding the most liked / preferred brand)The model is not adequate as the,111The two variables are independent of eachReputation of the most frequently purchasedbrand $\diamond$ Consumer loyalty (recommendations made regarding the most liked / preferred brand)The model is not adequate as the,111	(Switching coefficient)	>a=0	05		squire ( 534	$a \ge \alpha = 0.05$		
Reputation of the most liked / preferred brand $\diamond$ Consumer loyalty (brand preference) (Budget coefficient)The model is not adequate as the significance level is $> \alpha = 0,05$ The model is not adequate as the significance level is $> \alpha = 0,05$ The model is not adequate as the squire (,643 ) > $\alpha = 0,05$ Reputation of the most frequently purchasedbrand $\diamond$ Consumer loyalty (recommendations made regarding the most frequently purchasedbrand),481,231,000,326,000Reputation of the most frequently purchasedbrand $\diamond$ Consumer loyalty (recommendations made regarding the most liked / preferred brand),516,267,000,322,000Reputation of the most frequently purchasedbrand $\diamond$ Consumer loyalty (recommendations made regarding the most liked / preferred brand),478,229,000,325,000Reputation of the most frequently purchasedbrand $\diamond$ Consumer loyalty (recommendations made regarding the most liked / preferred brand)The model is not adequate as the,111The two variables are independent of each			,00		The two vari	ables are		
Activities in the interpretent of the most interpreten	Reputation of the most liked / preferred brand	The mode	el is not		independent	t of each		
Substitution of the most frequently purchasedbrand $<>$ Consumer loyalty (recommendations made regarding the most liked / preferred brand)significance level is $> \alpha = 0,05$ $\beta H2$ Other, shife (realso) > milling squire (,643 ) > $\alpha = 0,05$ Reputation of the most frequently purchasedbrand $<>$ Consumer loyalty (recommendations made regarding the most liked / preferred brand),481,231,000,326,000Reputation of the most frequently purchasedbrand $<>$ Consumer loyalty (recommendations made regarding the most liked / preferred brand),516,267,000,322,000Reputation of the most frequently purchasedbrand $<>$ Consumer loyalty (recommendations made regarding the most liked / preferred brand),478,229,000,325,000Reputation of the most frequently purchasedbrand $<>$ Consumer loyalty (brandThe model is not adequate as the,111The two variables are independent of each	$\sim$ Consumer loyalty (brand preference)	adequate	as the	312	other since P	earson Chi		
Reputation of the most frequently purchasedbrand $<>$ Consumer loyalty (recommendations made regarding the most frequently purchasedbrand $<>$ Consumer loyalty (recommendations made regarding the most frequently purchasedbrand $<>$ Consumer loyalty (recommendations made regarding the most fiked / preferred brand),516,267,000,326,000Reputation of the most frequently purchasedbrand $<>$ Consumer loyalty (recommendations made regarding the most liked / preferred brand),478,229,000,325,000Reputation of the most frequently purchasedbrand $<>$ Consumer loyalty (recommendations made regarding the most liked / preferred brand)The model is not adequate as the,111The two variables are independent of each	(Budget coefficient)	significanc	e level is	,512	squire ( 6	43) >		
Reputation of the most frequently purchasedbrand <> Consumer loyalty (repeated purchases)       ,481       ,231       ,000       ,326       ,000         Reputation of the most frequently purchasedbrand <> Consumer loyalty (recommendations made regarding the most frequently purchasedbrand)       ,516       ,267       ,000       ,322       ,000         Reputation of the most frequently purchasedbrand <> Consumer loyalty (recommendations made regarding the most fiked / preferred brand)       ,478       ,229       ,000       ,325       ,000         Reputation of the most frequently purchasedbrand <> Consumer loyalty (recommendations made regarding the most liked / preferred brand)       The model is not adequate as the       ,111       The two variables are independent of each	(Budget esemelent)	$>\alpha=0$	,05		a=0.0	)5		
International construction of the most of the most frequently purchasedbrand $<>$ Consumer loyalty (repeated purchases),481,231,000,326,000Reputation of the most frequently purchasedbrand $<>$ Consumer loyalty (recommendations made regarding the most frequently purchasedbrand),516,267,000,322,000Reputation of the most frequently purchasedbrand $<>$ Consumer loyalty (recommendations made regarding the most liked / preferred brand),478,229,000,325,000Reputation of the most frequently purchasedbrand $<>$ Consumer loyalty (recommendations made regarding the most liked / preferred brand)The model is not adequate as the,111The two variables are independent of each	Reputation of the most frequently				u. 0,0			
Reputation of the most frequently purchasedbrand <> Consumer loyalty (recommendations made regarding the most frequently purchasedbrand)     ,516     ,267     ,000     ,322     ,000       Reputation of the most frequently purchasedbrand <> Consumer loyalty (recommendations made regarding the most fiked / preferred brand)     ,478     ,229     ,000     ,325     ,000       Reputation of the most frequently purchasedbrand <> Consumer loyalty (recommendations made regarding the most liked / preferred brand)     The model is not adequate as the     ,111     The two variables are independent of each	purchased brand $\Leftrightarrow$ Consumer loyalty	.481	.231	.000	.326	.000		
Reputation of the most frequently purchasedbrand $<>$ Consumer loyalty (recommendations made regarding the most frequently purchasedbrand),516,267,000,322,000Reputation of the most frequently purchasedbrand $<>$ Consumer loyalty (recommendations made regarding the most liked / preferred brand),478,229,000,325,000Reputation of the most frequently purchasedbrand $<>$ Consumer loyalty (recommendations made regarding the most liked / preferred brand),478,229,000,325,000Reputation of the most frequently purchasedbrand $<>$ Consumer loyalty (brandThe model is not adequate as the,111The two variables are independent of each	(repeated purchases)	,	,	,	,	,		
rrr	Reputation of the most frequently							
International constructionInternational construction	purchasedbrand $>$ Consumer loyalty							
Interview	(recommendations made regarding the most	,516 ,267		,000	,322	,000		
Reputation of the most frequently purchasedbrand <> Consumer loyalty (recommendations made regarding the most liked / preferred brand)       ,478       ,229       ,000       ,325       ,000         Reputation of the most frequently purchasedbrand <> Consumer loyalty (brand       The model is not adequate as the       ,111       The two variables are independent of each	(requestly purchasedbrand)							
purchasedbrand $<$ Consumer loyalty (recommendations made regarding the most liked / preferred brand) Reputation of the most frequently purchasedbrand $<$ Consumer loyalty (brand adequate as the ,111 The two variables are independent of each	Reputation of the most frequently		1					
recommendations made regarding the most liked / preferred brand),478,229,000,325,000Reputation of the most frequently purchasedbrand $\sim$ Consumer loyalty (brandThe model is not adequate as the,111The two variables are independent of each	purchasedbrand $>$ Consumer lovalty							
Iked / preferred brand)     The model is not     ,111       Reputation of the most frequently purchasedbrand <> Consumer loyalty (brand     adequate as the     ,111	(recommendations made regarding the most	,478	,229	,000	,325	,000		
Reputation of the most frequently The model is not adequate as the ,111 The two variables are independent of each	liked / preferred brand)							
purchasedbrand $\diamond$ Consumer loyalty (brand adequate as the ,111 independent of each	Reputation of the most frequently	The mode	el is not		The two vari	ables are		
	purchasedbrand <> Consumer loyalty (brand	adequate	as the	,111	independent	t of each		

Variables tested	R	R <sup>2</sup>	Sig.	χ Cramer's V	2 Sig.
preference) (attachment coefficient)	significance level is $>\alpha=0.05$			other, since P squire ( .071	earson Chi ) >α=0,05
Reputation of the most frequently purchasedbrand $>$ Consumer loyalty (brand preference) (Switching coefficient)	The model is not adequate as the significance level is>α=0.05		,329	The two vari independent other, since P squire (,632 )	ables are t of each earson Chi $> \alpha = 0.05$
Reputation of the most frequently purchasedbrand $>$ Consumer loyalty (brand preference) (Budget coefficient)	The model is not adequate as the significance level $is>\alpha=0.05$		,547	,360	,014

Based on the information presented in the table, we can summarize that there is:

- statistically significant but weak relationship between SRB and brand image (determination coefficient varies between 0.176 and 0.192);
- statistically significant relationship between SRB and the level of satisfaction (determination coefficient 0.358);
- statistically significant but weak relationship between SRB and brand reputation (determination coefficient varies between 0.247 and 0.274).

The data in Table 2 show that there is also a statistically significant relationship between the three components (between image and satisfaction, satisfaction and image, satisfaction and reputation, reputation and satisfaction). These connections are logically substantiated and described in the presentation of the model of marketing projections from the application of SRB. At the present stage of the exhibition, these three constructs are of interest due to the fact that they form the three directions of indirect influence of SRB on consumer loyalty.

The subsequent strong and weak tests (presented in Table 2) show that there is:

- statistically significant relationship between satisfaction and repeated purchases as a form of loyalty (determination coefficient 0.264);
- statistically significant relationship between satisfaction and recommendations (both regarding the most liked and for the most frequently purchased brand) as another form of operationalizing loyalty (determination coefficients 0.379 and 0.361);
- statistically significant relationship between the image of the most liked/preferred brand and loyalty in the form of repeated purchases and recommendations made regarding the most liked and most frequently purchasedbrand (determination coefficients – 0.153, 0.172 and 0.160);
- statistically significant relationship between the image of the most frequently purchasedbrand and loyalty in the form of repeated purchases and recommendations made regarding the most liked and most frequently purchasedbrands (determination coefficients – 0.163, 0.154 and 0.129);

Georgieva, M., Stanimirov, E. (2021). Marketing Projections of Socially Responsible Branding on Consumer Loyalty.

- statistically significant relationship between the image of the most liked / preferred brand compared to other brands on the market and loyalty in the form of repeated purchases and recommendations made regarding the most liked and most frequently purchasedbrand (determination coefficients 0.148, 0.107 and 0.106);
- statistically significant relationship between the image of the most frequently purchasedbrand compared to other brands on the market and loyalty in the form of repeated purchases and recommendations made regarding the most liked and most frequently purchasedbrand (determination coefficients – 0.161, 0.115 and 0.091);
- statistically significant relationship between the reputation of the most liked/preferred brand and loyalty in the form of repeated purchases and recommendations made regarding the most liked and most frequently purchasedbrand (determination coefficients – 0.222, 0.242 and 0.267);
- statistically significant relationship between the reputation of the most frequently purchasedbrand and loyalty in the form of repeat purchases and recommendations made regarding the most liked and most frequently purchased brands (determination coefficients – 0.231, 0.267 and 0.229).

The tests also show that there is no statistically significant relationship between:

- image and loyalty in the form of preference;
- satisfaction and loyalty in the form of preference (129);
- reputation and loyalty in the form of preference (130);

The above said gives grounds to confirm the hypotheses of indirect influence of SRB on consumer loyalty in the theoretically differentiated three directions, by: 1) creating a favourable image; 2) increasing the level of satisfaction and 3) forming a positive reputation. The hypotheses formulated in this way are valid in terms of loyalty in the operationalization of the latter – as repeated purchases and as recommendations made. The hypothesis of indirect influence of SRB on consumer loyalty is rejected when considering the latter as a formed preference.

A comparison is made of the strength of SRB influence on consumer loyalty by direct and indirect impact and the relation is tested against all operationalizing variables of consumer loyalty and taking into account the indirect impact on all commented constructs of the marketing effects model (Figure 2). The results of the analysis can be summarized as follows:

## 1) Regarding the impact of SRB on consumer loyalty in the form of repeated purchases:

The strength of direct influence is 0.534. The total strength<sup>11</sup> of indirect influence through the individual constructs is as follows: image of the most liked/preferred brand (0.705); image of most frequently purchasedbrand (0.705); image of the most liked/preferred brand

<sup>&</sup>lt;sup>11</sup> The value of the total strength of influence is formed as a sum of the strength of direct influence + the strength of indirect influence by means of the respective construct.

compared to the other brands (0.697); image of the most frequently purchasedbrand compared to other brands (0.702); satisfaction with the most frequently purchasedbrand (0.841); reputation of the most liked/preferred brand (0.78); reputation of most often purchased brand (0.773).

# 2) Regarding the influence of SRB on consumer loyalty in the form of recommendations made regarding the most frequently purchasedbrand:

The strength of direct influence is 0.624. The total strength of indirect influence through the individual constructs is as follows: image of the most liked/preferred brand (0.805); image of the most frequently purchased brand (0.79); image of the most liked/preferred brand compared to the other brands (0.763); image of the most frequently purchased brand (0.992); reputation of the most liked/preferred brand (0.881); reputation of the most frequently purchased brand (0.881).

# 3) Regarding the influence of SRB on consumer loyalty in the form of recommendations made regarding the most liked/preferred brand:

The strength of direct influence is 0.637. The total strength of indirect influence through the individual constructs is as follows: image of the most liked/preferred brand (0.812); image of the most frequently purchased brand (0.79); image of the most liked/preferred brand compared to the other brands (0.776); image of the most frequently purchased brand (0.996); reputation of the most liked/preferred brand (0.907); reputation of the most liked/preferred brand (0.875).

# 4) Regarding the influence of SRB on consumer loyalty in the form of brand preference (attachment coefficient):

The strength of direct influence is 0.401. Indirect influence was reported only through the constructs – satisfaction with the most frequently purchased brand (0.484) and reputation of the most liked/preferred brand (0.464).

# 5) Regarding the influence of SRB on consumer loyalty in the form of brand preference (Switching coefficient):

The strength of direct influence is 0.227. There is no reported possibility of indirect influence of SRB on loyalty.

# 6) Regarding the influence of SRB on consumer loyalty in the form of brand preference (Budget coefficient):

The strength of direct influence is 0.233. There is no reported possibility of indirect influence of SRB on loyalty.

Based on the presented data, we can make two important conclusions:

1) The strength of the influence of SRB on consumer loyalty is significantly greater when the impact is not direct, but is mediated by creating a favourable image; positive reputation or maintaining a high level of customer satisfaction. Georgieva, M., Stanimirov, E. (2021). Marketing Projections of Socially Responsible Branding on Consumer Loyalty.

2) Exactly through the formation and maintenance of a high degree of consumer satisfaction, SRB has the strongest influence on consumer loyalty. The latter is not surprising given the fact that satisfaction, although indirect, is considered the strongest measure of loyalty. In this sense, in order to encourage consumers of carbonated soft drinks to repeat purchases and make recommendations, producers/bottling companies should make efforts to maintain their satisfaction at a high level. In the presence of a significant segment of "sophisticated" consumers on the market of carbonated soft drinks in Bulgaria, and in the conditions of "Experience economy" and striving for "sustainable development", this is possible by maintaining the behaviour of a good corporate citizen, which is also achieved by positioning of the company/brand as socially responsible.

The point of view of the business in terms of marketing projections of the implementation of SRB in general, and in particular on consumer loyalty, is presented in the form of expert assessment. For this purpose, as already mentioned, a survey was conducted among 13 representatives of the industry. Both some of the market leaders and small producers/bottlers of carbonated soft drinks with a significantly limited scale of activity are included. Some of the suppliers of the so-called "Private labels" also take part. In view of the requirement for confidentiality of the information provided, it is not possible to specify the companies participating in the survey.

The data systematized in Table 3 show that from a business point of view, the strongest advantages of engaging with CSR are related to creating a positive reputation (average score -3.92) and a positive image of the company/brand (average score -3.85). With a small difference, the representatives of the producers/bottlers of carbonated soft drinks rank the other positive effects of the application of SRB: 1) forming positive associations with regard to the company/brand (average score -3.69); 2) creating a positive identity of the company/ brand (average score -3.62).

The position of the business regarding the other effects of SRB, the existence of which is argued in theoretical terms, is contradictory. For example: 1) 17% of the surveyed companies do not think that the implementation of CSR/SRB helps to meet the expectations of consumers in the market (41% give a positive opinion); 2) 15% of the respondents deny the possibility to have a positive influence on the quality of the offered products through CSR/SRB (23% of the companies defend the opposite position), 3) as well as on the level of consumer satisfaction (54% believe that it is possible); 4) 8% of the respondents do not find a positive relationship between CSR/SRB and the value of the brand (62% of the respondents admit the existence of such); 5) 8% are also the companies according to which CSR/SRB does not contribute to their better performance on the market (however, 54% are of the opposite opinion).

There is a relatively higher degree of unanimity among business representatives regarding the role of CSR/SRB in the process of customer relationship management. For 54% of the companies, socially responsible behaviour helps to attract more customers, but also, the percentage of companies that are more sceptical of this finding is not low (46%).

61% of respondents are convinced that CSR/SRB helps to develop customer relationships, but at the same time, the percentage of companies that believe that CSR/SRB can be a

motive for maintaining customer relationships in the long run, as well as to gain and keep their loyalty is significantly lower – respectively 39% and 46%. This discrepancy shows that in addition to the socially responsible behaviour of producers/bottlers of carbonated soft drinks, other factors that determine their choice and consumer habits are essential for consumers.

#### Table 3

Commitment to CSR, including in the context of branding (SRB) helps to:		2	3	4	5	Mean
		1 – I do	l	evaluation		
8()1		5-1cc	mpletel	y agree		
<ol> <li>create positive associations regarding the company/brand</li> </ol>	-	23%	8%	46%	23%	3.69
2. create a positive image of the company/brand	-	-	38%	39%	23%	3.85
3. create a positive identity of the company/brand	-	-	62%	15%	23%	3.62
4. increase the value of the brand	8%	15%	15%	46%	16%	3.46
5. increase the quality of the offered products	15%	23%	39%	8%	15%	2.85
6. satisfy the expectations of the consumers on the market	17%	17%	25%	25%	16%	3.08
7. increase the level of consumer satisfaction	15%	8%	23%	31%	23%	3.38
8. create a positive reputation of the company/brand	-	8%	31%	23%	38%	3.92
9. better performance of the company/brand on the market	8%	15%	23%	39%	15%	3.38
10. attract more customers	-	23%	23%	31%	23%	3.54
11. develop customer relationships		8%	31%	46%	15%	3.69
12. maintain relationships with customers in the long run	-	15%	46%	23%	16%	3.38
13. form and maintain consumer loyalty	-	23%	31%	23%	23%	3.46

Effects of the application of CSR/SRB

In conclusion, we can summarize that the results of the survey in a mirror perspective show that there is a certain difference in the positions of the two groups of respondents regarding the possibilities of influencing consumer loyalty through SRB. Both consumers and business representatives recognize the existence of a positive relationship between the two constructs, but interpret the strength and direction of the influence of SRB on consumer loyalty in different manners.

A series of strong and weak tests of the data collected from the survey of end customers confirm that SRB influences the level of consumer loyalty in the form of repeated purchases and recommendations, both directly and indirectly, by forming a positive image; positive reputation and by increasing the level of satisfaction. Exactly the latter is established as the relationship with the greatest strength or, in other words, the application of SRB makes customers significantly more satisfied, and this is a prerequisite for them to be significantly more loyal in both behavioural and psychological aspects.

Businesses, on the other hand, also recognize that SRB influences forming and maintaining consumer loyalty. However, unlike consumers, business representatives are of the opinion

Georgieva, M., Stanimirov, E. (2021). Marketing Projections of Socially Responsible Branding on Consumer Loyalty.

that the strongest impact of SRB on loyalty is through forming a positive reputation of the company/brand. The direction –"SRB – positive associations – positive image – consumer loyalty" is ranked next and the businesses put the influence of SRB on consumer satisfaction as a tool for forming and maintaining loyalty only in the last place.

The summaries derived in this way are a prerequisite for formulating the final part of the study, in which the authors systematize the applied aspects, conclusions and recommendations of the study.

#### Practical Applicability of the Results of the Conducted Research

The practical applicability of the results of the study can be identified in several ways:

**First.** Since the term "Experience economy" was first introduced about 20 years ago (Pine, Gilmore, 1998, p. 97-105), its creators Pine and Gilmore have constantly been exploring howconsumer decisions about a given purchase are increasingly determined by the experience of the customers in the context of modern market conditions. Experts are adamant that since a long time, the availability of a good product or service is no more a competitive advantage on the basis of which a company can be differentiated from other market providers. Given the fact that the latter is highly saturated, consumers expect and demand a positive and personalized experience with a brand – "to feel that they are heard, understood and cared for" (Pine, Gilmore, 1998, p. 97-105). In this sense, emotion is gaining an increasingly key role as a motivator of consumer behaviour and a factor in the purchase decision.

This can be argued by the fact that the "Experience Economy"has created a new business model – B2H (Business to human) – a business focused on people. This model takes into account the fact that people are emotional beings by nature and in 90% of cases, emotions influence their purchasing decisions. This requires companies' offers not only to be rationally economically justified, but also to target customers emotionally (Kapital, 2019).

The latter is especially important given the profile of the modern consumer. The concept of consumer "sophistication" is presented as one of the leading global trends in consumer behaviour for 2019 (Euromonitor International, 2019).<sup>12</sup> Modern consumers are less and

<sup>&</sup>lt;sup>12</sup> The report of Euromonitor International "Top 10 Global consumer trends 2019" outlines the ten main trends in consumer behaviour for 2019. One of them is related to the profile of the "conscious" consumer. The characteristics in the profile and behaviour of this type of user, presented in the report, ideologically correspond to the profile and behavioural characteristics of the "sophisticated" consumer, which gives grounds to summarize that this is the same market segment, characterized by ethical consciousness, resulting in ethical, "sustainable" consumption. We can even say that the use of the term "conscious" is a kind of refinement of the previously widely used definition "sophisticated consumers". In Bulgarian, the translation of the latter concept is quite controversial (from "pretentious" to the accepted "sophisticated" customers). This sometimes leads to a distortion in the understanding of the essence of the concept of "consumer sophistication". In this sense, the definition of "sophisticated" consumers as "conscious" consumers is a positive move towards identifying the latter as responsible market participants who seek social, economic and environmental justice in their behaviour and consumption.

less sensitive to price, but more and more demanding and aware in their purchasing decisions; they are looking for products of natural origin; they worry about the effects of consumption on quality of life; they are strongly committed to the cause of reducing the volume of plastic used (Euromonitor International, 2019).<sup>13</sup> The common manifestation of these trends confirms the relevance and importance of the topic of sustainability in the context of consumer behaviour and shows that modern consumers are looking for companies with a position of active corporate citizens; organizations with a social consciousness that in all of their actions and decisions seek a balance between their own interests and public demand of models for sustainability. These are companies that manage to offer customers "value" of a super-material nature, as well as to make them active participants in its creation and sharing. Kotler (2010) identified this process as a new stage in marketing – a stage in which priority is given to values (so-called Marketing 3.0), in the context of which consumers are looking for companies that do not just provide the best products or services on the market, but whose mission, vision and values would maximize their pursuit of social, economic and environmental justice.

Companies are expected to offer not just excellent products and services, but to "make the world a better place" (CSR Bulgaria, 2017)<sup>14</sup>, whereas the practical approach to achieve this is related to the integration of the concept of CSR in the overall corporate strategy of business organizations, including in the process of creating and managing brands. The maintenance of SRB makes the companies competitive in the conditions of "Experience Economy" by providing an opportunity for the expectations and demands of the "sophisticated" consumers "for experience" to be fully satisfied. This study gives a theoretical argumentation of the presented thesis and empirically verifies its relevance by proving that the strongest impact of SRB on consumer loyalty is precisely by increasing the level of customer satisfaction.

**Second.** The study of the market of carbonated soft drinks in Bulgaria and the presented data on the strength of direct and indirect influence of SRB on consumer loyalty, as well as the confirmation of statistically significant relationships between these two variables in all aspects of the model of the marketing projections of SRB, are sufficient to argue that SRB can play a significant role in the customer relationship management process. SRB helps to develop and maintain the latter in the long run, especially in the presence of a segment of "sophisticated" consumers.

Effective customer relationship management can add value to the business in several ways: 1) it allows companies to better profile their market offers which create preconditions for a higher degree of customer satisfaction, repeated purchases, recommendations to potential customers and others; 2) optimization of the client portfolios of the companies with an emphasis on clients with a higher value or those that require service related to specific

<sup>&</sup>lt;sup>13</sup> These and other trends were identified as determining consumer behaviour globally in 2019, according to a study by Euromonitor International.Euromonitor International. (2019) Top 10 Global consumer trends 2019. 2019.

<sup>&</sup>lt;sup>14</sup> "A good company offers excellent products and services, but a great company does all this and strives to make the world a better place". (William Ford Jr., Chairman, Ford Motor Co.) Quotes and sayings in the positive spirit of corporate social responsibility. CSR Bulgaria. http://csr.bg/social-responsibility/csr-quotes, last accessed on 22.07.2017.

Georgieva, M., Stanimirov, E. (2021). Marketing Projections of Socially Responsible Branding on Consumer Loyalty.

competencies of the suppliers; 3) more effective financial planning given knowledge of the characteristics and dynamics of the behaviour of individual groups of clients within client portfolios throughout their life cycle.

Third. The results of the empirical testing of the relevance of the model of marketing projections of SRB on consumer loyalty presented in the study, metrify the effects of SRB implementation, emphasizing that the benefits for companies from creating and maintaining such brands far outweigh the positive image effects. Maintaining SRB undoubtedly creates value for companies of a non-financial nature, but at the same time allows it to be directly estimated by measuring the positive market and financial effects that consumer loyalty brings to companies. All this proves the need for sustainability in the investments of companies for the creation, development and maintenance of SRB. In the presence of "sophisticated" consumers and in the conditions of "Experience economy", SRB has a significant role in shaping consumer decisions and is an important factor in maintaining consumer loyalty. The latter is among the priority goals for the majority of companies in the market.

#### Conclusion

In the context of the trend in the 21<sup>st</sup> century to do business with care and emphasis on sustainable development and focus on the experience of consumers beyond the consumption of products and services, knowing all the positive effects of SRB implementation is a strong competitive advantage for companies.

Referring to various theoretical formulations, the authors of the study define the essence of the SRB category and derive a model of marketing projections from the application of this category by placing a priority focus on the relationship "SRB-consumer loyalty". The latter is among the leading goals in the strategies of many organizations, and in particular in the context of managing relationships with their customers. The results of the empirical mirror research conducted on the market of carbonated soft drinks in Bulgaria confirm the relevance of this model by proving that SRB really has a positive role in forming and maintaining the loyalty of the consumers. According to the latter, this is due to the fact that through SRB customers get satisfaction from their desire to experience value creation, while according to business representatives SRB practices form loyalty by creating a positive reputation of the company/brand.

In this context, the authors of the study believe that in order to effectively use all alternatives to form, develop and maintain long-term partnerships with their customers and in particular to be able to meet the requirements of "sophisticated" customers, companies should be aware of the effects of the application of SRB. To do so, it is good to organize more trainings in companies from different industries and this should happen, on the one hand, at the top management level in order to justify the inclusion of CSR in the strategic priorities of the organization, and on the other hand – at all other levels of the corporate hierarchy in order to ensure employees' conscious empathy for this different philosophy of doing business, creating and managing brands.

#### References

- Aaker, D., Keller, K. (1990). Consumer evaluations of brand extensions. Journal of marketing. 54(1), p. 27-41.
- Agarwal, M., Rao, V.(1996). An Empirical Comparison of consumer-based measures of brand equity. Marketing Letters, March, p. 237-247.
- Ahearne, M., Bhattacharya, C. B., Gruen, T. (2010). Antecedents and consequences of customer-company identification: expanding the role of relationship marketing. – Journal of applied Psychology. 90 (3), p. 574-585.
- Alba, J. W., Hutchinson, J. W. (1987). Dimensions of consumer expertise. Journal of consumer research. 13, March, p. 411-454.
- Barnett, M. (2008). Stakeholder influence capacity and the variability of financial returnsto CSR. Academy of management review. 32(3), p. 794-816.
- Berry, L. (2000). Cultivating Service brand equity. Journal of the Academy of MarketingScience, 28 (1), p. 128-137.
- Bhattacharya, C. B., Sen, S. (2003). Consumer-company identification: a framework for understanding consumers' relationships with companies. – Journal of Marketing, 67 (2), p. 76-88.
- Brestnichka, R. (2004). Upravlenie na targovskite marki. Stopanstvo, Sofiya, p.111-113.
- Bulgarian Network For Corporate Social Responsibility. [Online] http://csr.bg/social-responsibility/csrquotes. [Accessed: 22.07.2017].
- Caroll, A., Buchholtz, A. (2003). Business & Society: Ethics and stakeholder management. Cincinnati, Ohio: South-WesternCollege Pub, Thomson, p. 40.
- Cobb-Walgren, C., Ruble, C., Donthu, N. (1995).Brand Equity, brand preference, and purchase intent.– Journal of Advertising, March, p. 2-40.
- Crimmins, J. C. (1992). Better measurement and management of brand value. Journal of Advertising research. July/August, p. 11-20.
- Dawar, N., Pilluta, M. (2000). Impact of product-harm crises on brand equity: the moderating role of consumer expectations. – Journal of Marketing Research. February, p. 215-226.
- Dimova, N. (2013). Marketingovi aspekti na emotsionalnoto pazaruvane. Nov balgarski universitet, p. 77.
- Dodds, W., Monroe, K., Greal, D. (1991). Effects of price, brand, and store information on buyers' product evaluations. – Journal of Marketing Research. March, p. 307-319.
- East, R., Gendall, P., Hammond, K., Lomax, W. (2005). Consumer loyalty: singular, additive or interactive?. – Australasian Marketing Journal. 13(2), p. 10-27.
- Erdem, T., Swait, J., Louviere, J. (2002). The impact of brand credibility on consumer price sensitivity. International Journal of Research in Marketing. January, p. 1-19.
- Euromonitor International. (2019) Top 10 Global consumer trends 2019.
- Fan, Y. (2005). Ethical branding and corporate reputation. Corporate Communications. 10(4), p. 341-350.
- Feick, L. F., Price, L. L. (1987). The market Maven: a diffuser of Marketplace information. Journal of Marketing.51(1), January, p. 83-97.
- Folkenberg, A. W. (1996). Marketing and the wealth of firms. Journal of Macromarketing, April, p. 4-24.
- Garberg, N. A., Fombrun, C. J. (2006). Corporate citizenship: creating intangible assets across institutional environment. – Academy of management review. 31, p. 329-346.
- Georgieva, E., Tonkova, E., Stanimirov, E. (2008). Marketingovi analizi. Nauka i ikonomika, IU-Varna, p. 173.
- Hirschman, E. C. (1980). Innovativeness, Novelty seeking and Consumer Creativity. Journal of Consumer Research. 7(3), p.283-295.
- Hsu, K. (2012). The advertising effects of CSR on corporate reputation and brand equity: Evidence from the Life Insurance industry in Taiwan. – Journal of business ethics. 109 (2), August, p. 194.
- Jones, R. (2005). Finding sources of brand value: developing a stakeholder model of brand equity. Brand management. 13 (1), p. 10-32.

Kapital Magazine.

[Online]https://www.capital.bg/biznes/kompanii/2019/08/28/3983012\_formulata\_za\_uspeh\_v\_ikon omikata\_na\_izjiviavaneto/. [Accessed: 30.11.2019].

Georgieva, M., Stanimirov, E. (2021). Marketing Projections of Socially Responsible Branding on Consumer Loyalty.

- Keller, K. (1993). Conceptualizing, measuring and managing customer-based brand equity. Journal of marketing. 57 (1), p. 1-22.
- Keller, K. (2008). Strategic Brand Management.3rdedition, Upper Saddle River, NJ: Prentice-Hall, p. 97.
- Knox, S., Denison, T. (2000). Store Loyalty: Its Impact on Retail Revenue. Journal of Retailing and Consumer Services. 7, p.35.
- Kotler, F., Kartajaya, H., Setiavan, A. (2010). Marketing 3.0. Lokus, p. 34.
- Kotler, F. (2000). Kotlar za marketinga: kak da sazdavame, pechelim i upravlyavame pazarite. ABAGAR, Veliko Tarnovo, Parvo izdanie, p. 10.
- Kotler, F. (2005). Upravlenie na marketinga. Klasika i Stil, Sofiya, p. 54.
- Kotler, F., Lee, N. (2011). Korporativna sotsialna otgovornost nay-dobroto za vashata kompaniya i vashata kauza. Roy Komyunikeyshn, p. 2
- Kotler, P., Armstrong, G. (2008). Principles of marketing. 12th edition, Prentice Hall.
- Kotler, P., Pfoertsch, W. (2006). B2B Brand management. Springer, p. 300.
- Lai, C., Chiu, C., Yang, C., Pai, D. (2010). The effects of CSR on brand performance: the mediating effect of industrial brand equity and corporate reputation. – Journal of business ethics, 95 (3), p. 460, 465.
- Lundmark, A., Elsalhy, S. L. (2009). CSR in Branding, A study of The Body Shop's visitors' attitudes and purchase decisions. p. 21-22.
- Luo, X., Bhattacharya, C. B. (2006). CSR, customer satisfaction, and market value. Journal of Marketing. 70 (4), p. 1-18.
- Malai, V. (2011). The effect of CSR on customer loyalty. Review of business research. 11 (2), p. 168.
- Mcwilliams, A. D., Siegel, S., Wright, P. M. (2006). CSR: strategic implications. Journal of management studies. 43 (1), p. 1-18.
- Melo, T., Galan, J. (2011). Effects of CSR on brand value. Journal of brand management. 18 (6), April, p. 428.

Mladenova, G. (2000). Marketingovi analizi. Trakiya-M, Sofiya, p. 173.

- Nan, X., Heo, K. (2007). Consumer responses to CSR initiatives, examining the role of brand-cause fit in cause-related marketing. – Journal of advertising. 36 (2), p. 71.
- Nieto, D. V. (2009). CSR as part of your brand. Manager. British Journal of Administrative Management, N 68, Oct./Nov., p. 29.
- Pine, B.J., Gilmore, J.H. (1998). Welcome to the experience economy. Harvard Business Review, Vol. July-August, p.97- 105.
- Roberts, P. W., Dowling, G. R. (2002). Corporate reputation and sustained superior financial performance. – Strategic management journal. 23, p. 1077-1093.
- Roy, S. (2011). Brand loyalty measurement: A framework. SCMS Journal of Indian management. 8(2), April, p. 112-114.
- Sanchez, J., Sotorrio, L. (2007). The creation of value through corporate reputation. Journal of business ethics, 76, p. 337.
- Scott, S. G., Lane, V. R. (2000). A stakeholder approach to organizational identity. The academy of management review, 25(1), p. 43-62.
- Sproles, G. B., Geistfeld, L. V., Badenhop, S. B. (1978) Informational Inputs as Influences on efficient consumer decision making. – Journal of consumer affairs. 12, p. 88-103.
- Stanimirov, E. (2010). Upravlenie na targovskata marka, uchebno posobie. Nauka i ikonomika, IU-Varna, p. 59.
- Stanimirov, E. (2010). Upravlenie na vzaimootnosheniyata s klientite kontseptualni osnovi. Nauka i ikonomika, IU-Varna, p. 131-132.
- Stanimirov, E., Georgieva, M. (2019). Customer Profiling Based on the Criteria of Sustainable Consumption. – Economic Studies, 28 (3), p. 3-17.
- Stanimirov, E., Zhechev, V. (2013). Targovska marka i brand menidzhmant. Nauka i ikonomika, IU-Varna, p. 182.
- Stoycheva-Kehayova, M. (2009). Potrebitelsko povedenie. Nauka i ikonomika, IU-Varna, p. 207.
- Vallaster, C., Lindgreen, A., Maon, F. (2012). Strategically leveraging CSR: a corporate branding perspective. – California management review. 54(3), Spring, p. 56.
- Zhelev, S. (2000). Marketingovi izsledvaniya za marketingovi resheniya. Trakiya-M, Sofiya, p. 84.



Petar Peshev<sup>1</sup>

Volume 30 (4), 2021

# ANALYSING CFD RETAIL INVESTORS' PERFORMANCE IN A POST MIFID II ENVIRONMENT

In this scientific article, the performance of retail investors trading contracts for differences offered by EU regulated investment firms has been analysed. The aim of the study is to identify common patterns of behaviour and the determinants of holding period returns and risk aversion in general and in a post-MiFID II environment. More than 80% of clients in this sample are losing money and a panel econometric examination reveals that low equity and high used margin-to-equity ratios are among the biggest contributors for negative holding period returns. Used margin-to-equity ratios are affected by equity size and by the holding period returns. Regulatory changes due to MiFID II implementation and due to the introduction of a restriction on the sale of contracts for differences are affecting holding period returns and used margin-to-equity ratios, perhaps not as intended and expected. JEL: F31; G11; G15; G41

#### 1. Introduction

Trading complex financial instruments like leveraged Contracts for difference (CFDs) has dramatically grown in popularity over the last decade. Hundreds of investment firms have been active in offering "low commission" or "commission-free" over the counter (OTC) trading of CFDs via ever-improving electronic platforms. Investment firms try to match the growing demand for CFD trading by retail investors, but at the same time, they are in the business of creating their own demand with all the advertisements of potential big returns, independent income, aggressive and indirect marketing, etc.

In spite of the fact that the chance of an asset price (representing a stochastic process) going up or down is around 50%, on average above 70% of retail investors' accounts for trading CFDs are losing money (see Appendix Table 2). It is well known that odds for winning on the financial markets, especially in leveraged CFDs trading, are against the retail investor, however, this is not preventing vast of the new and existing clients to pursue their casino alike experience, emotions and of course, outcome and to devote different shares of their monthly income and accumulated wealth to this pursuit. Trading forex, derivatives and excessive trading of financial instruments are compared to gambling and addictions (Lopez-Gonzalez, Griffiths, 2018; Grall-Bronnec et al., 2017). It is not proven that derivatives trading

<sup>&</sup>lt;sup>1</sup> Petar Peshev, Ph.D., Senior (Chief) Assistant professor of Economics at UNWE, e-mail address: p.peshev@unwe.bg.

promotes higher quality for the market of the underlying market and for the overall quality of markets (Phylaktis, Manalis, 2013).

CFDs trading based on currency pairs has been very common. Client performance is determined not only by the pure price differential times quantity but also by slippage and by swap charges (rollover charges) that are one of the main revenue pillars of the investment firm with the latter representing financing costs incurred by retail investors and associated with margin trading. The bid-ask spreads also account for individual traders' performance, since spreads can sometimes represent 1-3% of the CFD price (Brown et al., 2010).

Opening a trading account for trading CFDs is relatively easy, e.g. investment firms usually require questionnaire filling, copy of a personal document for identification, proof of address, bank account/credit card possession and depositing money into the trading account. It is a very widespread practice for retail brokers to request a minimum of 100-200 EURO/USD initial deposit in order for the client to be allowed to open an account and to start investing/trading. Before the 2018 ESMA measures and newer legislation, it was possible for clients using services of EU investment firms to use 400 to 1 leverage which means that with just 100 EUR in their margin account, they could open a 400 times higher notional value, e.g. it was possible for a client with just 100 EUR in her account to open a position of 40 000 EUR. In this particular example, just a 0.25% price change of the underling asset in the opposite direction will lead to equity being wiped out, while a one percent change per day or even more being the normal for many underlying assets.

Regulators like European Securities and Markets Authority (ESMA) and EU member countries' authorities are aware of the CFD trading practices and the business model of regulated investment firms offering this kind of financial instruments' trading via an electronic platform. Through various regulatory measures, incl. regulations, directives, national laws implementing directives, ordinances, guidelines and recommendations, EU legislation set a common legal framework, that led to a standardised method of conducting business and have raised the standards for financial services providers aiming higher transparency and better-informed choice for clients. Although retail investors still don't manage to become profitable on average and to take advantage of higher regulatory and legislative standards in the field.

The aim of this scientific study is to analyse individual investors' performance in trading OTC CFDs and to test individual investors' profitability determinants and accounting for risk-taking determinants, using real trading data of retail investors, clients of licensed in the EU investment firms.

In this article following hypotheses have been tested:

- 1. The size of the equity variable has a positive impact on traders' performance (HPR);
- 2. The used-margin-to-equity ratio (UMER) negatively impacts the HPR;
- 3. Traders' performance is deteriorating with the advance of time;
- 4. When the UMER is considered as a responsive variable, then the equity size is negatively affecting the dependent variable;

- 5. The HPR negatively impacts the UMER;
- 6. A positive impact on HPR is caused by the 3<sup>rd</sup> of January, 2018 entry into force of the European Union's (EU's) Second Directive on Markets in Financial Instruments (MiFID II-Directive 2014/65/EU of the European Parliament and of the Council of the 15<sup>th</sup> of May 2014 on Markets in Financial Instruments and Amending Directive 2002/92/EC and Directive 2011/61/EU (MiFID II) aiming to strengthen investor protection, increasing transparency and set common rules for all investment firms offering services in the EU;
- The 1<sup>st</sup> of August 2018 ESMA's measures on restricting marketing, distribution and sales of CFDs led to improved performance of traders, i.e. to higher HPRs;
- 8. The UMER has decreased as a result of the implemented MiFID II-Directive;
- 9. The UMER has decreased as a result of the implemented August 2018 ESMA's measures.

After a brief introduction on the characteristics of CFD trading descriptive and econometric investigation follows, with summarising and analysing presented results.

#### 2. CFDs Trading Peculiarities

CFDs are complex derivative financial instruments allowing investors to take advantage of underlying asset's price changes. Investment firms offer CFDs on a wide range of underlying assets, including single stocks, currency pairs, equity indices, cryptocurrencies, commodities, etc. Usually CFDs are traded by retail investors, while professional traders, due to various regulatory limitations and helped by wider access to financial instruments and venues, prefer to make transactions with the underlying asset, e.g. trading equities, ETFs, exchange-traded derivatives, for example.<sup>2</sup> Bauer et al. (2009) signal that options trading is leading to much larger loss compared to the price dynamics in the underlying and is representing a gambling pattern of investors behaviour.

CFDs offer no direct arbitrage opportunity with the underlying asset, however, CFDs are traded at a price close to the underlying asset (Brown et al., 2010). CFD trading involves leverage, or said in other words, CFD trading usually is done on margin. If an individual retail investor uses a leverage of 20 to 1 and the underlying asset's price goes in the opposite direction of the opened position by 5%, then a 100% loss on initial investment is achieved. The leverage of "200 to 1" and "400 to 1" was not something unusual prior to August' 2018 ESMA's measures on limiting leverage and promoting additional measures for improving the soundness of retail investor's financial status and behaviour. CFDs are traded over the counter (OTC) and as not being a standardised product slight differences apply for the CFDs manufactured by different providers (investment firms). According to the ESMA Annual Statistical Report on EU Derivatives Markets (2018) CFDs account for 19% of the amount outstanding for currency derivatives, while in terms of the number of total derivatives

<sup>&</sup>lt;sup>2</sup> In the text the term retail investor can be used interchangeably with the terms: trader; individual investor; investor; client; consumer.

contracts, CFDs comprise 57% of total volume. CFDs are held and traded mainly by retail investors due to their ease of access.

When offering CFDs and acting as counterparty, the investment firms stick to one of the three common business models: 1) Dealing on own account and not hedging the exposure, thus taking the whole risk, respectively bearing the clients' profits and benefiting from clients' losses; 2) Hedging all client orders to a third party, e.g. transmitting received trades to a liquidity provider; 3) Dealing on own account and hedging part of the received exposure when a specific threshold is met or based on a discretionary decision.<sup>3</sup>

On the 3<sup>rd</sup> of January 2018, the EU's Second Directive on Markets in Financial Instruments (MiFID II) took into effect. The aim of the new regulatory framework is to improve transparency, increase investor protection and to help restoring competition in the sector. Rules for: algorithmic and high-frequency trading; provision of services from third (non-EU) countries; data reporting; and transparency requirements have been introduced with MiFID II. Furthermore, on the 2<sup>nd</sup> of July 2018, ESMA banned the marketing, distribution or sale of binary options to retail investors. In addition to these measures on the 1<sup>st</sup> of August 2018, for a period of 3 months initially restrictions on the marketing, distribution or sale of CFDs to retail investors entered into force. The restrictions are comprised by: limiting the leverage on different classes of instruments (from 30:1 for major currency pairs to 2:1 for cryptocurrencies); a margin close out rule; a negative balance protection; banning the use of incentives by CFD providers, such as bonuses; and a standardised risk warning. After several prolongations of the three-month period, the 1<sup>st</sup> of August, 2018 measures has been implemented permanently by country authorities of EU members.

Margin trading of CFDs is known to be a risky endeavour with odds for reducing initial capital invested exceeding by much odds for increasing it. Thanks to the standardised warnings, investment firms regulated in EU must inform potential and existing clients about the percentage of clients losing money using their services and each quarter to recalculate the indicator based on the latest data. A small sample of EU regulated investment firms, presented in Table 2 in the Appendix, reveals that 72% of CFD providers' retail investor accounts are losing money. Similar negative outcome from trading forex CFDs is revealed in the summarized and analysed results by Ivantchev (2020). In todays' informative world, traders have at their disposal abundant information on the matter of trading on the financial markets. A vast literature (books, scientific and non-scientific articles) has been written on the topic of Fundamental analysis, technical analysis, automation of trading, trading behaviour and numerous courses, coaching services, trading systems can be bought and accessed. Despite this fact, traders are still prone to failure in trading financial instruments, CFDs in particular. Financing costs are among the main contributors to CFD trading losses, especially for open positions (trades) held overnight, from a week to one year (Lee, Choy, 2014). Akerlof (1978)'s information asymmetry through the adverse selection can also be blamed for the prevailing share of retail investors losing money, furthermore, Levin (2001) claims that better buyer's information is increasing the quantity of services demanded.

<sup>&</sup>lt;sup>3</sup> See Questions and Answers Relating to the provision of CFDs and other speculative products to retail investors under MiFID, 31 March 2017, ESMA35-36-794.

Decisions made under stress are known to be irrational, as suggested by Kahneman and Tversky (1979), thus investors experiencing losses are prone to wrong trades/investments.

Investors, even professional ones, usually are experiencing behaviour that can be depicted by the disposition effect, characterised by the behaviour of keeping losses long and cutting gains short (Kahneman, Tversky, 1979; Weber, Camerer, 1998; Oehler et al., 2003; Lucchesi et al., 2015; Beev, Hristozov, 2020). Feng and Seasholes (2005), however, find that experience helps traders to overcome the reluctance to realise losses but reduces the propensity to realise gains significantly. Hartzmark (1991) analyses the performance of 2229 large traders trading on the Chicago Board of Trade (CBT) for the period from July 1977 to December 1981. Speculative traders prevail in comparison to hedging purposes traders. The performance of traders, however, can be defined as pure luck and random, which is not a subject to sophisticated persistently profitable trading strategy (see ibid.).

From other perspective, Doering et al. (2015) summarise that social trading networks can lead to higher returns for retail traders, also helping in restoring the transparency of returns and trading and eventually lead to higher liquidity on the financial markets. Retail investors can copy profitable patterns using social trading networks and achieve hedge funds alike returns (see ibid.).

### 3. Data

In this scientific paper, an unbalanced panel from January 2015 until May 2019 for 3038 active retail investors has been analysed. A larger data set has been filtered down to selected active clients who have realised closed and open daily profit or loss on average of above 20 currency units. The data set comprises retail investors' CFD trading historical data from various EU based and MIFID complying regulated investment firms. The analysed data comes from a history reports like the ones derived from the common Meta trader 4 and 5 trading platforms. Only the history reports variable, that is employed in the analysis, has been scrutinised descriptively and econometrically.

This scientific research has been accomplished through an anonymous dataset of retail investors trading data provided after a written consent by a liquidity provider investment firm licensed in the EU. No individual retail investor has been identified, neither can be identified by the provided dataset, nor has been identified by the liquidity provider itself. Following Recital 26 of the General Data Protection Regulation (GDPR) Regulation (EU) 2016/679 that came into effect on THE 25<sup>TH</sup> OF MAY 2018, no natural person can be or has been identified directly or indirectly through using this set of anonymous trading historical data, thus principles of data protection are not applicable to anonymous information.

Retail investors' performance, in terms of profitability and risk aversion analysis, involves real trading data scrutinisation. One of the reasons this topic is not commonly covered is due to the lack of easily accessible trading data of retail investors. The main limitation of this paper's dataset is the missing individual investors' trades who impact the variables used in the research, like closed and floating profit or loss, equity, balance and used margin. For example, the closed and floating profit or loss are leading to a change in equity and balance

variables, but it is not clear what part of the profit or loss is due to swaps (rollover charges), or to change in prices, or due other fees and commission charges, the size of the spread and the slippage of execution, etc.

Dependent variables have been selected among all history report variables, due to their ability to suit this research objective, namely, to allow the analysis of retail investors' profitability and risk aversion and their determinants.

#### 3.1. Dependent variables

**HPR** is the total holding period return (HPR), calculated as the change in equity adjusted for deposits, withdrawals and other adjustments, compared to beginning equity, all of them derived from the history report. The variable is calculated for each period and for each retail investor on a cumulative basis.

**MARGINRATIO** is the variable for the UMER, calculated as the quotient of the used margin and the equity variable, found in the history report.

### 3.2. Explanatory variables

Each of the dependent HPR and MARGINRATIO variables can serve as an explanatory variable if the other is selected as dependent variables.

LOGEQUITY is the natural logarithm of the trader's equity variable.

**D01012018** is a dummy variable for the 3<sup>rd</sup> of January' 2018 entry into force of the EU's Second Directive on Markets in Financial Instruments (MiFID II-Directive 2014/65/EU of the European Parliament and of the Council of the 15<sup>th</sup> of May 2014 on Markets in Financial Instruments and Amending Directive 2002/92/EC and Directive 2011/61/EU (MiFID II).

**D01082018** is a dummy variable for the 1st of August 2018 ESMA's measures on restricting marketing, distribution and sales of CFDs. These measures have been implemented temporarily, for three months initially. Upon expiry, they have been rolled over several times. On the 31<sup>st</sup> of July 2019 ESMA ceased the renewal of the temporary restriction on the selected financial instrument, since most national competent authorities (NCAs) have taken permanent national product intervention measures related to CFDs that are at least as stringent as ESMA's measures.

#### 4. Descriptive Analysis

The dataset is comprised by daily trading data for 3038 active retail investors of MIFID II compliant EU investment firms. The average length of the trading history of individual retail investors is 336 calendar days, with a median value of 224 days, from the beginning of 2015 until the end of May 2019 respectively. The sample is unbalanced and is comprised by more than 1 mln. observations per variable.

The retail investors' equity possesses the following base (account) currency distribution: 1629 retail investors' account are in EUR (53.6% from total), 1062 in USD (34.9%), 269 in PLN (8.8%), 69 in GBP (2.3%) and 10 in CHF (0.3%). The average retail investor's account size (equity) for the period whole period under investigation stood at 3227 EUR, while the median value came at 1 276 EUR. Retail investors with accounts in CHF base currency are having the largest mean and median values of their equity, equal to the amount of 6601 and 4371 EUR, respectively. Retail investors with a base currency of their trading account of Polish zloty are having the lowest mean and median values, 1458 and 247 EUR, respectively.<sup>4</sup>

The average length of each client's history is 338 calendar days, and with 224 calendar days for the median value. Retail clients experienced a daily change in equity, due to closed Profit or Loss or the change of Floating Profit or Loss on average of 72.5% of the days in review, and with a median value of 77.3%.

Summarised statistical data for variables presented in Table 5 in the Appendix suggests that variables are not following normal distribution since the third and fourth central moment are having different values than zero and the Jarque-Bera statistic and the p-value for accepting the null hypothesis of kurtosis and skewness having zero values is suggesting the non-rejection of the null hypothesis.

The distribution of the HPR variable, suggests that data is heavily skewed to the right (see figure 4). The UMER variable is also right-tailed yet having fewer outliers in comparison to the HPR dependent variable (see Figure 3). The distribution of the equity and the natural logarithm of the equity is not even, as can be seen from Table 5 and Figure 1 and Figure 2 in the Appendix. The natural logarithm of the equity is skewed to the left, while the equity variable is skewed to the right.

Since this paper is targeting retail investors' performance and common patterns of retail investors trading CFDs it is important to stress on profitability. In Table 1 a total HPR distribution has been presented. The variable has been calculated as the net change of equity during the whole period for each retail investor, adjusted for deposits, withdrawals, account adjustments. The distribution of this variable suggests considerable skewness and non-normality. Retail investors are prone to losing money when trading CFDs using electronic trading platforms. Summary statistics for the total HPR variable reveals that above 47% of retail investors are losing between 90 to 100% of their equity, around 60% of retail clients are losing at least half of their equity, while 84.4% of retail clients are losing money, i.e. they are experiencing negative total HPR on their equity. About 12% of retail investors realise an HPR between 0 and 50%, while only 2.8% gain more than 90%.

Considering the other variable for depicting retail investors' behaviour and performance led to the analysis of the risk-taking variable, approximated by the UMER (see Table 2 below and Figure 3 in the Appendix). The distribution of UMER of sample's retail clients reveals that 318 or 10.5% of all retail clients in the sample are not holding overnight trading positions, thus their overnight UMER is zero (as can be seen in Table 2). This, however, is not indicative

<sup>&</sup>lt;sup>4</sup> For the purpose of these calculations all accounts have been converted into single currency of EUR using average exchange rates values for the period of Jan-2015-May 2019.

for the degree of intraday risk aversion, i.e. for the UMER, respectively. In the range 0-0.2 are falling 562 clients (or 18.5% of total), while 17% of retail investors fall in the 0.2-0.4 range, 20.7% in the 0.4-0.6 respectively, and 18.5% are in the 0.6-0.8 range. In the last quantiles, from 0 to 1 and in the above "1" values are falling close to 14.9% of all retail investors. The distribution of the UMER is following a much equal path compared to the total HPRs' distribution of retail investors.

Distribution of total HPRs of retail investors

Table 1

Table 2

Total HPR ranges	number of clients	% total
above 90%	84	2.8
75 -90%	18	0.6
50 -75%	19	0.6
25 - 50%	68	2.2
0 -25%	286	9.4
-25 -0%	456	15.0
-5025%	285	9.4
-7550%	242	8.0
-9075%	140	4.6
-10090%	1440	47.4

Source: Own calculations.

Distribution of UMER of clients

UMER ranges	number of clients	% of total
equal to 0	318	10.5
from 0 to 0.2	562	18.5
from 0.2 to 0.4	516	17.0
from 0.4 to 0.6	628	20.7
from 0.6 to 0.8	563	18.5
from 0.8 to 1	294	9.7
above 1	157	5.2
Total	3038	100.0

Source: Own calculations.

After the descriptive analysis of variables, an econometric investigation of individual investors' behaviour has been carried out using selected responsive (dependent) and explanatory variables outlined in the next sections.

#### 5. Methodology and (Panel) Econometric Investigation

Several models for identifying the determinants of the traders' profitability and UMER have been revealed hereinafter. The ordinary least squares (OLS) approach for panel data has been employed for the purpose of dependent variable determinants identification. Bond (2002) suggests that lagged values of the dependent and explanatory variables can be used as instrument variables (also see Das, 2005; Miguel et al., 2004). Results of Judson and Owen

(1999) prove that the bias of a panel ordinary lest squares model with fixed effects and lagged dependent variables decreases with increasing the number of periods, hence improving dramatically the quality of the regression. The higher the number of periods, the lower the bias in the dynamic panel regression with fixed effects (Nickell, 1981a). Nickell (1980b) suggest adding a dependent lagged value as an explanatory variable in order to reduce the bias.

A Hausman test has been performed on Ordinary least squares (OLS) panel data models for the selection of Fixed, Random effects introduction. The low p-value for the Correlated Random Effects – Hausman Test suggests that the null hypothesis can be rejected, inferring thus the acceptance of the alternative hypothesis of Fixed effects.

Appling a panel econometric investigation through the fixed-effects models, as suggested from the Hausman test output, yields to satisfactory result in revealing the determinants for the HPR dynamics as a dependent variable. The same procedure applies when identifying the factors for the UMER.

A redundant fixed effects test is also carried out in order to check the joint significance of variables. The p-value of the Cross-section F-value and the Cross-section Chi-square value are equal to zero, suggesting the rejection of the null hypothesis and accepting the alternative.

The presence of multicollinearity has been checked through the application of correlation analysis. Low cross-correlation coefficient values are associated with the absence of multicollinearity (see Dormann et al., 2013). As can be seen from Table.5 in the Appendix, the variables are experiencing low cross-correlation, thus multicollinearity is not an issue in the panel econometric investigation.

Verifying the statements made in the hypotheses is done through individual variables' p-values for coefficient t-statistics and for overall model F-statistics and p-value for accepting the null of the F-test.

Since the performed Hausmann test suggest the use of a Fixed effects panel regression models, following general panel regression model has been applied:

$$Y_{it} = a_i + \gamma_1 Y_{it-n} + \beta_n X_{j,it-n} + \zeta_j D_{j,i} + u_{it}$$

$$\tag{1}$$

where:

 $Y_{it}$  is the dependent (responsive) variable for the i<sup>th</sup> retail investors in the t<sup>th</sup> period. First, the HPR variable is used as a dependent variable, then the UMER is employed as a dependent variable in order to test the performance and the risk-taking behaviour.

 $Y_{it-n}$  is the n-lagged dependent (responsive) variable for the  $i^{th}$  retail investors (if the value of n is larger than zero, a dynamic panel regression has been introduced);

 $X_{j,it-n}$  is  $j^{th}$  explanatory(predictor) variable for the  $i^{th}$  retail investors in the  $t^{th}$  period for lag-n. UMER by retail investors; Natural logarithm of the equity of retail investors; dummy variables.

 $D_{n,i}$  is  $n^{th}$  dummy variable for  $i^{th}$  retail investors accepting zero values before a specific date marking a structural break and taking a value of one for each period after. In this

scientific paper, dummy variables have been applied for the introduction of the second Markets in financial markets directive and the restrictions on the sale of CFDs;

t is a period index accepting values from 1 to T;

i is an individual retail investor index accepting values from 1 to N;

j is an index corresponding to the j<sup>th</sup> dependent variable;

 $\mathbf{n}$  is the index denoting the number of lags and can take values higher or equal to zero. When using the lagged-dependent variable on the right-hand side of the equation, then  $\mathbf{n}$  can take values higher or equal to "one" for the lagged-dependent variable.

 $\beta_n$  is coefficient representing the relationship between the n<sup>th</sup> explanatory(predictor) variable and the dependent variable, taking values from 1 to N depending from the number of explanatory variables involved in the panel regression;

 $\zeta_j$  is the coefficient describing the relationship between the j<sup>th</sup> dummy variable and the dependent variable;

**a**<sub>i</sub> is the i<sup>th</sup> individual retail investor's unobserved time-invariant individual effect;

 $\mathbf{u}_{it}$  is the error term.

Augmenting the general representation of the Fixed effect panel regression equation presented in eq. (1) by replacing the formal variable notations with the specific ones for this study, leads to the following two group models, separated by the responsive variable. In the first group (Group A) the HPR variable is analysed as a dependent, followed by the second group of models (Group B) where the MARGINRATIO determinants have been analysed Since the Hausmann test suggests the use of Fixed effects models two general groups of models have been constructed and analysed taking the data set and the goal of this study into consideration. In Group A, the models with HPR as a dependent variable have been presented by eq. (2.1), (2.2) and (2.3), respectively, while in Group B models with MARGINRATIO as a dependent variable have been considered (as can be seen from eq. (3.1), (3.2) and (3.3).

In eq. (2.0) and (3.0) a Fixed effects model has been applied, while in eq. (2.2) and (3.2) a lagged dependent variable Fixed effects model is introduced, while in eq. (2.3) and (3.3) first-order autoregressive term is replacing the first lag of the dependent variable in the Fixed effects models.

Following models have been introduced: models without lagged dependent variables and without AR term; models with lagged-dependent variable: models with first-order autoregressive term AR(1); respectively.<sup>5</sup> Adding a lagged dependent variable or first-order autoregressive term AR(1) aims to improve overall model explanatory power, stability and significance, justified by higher F-stat and higher Adj R<sup>2</sup>. The Durbin-Watson stat is not a good serial correlation predictor when lagged-depend variables are added or autoregressive terms (Baltagi, Wu, 1999; Zaman, 1996).

<sup>&</sup>lt;sup>5</sup> Presented in the appendix models are having either lagged dependent variable, or aurotregressive term(s), or none, thus reducing the abovementioned to models as they appear in the Results section and in the appendix.

#### **Group A models**

$HPR_{it} = \beta_1 LOGEQUITY_{it} + \beta_2 MARGINRATIO_{it} + \zeta_n Dummy_n + \beta_2 MARGINRATIO_{it} + \beta_2 MARGINRATIO_{it} + \zeta_n Dummy_n + \beta_2 MARGINRATIO_{it} + \beta_2 MARGINRATI$	(2.1)
individual_fixed_effects <sub>i</sub> + error_term <sub>it</sub>	

 $HPR_{it} = \gamma_{l}HPR_{it-l} + \beta_{l}LOGEQUITY_{it} + \beta_{2}MARGINRATIO_{it} + \zeta_{n}Dummy_{n} +$ (2.2) individual\_fixed\_effects<sub>i</sub> + error\_term<sub>it</sub>

 $HPR_{it} = \beta_1 LOGEQUITY_{it} + \beta_2 MARGINRATIO_{it} + \zeta_n Dummy_n +$ (2.3) individual\_fixed\_effects\_i + autoregressive\_term(n) + error\_term\_{it}

#### **Group B models**

$$MARGINRATIO_{it} = \beta_{1}LOGEQUITY_{it} + \beta_{2}HPR_{it} + \zeta_{n}Dummy_{n}$$

$$+individualfixedeffects_{i} + error \ term_{it}$$

$$(3.1)$$

 $MARGINRATIO_{it} = \gamma_1 MARGINRATIO_{it-1} + \beta_1 LOGEQUITY_{it} + \beta_2 HPR_{it} + \zeta_n Dummy_n \quad (3.2)$ +individualfixedeffects\_i + error term\_{it}

$$MARGINRATIO_{it} = \beta_1 LOGEQUITY_{it} + \beta_2 HPR_{it} + \zeta_n Dummy_n$$

$$+ individual fixed effects_i + autoregressive\_term(n) + error\_term_{it}$$

$$(3.3)$$

Where (for A and B models):

*HPR* is the total HPR, calculated as the change in equity adjusted for deposits, withdrawals and other adjustments, compared to beginning equity, all of them derived from the history report;

*MARGINRATIO* is the variable for the UMER, calculated as the quotient of the usedmargin and the equity variable, found in the history report;

**LOGEQUITY** is the natural logarithm of the trader's equity variable;

**Dummy** is either one: **D01012018** – a dummy variable for the 3<sup>rd</sup> of January' 2018, entry into force of the EU's Second Directive on Markets in Financial Instruments (MiFID II-Directive 2014/65/EU of the European Parliament and of the Council of the 15<sup>th</sup> of May 2014 on Markets in Financial Instruments and Amending Directive 2002/92/EC and Directive 2011/61/EU (MiFID II); **D01082018** – a dummy variable for the 1<sup>st</sup> of August 2018 ESMA's measures on restricting marketing, distribution and sales of CFDs.

These measures have been implemented temporarily, for three months initially. Upon expiry, they have been rolled-over several times. On  $31^{st}$  of July 2019, ESMA ceased the renewal of the temporary restriction on the selected financial instrument, since most NCAs have taken permanent national product intervention measures related to CFDs that are at least as stringent as ESMA's measures; *autoregressive\_term(n)* – autoregressive term of order n; *error\_term* – the error term.

#### 6. Results of the Econometric Investigation

Following the common representation in eq. (1) and the more specific form of the two general groups of econometric models, through eq. (2.1) to eq. (3.3) respectively, two groups of models have been outlined. In Group A models, the HPR determinants have been analysed, while in Group B models, an econometric investigation of the MARGINRATIO and its explanatory variables has been carried out. Results have been commented helped by a brief representation of analysed models, while in the Appendix models have been outlined in detail.

#### 6.1. Group A models with HPR as a dependent variable

By constructing group-A fixed-effect models, the following list of equations has been created and analysed. All model results in group A (with HPR being investigated as a dependent variable) are presented and commented hereinafter but can be seen in detail in Table.6 at the Appendix.

HPR of retail investors is in positive association with the equity variable, which supports the hypothesis that larger equity is giving better chances for retail investors. The average investor is having a small trading account in monetary terms, which is reducing the chances for a positive daily and cumulative returns. The larger account size is in favour of realised higher returns for retail investors, or vice versa- smaller retail investor accounts are prone to losses and failure.

In models A and B, one percent increase of the natural logarithm of the equity variable leads to a 0.14 and 0.13 percent increase in the dependent variable. In models D and F a one percent increase of the natural logarithm of the equity leads to around 0.17% increase in the retail investors' performance, i.e. leads to a 0.17% surge in the HPR, while in model C the relationship is justified by a much lower coefficient (one percent increase in the explanatory variable leads to a 0.04% percent increase in the dependent variable respectively). Results are supporting the first and third hypotheses laid out in the introduction section.

The findings of this scientific work suggest that individual investors worsen their performance over time, i.e. real trading experience approximated by the deterioration of adjusted equity over time leads to lower returns on investments for the retail investor, since there is a negative association between current and past values of the dependent variable. The results support the disposition effect characterised by the behaviour of keeping losses long and cutting gains short (Kahneman, Tversky, 1979; Weber, Camerer, 1998; Oehler et al., 2003). Feng and Seasholes (2005), however find that experience helps traders to overcome the reluctance to realise losses but reduces the propensity to realise gains significantly.

The UMER is in a negative association with the dependent variable, hence a higher used margin leads to lower performance in terms of overall profitability of retail investors. As can be expected, the higher the leverage used, the lower the HPR, hence the second hypothesis is also confirmed. In models A and B, a one percentage point increase in the margin ratio is leading to around 0.1 percentage points decrease in the HPR, while in models C, D and E, there is a weaker but yet statistically significant negative relationship, which leads between

0.021 and 0.028 percentage points reduction in HPR. Adding lags of the MARGINRATIO variable in model E is leading to smaller but positive interdependencies between the dependent variable and the first and second lags of the MARGINRATIO variable, while maintaining a negative relationship with the zero lag of the variable.

Dummy variables for the implementation of the Second Markets in Financial Instruments Directive and for the restriction on sales of CFDs are leading to lower HPRs, which is quite on the contrary from what one can expect and from what was hypothesised at the beginning of this research.

The effective introduction of the MiFID II from 1<sup>st</sup> of January 2018 that transposes numerous changes on investment firms offering CFDs to retail investors is harming their overall investment/trading performance. One of the potential answers may find grounds in higher costs for retail investors associated with trading, e.g. higher swaps, larger spreads, slippage, other fee and commissions that result in a reduction of equity and lower HPR, respectively. The introduction of the 1<sup>st</sup> of January 2018 MiFID II led to 0.12 percentage points decline in the HPR according to the results of model B and between 0.02 to 0.06 percentage points in models C, D, E, F.

The second dummy variable, responsible for the restrictions on the sale of CFDs that came into effect on 1<sup>st</sup> of August 2018, is also maintaining a negative relationship with the dependent variable. Restrictions on marketing, dramatically reducing the leverage for non-professional investors, led to poorer performance for retail investors, in terms of HPR, instead of restoring sustainability and soundness of trading results and overall profitability. The 1<sup>st</sup> of August 2018 sales on CFDs restriction is having a very similar negative impact on the dependent variable as the relationship between the 1<sup>st</sup> of January 2018 MIFID II dummy and HPR.

 $Model A: HPR = -1.371 + 0.143*LOGEQUITY_0.112*MARGINRATIO; Adj R<sup>2</sup> 0.64, F-stat (2.1)$ 199.5
Note: all coefficients are statistically significant at 1% level.
(2.2)

*Model B: HPR = -1.165 + 0.131\*LOGEQUITY\_0.095\*MARGINRATIO -0.123\*D01082018* (2.2)-0.14\*D01012018; Adj R<sup>2</sup> 0.65, F-stat 212.04 Note: all coefficients are statistically significant at 1% level.  $Model C: HPR = -0.033 + 0.969*HPR_{t-1} + 0.04*LOGEQUITY_{-}0.028*MARGINRATIO - 0.028*MARGINRATIO - 0.028*MARGINATIO - 0.028*MARGINATIO$ (2.3)0.002\*D01082018 -0.002\*D01012018; Adj R<sup>2</sup> 0.98, F-stat 5064.04 Note: all coefficients are statistically significant at 1% level. Model D: HPR = -1.721 + 0.17\*LOGEOUITY\_0.021\*MARGINRATIO -0.005\*D01082018 (2.4)+0.984\*AR(1); Adj R<sup>2</sup> 0.98, F-stat 5571.07 Note: all coefficients are statistically significant at 1% level. Model E: HPR = -0.024 + 0.167\*LOGEQUITY\_0.023\*MARGINRATIO -(2.5) $0.004*D01082018 - 0.004*D01012018 + 0.977*HPR_{t-1} - 0.006*HPR_{t-2} - 0.006*HPR_$  $0.167*LOGEQUITY_{t-1} + 0.002*LOGEQUITY_{t-2} + 0.015*MARGINRATIO_{t-1} + 0.015*MARGINRATIO_{t-1} + 0.002*LOGEQUITY_{t-2} + 0.$ 0.003\*MARGINRATIO<sub>t-2</sub>; Adj R<sup>2</sup> 0.98, F-stat 6290.02 Note: all coefficients but LOGEQUITY<sub>1-2</sub> are statistically significant at 1% level.  $Model F: HPR = -1.658 + 0.168*LOGEQUITY_0.021*MARGINRATIO + 0.979AR(1) - 0.021*MARGINRATIO + 0.979AR(1) - 0.979AR(1)$ (2.6)0.006AR(2) -0.006\*D01082018 - 0.006\*D01012018 ; Adj R<sup>2</sup> 0.98, F-stat 6293.16

Note: all coefficients are statistically significant at 1% level.

#### 6.2. Group B models with UMER as a dependent variable

In this subsection, the results of Group-B models (with MARGINRATIO as a responsive variable) have been reviewed and analysed. Detailed results for the group-B models, where the MARGINRATIO is set as a dependent variable, can be found in Table 7 in the Appendix.

As can be seen in models G, H, I, J, K, a strong negative association between the natural logarithm of the equity and the UMER exists. It can be reasonably expected that higher equity is diminishing the need for using a higher margin, i.e. retail investors can maintain larger exposure with smaller UMER due to abundance in the capital. Small retail investors are maintaining higher UMER in order to support larger exposure compared to their limited equity. Results are validating the fourth hypothesis stated at the beginning of the research. In Models G, H and I 1% increase in the natural logarithm of the equity leads to around 0.073% smaller MARGINRATIO, while this relationship is decreasing to around 0.02% in models J and K.

HPRs are supporting the need for a lower used margin compared to the equity justifying a negative association between the HPR variable and the dependent variable in group B models, supporting the fifth hypothesis of this paper. One percentage point increase in the HPR is leading to around 0.077 percentage points decrease in the UMER in modes G, H and I, whilst this negative relationship is around 0.02 percentage points in models J and K.

The 1<sup>st</sup> of August 2018, the introduction of restrictions on the sale of CFDs led to an increase in the UMER, invalidating the ninth hypothesis of this paper. The introduction of this regulatory change led to 0.072 and 0.077 percentage points increase of the dependent variable, as per the results of Models H and I and to 0.01 and 0.013 percentage points increase according to models J and K. The biggest change in the post-1<sup>st</sup> of August 2018 CFD trading world is the decrease of leverage, with a maximum of 30 to 1 leverage for CFDs on major FX pairs and 2 to 1 for the more volatile instruments like Cryptocurrencies. Retail investors cannot support huge exposures for their account compared to the period prior the regulatory change, sometimes got used to a 400 to 1 leverage. Retail investors need to keep a larger used margin to support just a fraction of the exposure before the regulatory change took effect. It can be summarised that retail investors are using a larger portion of their equity as a margin for securing a fraction of targeted profit and loss change due to swings in the CFD prices compared to the pre-change period. Planned swings in Profit or Loss and equity can be achieved with a higher margin, used in the post-changes period.

On the contrary, the MiFIDII changes that came into effect on 1<sup>st</sup> of January 2018 are having a small negative effect on the UMER, leading to a 0.011 and 0.014 percentage points decrease of the dependent variable (see models I and K). Retail investors are using lower margin thanks to the 1<sup>st</sup> of January 2018 measures, even though the association is very small, judging by the size of the coefficients, thus the eighth hypothesis is confirmed.

Adding a first lag of the dependent variable improves the overall model performance, by increasing the Adjusted  $R^2$  and the model F-stat (see models J and K). The first lag of the dependent variable is maintaining a strong positive association with the dependent variable, inferring that a one percentage point change of the UMER in the previous period is leading to around 0.85 percentage points change in the dependent variable, signalling the presence

of inertia, e.g. higher past values of the dependent variables will result in larger current values of the current value of the dependent variable and vice versa. Retail investors are prone to increase the MARGINRATIO, ceteris paribus, the variable in the next period is growing in comparison to the previous, or inertia dynamics is revealed.

<i>Model G: MARGINRATIO</i> = 0.959 – 0.085* <i>HPR</i> – 0.074* <i>LOGEQUITY; Adj R</i> <sup>2</sup> 0.477, <i>F</i> -stat 103.043	(2.1)
Note: all coefficients are statistically significant at 1% level.	
Model H: MARGINRATIO= 0.928 – 0.073*LOGEQUITY_0.074*HPR + 0.072*D01082018: Adi R <sup>2</sup> 0.48 F-stat 104 217	(2.2)
Note: all coefficients are statistically significant at 1% level.	
Model I: MARGINRATIO = 0.935 - 0.073*LOGEQUITY_0.073*HPR + 0.077*D01082018 - 0.014*D01012018* Adi R <sup>2</sup> 0.48 F-stat 104.070	(2.2)
Note: all coefficients are statistically significant at 1% level.	
Model J: MARGINRATIO= 0.242 - 0.022*LOGEQUITY_0.02*HPR + 0.8*	(2.2)
MARGINRATIO <sub>t-1</sub> + 0.001*D01082018; Adj R <sup>2</sup> 0.778, F-stat 402.696	
<i>Note: all coefficients are statistically significant at 1% level.</i>	
<i>Model K: MARGINRATIO</i> = 0.097 - 0.007* <i>LOGEQUITY</i> - 0.019* <i>HPR</i> + 0.894*	(2.5)

MARGINRATIO<sub>t-1</sub> + 0.013\*D01082018– 0.011\*D01012018; Adj R<sup>2</sup> 0.789, F-stat 402.607 Note: all coefficients are statistically significant at 1% level.

#### 7. Conclusions

In this paper, the retail investors' CFD trading performance has been targeted. Identifying profitability and risk aversion determinants in a post-MiFID II world through scrutinising a large panel of retail investors daily history reports has been performed.

Properties of analysed data justify the conclusion that trading CFDs is against the odds, since only 15.7% of clients of EU investment firms in this sample manage to make money, and 84.3% are losing funds on their investments, with bulky 60% losing more than 50% of their investments. The analysis of the UMER reveals that more than 60% of retail investors holding a position overnight tend to use more than 40% of their equity as margin, thus being exposed to a big change of their equity due to a small change in the price of the underlying asset.

Econometric investigation' results suggest that retail investors are losing money over time due to small equity and high used margin. ESMA CFDs sale restrictions and the implementation of MiFID II are deteriorating retail investors' performance, quite on the contrary to what can be expected, since these measures were meant to strengthen investors' financial health. On the other hand, risk-taking behaviour, approximated by UMER, is stimulated by daily losses and small equity of retail investors. Growing equity and larger HPRs reduce the MARGINRATIO variable. The dummy for restricting the sale of CFDs is increasing the margin ratio, most probably due to the higher larger margin requirements by different classes of instruments, while the MiFID II implementation is helping retail investors to reduce the UMER.

Retail investors' performance and risk aversion behaviour may be supported by the following initiatives: 1. Breaking down of HPRs in the standardised risk warning EU investment firm put on their website and official documents. Retail investors, regulators, analysts need to know what part of client losses are determined by swaps, slippage and open-close price differential. After this information is easily accessible and publicly available competition will be in favour of investment firms with narrowest spreads, lowest swaps, smallest slippage, etc.; 2. Imposing even higher margin requirements for novice and small equity retail investors is recommendable. Clients need to provide real proofs of trading experience and performance.; 3. Stressing on the education of retail investors through revealing most common patterns for failure.

#### References

- Akerlof, G. A. (1978). The market for "lemons": Quality uncertainty and the market mechanism. In Uncertainty in economics (pp. 235-251). Academic Press.
- Baltagi, B., Wu, P. (1999). Unequally Spaced Panel Data Regressions with AR(1) Disturbances. Econometric Theory, 15(6), p. 814-823.
- Bauer, R., Cosemans, M., Eichholtz, P. (2009). Option trading and individual investor performance. Journal of Banking and Finance, 33(4), p. 731-746.
- Beev, I., Hristozov, Y. (2020). Welfare and Basic Income. Finance, Accounting and Business Analysis (FABA), Vol 2, N 1.
- Brown, C., Dark, J., Davis, K. (2010). Exchange traded contracts for difference: Design, pricing, and effects. Journal of Futures Markets, 30(12), p. 1108-1149.
- Bond, S. R. (2002). Dynamic panel data models: a guide to micro data methods and practice. Portuguese economic journal, 1(2), p. 141-162.
- Das, M. (2005). Instrumental variables estimators of nonparametric models with discrete endogenous regressors. Journal of Econometrics, 124(2), p. 335-361.
- Doering, P., Neumann, S., Paul, S. (2015, May). A primer on social trading networks institutional aspects and empirical evidence. In *EFMA annual meetings*.
- Dormann, C. F., Elith, J., Bacher, S., Buchmann, C., Carl, G., Carré, G., ... Münkemüller, T. (2013). Collinearity: a review of methods to deal with it and a simulation study evaluating their performance. – Ecography, 36(1), p. 27-46.
- Feng, L., Seasholes, M. S. (2005). Do investor sophistication and trading experience eliminate behavioural biases in financial markets?. Review of Finance, 9(3), p. 305-351.
- Grall-Bronnec, M., Sauvaget, A., Boutin, C., Bulteau, S., Jiménez-Murcia, S., Fernández-Aranda, F., ... Caillon, J. (2017). Excessive trading, a gambling disorder in its own right? A case study on a French disordered gamblers cohort. – Addictive behaviours, 64, p. 340-348.
- Judson, R. A., Owen, A. L. (1999). Estimating dynamic panel data models: a guide for macroeconomists. Economics letters, 65(1), p. 9-15.
- Hartzmark, M. L. (1991). Luck versus forecast ability: Determinants of trader performance in futures markets. Journal of Business, p. 49-74.
- Ivantchev, B. (2020). Forex Trading: Neuroeconomic Insightsand Psychological Biases. Economic Science, education and the real economy: Development and interactions in the digital age, (1), p. 169-178.
- Kahneman, D., Tversky, A. (1979). Prospect theory: An analysis of decision under risk. Econometrica 47(2), p. 263-292.
- Lee, A. D., Choy, S. (2014). Contracts for dummies? The performance of investors in contracts for difference. Accounting and Finance, 54(3), p. 965-997.
- Levin, J. (2001). Information and the Market for Lemons. RAND Journal of Economics, p. 657-666.

- Lopez-Gonzalez, H., Griffiths, M. D. (2018). Betting, forex trading, and fantasy gaming sponsorships a responsible marketing inquiry into the 'gamblification' of English football. – International Journal of Mental Health and Addiction, 16(2), p. 404-419.
- Lucchesi, E. P., Yoshinaga, C. E., Castro Junior, F. H. F. D. (2015). Disposition effect among Brazilian equity fund managers. – Revista de administracao de empresas, 55(1), p. 26-37.
- Nickell, S. (1981a). Biases in dynamic models with fixed effects. Econometrica: Journal of the Econometric Society, p. 1417-1426.

Nickell, S. (1980b). Correcting the Biases in Dynamic Models with Fixed Effects.

- Miguel, E., Satyanath, S., Sergenti, E. (2004). Economic shocks and civil conflict: An instrumental variables approach. – Journal of political Economy, 112(4), p. 725-753.
- Oehler, A., Heilmann, K., Läger, V., Oberländer, M. (2003). Coexistence of disposition investors and momentum traders in stock markets: experimental evidence. – Journal of International Financial Markets, Institutions and Money, 13(5), p. 503-524.

Phylaktis, K., Manalis, G. (2013). Futures trading and market microstructure of the underlying security: A high frequency experiment at the single stock future level. – Borsa Istanbul Review, 13(4), p. 79-92.

Weber, M., Camerer, C. F. (1998). The disposition effect in securities trading: An experimental analysis. – Journal of Economic Behaviour and Organization, 33(2), p. 167-184.

Zaman, A. (1996). Statistical Foundations for Econometric Techniques. Emerald Group Publishing. *Other sources:* 

ESMA Annual Statistical Report on EU Derivatives Markets (2018)http://publications.europa.eu/resource/cellar/0a57b194-e309-11e8-b690-01aa75ed71a1.0001.01/DOC\_1. European Securities And Markets Authority Decision (EU) 2018/796- https://eur-lex.europa.eu/legal-

content/EN/TXT/?uri=uriserv:OJ.L\_.2018.136.01.0050.01.ENGandtoc=OJ:L:2018:136:TOC. General Data Protection Regulation (GDPR) Regulation (EU) 2016/679- http://data.europa.eu/eli/reg/2016/679/oj.

Product Intervention Measures on CFDs and Binary Options-https://www.esma.europa.eu/press-news/esmanews/esma-adopts-final-product-intervention-measures-cfds-and-binary-options.

Questions and Answers Relating to the provision of CFDs and other speculative products to retail investors under MiFID, the 31st of March 2017, ESMA35-36-794. https://www.esma.europa.eu/sites/default/files/library/esma35-36-

794 qa on cfds and other speculative products mifid.pdf.

Second Directive on Markets in Financial Instruments (MiFID II) - http://data.europa.eu/eli/dir/2014/65/oj.

## APPENDIX

Table 3

#### Share of losing retail investor accounts

Provider (investment	Share of losing retail investor accounts with this provider as of 15th of
firm)	December 2019 (%)
FXPRO	77
Plus500	76
Admiral	76
Xtb	75
Etoro	75
IG Markets	75
Saxobank	72
Avatrade	71
FXCM	70
Xm	69
Leagacy fx	68
Deltastock	61
AVERAGE	72

Source: websites of abovementioned firms; Own calculations.

# Table 4

## Correlation matrix

Probability Correlation t-Statistic	HPR	MARGINRATIO
HPR	1	
MARGINRATIO	-0.23703	1
	-127.993	
	0	
LOGEQUITY	0.252992	-0.26698
	137.1804	-145.331
	0	0

### Note: Included observations: 275200 after adjustments Source: Own calculations

Table 5

## Descriptive statistics

	Mean	Median	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis	CV	Jarque-Bera Prob.	Observations
HPR	-0.4	-0.5	139.0	-1.0	0.7	60.1	10 262	-1.5273	0	993436
MARGINRATIO	0.5	0.4	17.8	0.0	0.4	3.4	61.4	0.90541	0	303775
LOGEQUITY	5.3	6.0	13.1	-4.6	3.4	-0.7	2.7	0.63628	0	983502
EQUITY	3363	340	507468	-62290	11958	12.8	241	3.55548	0	1020637

#### Note: Individual sample descriptive statistics Source: Own calculations

Table 6

Group A models with HPR as dependent variable

Variables	Model OLS A		Model OLS B		Model OLS C		Model OLS D		Model OLS E		Model OLS F	
Dependent (responsive) variable→	HPR											
Explanatory variables $\downarrow$	Coef.	P- value										
C	-1.371	0.000	-1.165	0.000	-0.033	0.000	-1.721	0.000	-0.024	0.000	-1.658	0.000
LOGEQUITY	0.143	0.000	0.131	0.000	0.004	0.000	0.170	0.000	0.167	0.000	0.168	0.000
MARGINRATIO	-0.112	0.000	-0.095	0.000	-0.028	0.000	-0.021	0.000	-0.023	0.000	-0.021	0.000
AR(1)							0.984	0.000			0.979	0.000
AR(2)											-0.006	0.001
D01082018			-0.123	0.000	-0.002	0.005	-0.005	0.004	-0.004	0.000	-0.006	0.000
D01012018			-0.140	0.000	-0.002	0.006			-0.004	0.000	-0.006	0.000
HPR(-1)					0.969	0.000			0.977	0.000		
LOGEQUITY(-1)									-0.167	0.000		
MARGINRATIO(-1)									0.015	0.000		
HPR(-2)									-0.006	0.001		
LOGEQUITY(-2)									0.002	0.122		
MARGINRATIO(-2)									0.003	0.000		
Number of observations	303	168	303 168		301 444		279 260		263 630		263 630	
Adjusted R-squared	0.0	64	0.65		0.98		0.98		0.98		0.98	
F-statistic	199.54		212.04		5064.04		5571.07		6290.02		6293.16	
Prob(F-statistic)	0.0	00	0.	00	0.	00	0.	00	0.00		0.00	

Source: Own calculations.

## Table 7

Variables	Model OLS G		Model OLS H		Model OLS I		Model OLS J		Model OLS K		
Dependent (responsive)	MARG	INRATI	MARGINRATI		MARGINRATI		MARGINRATI		MARGINRATI		
variable→		0	0		0		0		0		
Explanatory variables ↓	Coef.	P-value	Coef.	P-value	Coef.	P-value	Coef.	P-value	Coef.	P-value	
С	0.959	0.000	0.928	0.000	0.935	0.000	0.242	0.000	0.097	0.000	
MARGINRATIO(-1)							0.800	0.000	0.894	0.000	
HPR	-0.085 0.000		-0.074	0.000	-0.073	0.000	-0.020	0.000	-0.019	0.000	
LOGEQUITY	-0.074	0.000	-0.073	0.000	-0.073	0.000	-0.022	0.000	-0.007	0.000	
D01082018			0.072	0.000	0.077	0.000	0.010	0.000	0.013	0.000	
D01012018					-0.014	0.000			-0.011	0.000	
Number of observations	303	303 168		303 168		303 295		279 778		279 778	
Adjusted R-squared	0.4	0.477		0.480		0.480		0.788		0.789	
F-statistic	103	103.043		104.217		104.070		402.696		402.607	
Prob(F-statistic)	0.0	000	0.000		0.000		0.000		0.000		

Group B models with MARGINRATIO as dependent variable

Source: Own calculations

Figure 1

Natural logarithm of the equity of retail investors variable



log(equity)

Source: Own calculations



# Equity of retail investors variable



UMER (Margin ratio) variable

Figure 3

Figure 2



Source: Own calculations

72


The HPR variable

Figure 4



Figure 5







Source: Own calculations



Juhee Singh Verma<sup>1</sup> Pritee Sharma<sup>2</sup>

Volume 30 (4), 2021

# VULNERABILITY OF SMALL FARMERS TO HIGH FOOD PRICES – A CASE STUDY OF INDIAN FARMERS<sup>3</sup>

Food price spikes increase the vulnerability of poor, marginalized people to food insecurity and are often associated with landless rural or urban poor. Nevertheless, high food prices are commonly understood as instrumental in increasing farm incomes. For this reason, agriculture price policies are used to provide higher incomes to farmers. Income gains could be real for farmers with large landholdings but often attributed to all farmers without regard to their holding-size. Farmers with small holdings are typically net food buyers of essential food commodities and thus vulnerable to rising food prices. Fluctuations in food prices globally have increased the significance and the probable policy response to such price rise in recent years. Studies in different countries have revealed that household responses depend upon the region's market structure where the household is situated. However, the extent of vulnerability is rarely accessed in any such analysis.

In this context, the present study uses India as a case study to understand the distributional impact of food prices on farm households and their vulnerability position. Many of these farm households are net food buyers such that the effect of high food prices is counterproductive for them. Results show that about sixty-four percent of producer households in India are net buyers of food, and nearly two-thirds of these lie in the lowest quintile. Around one-third of these agriculture households are significant food buyers, further increasing their vulnerability to high food prices. Short-term policy interventions like income transfers and, in the long run, better livelihood opportunities in other sectors would be required to shield such farmers from the detrimental effect of increased crop prices. Results also suggest the need for reexamining the role of price policy instruments as a tool to increase the incomes of all farmers in India. JEL: D31; H23; Q12; Q18

<sup>&</sup>lt;sup>1</sup> Juhee Singh Verma, Corresponding Author, Ph.D. Research Scholar, Discipline of Economics, School of Humanities and Social Sciences, Indian Institute of Technology Indore, India, Phone: +91-9522225970, Email: juheesingh22@gmail.com, phd1501261001@iiti.ac.in\_http://orcid.org/0000-0002-5497-8106.

 <sup>&</sup>lt;sup>2</sup> Dr. Pritee Sharma, Associate Professor, Discipline of Economics, School of Humanities and Social Sciences, Indian Institute of Technology, India, Phone: +91-731-2438 963, Email: psharma@iiti.ac.in.
 <sup>3</sup> Preliminary version of the article was presented and discussed as a report of the ANVESH Conference 2020, organized by Institute of Management, Nirma University, India.

## 1. Introduction

When individuals or some socio-economic groups of people have low potential to predict, deal with, prevent and mitigate the effects of anthropogenic or natural hazards such that they are differentially affected by such risks (Wisner et al., 2004), then they are identified as vulnerable in case of some potentially hazardous event. Such vulnerability is oftentimes embedded in complex social relations and mediated by external shocks, risks, and stress.

Vulnerability is the degree to which some groups, individuals, or communities are likely to suffer damages due to exposure to peril, either a perturbation or distress (Turner et al., 2003; Suryahadi, Sumarto, Pritchett, 2000).

Macroeconomic shocks due to various factors such as international trade environment, climate events, or domestic policy changes (Philip, Rayhan, 2004) may result in spikes in food prices and expose the poor communities to hunger and food insecurity. Many of these poor people live in rural areas and have limited land holdings to support themselves and low access to other assets and services.

Food prices have risen dramatically in the last few years. The use of food grains for producing biofuels has been one of the triggers contributing to the rise in food prices. These spikes in food prices have coerced many countries to implement various trade policy instruments like taxes on exports and prohibitions to halt the rise in food prices. Such measures are understood as necessary in order to shield the vulnerable poor households from the negative impact of food prices. During the food crises of 2008, the prices of wheat, rice, and maize increased by more than 50%, and the F.A.O. (Food and Agriculture Organization) index rose by 61%. A second such wave of the sharp spike was observed in 2010-11, and since then, the prices of food have remained at a high level (FAO, 2011).

These high food prices have increased the poor peoples' vulnerability in developing and underdeveloped countries and augmented their susceptibility to hunger and poverty, even though the percentage of price transmission to regional economies has varied (Baltzer, 2013; Minot, 2010). Inflated food prices reduce the real income of the poor in the urban areas and force them to spend more on food and also switch to less nutritious substitutes. This increases the challenge of hunger and nutrition for countries facing acute undernutrition situations. Many of the protests in the Arab world and other such countries have been attributed to high prices in the recent past (Bellemare, 2015; Benson, Mugarura, Wanda, 2008; Perez, Wire, 2013).

Inflated prices of staples are understood as detrimental for the poor in the urban areas who devote a major portion of their expenditure on food. Apart from this, many studies have also found that food price rise is unfavourable for rural households, and in rural areas, quite frequently, poor households are buyers of food (Ivanic, Martin, 2008; Seshan, Umali-Deininger, 2007; Barrett, Dorosh, 1996).

Nevertheless, food prices are considered beneficial for the food growers as they can get remunerative prices of their produce, which raises their incomes. However, this may not be valid everywhere, particularly in countries with lower development in secondary and tertiary sectors and a considerable number of poor people reliant on agriculture (Headley, Fan, 2008).

Verma, J. S., Sharma, P. (2021). Vulnerability of Small Farmers to High Food Prices – A Case Study of Indian Farmers.

Price hikes have the potential to increase the earnings of agricultural households, but only if they have a surplus left after fulfilling their own food requirements. Besides, these farmers may not grow all crops and need to purchase other food products. Some households do not have surplus production for their own needs and, as a result, may additionally be net buyers of their own produce, and therefore, higher food prices may harm them as well. Farm households with some additional livelihood sources depend upon the market for the food crops in which their output is low and are net food buyers. This is especially true of households allocating a larger portion of their household's capital and labour resources but still unable to generate sufficient output for their own consumption.

However, the real question is that, among these net buyer farm households, which landholding categories will be most vulnerable to a rise in food prices, especially in those developing countries where land distribution is quite uneven. Such net buyer farm households may include some well-off households. However, they are mostly poor farmers with some landholding, but still insufficient to meet their own food needs. Hence, they are employed as labourers in agriculture or other sectors to utilize the extra incomes for consumption and home production. In the past few years, several studies have utilized the data from household surveys to study the net position of rural households, in particular, the farm households (Barrett, Dorosh 1996; Budd, 1993; Deaton, 1989; Jayne et al., 2001; Rios, Shively, Masters, 2009) to understand their behavioural responses to high food prices. However, it is observed that, even if the supply elasticity of high food prices is positive, the same may not be valid for price elasticity of consumption. And hence, the household response will depend upon the region's market structure where the household is situated (Gamboa et al., 2020). Consequently, analysis of the sale position in a few low-income countries of Asia, Africa and Latin America have found a favourable redistribution of income from the affluent food buyers to poorer food producers (Aksoy, Isik-Dikmelik, 2008; Dimova, 2015; Minot, Goletti, 2000). In contrast, others have found a negative redistribution of income from the poor to the rich (Balagtas et al., 2014; De Janvry, Sadaolet, 2009).

Such a unique case is that of India, which has risen as a significant producer and exporter of agricultural commodities in the last few decades (Bala, & Sudhakar; Shinoj & Mathur, 2008). At the same time, the country's unequal landholding pattern has given rise to a large number of very small farmers. Around 86% of the farm households are left with small and marginal holdings (Agriculture Census, 2015) such that these farmers are worse off in case of food price fluctuations. Hence, such producers have to be shielded from high prices more than the urban consumers (De Janvry, Sadaolet, 2009). Many such farm households do not have any other means of livelihood and are hence vulnerable to hunger and food insecurity. The resilience of smallholder farming and their food security are dependent on their propensity to safeguard themselves from the impact of price increases. Besides, their capability to generate profitability from crop production and escape the poverty trap is extensively influenced by the degree to which price shocks can be coped.

Hence, analyzing the vulnerability position of different landholding groups may shed more light on the intra-farming pattern of benefit/loss distribution when the food prices rise. Such an analysis would also reveal the direction of redistribution and the inequality pattern of farm households in the context of rising food prices. The present study attempts to analyze and quantify the situation of such farm households in India and how the food price shocks affect

their vulnerability differentially. In light of the issues described above, the present study attempts to investigate three objectives:

- Understand the Intra-farm pattern in the allocation of welfare effects due to food price rise and the groups among the farmers that are benefitted/negatively impacted due to high prices
- Which income categories among farm households are more likely to be negatively
  affected due to high food prices?
- Which are the groups among the net buyer (negatively impacted) farm households that are more vulnerable to food price spikes in developing countries like India and would require protection during sudden domestic price change?

For our analysis, we define vulnerability as the extent to which the farm households are likely to encounter a decrease in real income due to food price spikes. It is the risk that the net food buyers would experience income losses due to high food prices in the future and food insecurity due to their dependence on the market for their food, which perpetuates their vulnerability and sustains food insecurity.

#### 2. Literature Review

The significance of rising food prices on the welfare of low-income households in developing and underdeveloped countries has been investigated in various studies. One of the first such studies was conducted by Deaton (1989), in which he constructed a ratio (net benefit ratio) to measure the short-term welfare impact of prices on households. Using Thailand rice cultivators' data, he stated that increased rice prices would positively impact all rural households irrespective of their incomes. However, the middle-income cultivators would gain the most from such a price rise.

Budd (1993) used the data from Cote d'Ivoire with more crops and concluded that to increase crop production, high food prices may not serve as a useful policy tool. Nevertheless, an increase in home production does have the capability to shield the poor from the harmful impact of such price effects. Very recently, the welfare impacts of rising food prices in Cote d'Ivoire for all households concluded that food price increases would redistribute the benefits from rich to poor households. This is because low-income households are predominantly involved in food and cash crop production than the rich (Dimova, 2015).

Barrett and Dorosh (1996) studied price changes in Madagascar and reported that first-order price changes would severely impact the poor rice farmers as nearly one-third of them would be net buyers of rice. However, in a study examining the effect of liberalization of food markets in Vietnam, conducted by Minot and Goletti (2000), it was found that the consequence of the liberalization would be an increase in the real income gains for the rural poor and hence, a decrease in the poverty rate.

The dramatic food price rise of 2007-2008 and then in 2011 has revived the discussion on the welfare impact of such a price rise. To this effect, several studies were conducted; one such study, done in Mexico and Mali, concluded that for estimation of the distributional effect

Verma, J. S., Sharma, P. (2021). Vulnerability of Small Farmers to High Food Prices – A Case Study of Indian Farmers.

of reforms (e.g., free trade agreements), which influence food prices, the quantification of net food buyers and net sellers is essential. For such a quantification, the definition of food buyers and sellers would yield better estimates than that of net producers and consumers (Vergez, 2007). A comprehensive picture of the households obtained by studying households' economic profile from different regions may provide a better picture of a price increase's repercussions. To realize such a comprehensive picture, Aksoy & Isik-Dikmelik (2008) studied households' net position in nine countries with low per capita income in Africa, Asia, and Latin America. They found that except in one country, in all others, the net food buyers were affluent compared to the net food sellers, and hence they argued that there would be income gains from such food buyers to sellers and redistribution of wealth.

Some studies have gone further to understand the second-order impacts of price increases. One such study in Bangladesh (Klychikova, Diop, 2006) reported that for rural net buyers, income grew over a period of five years, which may have been the result of an increase in wages both in agriculture and other informal sectors in the long run. However, it was also reported that this positive trend was overridden due to the commodity price rise in 2008, which pushed around 13 million people in rural areas of Bangladesh into poverty (Balagtas et al., 2014). Similar such studies were done for Ethiopia (Schreitter, 2016) by calculating the first-order effects and then incorporating behavioural responses in a more general equilibrium analysis for second-order effects; and Uganda (Van Campenhout, Pauw and Minot, 2018), where it was inferred that the estimates are very much influenced by the complexity of the model being used. Gamboa et al. (2020) recently studied the change in quinoa production and consumption, a staple crop for Peruvian farmers, due to the global increase in its price. They found that both the price elasticity of supply and consumption are positive as the households are raising both the production and consumption of quinoa in response to a rise in its price.

The case study of a country like India, where the land distribution is quite unequal, may reveal some more findings. In this context, Ravallion (1998) found a correlation between food prices and poverty conditioned upon erratic monsoonal patterns in India. The repercussions of food price changes on consumers in both urban and rural areas were studied by De Janvry and Sadaolet (2009). It was inferred that the rural poor are the most vulnerable category as opposed to the urban consumers. However, as food prices increase, a study on the various landholding groups might shed more light on the intra-farming pattern of profit/loss distribution. Such a study will also show the direction of wealth redistribution and inequality trends among farm households when the food prices increase. Such an examination becomes crucial because various farmer groups in India often demand higher prices for crops, and government policies have also tried to increase farm production and increase income for farmers by increasing the support prices of basic staples. Such price increases have often fuelled food inflation, but it has also been seen as benefitting the farm community. Only when an estimation of the net producers and buyers of crops is provided, we may understand the distributional impact of these price increases. Also, focussing on the households which spend a significant part of their household income on food purchases would reveal the level of vulnerability among the net buyer farmers (Aksoy, Isik-Dikmelik, 2008). Many of such net buyers depend upon the markets for their food supply and are poor. This further increases their vulnerability to food price changes and contributes to their food insecurity (Asibey, Abubakari, Peprah, 2019; Barker, Sedik, Nagyet, 2008; Cantore, 2012). The present study

has attempted to study a comprehensive picture of farm households in India with respect to food price changes and their vulnerability to such price increases.

## 3. Research Methodology

The welfare impact of a price change can be measured by compensating variation (CV). Compensating variation is the least amount of money by which the consumer has to be compensated for bringing the consumer to the original utility level after an economic change. Deaton (1989) developed a simple analytical expression for calculating rice farmers' first-order welfare effects in Thailand and is expressed as follows:

Let there be a farm household  $H_i$  producing *j* crop.  $Q_j$  is the production and  $X_j$  consumption of the household in one agriculture year. The net sale position of  $H_i$  is given as:

$$\frac{cV}{I_h} = \frac{1}{I_h} \sum_{j=1}^{j=n} P_j (Q_j - X_j)$$
<sup>(1)</sup>

We use the total household consumption expenditure of  $H_i$  as an indicator of their income  $I_h$ . Consumption expenditure is used because it is an established fact that consumption is more accurately recorded than income in household surveys. Hence consumption expenditure gives a more consistent estimate of household income in a year than income itself (Benjamin, Deaton, 1993; Meyer, Sullivan, 2003; Ravallion, 1994).

The right-hand side of equation (1) is called the net benefit ratio (NBR). It is determined by the net sales (i.e., the net of marketed and consumed product in terms of its monetary value) defined as the net sale value of commodity j as a fraction of household income. This ratio can be viewed as the short-term elasticity of household H's welfare in relation to the price of j commodity. Also, the computation of the expression does not involve details on household reaction to change in price and hence its functionality for policymakers. However, the expression is valid with a few assumptions. Firstly, the time period is short such that the input prices do not change. Secondly, the consumers or producers are unable to respond to prices in this short time period. In other words, it calculates the first-order welfare change associated with a price change. Furthermore, the analysis on total food production and consumption is more relevant for understanding the comprehensive household position than that of single crops for welfare analysis (Aksoy & Dikmelik, 2008). Hence, for i commodities, the expression can be modified as:

$$NBR_{h} = \frac{1}{c_{h}} \sum_{i=1}^{i=n} (P_{i}^{p} \cdot Q_{i}^{p}) - (P_{i}^{c} \cdot X_{i}^{c})$$
<sup>(2)</sup>

Here,  $P_i^p$ ,  $P_i^c$  are the producer prices and retail consumer prices of *i* commodities respectively;  $Q_i^p$ ,  $Q_i^c$  are the associated quantities, which are marketed and bought by the agriculture household  $H_i$ 

The NBR is used to calculate the net buyers, sellers, and self-sufficient households. If NBR's value is negative/near-zero/positive, then the household is net buyer/self-sufficient/net seller, respectively. If a price rises, the household stands to gain/suffer a loss/has no effect if they are net sellers/net buyers/self-sufficient in the crops.

Verma, J. S., Sharma, P. (2021). Vulnerability of Small Farmers to High Food Prices – A Case Study of Indian Farmers.

To calculate farm households' vulnerability, we use a vulnerability measure to segregate the fraction of farm households likely to be more vulnerable to food price changes from the others. For this, significant net buyers (highly susceptible to food price changes) are segregated from marginal net buyers (which will not be much affected by food price changes) and net seller (experience income gains due to high prices) farm households. Such segregation allows us to better understand the intra-farm household picture and avoid exaggerated food price change effects.

To this effect, the net buyers have been further segregated into vulnerable and non-vulnerable food buyers. Vulnerable food buyers are the net food buying agriculture households with a larger proportion of their consumption expenditure on food purchases. Furthermore, non-vulnerable food buyers spend only a small portion of their income on food purchases. The vulnerable food buyers are susceptible to price shocks, and oftentimes, they are poor farmers with small landholdings. Alternatively, the non-vulnerable food buyers may be either near self-sufficient farm households or, they may be affluent households with a minuscule fraction of expenditure on food.

#### 4. Data Source

This study uses farm households' production, income, and expenditure data from the India Human Development Survey (IHDS)II conducted in 2012 (Desai, Vanneman and National Council of Applied Economic Research, 2015). The survey encompasses a rural sample composed of households from 1420 villages selected by stratified random sampling. The households in possession or cultivation of agricultural land were segregated for the analysis, and 18,782 agricultural households were identified. We segregated farm households into four categories. The percentage of farm households in our sample and percentage of total in India (based on Agriculture Census of 2015 (G.O.I., 2019) conducted by the Ministry of Agriculture) are shown on Table 1.

Table 1

Household	Land Size (in Hectares)	Percentage in sample	Percentage in India (as per agriculture census, 2015)
Marginal	Below 1.00 ha	68.72	67.10
Small	1.00-2.00 ha	18.94	17.91
Medium	2.00-10.00 ha	11.63	14.29
Large	Above 10.00 ha	0.70	0.70

Percentage of farmers in different land categories in the study sample and in India

Source: Authors' Calculations and agriculture census (G.O.I., 2019)

Comparing the sample with the census data shows that the sample is quite consistent with the total number of different sizes of holdings in India.

## 5. Results

The percentage of net food sellers, buyers, and self-sufficient farm households with different landholdings are shown in table 2. The results show that around 76% of the marginal farmers with very small holdings of less than 1 hectares are net food buyers. Small farmers' position is only a little better as 44% of small farmers are net food buyers, and almost the same percent is only self-sufficient in food. Twenty-one percent and forty-five percent of marginal and small farmers, respectively, are not affected by high food prices and are self-sufficient. Whereas 23% of the medium farmers and 47% of large farmers are net sellers of food, and as envisaged, the percentage of self-sufficient and net food seller households increases with land size.

#### Table 2

Percentage of net food seller, b	buyer,	and self-sufficient	farm	households	with	different
		landholdings				

Landholding	NBR	Net Buyer (%)	Self Sufficient (%)	Net Seller (%)
Marginal	-0.04	76	21	3
Small	0.31	44	45	10
medium	0.69	30	47	23
large	1.76	17	36	47
Total	0.13	64	29	7

Source: Authors' Calculation.

As already stated above, marginal and small farmers are the single largest farmers group in the country. Furthermore, our analysis reveals that net food buyer households are much greater than the net sellers amongst the marginal and small farmers. The above fact indicates that higher food prices are detrimental to a large number of farmer families in India. Surprisingly, a sizeable number of medium and large farmers also net buyers of food, which was quite unexpected. Improper land utilization and historic negative association of farm size with productivity in India (Chand, Prasanna, Singh, 2011; Deolalikar,1981) could be one of the causes, though the opposite relation may also be true (Fan, Chan-Kang, 2005; Singh et al., 2018) and hence would need further investigation.

NBR's absolute value indicates that except for marginal farmers, the income gains from higher food prices would be positive for small, medium, and large farmers. Marginal farmers would suffer income losses in such a situation. If we assume a food price increase of 10%, then marginal farmers would have income losses by 0.4%.

As already mentioned, the share of net buyers is substantial amongst small and marginal farmers. An important issue worth considering is whether these net buyers are prevalent among the rich or poor farmers. The most common perception is that the net food buyers would be poor farmers with smallholdings, and the net sellers are supposed to be the rich

Verma, J. S., Sharma, P. (2021). Vulnerability of Small Farmers to High Food Prices – A Case Study of Indian Farmers.

ones with large landholdings. However, given India's socio-economic situation, it is also possible that the farmers with meagre holdings have alternate sources of livelihood, and their economic situation better off than the farmers dependent on farming alone.

To test such assumptions, the farmers were divided into rich and poor. The farmers in the lowest two quintiles of income were defined as poor and the top quintile as rich farmers. Per capita household consumption expenditure was used as a measure for income as in most household surveys, expenditures are better recorded than incomes (Benjamin, Deaton, 1993; Meyer, Sullivan, 2003; Ravallion, 1994). Table 3 shows the proportion of net sellers and buyers in the poorest and the richest quintiles of incomes.

Table 3

Quintile	NBR	Net Buyer (%)	Self Sufficient (%)	Net Seller (%)
Poorest quintile	-0.017	74	22	4
2nd quintile	0.032	70	25	5
3rd quintile	0.123	64	28	8
4th quintile	0.219	60	31	9
Richest quintile	0.279	52	38	9

The percentage of net sellers and buyers in the poorest and richest income quintiles

Source: Authors' Calculation.

On average, only 4% of the poor farmers are food sellers compared to 9% of the rich farmers. Keeping the self-sufficient households aside, almost two-thirds of the poor farmers and around half of the wealthy farmers are not self-sufficient in food and are net buyers. A more significant fraction of the low-income farmers are the net buyers of food as compared to rich farmers. Nevertheless, it is pertinent to mention that the share of food sellers in different quintiles increases gradually, but is still not much different. It can be stated that the net sellers are positioned fairly judiciously around all levels of wealth distribution.

In the attempt to understand the ramifications of the rise in the prices of food on poverty, it would be more significant to focus on the farmers who allocate a larger portion of total income on buying food commodities. These classes of producers will be more influenced by rising food prices than those whose food expenses are insignificant as compared to their total expenditure. Hence, by concentrating on vulnerable net food purchasers in greater detail, we would better understand the price impact on them. The net food seller and buyer definition fail to distinguish between the net buyers (of food) whose net staple purchases are negligible portions of their income (measured using per capita consumption expenditure) and the ones with higher expenditures on food, i.e., non-vulnerable and vulnerable food buyers. The non-vulnerable food buyers would be the farm households with higher incomes such that the expenditure on food is less than that on other items, or they could also be the farmers that are nearly self-sufficient with small food purchases. Hence, such households would not be vulnerable. Alternatively, vulnerable buyers of food are the farmers with a larger proportion

of food spending such that they will be deleteriously affected by changes in prices of food commodities.

Net staple food buys by farmers' households as a percentage of their total spending (as income proxy) have been used to quantify vulnerability. For convenience, we describe two classes of net food purchasers. Non-Vulnerable net buyers are net buyer households that spend less than 30% of their income on food purchases. Vulnerable households are those marginalized households that utilize 30% or higher expenditure (of the total consumption expenditure) on food purchase.

Quintiles of Income	Non-Vulnerable	Vulnerable
Total	71.7	28.3
quintiles (by per capita consumption expenditure)		
Poorest quintile	54.8	45.2
2nd quintile	64.1	35.9
3rd quintile	74.0	26.0
4th quintile	82.7	17.3
Richest quintile	90.8	9.2

Vulnerability profile of net Food buyers

Source: Authors' Calculation.

Table 4 above shows the percentage of vulnerable and non-vulnerable farm households. On average, non-vulnerable net food buyers are around 72% of the total net food buyers, and less than 30% are vulnerable. Added to this, the total net food buyers are 64% (see Table 2 above), which implies that around 46% of total farm households devote 30% or less of their income on the purchase of food and hence the effect of food price increases on these households would be minimal. On the other hand, a little less than 20% (17.9%) of the farm households are vulnerable food buyers and devote 30% or more of their income to food. Consequentially, the rise of food prices by 10-20% would adversely affect the poor food buyers, and their real incomes would be reduced by 4-8%. Only if the second-order welfare impacts would be positive, they would be able to shield themselves from the high prices in the long run.

Households show the highest vulnerability rates in the poor income quintiles, with around 45% of agriculture households being vulnerable food buyers. The percentage of vulnerable food buyers decreases with income, and in the higher income quintiles, vulnerable category households form a smaller proportion of the total number of farm households. Moreover, they are mainly marginal food buyers with low food purchases. These results could be understood by the fact that around 47% of the farm households in the higher income quintiles are net sellers or self-sufficient (Table 3). Moreover, the vulnerability position shows that

Table 4

Verma, J. S., Sharma, P. (2021). Vulnerability of Small Farmers to High Food Prices – A Case Study of Indian Farmers.

these are mainly non-vulnerable marginal food buyers, so it can be ascertained that they are not much affected by the food price rise.

#### Table 5

Landholding	Non-Vulnerable	Vulnerable	
Marginal	71.2	28.8	
Small	76.0	24.0	
medium	70.8	29.2	
large	50.0	50.0	

Vulnerability of agriculture households according to land size

Source: Authors' Calculation

Table 5 shows the vulnerability of different farm categories. These results should be seen visa-vis the net position depicted in Table 2 above. The percentage of net food buyers decreases with the increase in landholding with agricultural households. However, a large percentage of net food buyers are marginal food buyers and make limited food purchases from the market. This can be concluded from Table 5, as around 70 to 75% of the marginal to medium farm households are in the non-vulnerable category of net food buyers. Less than 30% of these households make significant food purchases from the market and are hence vulnerable. The increased vulnerability of large farmers shown by the data can be understood by the fact that most of the large farmers were net food sellers, and very few were in the net food buyer category. These small numbers of data points of net food buyers got further divided into vulnerable and non-vulnerable, which produced such discrepancy in the results. Hence, we refrain from making any analysis for such limited data, though the results have been presented to maintain the continuity in the results.

## 6. Discussion

The results suggest that many farm households in India are net buyers of food, and an escalation in food prices on account of international price fluctuations or price policies will affect them negatively and lead to income losses. This can be ascribed to the verity that a large number of farm households have minimal holdings and little means of external livelihood support in other non-farm sectors. So, in case of sudden price shocks, these households would require some form of income and other support to shield them from vulnerability to food insecurity.

Our results also show that a more significant number of large farmers are also net buyers of food. These large farmers not being self-sufficient may indicate some income transfers from them. However, unlike in other countries, these gains will accrue again to big farmers as a large percentage of small farmers are not self-sufficient in food and do not participate in the market as sellers. As a matter of fact, there will be a regressive distribution of wealth from

the small and marginal farmers, most of whom are in net buyer position in the market to the medium and large farmers. But as already stated, the number of medium and large landholdings together make up only around 15% of the total landholdings in India (G.O.I., 2019). Hence we infer that the benefits of high prices would accrue to a very small fraction of farm households in India while a large percentage of farm households would have income losses due to high prices.

As the analysis of the sale position of different income quintiles reveals that the food sellers are more or less equally distributed in all income quintiles, an assumption that the net sellers belong to a particular income group is not valid, and the gains of high prices do not favour any particular economic strata of farm households. The vulnerability position further clarifies the main groups of farm households negatively affected due to food price spikes. The lowest income strata households are the most vulnerable to high food prices due to high-income spending on food. And as the food prices increase, they shift to less nutritious food and are further pushed to hunger and food insecurity.

However, these results should be seen with caution. In rural areas, many small and marginal farmers and landless labourers may be dependent on wage labour in agriculture and other sectors (Dev, 2012; Nithyashree, Pal, 2013). Since there are linkages between agriculture and other non-agriculture sectors in the rural areas (Dorosh, Thurlow, 2018; Van Campenhout, Pauw, Minot, 2018), price rise, in the long run, may contribute to higher wages. This would have different consequences for different kinds of farmers, depending upon their livelihood sources. There would be income gains for the small and marginal farm households who depend upon wage labour as a secondary income source. The net sellers with large landholdings would experience two contradictory phenomenon- reduced profits due to higher factor prices and higher sale prices for the final output. The dominant effect would lead the direction of welfare impact for the net sellers.

Until now, the policymakers' focus has been on urban poor or rural landless poor, and the susceptibility of landowners to such price rise has been overlooked. Due to the inherent distinction in the farm households by virtue of the size of their holdings and access to other resources, the distributional impact of food prices on them is dissimilar. Food price policies designed to increase farm households' incomes may be ineffectual and, in fact, lead to retail food price hikes, which increases their vulnerability if they are net buyers of food. In India, a large number of food producers (around 64%) are forsooth food buyers; however, less than a third of these net food buyers are vulnerable to high food prices. In a more extended period of time, capacity building, and better livelihood opportunities in other sectors would be required to be developed to safeguard them from high prices. It is also essential that the role of price policy instruments as a course of measure to enhance the income of all farmers in India be reexamined.

# 7. Limitations and Future Scope

This study addresses the first order welfare impact of food price increases on farm households in developing countries like India, with a highly skewed land distribution pattern. A limitation of the present study is that due to data constraints on the availability of farm Verma, J. S., Sharma, P. (2021). Vulnerability of Small Farmers to High Food Prices – A Case Study of Indian Farmers.

households' long-term panel data, long term second-order welfare impacts of high prices have not been studied. Over a more extended time-frame, supply structures may be able to respond to high prices and may be able to increase production. The wages may also respond to higher prices, and rates may increase. This would have welfare consequences for large farmers (by pushing up the input prices) and the small and marginal farmers (who are additionally employed as wage labourers for secondary sources of livelihood). Such a long-term analysis would be able to guide effective policymaking. Also, the spatial distribution of welfare impacts on different regions of the country needs to be explored. This would reveal those pockets of vulnerability that would need additional resources to shield the food insecure population from sudden price changes. The pattern of behavioural shifts in food consumption and production decisions by the farm households during food price spikes may have nutritional consequences, and this aspect would need further study.

## 8. Conclusion

Results suggest that around 76% of the marginal and 44% of India's small farmers are net buyers of food hence vulnerable to high prices. Also, many of these farmers are among the poorest of the farmers in India, which increases their vulnerability to high food prices. Hence, high prices' welfare impacts would be unequally distributed to different categories of farm households in India. This is due to the variance in the farmer groups' net sales positions. Nonetheless, the results would be subject to the alternative choice of production, available and the complexity of regional and local markets' institutional architecture.

The percentage of vulnerable food buyers decreases with income. In the higher income quintiles, vulnerable households form a tiny proportion of the total farm households, and even then, they are mainly marginal food buyers with low food purchases. So, in the event of a food price rise, a significant fraction of low-income farm households would be negatively impacted. This would be against the conventional notion in India that higher food prices are beneficial to the farmer community in general. Hence, this issue should be factored in when using price policy tools for influencing farmer welfare.

Since vulnerable farmers mainly lie in the lower-income categories, so they would need extra cushion during the waves of price spikes. If such safety nets are not provided to these resource-poor groups, then they may be forced to smooth their consumption by shifting to inferior food choices or cutting the expenditure on food. This would severely impact their food security and make them vulnerable to hunger. In order to shield such farmers from the adverse impact of high food prices, short-term policy measures like income transfers and, in the long run, better livelihood opportunities in other sectors would be required. The results also suggest the need for reexamining the role of price policy instruments as a tool to increase the incomes of all farmers in India.

#### References

- Aksoy, M. A., Isik-Dikmelik, A. (2008). Are low food prices pro-poor? Net food buyers and sellers in low-income countries. The World Bank.
- Asibey, M. O., Abubakari, M., Peprah, C. (2019). Vulnerability and urban farming: Coping with price volatility in Ejisu-Juaben municipality, Ghana. Cogent Food & Agriculture, 5(1), p.1594504.
- Bala, D. M. L., Sudhakar, K. (2017). An Overview of Export Performance of Agricultural Products in India. Journal of Business and Management, 19(2), pp. 1-5.
- Balagtas, J. V., Bhandari, H., Cabrera, E. R., Mohanty, S., Hossain, M. (2014). Did the commodity price spike increase rural poverty? Evidence from a long-run panel in Bangladesh. – Agricultural Economics, 45(3), pp. 303-312.
- Baltzer, K. (2013). International to domestic price transmission in fourteen developing countries during the 2007-08 food crisis (No. 2013/031). WIDER Working Paper.
- Barker, J., Sedik, D., Nagy, J. (2008). Food price fluctuations, policies and rural development in Europe and Central Asia. Rome, Italy: Food and Agriculture Organisation.
- Barrett, C. B., Dorosh, P. A. (1996). Farmers' welfare and changing food prices: Nonparametric evidence from rice in Madagascar. – American Journal of Agricultural Economics, 78(3), pp. 656-669.
- Bellemare, M. F. (2015). Rising food prices, food price volatility, and social unrest. American Journal of agricultural economics, 97(1), pp. 1-21.
- Benjamin, D., Deaton, A. (1993). Household welfare and the pricing of cocoa and coffee in Côte d'Ivoire: lessons from the Living Standards Surveys. – The World Bank Economic Review, 7(3), pp. 293-318.
- Benson, T., Mugarura, S., Wanda, K. (2008). Impacts in Uganda of rising global food prices: the role of diversified staples and limited price transmission. – Agricultural Economics, 39, pp. 513-524.
- Budd, J. W. (1993). Changing food prices and rural welfare: A nonparametric examination of the Cote d'Ivoire. Economic Development and Cultural Change, 41(3), pp. 587-603.
- Cantore, N. (2012). Impact of the Common Agricultural Policy on food price volatility for developing countries. Overseas Development Institute, London (November).
- Chand, R., Prasanna, P. L., Singh, A. (2011). Farm size and productivity: Understanding the strengths of smallholders and improving their livelihoods. – Economic and Political Weekly, pp. 5-11.
- De Janvry, A., Sadoulet, E. (2010). Agricultural growth and poverty reduction: Additional evidence. The World Bank Research Observer, 25(1), pp. 1-20.
- Deaton, A. (1989). Rice prices and income distribution in Thailand: a non-parametric analysis. The Economic Journal, 99(395), pp. 1-37.
- Deolalikar, A. B. (1981). The inverse relationship between productivity and farm size: a test using regional data from India. – American Journal of Agricultural Economics, 63(2), pp. 275-279.
- Desai, Sonalde, Reeve Vanneman and National Council of Applied Economic Research, New Delhi. India Human Development Survey-II (IHDS-II), 2011-12. ICPSR36151-v2. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2015-07-31.doi.org/10.3886/ICPSR36151.v2.
- Dev, S. M. (2012). Small farmers in India: Challenges and opportunities. Indira Gandhi Institute of Development Research, pp. 8-14.
- Dimova, R. (2015). The welfare impact of rising food prices. I.Z.A. World of Labor.
- Dorosh, P., Thurlow, J. (2018). Beyond agriculture versus non-agriculture: decomposing sectoral growth-poverty linkages in five African countries. - World Development, 109, pp. 440-451.
- F.A.O. (Food and Agriculture Organization). (2011). F.A.O. International Commodity Prices database. Accessed on: 12.08.2020. www.fao.org/es/esc/prices/PricesServlet.jsp?lang=en.
- Fan, S., Chan-Kang, C. (2005). Is small beautiful? Farm size, productivity, and poverty in Asian agriculture. Agricultural economics, 32, pp. 135-146.
- G.O.I. (2019). All India Report on Number and Area of Operational Holdings. Agriculture Census 2015-2016. Agriculture Census Division, Dept. of Agriculture, Cooperation and Farmers' Welfare, Ministry of Agriculture and Farmers' Welfare.
- Gamboa, C., Schuster, M., Schrevens, E., Maertens, M. (2020). Price volatility and quinoa consumption among smallholder producers in the Andes. – Scientia Agropecuaria, 11(1), pp. 113-125.
- Headey, D., Fan, S. (2008). Anatomy of a crisis: the causes and consequences of surging food prices. Agricultural economics, 39, pp. 375-391.
- Ivanic, M., Martin, W. (2008). Implications of higher global food prices for poverty in low-income countries. The World Bank.

Verma, J. S., Sharma, P. (2021). Vulnerability of Small Farmers to High Food Prices – A Case Study of Indian Farmers.

Jayne, T. S., Yamano, T., Nyoro, J. K., Awuor, T. (2001). Do Farmers Really Benefit from High Food Prices? Balancing Rural Interest in Kenya's Maize Pricing and Marketing Policy (No. 1093-2016-88037).

Klytchnikova, I., Diop, N. (2006). Trade reforms, farm productivity, and poverty in Bangladesh. The World Bank. Meyer, B. D., Sullivan, J. X. (2003). Measuring the well-being of the poor using income and consumption (No. w9760). National Bureau of Economic Research.

- Minot, N., Goletti, F. (2000). Rice market liberalization and poverty in Viet Nam (Vol. 114). Intl Food Policy Res Inst.
- Minot, N. (2010). Transmission of world food price changes to markets in Sub-Saharan Africa. Washington: International Food Policy Research Institute.

Nithyashree, M. L., Pal, S. (2013). Regional Pattern of Agricultural Growth and Rural Employment in India: Have Small Farmers Benefitted?. – Agricultural Economics Research Review, 26(conf), pp. 1-11.

- Perez, I., Wire, C. (2013). Climate change and rising food prices heightened Arab Spring. Scientific American, 4(03), p.2013.
- Philip, D., Rayhan, M. I. (2004). Vulnerability and Poverty: What are the causes and how are they related. ZEF Bonn, center for Development Research, University of Bonn.

Ravallion, M. (1994). Poverty comparisons (Vol. 56). Taylor & Francis.

Ravallion, M. (1998). Reform, food prices and poverty in India. - Economic and Political Weekly, p. 29-36.

- Rios, A. R., Shively, G. E., Masters, W. A. (2009). Agricultural Prices and Income Distribution among Farmers: A Whole-Household, Multi-Country, Multi-Year Analysis (No. 319-2016-9772).
- Schreitter, V. (2016). January. Measuring the welfare impacts of food price increases: Evidence from rural Ethiopia. In Avilable: https://editorialexpress.com/cgi-bin/conference/download.cgi. Accessed From: https://pdfs.semanticscholar.org/76c3/12db313c51e3912b7214807f5392fe01ace8.pdf? \_ga=2.63722022.861564728.1571396167-835082159.1571396167.
- Seshan, G., Umali-Deininger, D. (2007). Agriculture and import Liberalization and Household welfare in Sri Lanka.
- Shinoj, P., Mathur, V. C. (2008). Comparative advantage of India in agricultural exports vis-à-vis Asia: a postreforms analysis. – Agricultural Economics Research Review, 21(1), pp. 60-66.
- Singh, R. K. P., Kumar, A., Singh, K. M., Chandra, N., Bharati, R. C., Kumar, U., Kumar, P. (2018). Farm size and productivity relationship in smallholder farms: some empirical evidences from Bihar, India. – Journal of Community Mobilization and Sustainable Development, 13(1), pp. 61-67.
- Suryahadi, A., Sumarto, S., Pritchett, L. (2000). Quantifying vulnerability to poverty: A proposed measure, applied to Indonesia. The World Bank.
- Turner, B. L., Kasperson, R. E., Matson, P. A., McCarthy, J. J., Corell, R. W., Christensen, L., Eckley, N., Kasperson, J. X., Luers, A., Martello, M. L., Polsky, C. (2003). A framework for vulnerability analysis in sustainability science. – Proceedings of the national academy of sciences, 100(14), pp. 8074-8079.
- Van Campenhout, B., Pauw, K., Minot, N. (2018). The impact of food price shocks in Uganda: first-order effects versus general-equilibrium consequences. – European Review of Agricultural Economics, 45(5), pp. 783-807.
- Vergez, A. (2007). October. Agricultural price seasonality and market failure: examining the net seller household and the net benefit ratio definitions. In 106. EAAE Seminar: Pro-poor development in low income countries: Food, agriculture, trade, and environment (pp. 18-p).
- Wisner, B., Blaikie, P.M., Blaikie, P., Cannon, T., Davis, I. (2004). At risk: natural hazards, people's vulnerability and disasters. Psychology Press.



Volume 30 (4), 2021

Yuliia Sotnikova<sup>1</sup> Eka Stepanova<sup>2</sup> Nikita Nazarov<sup>3</sup> Andrey Semenchenko<sup>4</sup>

# FEATURES OF CREATIVE CLUSTERS FORMATION IN UKRAINE

In this article, the definition and concept of the term "creative industry" have been considered. The definition of creative clusters from the point of view of domestic and foreign scientists has been given. A number of creative clusters features have been identified and the own definition of this term has been formed. The experience of developed countries in the formation of creative clusters has been analyzed. The analysis of the population of Ukraine by the indicators of employment, employment by type of economic activity has been conducted. Examples of creative hubs organization in Ukraine have been considered and their economic activity has been analyzed. The main types of creative clusters have been identified and the principles of their formation have been outlined.

JEL: C38; O15; O24

## 1. Introduction

At the end of the 20<sup>th</sup> century the world economy has been severely shaken – financial crises, rising unemployment, scarcity of resources due to which traditional industries cease to be national elements welfare. That is why, at the turn of the last century, new, dynamically growing industries, which are designed to overcome, have emerged in the world economy socio-economic problems of regions and countries of the world – creative industries.

<sup>&</sup>lt;sup>1</sup> Yuliia Sotnikova, Assistant Professor, PhD in Economics, Department of Economics and Social Sciences, Simon Kuznets Kharkiv National University of Economics, Kharkiv, Ukraine, phone: +380687287707, e-mail: Sotnikova Yuliia@i.ua\_

<sup>&</sup>lt;sup>2</sup> Eka Stepanova, Assistant Professor, PhD in Economics, Department of Economics and Social Sciences, Simon Kuznets Kharkiv National University of Economics, Kharkiv, Ukraine, phone: +380671266592, e-mail: stepanovaekaraminovna@gmail.com.

<sup>&</sup>lt;sup>3</sup> Nikita Nazarov, Assistant Professor, PhD in Economics, Department of Management and Business, Simon Kuznets Kharkiv National University of Economics, Kharkiv, Ukraine, phone: +380984896578, e-mail: nikita\_nazarov\_88@ukr.net.

<sup>&</sup>lt;sup>4</sup> Andrey Semenchenko, Assistant Professor, PhD in Economics, Department of Economics and Social Sciences, Simon Kuznets Kharkiv National University of Economics, Kharkiv, Ukraine, phone: +380999840844, e-mail: semenchenko\_av@ukr.net.

Sotnikova, Y., Stepanova, E., Nazarov, N., Semenchenko, A. (2021). Features of Creative Clusters Formation in Ukraine.

An analysis of the current global trends in the economies of Europe, Asia and the US indicates that there is a gradual reorientation of economies from the material sector to the services sector and to the so-called "creative industries", which are increasingly bearing in the GDP of developed countries.

The term and concept of "creative industries" first emerged in the UK. In recent years, this concept (and relevant practice) has spread widely around the world and is today one of the most popular innovative ideas relevant to culture and the economy.

There are a number of definitions of the creative industry in the literature that have been proposed, including by UNESCO, the Department of Culture, the media and sports by the UK government and more. All these sources are the basis of the activities of such industries to determine the creation of a creative product. This list includes: advertising, architecture, art and antique markets, crafts, design, fashion, film and video production, programming, including the creation of entertaining interactive programs and computer games, music, performing arts, publishing, television, radio and the Internet (Creative Industries Programme, 2010-2018; Mateos-Garsia, Bakhshi, 2016).

The main indicators of the development of the developed countries indicate that the creative industries are one of the priorities of economic development in the countries of Europe, America and Southeast Asia. While creative industries were initially a crisis tool for Europe, creative programs in Asia have become a "work ahead", a new lever of influence and positioning on the world stage as the leading modern states. It is part of the strategic development of countries and cities, the opportunity to improve the quality of life and human capital, and at the same time – the path to cultural expansion, the translation of their values and norms.

The creative industries display a strong tendency to concentrate in a small number of locations. In doing so, they form creative clusters – agglomerations of creative businesses and workers that collaborate and compete with each other. This geographical proximity has important advantages: creative businesses are able to tap into a critical mass of creative workers, access clients, and collaborate and share information with one another (Kuznetsova, 2018).

The purpose of the article is to clarify the essence of creative clusters and their influence on the modern economy in the circumstance of transformation.

To achieve the goal, the following tasks were solved:

- to consider existing approaches to defining the concept of "creative clusters";
- to monitor the foreign experience on creative industries and clusters forming;
- to analyze main labour indicators in terms of creative industries;
- to conduct main principles of creative clusters forming in the modern economy.

# 2. Literature Review

The issue of clustering of creative industries is poorly understood. A recognized specialist in the study of clusters and the founder of the theory of the same name is the American economist M. Porter. An important contribution in this direction was made by A. Marshall. Valuable theoretical developments in the field of creative clusters are presented in the works of such scientists as J. Evans, J. Hawkins, D. Power, A. Pret, R. Florida, L. De Propris, L. Gipponen, S. Tkalenko, T. Galakhov, A. Chul and others.

Let's consider more detail on the definition of creative clusters given by domestic and foreign researchers (Table 1).

Table	1
-------	---

Author	Definitions
Kuznetsova N.B.	An independent productive environment (place), that brings together creative entrepreneurs in their territory for free communication, the ability to generate new ideas and create creative products as a cultural product through the combination of technical innovation, creativity and entrepreneurship (Kuznetsova, 2018).
Kowalska K.	A type of cluster structure, based on geographic concentrations of interconnected people or companies to create new product (Kowalska, 2016).
Klasik A.	The structure, that consists of companies, non-profit organizations, cultural and research institutions and special meeting places (such as science parks, cultural centres and media centres) that stimulate ideas exchange between individual artists and scientists (Klasik A., 2008).
Propis L. De, Hipponen L.	Places, that bring together creative people who share an interest in new items, but not necessarily on the same topic; a catalyst place where people, relationships, ideas and talents can "spark" each other; an environment that offers diversity, stimulation and freedom of expression; a dense, open and ever- changing network of interpersonal exchanges that feeds on individual uniqueness and identity (Propis, Hipponen, 2008).
Namyslyak B.	Specific kind of cluster connected with the creative sector (Namyslyak, 2016).
Janine Matheson, Gillian Easson	It is a kind of online or offline space that connects representatives of creative professions (designers, architects, artists, musicians, directors) and art entrepreneurs (Janine Matheson, Gillian Easson, 2019-2020).
UNDP	Geographic networks, where creative and cultural activities are concentrated (UNDP, 2013).
Project "Creative Cities in Ukraine"	A certain environment (building, factory, technopark, etc.) that brings together organizations and enterprises of the cultural sphere of various directions. Due to the combination of many diverse forms of cultural entrepreneurship (theatre, fashion, design or music), such clusters become places of innovation and creativity (Creative Cities in Ukraine, 2020).

Thus, the majority of both domestic and foreign scientists distinguish the following features of creative clusters:

- geographical concentration;
- ability to create new ideas and free communication;

Sotnikova, Y., Stepanova, E., Nazarov, N., Semenchenko, A. (2021). Features of Creative Clusters Formation in Ukraine.

• may include individuals, companies, non-profit organizations, cultural and educational institutions.

Therefore, in this work, under creative clusters we will understand the form of association of individuals, companies, non-profit organizations, cultural and educational institutions by geographical feature, which allows to create effective channels of communication and free space for an exchange of ideas and aimed at creating creative products.

## 3. Methodology of the Empirical Research

The issue of creative clusters formation in modern transformation circumstances in literary sources and scientists' researches is given considerable attention. Most of the widely used approaches were successfully highlighted. In the article, next variety of research methods were used: analysis and synthesis, induction and deduction, monographic analysis, comparisons, methods of statistical analysis.

# 4. Findings

The experience of developed countries in the formation of this type of associations allows to conclude that their high efficiency. According to the European Cluster Observatory, there is a total of 28 clusters in the creative sector, which represents 19% of the total number of identified clusters in Poland. For comparison, the highest participation of creative clusters in the EU countries is recorded in the Netherlands and the UK (over 50%).

For example, in UK Creative industries GVA grew by 8.9 per cent between 2013 and 2014 – almost twice as fast as the economy as a whole, while creative industries jobs grew by 5.5 per cent (compared with 2.1 per cent in the UK workforce) (Kuznetsova, 2018). The creative industries are becoming an important component of local economies right across the UK – not just in London and the South-East of England. Agile freelancers and businesses play an important role in the UK's creative innovation system. However, their clusters may experience barriers to growth insofar as smaller businesses may lack resources for R&D and training, or visibility in the eyes of policymakers and universities.

Poland is also one of the countries in Europe, which is characterized by a large number of creative clusters. Only in the period from 2007 to 2013, was Poland able to use over 100 million euros to support cluster initiatives in the framework of the PO Innovative Economy (Florida, 2013). The majority of the creative clusters in Poland (as well as throughout the European Union) represents the knowledge-intensive sector, especially in financial services -16, and education -9.

The largest and most developed clusters in Poland are:

- The Cluster of Multimedia and Information Systems "Multi-Klaster";
- The Media Cluster of Łódź;
- The Printing and Advertising Cluster in Leszno;

- The Mazowiecki Printing and Advertising Cluster "Colorful Basin";
- The Cluster of Culture and Leisure Industries "INRET".

In Ukraine, the process of formation and development of creative clusters is only at the stage of formation compared to other developed European countries. In Poland, these clusters were created in the period 2006-2009, and in the UK, which was the first country where creative industries have been created, this happened at the end of the XX century. For comparison, in Ukraine where one of the first steps in this direction was created in 2016 by the cultural and creative industries' problems development department. However, despite the existence of a power institute, which should regulate these issues, lack of funding, understanding of the essence of the creative industries and specialist creators who would carry out information work with the population; mechanisms of copyright observance and protection, leads to the fact that Ukraine belongs to the outsider countries in the development of the creative sector.

The statistical analysis of the formation and development of creative industries and clusters in Ukraine is difficult, since, unfortunately, the monitoring of these indicators by the state statistical authorities is not conducted. According to the grouping of the classic theory of the creative economy of scientist R. Florida, the creative industries include:

- advertising;
- architecture and design;
- filmmaking;
- book publishing;
- concert and entertainment business;
- software production;
- television, radio and other media;
- creation of video and computer games;
- fashion industry (WIPO, 2015).

Therefore, among the general list of economic activities according to which statistical reporting is conducted, the authors have selected the types that can be attributed to the creative by common world criteria and proposed by R. Florida groups: information and telecommunications; professional, scientific, technical activity; arts, sports, entertainment and recreation.

The analysis of the number of employed population by types of economic activity in Ukraine leads to the conclusion that the highest level is observed in industry and education (21.8% and 15.4%, respectively). In the creative industries, only 6.8% work; this is three times less than in the sphere of material production. For comparison, employment in the creative sector abroad is characterized by significantly higher rates. Due to the information of the World Intellectual property organization (State Statistics Service of Ukraine, 2010-2018), the highest employment rate in the creative sector is observed in the Philippines (11.1%), Bhutan (10.9%) and Mexico (11.1%).





Source: research result, 2018 (State Statistics Service of Ukraine, 2010-2018).

The analysis of employment by type of economic activity in a regional context is quite interesting. Thus, the highest employment rate is observed in the cities of Kyiv, Dnepropetrovsk and Kharkov regions. In the creative sectors of the economy, the largest number of employees is concentrated in the same Kharkov and Dnepropetrovsk regions. Because of their proximity and territorial level of the creative sector, most of these areas have the highest potential for the formation of a creative cluster in Ukraine.

Creating creative potential in the regions is facilitated by new IT and creative centres or hubs. This is still a new phenomenon in some EaP countries, and most of these projects are private initiatives that are practically not supported by public authorities. These hubs demonstrate the dynamic entrepreneurial spirit of creative and business communities that are in line with global trends.

Creative hubs have different shapes and structures. Most of them are physical areas, although they can also be digital platforms and virtual networks and include coworkings, business incubators or accelerators, a "fab lab", or city labs, but first and foremost, they embody a new community. In many cities, they begin to occupy abandoned downtown buildings, abandoned premises, or former/actual industrial sites and neighbourhoods. By revitalizing and gradually restoring them, these hubs revive the forgotten parts of cities and contribute to the development of cities and regions.

#### Figure 2





Source: research result, 2018 (State Statistics Service of Ukraine, 2010-2018).

These are places for work, meetings, training and interaction where knowledge is shared. Creative hubs take on different functions and offer a variety of products and services:

- jobs and offices;
- workshops and seminars;
- mentoring and training;
- business clubs;
- coordination events;

Sotnikova, Y., Stepanova, E., Nazarov, N., Semenchenko, A. (2021). Features of Creative Clusters Formation in Ukraine.

• brainstorming, and more.

The hubs primarily contribute to project implementation, business development, and community building.

Creative industries tend to be highly concentrated in the space, even much more than the rest of the activities. Geographical clusters and hot spots are a usual form of concentration of these industries. One of the main problems for the identification of clusters of creative industries in Europe is the limitation of data. In practice, this has constrained the identification of clusters of creative industries to:

- a) concrete case studies comparing two or more clusters using qualitative approaches, which gives only local evidence and are difficult to replicate for all the EU countries;
- b) the use of NUTS 2 regions, valid to detect very general and vague patterns of clustering, although too large and heterogeneous for the detailed detection of intra-regional and cross-regional clusters. Apart from the identification of global trends, the definition resulting from these data is too vague and incomplete;
- c) cross-country comparisons based on Census data that are equally dependent on the definition a priori of the spatial unit and the laboured coordination of groups of research in several countries.

It is difficult to imagine how many cities and regions are enacting policy strategies based on clusters of creative industries based on vague definitions of their clusters, as well as how many are not aware of the existence of these clusters in their space.

Creative industries have enormous, but often unrecognized potential to support cities in facing the challenges of global competition, convincing investors and creating more and better jobs. CREATIVE CITIES fosters this potential by making European cities aware of the benefits creative industries can bring and supports the development of suitable policies or instruments. The barriers for creative industry actors can be high, ranging from a low capital endowment and poor networking to insufficient external visibility. The project identifies the resources and know-how needed, and provides comparable transnational data on the impact of creative industries on economic growth.

The project has brought together the central European cities of Gdansk, Genoa, Leipzig, Ljubljana and Péc and has been fostering the exchange of best practice experiences in the fields of creativity and innovation. The project partners first analyzed their local creative industry sectors, working with the UK Department of Culture, Media and Sport. The assessment served as the basis for proposing actions to improve conditions for the creative industry and professionals.

In 2019 (the latest available like-for-like data published by Eurostat):

- Germany is the leading Creative Hub in Europe, with €49 billion of Gross Value Added (GVA) generated by 133,000 enterprises;
- the UK stands at €44 billion generated by 101,000 enterprises, which amounts to 4.6% of the non-financial economy. The UK has the largest creative industries sector in Europe in per capita terms with €700 (vs €605 in Germany and €545 in France);

- France had GVA of €35 billion generated by 158,000 enterprises. This amounts to 3.9% of the non-financial economy;
- together, France, Germany and the UK had €128 billion in contribution from the creative industries in 2011, close to 4% of non-financial GVA of €3,250 billion.

Analyzing Ukrainian experience, it have been noticed that the largest number of such creative centers is also concentrated in Kharkov and Dnepropetrovsk regions, and Kyiv (Table 2).

Table 2

Name	The purpose of the activity		
Dnepropetrovsk regions			
Technopark	Development of tourism industry in the region, attracting investors		
Innovative Center	Organizing interaction between the community and local governments		
Center of innovative	Organization of seminars and business classes on the development of		
Program and	innovative technologies at the international level		
Progress			
creative space «Self	Organizing the interaction of large groups of people with the provision of		
Plus»	the necessary equipment for brainstorming		
First regional	Organization of a platform for the development of small and medium		
innovation box	business		
Co-working «365»	Startup support organization		
I Co-Working Hub	He started his business as an investment fund and		
	incubator and then switched to the resident co-working model, offering		
	appropriate activities and services		
	Kharkov region		
Project «Spalah»	Joint co-working involving an educational centre		
Art factory	Former shop of the Malyshev plant, transformed into a creative cluster		
«Mehanika»			
Fabrika Space	Co-working space		
Art area "DK»	Platform for creation of new projects, organization of interaction of		
	different stakeholders		
	Kyiv		
«Chasopys»	One of the first creative coworkings		
« Art factory	Former silk factory converted to a creative cluster and the ecosystem that		
Platforma»	brings together business, festivals, co-working playground, arts,		
	information technology, fashion and education		
UNIT City	A large innovation park. Focuses on companies working in the fields of		
	high technology, creative ideas and innovative business. Includes business		
	campuses, UNIT. Factory (a free programming school), sports complexes		
	and cultural, medical and entertainment facilities.		
IZONE — platform	The Foundation implements projects in Kiev, Eastern Ukraine and abroad		
«ISOLATION» for	in three intertwined areas of activity: arts, education and projects aimed at		
culture initiations	revitalizing Ukraine's creative sector. IZONE is a creative community		
	centre that provides working environment, with a particular focus on the		
	creative process of research and production and multidisciplinary. Includes		
	multifunctional facilities, galleries, co-working and art studios,		
	manufacturing facilities and laboratories.		

Examples of creative hubs organization in Ukraine

Sotnikova, Y., Stepanova, E., Nazarov, N., Semenchenko, A. (2021). Features of Creative Clusters Formation in Ukraine.

The organizationally creative business began to develop in the form of small and mediumsized enterprises located in the common territory and today is gaining considerable size and importance in the economic and social life of countries.

Thus, according to Alibaba Group chairman Jack Ma, if over the past 30 years, about 6% of companies have benefited from globalization, then in the next 30 years at least 60% of small businesses will become global (Eurostat, 2016).

One of the reasons for small business globalism is the intensification and scale of development of the intellectual resource, creative activity of people due to the increase of their level of education, changes in the structure of consumption and employment, which led to the need for the formation of a new market segment of creative products, represented in smallest business entities. Thus, in 2016, in the creative and creative sectors of the EU economy, there were 10,645 enterprises (3.4% of the total service sector), of which 94.2% are micro-enterprises with fewer than 10 people, employing 31.5% persons. The share of big business in the creative industry was only 0.2% of the total number of enterprises (Eurostat, 2016).

Figure 3 presents an analysis of the number of economic entities by type of economic activity in Ukraine.

Most of them are concentrated in trade, which is understandable. In the second place are creative industries – information and telecommunications; professional, scientific and technical activities. The statistics confirm the global trend – the concentration in the creative industries in Ukraine of a large number of small and medium-sized business entities.

# Figure 3

## Number of economic entities by type of economic activity in Ukraine



Source: research result, 2018 (State Statistics Service of Ukraine, 2010-2018).

The analysis of the dynamics of the number of economic entities in creative clusters in the last seven years in Ukraine (Figure 4) shows a steady upward trend in the field of information and telecommunications, a slight increase in the field of scientific and professional activity and almost no positive dynamics in the arts, sports, entertainment and recreation. It is the latter sector that has significant development potential.

Figure 4



Dynamics of the number of economic entities in Ukraine in creative industries in 2010-2017

Source: research result, 2010-2017 (State Statistics Service of Ukraine, 2010-2018).

Further analysis of the possibility of forming creative clusters in Ukraine is advisable to make in terms of remuneration for different types of economic activity (Figure 5).

The chart clearly shows that creative industries, such as information and telecommunications, take the first place in the average monthly wage; professional, scientific and technical activities, almost twice the average for other industries.

This situation testifies to the expediency and necessity of involving the workforce precisely in the creative industries, which allow not only to realize the creative potential, but also to provide a sufficient standard of living, attract investments in the region.



Sotnikova, Y., Stepanova, E., Nazarov, N., Semenchenko, A. (2021). Features of Creative Clusters Formation in Ukraine.

Source: research result, 2018 (State Statistics Service of Ukraine, 2010-2018).

## 5. Discussion

The analysis of statistical data shows the possibility and necessity of forming creative clusters in Ukraine. Kuznetsova N. B. distinguishes four types of creative clusters by their features (Kuznetsova, 2018):

- creative workspaces (zones) from one roof (local media centre or market);
- creative districts in cities (at a designated address);
- regional creative clusters;
- virtual clusters on the Internet.

The most promising and effective, as the experience of developed countries shows, are clusters of the third type, or regional creative clusters. The creation of such clusters must comply with certain principles.

So, Tishchenko O. M. defines clusters as the vector of economic development and proposes the following principles: the principle of territorial localization; the principle of openness in the form of knowledge flow, dynamism and convenience; the economic and process principle of integration in the form of sustainable partnership, cooperation and competition; the principle of having a leading company (core) or integrating product, as well as the principle of influencing small and medium-sized businesses (Tishchenko, 2010).

Movchan I. V. and Chuchina I. M. pointed out that the basic principle of formation of an innovation cluster is the choice of priority directions of scientific and technological and technological development of the economy, a search of territories considering the scientific and innovative potential of objects attractive for solving the set tasks (Movchan, Chuchina, 2011).

According to Mykytyuk N. O., it is advisable to use a systematic approach to the cluster model of economic development, which the author views as a means of economic relations at the regional level. The scientist identifies the following principles necessary for the activity of clusters, in particular, innovative ones, namely (Mykytyuk, 2011):

- unity;
- hierarchy;
- the ultimate goal;
- uncertainties;
- development;
- decentralization;
- functionality.

According to O. V. Annanenkova's basic principles of cluster formation are: strategic principles of cluster functioning in the conditions of globalization and principles of state support of cluster structures. Strategic principles of cluster functioning in the conditions of globalization are guided by the strategy of cluster development on the basis of the formation of the most competitive research and production cluster systems. Strategic principles for the functioning of clusters in the context of globalization include the principles of: systematic; compliments; cooperatives; objectivity. The author considers the principles of state support for cluster structures (Annanenkova, 2013):

Sotnikova, Y., Stepanova, E., Nazarov, N., Semenchenko, A. (2021). Features of Creative Clusters Formation in Ukraine.

- targeting of state support for clusters;
- systematic validity of regional clusters;
- integration of centralization and decentralization;
- adequacy.

Shumskaya H. M. notes the need to consider such additional principles of cluster functioning as: the principle of innovation, priority, efficiency and information support (Shumskaya, 2011). The author emphasizes that these principles will allow the cluster's internal environment to be consistent with an unstable external environment, as well as to further develop the cluster. Moreover, the importance of the above principles depends on the specific activity of the cluster and its regional location.

Smolich D. V. combines the above principles and highlights its "radically new and necessary" principles for cluster formation directly in the context of cross-border cooperation of regions, since the study showed a lack of consideration of a number of aspects of activities and conditions for the formation of cluster entities of this type (Smolich, 2012) (Figure 6).

#### Figure 6



Principles of creative clusters formation

Source: Karpenko, 2017.

Creative industries as they operate and organizational features tend to clustering, that is, spatial integration. The clustering of cretaceous industries represents is a medium of wide

creative interaction professionals built on complementary and the opportunistic behavior of its participants.

Innovative technologies and ideas are becoming a staple of new economic systems where a special place is played by the creative component, which brings to the fore such factors of production as land and capital, thus overcoming the problem of scarcity of resources.

The creative sector is today the fastest growing in the global economy. International trade in creative goods shows steady growth, which has stimulated its considerable expansion in the last decade.

The clustering of creative industries stimulates the prosperity of the regional economy. Creative clusters are a significant source of budget GDP revenue and growth, create new ones environmentally friendly jobs that attract skilled workforce from other regions, based on rebranding creates an attractive image of the region for both tourists and investments. Cluster form of organization of creative industries manifests positive impact on other sectors of the economy and for social well-being, and the circulation of knowledge in the cluster is the basis for innovative growth component in the region.

## 6. Conclusions

Analysis of historical origins, theoretical foundations and world practice of clustering of creative industries allowed identify the positive impact of creative clusters to the local and national economies and to identify the main determinants of the creative sector clustering that carry the potential of successful changes in the vector of socio-economic development.

Thus, the study of existing scientific opinions on the conceptual foundations of the functioning of creative clusters made it possible to determine the following provisions for the formation of a new model of creative business profile:

- 1. Creative enterprises are more effectively developed in community with each other, in places with strong local identity and which are at the same time open to the global world, which differentiates them greatly among other enterprises. They are created both in small cities and in global centres, which subsequently become self-sufficient clusters of creative activity and have a significant impact on their socio-economic development;
- 2. In the creative sector of the economy a new value is formed when the interaction of technical innovation, creative activity and business entrepreneurship is directed to the creation and distribution of a creative product. Such businesses have the ability to be flexible and adapt quickly to changes in the environment, on which their reputation, skills and brands will depend;
- The main strategic objective of the creative sector of the economy is pooling of resources and grouping of enterprises into networks, clusters, creative quarters and other types of partnership, which contributes to a larger savings of different types of resources;
- 4. In terms of their structural content and external infrastructure, creative clusters unite different in the direction and spheres of activity of the enterprise, institutions, creative

Sotnikova, Y., Stepanova, E., Nazarov, N., Semenchenko, A. (2021). Features of Creative Clusters Formation in Ukraine.

platforms, platforms and talented people, which is the basis of creation of creative cities where creative products are consumed and produced, and their external interaction contributes to the formation of a healthy competitive business environment;

5. Creative clusters define the new vector of education system development, ensure the formation of new quality of human resources with critical thinking, flexible to technological change and the potential of creative human capital, promote professional development and realization of talents.

It is the combination of these principles that provides successful clustering of creative industries, avoids problems in the way of formation of local units of interaction between creative entrepreneurs and in the long run, shows a positive effect in the further impact on regional and national well-being.

### References

Annenkova, O. V. (2013) Practical and theoretical aspects of formation and development of cluster structures in the conditions of globalization. – Bulletin of the Donbass State Engineering Academy, 3 (13), p. 7-12 [in Ukrainian].

Creative cities in Ukraine [Retrieved from http://www.creativecities.org.ua/uk/creative-city/project/].

- Creative Industries Programme (2010-2018) [Retrieved from https://creativeconomy.britishcouncil.org/media/uploads/files/English\_mapping\_the\_creative\_industries\_ a toolkit 2-2.pdf].
- Culture Statistics (2016) Eurostat [Retrieved from http://ec.europa.eu/eurostat/documents/3217494/7551543/KS-04-15-737-EN-N.pdf/648072f3-63c4-47d8-905a-6fdc742b8605].

De Propris, L., Hypponen, L. (2008) Creative Cities, Cultural Clusters and Local Development.

European Creative Hubs Forum [Retrieved from http://creativehubs.org].

Florida, R. Creative class: people who change the future. Moscow: Publishing House «Classic XXI» [in Russian].

- Go See Share Creative Industries Fund [Retrieved from https://www.creativescotland.com/funding/fundingprogrammes/targeted-funding/go-see-share-creative-industries-fund].
- Guide on surveying the Economic contribution of Copyright industries (2015). WIPO

Karpenko, O. Alibaba's Jack Ma – the economy of the future: "Stop hoping for manufacturing in job creation." [Retrieved from https://ain.ua/2017/09/21/dzhek-ma-ob-ekonomike-budushhego ].

Klasik, A. (2008). Budowanie i promowanie kreatywnej aglomeracji miejskiej. – AE Forum, 27, p. 12-15 [in Polish]. Kowalska, K. (2016). The value of crowdsourcing for creative clusters development. – Acta Innovations, 14, p. 13-

- Kuznetsova, N. B. (2018). Conceptual bases of formation and development of creative clusters. Web of Scolar, 2 (20), p. 7-11 [in Ukrainian].
- Mateos-Garsia, J., Bakhshi, H. (2016). Creative clusters, creative people and creative networks. Nesta.
- Movchan, I. V., Chuchina, I. M. (2011) Innovative clusters formation in Ukraine. Economic space, 49, p. 289-294 [in Ukrainian].

Mykytyuk, N. O. (2011). Features of system approach application at clusters' formation and management. – Bulletin of the National University "Lviv Polytechnic", 683, p. 112-117 [in Ukrainian].

Namyslyak, B. (2016). Creative clusters in Poland. - Barometr Regionalny, 11 (2), p. 25-31.

Report on creative economy. Enhancing local development (2013) creative economy report. Widening local development pathways 2013 special edition. UNDP [Retrieved from http://ssc.undp.org/content/ssc/news/events/widening\_local\_development\_pathways.html].

Shumskaya, H. M. (2011). Principles of Cluster Functioning in the Regional Economy of Ukraine. – Economic space, 48 (2), p. 68-73 [in Ukrainian].

Smolich, D. V. (2012). Conceptual bases of innovative clusters formation in the conditions of cross-border cooperation. – Lviv Polytechnic National University Institutional Repository, 34, p. 206-210.

State Statistics Service of Ukraine. (2010-2018). [Retrieved from http:// http://www.ukrstat.gov.ua/].

Tishchenko, O. M. (2010). Clusters as a vector of economic development: organization, essence and concepts. – Theoretical and applied questions of economics, Kyiv University, 21, p. 74-80 [in Ukrainian].



Reshmi Banerjee<sup>1</sup> Avani Desai<sup>2</sup>

Volume 30 (4), 2021

# A STUDY OF COMPETENCIES AND CHALLENGES OF INDIAN WOMEN ENTREPRENEURS<sup>3</sup>

Entrepreneurs are innovators, job providers and people who perform economic activities while fulfilling responsibility towards the society (Ahmad N & Seymour R, 2006). According to the 6th Economic Census released by the Ministry of Statistics and Programme Implementation, there are 58.5 million entrepreneurs in India, of which 14 % are women entrepreneurs. The aim of the research paper is to outline empirical research on the competencies required by women entrepreneurs to start a business and to sustain the same successfully. This paper also aims to discuss the problems and challenges encountered by women entrepreneurs in running their business. A survey of women entrepreneurs was conducted in Gujarat using a structured questionnaire and personal interview. The questionnaire was designed with a list of competencies, problems and challenges faced by the women entrepreneurs that were compiled from previous theoretical and empirical research. The entrepreneurs were asked to give their ratings based on their perception and experience on five-point Likert scales. A factor analysis was conducted in order to identify clusters of competencies that loaded onto each group. The most common problems and challenges faced by women entrepreneurs were identified statistically.

The factor analysis identified 9 clusters of competencies from the list of 36 competencies, which are necessary for entrepreneurs to start the business and sustain with it. The results show that the major problems faced by the women are lack of finance, difficulty in work-life balance and high socio-cultural barriers over the life of the business.

The outcome of this paper can be used by researchers, government agencies, nongovernment organisations and incubation centres to understand and develop policies that help more and more women to become entrepreneurs and run their business successfully.

JEL: L26

<sup>&</sup>lt;sup>1</sup> Ms. Reshmi Banerjee, Assistant Professor and Research Scholar in Som-Lalit Institute of Management Studies and GLS University, Ahmedabad-Gujarat (India), phone: +91 8128547490, e-mail: reshmi.b19@gmail.com.

<sup>&</sup>lt;sup>2</sup> Dr. Avani Desai, Professor in GLS University, Ahmedabad-Gujarat (India), phone: +91 79 26430 373 +91 9824184747, e-mail: avani.desai@glsuniversity.ac.in, dean.bba@glsuniversity.ac.in.

<sup>&</sup>lt;sup>3</sup> Preliminary version of the article was presented and discussed as a report of the ANVESH Conference 2020, organized by Institute of Management, Nirma University, India.

Banerjee, R., Desai, A. (2021). A Study of Competencies and Challenges of Indian Women Entrepreneurs.

#### Introduction

India today is witnessing a multi-dimensional change in the area of women-led entrepreneurial endeavours. On one hand, technology, globalisation, digitalisation and ease of doing business has ensured start-up booms; on the other hand, other women are gradually but persistently entering the domain of entrepreneurship. In today's era, women entrepreneurs don't come from only established business houses or the higher-income strata of the society, but they belong to all walks of life and from all over the country. According to the 6th Economic Census released by the Ministry of Statistics and Programme Implementation, in India there are 14% women entrepreneurs.

In today's start-up boom, it is remarkable to see 35% of start-ups being led by women entrepreneurs. This goes on to show how women are not just contributing to the economic growth of the nation but are also creating employment opportunities for others. As per a survey, around 71% of women employ around 5 or less people in India. Moreover, 73% of women entrepreneurs earn an income of approximately Rs.10,00,000 in a financial year. (https://www.startupindia.gov.in/).

While India witnesses women entrepreneurs across age groups, it is noteworthy that 58% of women entrepreneurs commenced their business in the age group of 20 and 30 and around 25% of women initiated business even before turning 25. Early entry into the business space gives them higher risk-taking ability. Geographically while, Bangalore, Delhi-NCR, Chennai, Mumbai and Hyderabad stands out in the Women entrepreneurship index, other tier 1&2 cities are also picking up well. (https://www.startupindia.gov.in/).

#### **Entrepreneurs and Women Entrepreneurs**

There have been various definitions and interpretations of the term 'entrepreneur' presented by various researchers and scholars. Ahmad and Seymour (2006), stated that the key role of entrepreneurs is to be innovators, job providers and people who perform economic activities while fulfilling responsibility towards the society. Anwar and Amber (2012) believe that women entrepreneurs use their knowledge and resources to develop or create new business opportunities. According to Moore and Butter (1997), be it informal setups, non-registered businesses, or any formal registered setup. They further added that women entrepreneurs could be classified as those who have started their businesses and managing them steadily with an ownership of at least 50% of the entity and they are in operating for one year or more. As per the Government of India (2006), a business entity owned and controlled by a woman with a financial interest of a minimum of 51% of the capital and should also provide 51% of employment to women in the entity.

In India, out of a total of 58.5 million entrepreneurs, only 13.76%, i.e., 8.05 million are women. These establishments owned by females, provide employment to 13.45 million people. Table 1 explains the number of units registered in the states of India and the no. of women entrepreneurs in each of the states as a % of the total no. of units registered in that particular state (https://www.startupindia.gov.in/).

#### Table 1

Women Entrepreneurship	No. of Units	No. of Women	Percentage
States	Registered	Entrepreneurs	0
Tamil Nadu	9,618	2,930	30.36
Uttar Pradesh	7980	3180	39.84
Kerala	5487	2135	38.91
Punjab	4791	1618	33.77
Maharashtra	4339	1394	32.12
Gujarat	3872	1538	39.72
Karnataka	3822	1026	26.84
Madhya Pradesh	2967	842	28.38
Other States & UT's	14,576	4185	28.71
Total	57,452	18,848	32.82

Women Entrepreneurs Registered in India

Source: Report of MSMEs, 12th Five-year plan 2012-2017.

The ranks are given to the top 8 states having more than 25% of the total no. of registered units in the respective state. Rank 1 is given to the Uttar Pradesh in terms of registered women entrepreneurs, followed by Tamil Nadu and Kerala. Gujarat is in rank 5.

According to Global Entrepreneurship Monitor (2010), in the global entrepreneurial activity, more than one-third are women.

#### Women Entrepreneurship in Gujarat

The business-driven aspect of Gujarat has been at the core of its growth ever since the beginning. The youth of Gujarat grows in an environment that is highly conducive for business orientation and development. British Council, (2016) have analysed that both the genders benefit from this socio-economic exposure and it is reflected in the entrepreneurial acumen of the youth. Along with the men who are the obvious receivers of this knowledge, the female counterparts also learn the art of doing business from a very early age in life. While the spirit of entrepreneurship exists in the environment, it is all the more fuelled by the various incentives provided to the women entrepreneurs by the Government of India and the Government of Gujarat. Gujarat's vast culture and the zeal towards entrepreneurship, along with its deep-rooted tradition of business, geographical benefits, government's initiatives to boost women entrepreneurship and the continuous development of the 'Vibrant' state, has attracted investors and business communities from across the globe.

The continuously growing literacy rate in the state as a whole and amongst women, in particular, is another very important contributor in grooming women entrepreneurs. Census, (2011), the literacy rate amongst women in Gujarat has increased to 70.73%, which was 5% better in comparison to the average national women's literacy rate.

Banerjee, R., Desai, A. (2021). A Study of Competencies and Challenges of Indian Women Entrepreneurs.

## **Review of Literature**

Women lead 13.72% of enterprises in the MSME sector in India (4th All India Census of MSME, 2007). Lerner et al. (1997), explained that businesses, that are owned by women are privately owned and dependent on the owner of the business and her skills or competencies. Colombo and Grilli, (2005) have identified that entrepreneurial competencies are those cluster of competencies which is applicable to successful entrepreneurship and is related to the growth and survival of new and small businesses.

## Competencies amongst women entrepreneurs

The Oxford dictionary defines competency as "the ability to do something successfully or efficiently". Taking forward this literal definition, UNIDO (2002) stated that within any function or job, when an individual successfully performs a task or an activity, the set of skills, related knowledge and attributes which she uses are called her competencies. Therefore the capability to apply or use a set of related knowledge, skills and abilities which are useful in performing tasks in a defined work setting or critical work functions. There is widespread acknowledgement that the overall success, performance, and growth of an MSME is heavily dependent on the competencies of the entrepreneur (Lerner et al., 1997). Lerner and Almor (2002) have stated that there is a definite linkage between women entrepreneur's skills and the firm's performance and development. Man, Lau and Chan (2002) also clarify that entrepreneurial competencies are the capability of the entrepreneur to successfully do a job. Another study by Birley (1989) explains that women business owners consider their social skills and interpersonal skills as the chief competencies required for a business.

According to another study by Chandler and Hanks (1994), an assumption is made that two key roles, in which entrepreneurs must be competent, are managerial and entrepreneurial. While the managerial aspect covers the ability to acquire and utilise resources to synchronise the business interest and activities, the entrepreneurial aspect consists of the ability to recognise and realise the opportunities. Chandler and Jansen (1992) also surveyed some companies in the US state of Utah and stated that the founder of the organisation must be competent in entrepreneurial, managerial and technical functional competencies. Mitchelmore, Rowley and Shiu, (2014) have studied the relationship between those competencies like personal and relational competencies, which the women small and medium enterprise owners generally consider the most significant for the success of the business and the competencies that were classified as most critical like acquiring finance, risk-taking ability, pro-activeness, strategic planning, implementation for opportunities, by the women entrepreneurs who had high-growth businesses.

Another in-depth study by Mitchelmore and Rowley (2013) reported that these competencies could be classified into 4 categories:

• Entrepreneurial competencies – comprising of recognition, idea generation, and realising opportunities.
- Business and management competencies focusing on financial and budgeting skills, operational skills.
- Human relations competencies dealing with leadership skills and delegation skills.
- Conceptual and relationship skills consisting of interpersonal skills, communication skills and logical thinking skills.

Stefanovic, Prokic and Rankovic (2010) obtained *four* motivational factors – greater business achievement, independence, intrinsic factor and job security from their research on SMEs in Serbia using factor analysis and *seven* factors affecting entrepreneurs' success which are – position in society, interpersonal skills, approval and support, competitive product/service, leadership skills, always to be informed and business reputation

Bird (1995) identified the characteristics like motives, traits, specific knowledge, social roles and skills, self-images are some of the entrepreneurial competencies, that assist in the birth, survival and growth of the firm. A research by Rao, Rao and Dixit (1975) identifies some personal background, attitudinal, organisational and management variables that clearly shows the difference between successful and unsuccessful entrepreneurs. This examination of the existing literature emphasises that certain competencies are inevitable to becoming an entrepreneur. Having said that, in the context of women entrepreneurs, entrepreneurial competencies and managerial competencies along with support from the family can motivate and help a woman to start a business and survive in the market.

#### Problems and Challenges Faced by Women Entrepreneurs

According to Global Entrepreneurship Monitor (2010), in the global entrepreneurial activity, more than one-third are women. Women entrepreneurs face a lot of gender-biased problems, which ultimately affects the financial performance of the firm. In the research by Jamali (2009), it is observed that women play a very distinct role in the eradication of rural poverty and improvement of the financial condition of the family.

It is found that women face serious gender discrimination, which creates problems in getting opportunities, resources, assets and service, as reported in Women Watch by United Nations (2015). Moreover, a study by Myers and Majluf (1984) indicated that small business owners are dependent on their savings or the funds that they obtain from their family and friends as the initial source of finance. The major reason for this is the limited resources that these business owners have and their income from the business is not sufficient for repaying their debt obligations. A very interesting point came forward in research by Premaratne and Kudaliyanage (2016). It showed that in spite of being an Islamic state, Maldives demonstrated the highest performance in all of South Asia in certain indicators for women, e.g. education, health services, employment and women empowerment. Despite this, the women entrepreneurs in Maldives SME are still facing problems and challenges related to skill shortage, unavailability of adequate and timely finance, limited access to larger markets and limited support from the financial institution.

A research by Roomi and Harrison(2010) showed the peculiar problems faced by women entrepreneurs in five major cities of Pakistan – Karachi, Lahore, Peshawar, Quetta and

Rawalpindi/Islamabad. The main findings were that women in Pakistan are facing: sociocultural barriers (Izzat and Pardah), barriers to capital (financial and social), and barriers to the development of entrepreneurial capacity (education and training). These barriers can be lessened by training programs in entrepreneurial competencies for women. According to Brush et al. (2009), women entrepreneurs face more socio-cultural challenges compared to their male counterparts. They are related to cultural expectations (e.g., values, attitudes, gender roles, etc.) and societal structures (e.g., family, reference groups or networks, status in society, etc.) that affect the development of women entrepreneurs. In a study in Indonesia, Tambunan (2007) examined the common constraints faced by SMEs, which were classified as lack of capital, difficulties in procuring raw materials, lack of access to information that is relevant for business, difficulties in marketing and distribution, low technological capabilities, high transportation costs, communication problems, problems caused by cumbersome and costly bureaucratic procedures, cumbersome and onerous government regulations and restrictions, lack of finance and low human resource capabilities. Danish & Smith (2012) analysed the problems faced by women entrepreneurs in Jeddah and identified the following access to loans and grants, liaising with network organisations, managing male & female staff, dealing with clients and customers, bureaucracy and procedures and business effect on personal and family life. Further, managing bureaucracy and procedures was found to be the most common problem. Ramadani (2015) identified the array of problems that women entrepreneurs are facing in Albania and found the following difficulty in establishing a balance between family and work, finance, insufficient time in order to enhance their skills through various training sessions, problems in creating high-quality contact networks, collection of quality information and lack of self- confidence. Entrepreneurial and managerial competencies amongst women can help them to become entrepreneurs and start on their own, grow and survive. But the sustainability of the firm is dependent on various factors like support from the family, skills, availability of adequate and timely finance, access to larger markets, networking etc. Furthermore, from the above-studied literature, it has been identified that gender biases, work-life balance, lack of finance, skill shortage, socio-cultural barriers, education and training, difficulties in Marketing etc., are the main problems and challenges faced by the women entrepreneurs, despite of being from different geographical locations.

Against this background, the researchers turn now to an analysis of women entrepreneurs in Gujarat based on a primary survey to understand the situation faced by the women of the state in terms of competencies required and the challenges faced by them.

## **Objectives of The Study**

- To identify the competencies required by women entrepreneurs to start a business and to sustain the same successfully.
- To identify the problems and challenges faced by women entrepreneurs in running their business.

## **Research Methodology**

A survey of women entrepreneurs was conducted in Gujarat (India) to collect primary data by using structured personal interview. The structured interview was designed with a list of competencies, problems and challenges faced by the women entrepreneurs that were compiled from previous theoretical and empirical research. Data was collected by using judgement sampling.

The sample size was 100, and the sample was drawn from various states of Gujarat like Ahmedabad & Gandhinagar, Vadodara, Rajkot, Mehsana, Patan and Gandhidham. The entrepreneurs selected were from varied industries such as:

- Bakery & Fast food
- Tiffin services
- Health and Wellness
- Boutique
- Beauty parlour & Salon
- Jewellery
- Pre-school and Day-care
- Educationist, Toy rental services
- Food blogger
- Builder
- · Customised wooden gift articles manufacturer

Factor analysis was conducted in order to identify groups of competencies and the specific competencies that loaded onto each group. The most common problems and challenges faced by women entrepreneurs were identified through descriptive statistics. Chi-square is used to understand the association between demographic variables and the challenges faced by the women entrepreneurs.

## **Data Analysis and Discussion**

The data has been analysed in three sections. The first section presents the profile of the women entrepreneurs, which includes age, education, marital status, prior work experience. It also includes details such as motivation to become an entrepreneur and the source of finance for the business. The second section reports the requirement of competencies amongst women entrepreneurs to start a business and to sustain the same successfully. The third section discusses the problems and challenges faced by women entrepreneurs.

#### Profile of the women entrepreneurs

The entrepreneurs, who have participated in the survey, are from the varied age group starting from the early twenties to late fifties. The lowest age of the respondent is 22 years, whereas the highest age is 58 years. The majority of the respondents surveyed are in the age group of 41 to 45 years. 13% of respondents are in the age group of below 25 years and 5% are 55 years and above. The educational qualification of the respondents is as per Figure 1.





The marital status of the respondents is shown in Figure 2.

Our society is opening up towards the women who want to establish themselves in their career as well as who can maintain their family. Out of the total 100 respondents participated in the survey, we can see from the Figure 2 that 77% respondents are married and only 18% of them are unmarried followed by 4% divorced and only 1% is a widow. It is evident from figure 3 that out of the 100 respondents those who have participated in the survey, 63% have prior work experience before turning into an entrepreneur.



Figure 3





The main motivation for the respondents to become an entrepreneur is to have independence in their life. It can be seen in figure 4 that 52% of the respondents have given ranked 1 to 'Independence' followed by rank 2 to 'Source of Income', which is 35% and 'Reduced dependency on family' got the rank 3, which is 31%. Brush (1992) and Mukhtar (1992), analysed that the respondents, who own a small business felt that owning such a business improves their standard of living, empowered self confidence, improved skills and managerial capabilities, expanded social activities and communications and financial independence.

Figure 4



The majority of the respondents are seen to have used their personal finances, which includes their own funds and funding from friends & relatives, to start the business. From figure 5, it is clear that 46% of the respondents have used their own funds to commence with a business, followed by 21% getting funding from their friends & relatives. This reflects how the personal source of finance and savings of women is significant as compared to formal sources of funding to support women entrepreneurship. Only 14% of respondents have accessed finance from commercial banks, followed by 4% from private money lenders, husband and father respectively. The above scenario shows that either the circumstances for private finance is unique to that found in other studies, that show difficulties for women entrepreneurs in getting personal finance in starting stages of entrepreneurship (Andersson et al., 2007) or it shows a generalised form of bank lending practices to women (Carter et al., 2007). It shows the lack of knowledge with business and financing options available to establish and to finance firms (Ahmad, 2011). The profile of the women entrepreneurs and

114

the discussions in the previous researches show, that the women in Gujarat have both their own funds and sufficient support from the family, friends and relatives. Myers and Majluf (1984) indicated that small business owners are dependent on their savings or the funds that they obtain from their family and friends as the initial source of finance. The major reason for this is the limited resources that these business owners have and their income from the business is not sufficient for repaying their debt obligations.



#### Competencies amongst women entrepreneurs

In this study, according to the literature reviewed, it has been identified that competencies amongst women can help them to become entrepreneurs and start on their own, grow and survive. Based on which the questionnaire listed 36 competencies, required to become an entrepreneur, which were compiled from previous theoretical and empirical research (Mitchelmore, Rowley, 2013; Stefanovic, Prokic, Rankovic, 2010; Bird, 1995; Rao, Rao, Dixit, 1975). Respondents were asked the extent to which they consider themselves as having each of these competencies, on a five-point Likert scale, where1 was "absolutely important".

A factor analysis of the 36 competencies was conducted. The "best fit" factor analysis accounted for 35.46% of the variance and was obtained by using principal component factor analysis with a Varimax with Kaiser Normalization rotation method. As recommended by Hair et al. (2006), all factor loadings are greater than 0.40, and all communalities exceed 0.50.

The Cronbach's alpha model was used and values over 0.50 were considered. The Cronbach's alpha of the entire instrument came as 0.940. The Cronbach's alpha-values for

all the 36 competencies ranged from 0.936 to 0.942, indicating that the scale was internally consistent and reliable (Cronbach, 1951; Nunnally, 1978).

Table 2

Competencies	Cronbach's Alpha values	Communalities
Idea Generation	0.938	0.663
Self Confidence	0.937	0.773
Ability to recognize Opportunity	0.938	0.643
Previous Work Experience	0.942	0.718
Ability to implement Business Strategy	0.939	0.539
Ability to Control and Check Quality of Work	0.938	0.641
Efficient Resource Utilization	0.939	0.734
Creative Thinking	0.939	0.77
Desire to Succeed	0.937	0.789
Ability to sense future Threats	0.939	0.725
Exposure to Business World	0.939	0.695
Technical Knowhow	0.94	0.73
Ability to Acquire Finance	0.94	0.778
Self-Motivation	0.937	0.716
Readiness for Challenges	0.937	0.789
Ability to build on own strength	0.936	0.74
Planning Skills	0.937	0.749
Operational Skills	0.937	0.778
Ability to Manage Finance	0.938	0.782
Family-Motivation	0.939	0.751
Interpersonal Relationship building	0.938	0.726
Ability to recognise and eradicate self-weakness	0.938	0.707
Risk Taking Ability	0.938	0.759
Delegation of work	0.939	0.772
Ability to handle Crisis Situation	0.938	0.704
Passion for Work	0.938	0.787
Ability to Adapt	0.937	0.739
Managing Customer Relationship	0.938	0.781
Proactive Attitude	0.938	0.708
Leadership Qualities	0.938	0.762
Effective Resource Planning	0.937	0.718
Communication Skills	0.937	0.777
Building Customer base	0.937	0.674
Team Management Skills	0.938	0.776
Effective Resource Management	0.937	0.854
Ability to Formulate Business Strategy	0.937	0.751

Cronbach's alpha-value of the competencies

From Table 2, it can be concluded that this is a list of competencies, that women entrepreneurs believe they have as per their experience and perception and by extension, accordingly, all women entrepreneurs should have these above-mentioned competencies to start a business and to sustain the same successfully.

## Descriptive Statistics of decision making parameters under consideration

The descriptive statistics for all the variables under investigation are calculated below. The mean, standard deviation and number of respondents (N) who participated in the survey are given. Looking at the mean, one can conclude that previous work experience is the most important variable (competencies) required to become an entrepreneur amongst women, according to the respondents. It has the highest mean of 3.09.

Table 3

	Ν	Minimum	Maximum	Mean	Std.
					Deviation
Idea Generation	100	1	5	1.35	0.757
Self Confidence	100	1	5	1.33	0.766
Ability to recognize Opportunity	100	1	5	1.63	0.939
Previous Work Experience	100	1	5	3.09	1.45
Ability to implement Business Strategy	100	1	5	1.87	0.96
Ability to Control and Check Quality of Work	100	1	4	1.39	0.723
Efficient Resource Utilization	100	1	5	1.84	1.012
Creative Thinking	100	1	5	1.53	0.881
Desire to Succeed	100	1	5	1.42	0.855
Ability to sense future Threats	100	1	5	2.08	1.079
Exposure to Business World	100	1	5	2.43	1.297
Technical Knowhow	100	1	5	2.32	1.27
Ability to Acquire Finance	100	1	5	2.22	1.219
Self-Motivation	100	1	5	1.41	0.889
Readiness for Challenges	100	1	5	1.58	1.093
Ability to build on own strength	100	1	5	1.63	1.002
Planning Skills	100	1	5	1.67	0.985
Operational Skills	100	1	5	1.69	0.95
Ability to Manage Finance	100	1	5	1.85	1.114
Family-Motivation	100	1	5	1.81	1.116
Interpersonal Relationship building	100	1	5	1.65	1.019
Ability to recognize and eradicate self-weakness	100	1	5	1.97	1.167
Risk Taking Ability	100	1	5	1.81	1.042
Delegation of work	100	1	5	2.02	1.231
Ability to handle Crisis Situation	100	1	5	1.68	1.004
Passion for Work	100	1	5	1.29	0.686
Ability to Adapt	100	1	5	1.65	0.957
Managing Customer Relationship	100	1	5	1.36	0.732
Proactive Attitude	100	1	5	1.65	0.957
Leadership Qualities	100	1	5	1.65	0.957
Effective Resource Planning	100	1	5	1.9	1
Communication Skills	100	1	5	1.51	0.893
Building Customer base	100	1	5	1.52	0.926
Team Management Skills	100	1	5	1.93	1.157
Effective Resource Management	100	1	5	1.78	0.917
Ability to Formulate Business Strategy	100	1	5	1.76	1.016
Valid N (listwise)	100				

**Descriptive Statistics** 

#### Kaiser-Meyer-Olkin

The KMO measures the sampling adequacy, which should be greater than 0.5 for a satisfactory factor analysis to proceed. A common rule suggests that a researcher has at least 10-15 participants per variable. Kaiser (1974) recommend 0.5 as minimum (barely accepted), values between 0.7-0.8 acceptable, and values above 0.9 are superb. Here the KMO, as per Table 4 comes out to be 0.817; hence we can go ahead to process with factor analysis.

#### Bartlett's test

Bartlett's test (Bartlett, 1954) is an indication of the strength of the relationship among variables. This tests the null hypothesis that the correlation matrix is an identity matrix. An identity matrix is a matrix in which all of the diagonal elements are 1 and all off-diagonal elements are 0.

We can see from Table 4, that Bartlett's test of sphericity is significant. That is, its associated probability is less than 0.05. In fact, it is actually 0.00, that is significance level is small enough to reject the null hypothesis and accept the alternate hypothesis.

Table 4

Kaiser-Meyer-Olkin Measure of Sampling	.817	
Bartlett's Test of Sphericity	Approx. Chi-Square	2.379E3
	Df	630
	Sig.	.000

## KMO and Bartlett's Test

## Factor analysis

Factor analysis is a statistical data reduction and analysis technique that strives to explain correlations among multiple outcomes as the result of one or more underlying explanations, or factors. The technique involves data reduction, as it attempts to represent a set of variables by a smaller number. Factor structures for the study were identified on the basis of significance and clarity of the factor loadings and the interpretability and meaningfulness of the factors within the theoretical framework. This resulted in some variables that did not fit well with other items in the structure being excluded and also in the change of name of some factors due to the grouping of variables thrown up by the analysis. The final framework comprised nine factors with 35 competencies in all. The name and reliability of the responses forming each of the nine factors are shown in Table 5.

- Economic Studies (Ikonomicheski Izsledvania), 30 (4), p. 105-130.

Results of Exploratory Factor Analysis

# Table 5

			Factors								
		1	2	3	4	5	6	7	8	9	10
	Fa	ctor 1 –	Growth	compete	ncies (C	ronbac	h Alpha	= .823)			
5	Ability to implement Business Strategy	0.503	0.077	-0.07	0.118	0.11	0.034	0.453	0	0.2	0
6	Ability to Control and Check Quality of Work	0.625	0.274	0.078	0.06	0.21	-0.126	0.275	0.16	-0.01	-0.1
16	Ability to build on own strength	0.402	0.287	0.345	0.181	0.1	0.344	-0.03	0.4	0.24	0
18	Operational Skills	0.666	0.2	0.156	0.194	0.15	0.103	-0.23	0.18	0.24	0.25
27	Ability to Adapt	0.746	0.095	0.196	0.082	0.22	0.223	0.091	0.08	0.07	0.11
29	Proactive Attitude	0.538	0.232	0.016	0.488	0.06	0.213	0.103	0.11	-0.12	-0.2
	Fact	or 2 – A	ttitudina	l compe	tencies (	Cronba	ich Alph	a = .878	)		
2	Self Confidence	0.256	0.66	0.077	0.138	0.11	0.324	0.087	0.09	0.32	0.09
8	Creative Thinking	0.021	0.828	0.102	0.008	0.08	-0.027	0.102	0.22	-0.01	0.09
9	Desire to Succeed	0.184	0.514	0.048	0.201	0.07	0.471	0.373	-0.1	0.16	0.23
14	Self-Motivation	0.297	0.49	0.288	0.19	0.3	0.185	0.157	-0.1	0.32	-0.1
26	Passion for Work	0.447	0.6	0.117	0.296	0.14	0.275	-0.04	0	-0.03	0.17
28	Managing Customer Relationship	0.333	0.586	0.004	0.119	0.5	0.052	0.184	0.06	0.14	0
	Factor 3 – Strategic competencies (Cronbach Alpha = .757)										
15	Readiness for Challenges	0.218	0.255	0.761	0	0.14	0.187	0.044	0.1	0.18	0.01
17	Planning Skills	0.47	0.097	0.481	0.361	0.19	-0.163	0.014	0.26	0.09	0.14
24	Delegation of work	-0.11	0.121	0.662	0.018	-0.01	0.408	0.269	0.13	-0.09	0.21
25	Ability to handle Crisis Situation	0.305	-0.08	0.619	0.262	0.15	-0.029	0.132	0.01	0.31	0.13
	Factor	4 – Entr	epreneu	rial com	petencie	s (Cror	bach Al	pha = .8	08)		
1	Idea Generation	0.059	0.37	0.301	0.519	0.35	0.077	0.04	0.06	0	-0.2
23	Risk Taking Ability	0.152	0.094	0.32	0.616	0.12	-0.01	0.115	0.08	0.42	-0.2
35	Effective Resource Management	0.245	0.005	0.05	0.688	0.24	0.161	0.042	0.27	0.21	0.34
36	Ability to Formulate Business Strategy	0.165	0.182	0.021	0.726	0.13	0.229	0.213	0.14	0.11	0.14
	Fac	ctor 5 – F	Personal	compete	encies (C	Cronbac	h Alpha	= .808)			
20	Family-Motivation	0.147	0.157	0.002	0.155	0.8	-0.108	0.031	0.11	-0.04	0.09
21	Interpersonal Relationship building	0.122	0.104	0.068	0.014	0.65	0.467	0.133	0.13	0.05	0.12
22	Ability to recognize and eradicate self- weakness	0.387	-0.06	0.349	0.201	0.58	0	0.147	0.16	-0.05	-0.1
32	Communication Skills	0.106	0.378	0.292	0.208	0.51	0.367	-0.09	0.05	0.3	0.04
33	Building Customer base	0.378	0.196	0.185	0.257	0.47	0.267	-0.01	0	0.29	0.1

			·	·	·	Facto	ors				
		1	2	3	4	5	6	7	8	9	10
	Fact	or 6 – M	lanageria	il compe	tencies	(Cronb	ach Alph	ia = .651	.)		
3	Ability to recognize Opportunity	0.133	0.432	0.121	0.27	-0.06	0.03	0.583	0.02	0.02	0.08
10	Ability to sense future Threats	0.035	0.045	0.323	0.036	0.19	0.086	0.731	0.06	0.15	0.12
11	Exposure to Business World	0.155	0.076	-0.02	0.046	0.03	0.441	0.561	0.38	0.07	0.03
	Fact	or 7 – A	ptitudine	il compe	tencies	(Cronb	ach Alph	na = .721	)		
7	Efficient Resource Utilization	0.306	0.177	0.136	0.182	-0.06	0.121	0.075	0.72	-0.12	0.09
12	Technical Knowhow	-0.04	0.01	0.045	0.077	0.33	-0.045	0.102	0.74	0.21	0.11
31	Effective Resource Planning	0.196	0.138	0.267	0.352	0.13	0.16	0	0.47	0.16	0.42
	Fa	ctor 8 –	Financia	l compe	tencies (	Cronba	ich Alph	a = .60)			
13	Ability to Acquire Finance	-0.19	0.099	0.016	0.172	-0.02	0.092	0.409	0.29	0.64	0.19
19	Ability to Manage Finance	0.391	0.181	0.253	0.141	0.04	-0.011	0.092	0.03	0.71	0
	Facto	r 9 – Or	ganisatic	nal com	petencie	es (Croi	nbach Al	pha = .6	0)		
4	Previous Work Experience	0.051	0.068	0.037	-0.06	0.06	0.034	0.088	0.11	0.02	0.83
34	Team Management Skills	-0.01	0.154	0.514	0.27	0.02	0.116	0.137	0.09	-0.01	0.61

Banerjee, R., Desai, A. (2021). A Study of Competencies and Challenges of Indian Women Entrepreneurs.

In order to establish convergent validity and discriminant validity of the constructs, the test suggested by Fornell and Larcker (1981) was used.

Convergent and Discriminant Validity

## Table 6

Factor	Scale Composite Reliability	Cronbach's Alpha	AVE
Growth competencies	0.756	0.823	0.4
Attitudinal competencies	0.787	0.878	0.4
Strategic competencies	0.729	0.757	0.41
Entrepreneurial competencies	0.734	0.808	0.41
Personal competencies	0.746	0.808	0.4
Managerial competencies	0.66	0.651	0.4
Aptitudinal competencies	0.684	0.721	0.43
Financial competencies	0.625	0.6	0.45
Organisational competencies	0.686	0.6	0.53

The reliability of the factors was checked by calculating Cronbach Alpha. Table 6 shows composite reliability, Cronbach Alpha reliability and average variance extracted (AVE) for each factor. For each factor, the value of Cronbach Alpha was greater than 0.6. The values of scale composite reliability (SCR) were found to be greater than 0.6 for all the factors. AVE for the nine factors is greater than 0.40. AVE should be higher than 0.5. However, the value of 0.4 is acceptable due to the condition that if AVE value is less than 0.5, but the composite

reliability is higher than 0.6, the convergent validity of the construct is acceptable (Fornell, Larcker, 1981).

Therefore, the constructs of the framework presented in the paper possessed both convergent and discriminant validity can be inferred (Singh, Nandan, Chawla, 2015).

The first factor of competencies have been grouped as "Growth competencies" as they include:

- Ability to implement business strategy
- Ability to control and check the quality of work
- Ability to build on own strength
- Operational skills
- Ability to adapt
- Proactive attitude

The second factor of competencies have been grouped as "Attitudinal competencies" as they include:

- Self-confidence
- Creative thinking
- Desire to succeed
- Self Motivation
- Passion for work
- Managing customer relationship

The third factor of competencies have been grouped as "Strategic competencies" as they include:

- Readiness for Challenges
- Planning Skills
- Delegation of work
- Ability to handle Crisis Situation

The fourth factor of competencies have been grouped as "Entrepreneurial competencies" as they include:

- Idea Generation
- Risk-Taking Ability
- Effective Resource Management
- Ability to Formulate Business Strategy

The fifth factor of competencies have been grouped as "Personal competencies" as they include:

- Family-Motivation
- Interpersonal Relationship building
- · Ability to recognise and eradicate self-weakness
- Communication Skills
- Building Customer base

The sixth factor of competencies have been grouped as "Managerial competencies" as they include:

- Ability to recognise an Opportunity
- Ability to sense future Threats
- Exposure to Business World

The seventh factor of competencies have been grouped as "Aptitudinal competencies" as they include:

- Efficient Resource Utilisation
- Technical Knowhow
- Effective Resource Planning

The eighth factor of competencies have been grouped as "Financial competencies" as they include:

- Ability to Acquire Finance
- Ability to Manage Finance

The ninth factor of competencies have been grouped as "Organisational competencies" as they include:

- Previous Work Experience
- Team Management Skills

All factors showed a significant factor loading and no blurred loading across factors was observed. All nine factors had attributes that were interpretable and groupable according to the theoretical framework. Based on the above factor interpretation, the researchers have formed 9 clusters of factors, namely, Growth competencies, Attitudinal competencies, Strategic competencies, Entrepreneurial competencies (Mitchelmore, Rowley, 2013), Personal competencies, Financial competencies and Organisational competencies which were supported by previous researches under which the 36 competencies have been clubbed. Leadership qualities were one of the competencies, which came as a single factor as a result

of factor analysis was dropped from the final groups. Consequently, the results were considered viable and factor nomenclature was assigned on the basis of the groups of variables.

#### Problems and challenges faced by women entrepreneurs

The respondents were asked to rate the below-mentioned problems and challenges that they consider based on their perception and experience. From the table below, it is apparent that the major challenges which these women entrepreneurs are facing are related to:

- Difficulty in Work-Life Balance (33%) Danish & Smith (2012)found that the most significant challenge faced by women entrepreneurs in Jeddah is the effect of business on personal and family life. Ramadani (2015) identified that women entrepreneurs are facing difficulty in establishing a balance between family and work in Albania.
- Difficulties in marketing (30%) (Tambunan, 2007) examined the common constraints faced by SMEs, like difficulties in marketing and distribution. Premaratne and Kudaliyanage (2016) identified that women entrepreneurs in SMEs of Maldives are having limited access to larger markets.
- High Socio-cultural Barriers (29%) (Brush et al. 2009), Brush et al. (2009), women entrepreneurs face more socio-cultural challenges compared to their male counterparts. They are related to cultural expectations (e.g., values, attitudes, gender roles, etc.) and societal structures (e.g., family, reference groups or networks, status in society, etc.) that affect the development of women entrepreneurs. (Roomi, Harrison, 2010) investigated that Pakistani women entrepreneurs face particular barriers of socio-cultural like Izzat and Pardah.
- Lack of finance (27%) which is supported by other researchers that getting finance is a predominantly significant barrier to women entrepreneurs (Tambunan, 2007; Andersson et al., 2007; Robb, Coleman, 2010). Myers and Majluf (1984) indicated that small and medium enterprise owners mostly depend on their personal savings or funds obtained from their family members and friends as initial sources of finance. The complicated procedures like paperwork, keeping security against the loan, providing guarantor, the requirement of a male as one of the borrowers, when applying for a loan as found out from the survey are some of the factors which keeps them away from taking funds from the formal sources like banks, NBFCs etc.
- Complicated Bureaucracy & Procedures (24%) (Tambunan, 2007) examined the common constraints faced by SMEs like Problems caused by cumbersome and costly bureaucratic procedures and Cumbersome and onerous government regulations and restrictions. Danish & Smith (2012) analysed the challenges faced by women entrepreneurs in Jeddah are Bureaucracy and procedures, Liaising with network organisations and dealing with clients and customers.

From the survey analysis, which is supported by existing literature, that the challenges encountered by women entrepreneurs in the state of Gujarat (India), are similar to what have been identified in other developing countries of the world.

#### Table 7

Survey Responses of women entrepreneurs regarding problems and chanenges (%)							
Statements	Strongly disagree	Disagree	Neutral	Agree	Strongly agree		
Gender Biases	23	25	22	19	11		
Difficulty in Work Life Balance	19	16	35	33	7		
Lack of Finance	11	26	31	27	5		
Skill Shortage	22	33	14	22	9		
High Socio-Cultural Barriers	19	24	18	29	10		
Lack of Education and Training	34	28	23	12	3		
Difficulties in Marketing	14	29	20	30	7		
Low Technological Capabilities	18	31	27	17	7		
Complicated Bureaucracy & Procedures	12	23	30	24	11		
Problems in Networking	17	37	25	19	2		

Survey Responses of women entrepreneurs regarding problems and challenges (%)

## Chi-square tests

 $H_01$ : There is no significant association between age and the parameters of problems and challenges faced by the women entrepreneurs

 $H_1$ : There is a significant association between age and the parameters of problems and challenges faced by the women entrepreneurs

Table 8

Null Hypothesis	Alternate hypothesis	Results
There is no significant association between age and gender biases	There is a significant association between age and gender biases	0.055
There is no significant association between age and difficulty in work-life balance	There is a significant association between age and difficulty in work life balance	0.004*
There is no significant association between age and lack of finance	There is a significant association between age and lack of finance	0.692
There is no significant association between age and skill shortage	There is a significant association between age and skill shortage	0.41
There is no significant association between age and high socio-cultural barriers	There is a significant association between age and high socio-cultural barriers	0.408
There is no significant association between age and lack of age and training	There is a significant association between age and lack of age and training	0.568
There is no significant association between age and difficulties in marketing	There is a significant association between age and difficulties in marketing	0.737
There is no significant association between age and low technological capabilities	There is a significant association between age and low technological capabilities	0.254
There is no significant association between age and complicated bureaucracy & procedures	There is a significant association between age and complicated bureaucracy & procedures	0.86
There is no significant association between age and problems in networking	There is a significant association between age and problems in networking	0.508

Chi-square tests interpretation

From the above Table 8, the researchers have analysed that there is a significant association between age and the parameter of challenges' difficulty in the work-life balance, which is the most important challenge faced by the women entrepreneurs as identified in the survey. This is also supported by various pieces of literature, that have been studied (Danish and Smith, 2012; Ramadani, 2015). Apart from this, no significant association between age and other parameters of the problems and challenges faced by the women entrepreneurs like lack of finance, skill shortage, high socio-cultural barrier etc., have been identified.

 $H_02$ : There is no significant association between marital status and the parameters of problems and challenges faced by the women entrepreneurs

 $H_12$ : There is a significant association between marital status and the parameters of problems and challenges faced by the women entrepreneurs

Table 9

Null Hypothesis	Alternate hypothesis	Results
There is no significant association between marital status and gender biases	There is a significant association between marital status and gender biases	0.766
There is no significant association between marital status and difficulty in work-life balance	There is a significant association between marital status and difficulty in work-life balance	0.309
There is no significant association between marital status and lack of finance	There is a significant association between marital status and lack of finance	0.474
There is no significant association between marital status and skill shortage	There is a significant association between marital status and skill shortage	0.351
There is no significant association between marital status and high socio- cultural barriers	There is a significant association between marital status and high socio-cultural barriers	0.35
There is no significant association between marital status and lack of education and training	There is a significant association between marital status and lack of education and training	0.412
There is no significant association between marital status and difficulties in marketing	There is a significant association between marital status and difficulties in marketing	0.683
There is no significant association between marital status and low technological capabilities	There is a significant association between marital status and low technological capabilities	0.343
There is no significant association between marital status and complicated bureaucracy & procedures	There is a significant association between marital status and complicated bureaucracy & procedures	0.916
There is no significant association between marital status and problems in networking	There is a significant association between marital status and problems in networking	0.544

Chi-square tests interpretation

From the above Table 9, the researchers have identified that irrespective of the marital status of the women, there is no significant association with the problems and challenges faced by the women entrepreneurs. One of the reason can be that the women in India do not still want to portray their marital life in public. Moreover, quite a few of the respondents were from

business families, therefore their family might have been a key support in establishing their business. It can be seen that 77% of the respondents are married and they are running their business efficiently.

 $H_03$ : There is no significant association between education and the parameters of problems and challenges faced by the women entrepreneurs

 $H_1$ 3: There is a significant association between education and the parameters of problems and challenges faced by the women entrepreneurs

Table 10

Null Hypothesis	Alternate hypothesis	Results
There is no significant association between education and gender biases	There is a significant association between education and gender biases	0.054
There is no significant association between education and difficulty in work- life balance	There is a significant association between education and difficulty in work-life balance	0.363
There is no significant association between education and lack of finance	There is a significant association between education and lack of finance	0.369
There is no significant association between education and skill shortage	There is a significant association between education and skill shortage	0.563
There is no significant association between education and high socio-cultural barriers	There is a significant association between education and high socio-cultural barriers	0.954
There is no significant association between education and lack of education and training	There is a significant association between education and lack of education and training	0.28
There is no significant association between education and difficulties in marketing	There is a significant association between education and difficulties in marketing	0.926
There is no significant association between education and low technological capabilities	There is a significant association between education and low technological capabilities	0.565
There is no significant association between education and complicated bureaucracy & procedures	There is a significant association between education and complicated bureaucracy & procedures	0.824
There is no significant association between education and problems in networking	There is a significant association between education and problems in networking	0.667

Chi-square tests interpretation

From the above Table 10, the researchers have identified that despite a rise in educational qualification, it does not reduce/impact or mitigate the problems and challenges faced as an entrepreneur. In the sample, around 64% are graduates, of which 32% are post-graduates followed by 23% are either having technical or professional qualification. Therefore it is possible that the data is inclined towards highly qualified respondents and hence the problems that lack of qualification could cause are not being reflected in the sample. Problems and challenges faced by women entrepreneurs are independent and educational qualifications have no role to play in reducing them. This finding is supported by other researches that

educated women are the driving force of the new businesses (OECD, 2004). Hamad (2005) mentioned that education is not only the reason of the empowerment of women, but also it is significant to "the economic survival of the country in years to come".

## **Conclusion and Way Forward**

The researchers have found that in global scenarios, there are various competencies that are required in entrepreneurs for running a successful business. These competencies have a deeper impact among businesses run by women entrepreneurs. With the help of the factor analysis, the researchers have found 9 different groups of competencies such as:

- 1. Growth competencies
- 2. Attitudinal competencies
- 3. Strategic competencies
- 4. Entrepreneurial competencies
- 5. Personal competencies
- 6. Managerial competencies
- 7. Aptitudinal competencies
- 8. Financial competencies
- 9. Organisational competencies

Similar to our results, Chandler and Hanks (1994), identified that two groups of skills were necessary for the entrepreneurial position and the management position, whereas Chandler and Jansen (1992), found out three groups of competencies like entrepreneurial skills, management skills and technical function. Mitchelmore and Rowley (2013), found that along with entrepreneurial competencies and management competencies, two more groups of competencies, i.e. personal & relationship competencies and human relations competencies, are relevant for business. Previous studies have also recommended that one of the areas where women entrepreneurs may outperform men is in their abilities to develop strong interpersonal relationships (Birley et al., 1987), personal competencies have also emerged in our study. Rao, Rao and Dixit (1975) identify some personal background, attitudinal, organisational and management variables that clearly shows the difference between successful and unsuccessful entrepreneurs. This is in line with our study. Man et al. (2002) have identified ten factors of entrepreneurial competencies like opportunity, commitment, relationship, operational, human, analytical, innovative, learning, strategic and personal strength competencies. Most of these competencies have reflected in our factor analysis results. However, they appear in different clusters. In our research, we have identified a few more competencies like growth competencies, strategic competencies, aptitudinal competencies and financial competencies, which were not studied in this format in the previous researches.

From Global Entrepreneurship Monitor (2012) it was found that if women believe that they have the potential or competencies for entrepreneurship, they will focus on the fact that they will work out entrepreneurial opportunities. Accordingly, the above-concluded competencies

can be used as a framework for developing the training programmes for women entrepreneurship. Hence, the researchers found that these competencies affect in development and growth of the business run by women entrepreneurs. Moreover, the researchers have found that just like global scenarios, even in Gujarat, the problem and challenges faced by entrepreneurs are highly gender-specific. Despite a highly conducive business environment, women face various difficulties in establishing their business. By using descriptive statistics, the researchers have concluded that 'Difficulty in work-life balance is the challenge, that most (33%) respondents have faced in their entrepreneurial journey. 'Difficulty in Marketing' and 'High socio-cultural barriers' being the close second and third with 30% and 29% of women, facing these challenges respectively. Overall it can be concluded that despite these challenges and with the help of the competencies, women entrepreneurs across Gujarat are flourishing and entrepreneurship seems to be gaining popularity amongst women in Gujarat.

## Limitations

The survey has been conducted in the state of Gujarat with a sample size of 100 respondents, which is only one state of the entire country. This reflects a state-specific results of women entrepreneurs competencies and challenges faced. A similar study with a larger sample size, if conducted in all the states of India, would give a results on a larger scale.

#### **Practical Implications**

The outcome of this paper can be used by researchers, government agencies, non-government organisations and incubation centres to understand and develop policies like:

- Training programmes It is of utmost importance to provide technical and skill development to encourage and promote women entrepreneurship. This is one of the ways in which women empowerment can happen and the socio-cultural barrier of our country towards women can be changed. Other trainings, like helping and guiding the entrepreneurs in how to do marketing of their products and services, are also required.
- Awareness programmes It is necessary to create awareness about the existing government support available for the women entrepreneurs that will help women to know about the procedural requirement for availing the benefits. This will eventually reduce the complicated bureaucracy and procedures.
- Financial assistance programmes Lack of financial support is one of the major problem faced by women entrepreneurs. Due to the lack of knowledge and the complicated procedures, women pull themselves back from accessing the formal source of finance from banks and financial institutions. The policy should be framed in such a manner, that is easily understood and accessed by the women entrepreneurs.

These policy changes will help more and more women to become entrepreneurs and run their business successfully.

#### References

- Ahmad, S. Z. (2011). Evidence of the characteristics of women entrepreneurs in the Kingdom of Saudi Arabia: an empirical investigation. International Journal of Gender and Entrepreneurship, 3(2), p. 123-43.
- Ahmad, Seymour. (2006). Defining Entrepreneurial Activity: Definitions Supporting Frameworks for Data Collection [Online]. Available at: https://www.oecd.org/ (Accessed: 21 November 2019).
- Alturki, N., Braswell, R. (2010). Business Women in Saudi Arabia: Characteristics, Challenges, and Aspirations in a Regional Context, Monitor Group [Online]. Available at https://www.academia.edu/35892321/Businesswomen\_in\_Saudi\_Arabia\_Characteristics\_Challenges\_and \_Aspirations\_in\_a\_Regional\_Context (Accessed: 25 November 2019).
- Andersson, I., Raihan, A., Rivera, M., Sulaiman, I., Tandon, N. (2007). in Welter, F. (ed.), Handbook on Women-Owned SMEs: Challenges and Opportunities in Policies and Programmes, International Organisation for Knowledge Economy and Enterprise Development (IKED) and Global Knowledge Partners (GKP) [Online]. Available at www.iked. org/pdf/Handbook%20on%20Women-owned%20SMEs.pdf (Accessed: 2 January 2020).
- Anwar, M. U., Amber, G. R. (2012). Female Entrepreneurs A Review of the Literature and Proposed Conceptual Framework. Proceedings of 2nd International Conference on Business Management [Online]. Available at http://umt.edu.pk/icobm2012/pdf/2C-78P.pdf (Accessed: 10 February 2020).
- Bartlett, M. S. (1954). A Note on the Multiplying Factors for Various Chi-Square Approximations. Journal of the Royal Statistical Society, 16 (Series B), p. 296-298.
- Bird, B. (1995). Towards a theory of entrepreneurial competency. In: Katz, J. A., Brockhaus, R. H. (eds). Advances in Entrepreneurship, Firm Emergence and Growth, 2, p. 51-72.
- Birley, S. (1989). Female entrepreneurs: are they really any different?. Journal of Small Business Management, 27(1), p. 32-37.
- Brush, C. (1992). Research on women business owners: past trends, a new perspective and future directions. Entrepreneurship: Theory & Practice, 16, p. 5-26.
- Brush, CG, Anne de Bruin, Welter, F. (2009). A gender-aware framework for women's entrepreneurship. International Journal of Gender and Entrepreneurship, 1(1), p. 8-24.
- Carter, S., Shaw, E., Wilson, F., Lam, W. (2007). Gender, entrepreneurship and bank lending: the criteria and processes used by bank loan officers in assessing applications. – Entrepreneurship, Theory & Practice, 31(3), p. 427-44.
- Chandler, G. N., Hanks, S. H. (1994), Founder competence, the environment, and venture performance. Entrepreneurship Theory and Practice, 18(3), p. 77-89.
- Chandler, G. N., Jansen, E. (1992). The founder's self-assessed competence and venture performance. Journal of Business Venturing, 7(3), p. 223-236.
- Colombo, M. G., Grilli, L. (2005). Founders' human capital and the growth of new technology-based firms: a competence-based view. – Research Policy, 34(6), p. 795-816.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. Psychometrika, 16, p. 297-334.
- Danish, A. U., Smith, H. L. (2012). Female entrepreneurship in Saudi Arabia: opportunities and challenges. International Journal of Gender and Entrepreneurship, 4(3), p. 216-235.
- Fornell, C., Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. Journal of Marketing Research 18(1), p. 39-50.
- Global Entrepreneurship Monitor. (2010). Global Report [Online]. Available at http://www.gemconsortium.org (Accessed: 7 December 2019).
- Global Entrepreneurship Monitor. (2012). Global Report [Online]. Available at http://www.gemconsortium.org (Accessed: 7 December 2019).
- Hair Jr., J. F., Black., W. C., Babin., B. J., Anderson., R. E., L.Tatham., R. (2006). Multivariant Data Analysis. New Jersey: Pearson International Edition.
- Hamad, A. (2005). Women and education in Saudi Arabia: challenges and achievements. International Education Journal, 6(1), p. 42-64.
- Jamali, D. (2009). Constraints and opportunities facing women entrepreneurs in developing countries: A relational perspective. – Gender in Management: An International Journal, 24(4), p. 232-251.
- Kaiser, H. (1970). A Second Generation Little Giffy. Psychometrika, 35, p. 401-415.
- Kaiser, H. (1974). An Index of Factorial Simplicity. Psychometrika, 39, p. 31-36.
- Lerner, M., Brush, C., Hisrich, R. (1997). Israeli women entrepreneurs: an examination of factors affecting performance. – Journal of Business Venturing, 12(4), p. 315-39.

- Lerner, M., Almor, T. (2002). Relationships among strategic capabilities and the performance of women-owned small ventures. – Journal of Small Business Management, 40(2), p. 109-125.
- Man, T. W. Y., Lau, T., Chan, K. F. (2002). The competitiveness of small and medium enterprises: a conceptualisation with focus on entrepreneurial competencies. – Journal of Business Venturing, 17(2), p. 123-142.
- Mitchelmore, R. (2013). Entrepreneurial competencies of women entrepreneurs pursuing business growth. Journal of Small Business and Enterprise Development, 20(1), p. 125-142.
- Mitchelmore, S., Rowley, J., Shiu, E. (2014). Competencies associated with growth of women-led SMEs. Journal of Small Business and Enterprise Development, 21(4), p. 588-601.
- Mukhtar, S. (1992). Differences in male and female management characteristics: a study of owner-manager businesses. – Small Business Economics, 18(4), p. 289-311.
- Myers, S. C., Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. Journal of Financial Economics, 13(2), p. 187-221.
- Nunnally, J. C. (1978). Psychometric theory (2nd ed.). New York: McGraw-Hill.
- OECD. (2004). Women's entrepreneurship: issues and policies. Report for the 2nd OECD Conference of Ministers Responsible for Small and Medium-Sized Enterprises (SMEs), Istanbul, OECD, Paris, June 3-5 [Online]. Available at https://www.oecd.org/cfe/smes/Policy-Brief-on-Women-s-Entrepreneurship.pdf (Accessed: 12 December 19).
- Premaratne, S. P., Kudaliyanage, G. (2016). Issues, Challenges and Prospects of Women Owned Small and Medium Scale Enterprises in Maldives. – International Journal of Scientific and Research Publication, 6(9).
- Ramadani, V. (2015). The Woman Entrepreneur in Albania: An Exploratory Study on Motivation, Problems and Success Factors. – Journal of Balkan and Near Eastern Studies, 17(2), p. 204-221.
- Rao, T. V., Rao K. D., Dixit, N. (1975). Psychological and Organisational Factors in successful Entrepreneurship A Small Sample Survey. – Working Paper 1975/75. Indian Institute of Management Ahmedabad.
- Report by Ministry of Micro, small and medium enterprises, Government of India. (2016). MSME at a Glance. [Online] Available at http://msme.gov.in/sites/default/files/MSME\_at\_a\_GLANCE\_2016\_Final.pdf (Accessed 17 December 2019).
- Roomi, Harrison. (2010). Behind the veil: women-only entrepreneurship training in Pakistan. International Journal of Gender and Entrepreneurship, 2(2), p. 150-172.
- Singh, T., Nandan, S., Chawla, G. (2015). HR service dimensions of quality of work life enabled services perspectives in India. – International Journal of Indian Culture Management, 10(4), p. 460-475.
- Stefanovic, I, Prokic, S., Rankovic, L. (2010). Motivational and success factors of entrepreneurs: the evidence from a developing country. Zbornik Radova Ekonomskog Fakulteta u Rijeci, 28(2), p. 251-269.
- Tambunan, T. (2007). Development of SME and Women Entrepreneurs in a Developing Country: The Indonesian Story. – Small Enterprise Research, p. 31-51.
- UN Women Watch. (2015). The UN System: Working Together to Empower Rural Women. [Online] Available at http://www.un.org/womenwatch/ feature/ruralwomen/ (Accessed: 2 February 2020).
- 4th All India Census of MSME (2006-2007). [Online] Available at http://www.dcmsme.gov.in/publications/FinalReport010711 (Accessed: 15 December 2019).



Imad Kareem Alaamshani<sup>1</sup> Hanny Zurina Hamzah<sup>2</sup> Shivee Ranjanee Kaliappan<sup>3</sup> Normaz Wana Ismail<sup>4</sup>

Volume 30 (4), 2021

## IMPACT OF TRADE FACILITATION ON EXTENSIVE MARGIN

This paper examines the link between trade facilitation and extensive margin for 111 countries over the period of 2008 to 2014. The study employs a panel pseudo-maximum likelihood (PPML) method to estimate the model. We measure trade facilitation using more comprehensive measures of enabling trade index (ETI); market access, border administration, transport and communication infrastructure, and business environment. The novelty in using ETI is a comprehensive index that takes into account the effects of factors, policies, and services facilitating the free flow of goods over borders and to the destination. The paper has four major findings. Our results highlight that better trade facilitation leads the countries to export, import more diversified, and a wider range of products. Second, improvement in the business environment and transport and communication infrastructure in trade facilitation yield the highest return in terms of increasing the number of exported products. Third, border administration coming as the second most important factor in affecting extensive margin. Forth and most interestingly, despite economic integration, there is a considerably stronger effect on the side of exporter's trade facilitation, which shows large unexploited gains, to be reaped on the side of exporter countries trade facilitation. JEL: F13; O24; C13

## 1. Introduction

Trade costs in developing countries are still high and factors that hindering trade is substantial. Exporter and importer facing many administrative barriers such as complying with complicated regulations, deal with massive quantity paperwork, repetitive cargo inspections and waiting for prolonged customs clearance (Hornok, Koren, 2015). The ad valorem equivalent of trade cost on average, is estimated to equal 80% in developed and 300% in developing countries (Arvis et al., 2016). Moreover, delays are higher than tariffs

<sup>&</sup>lt;sup>1</sup> Imad Kareem Alaamshani, School of Business and Economics, Universiti Putra Malaysia, Malaysia, e-mail: imadupm@yahoo.com.

<sup>&</sup>lt;sup>2</sup> Hanny Zurina Hamzah, Corresponding Author, ORCID 0000-0002-3084-6395, School of Business and Economics, Universiti Putra Malaysia, Malaysia, e-mail: hannyzurina@upm.edu.my.

<sup>&</sup>lt;sup>3</sup> Shivee Ranjanee Kaliappan, School of Business and Economics, Universiti Putra Malaysia, Malaysia, e-mail: shivee@upm.edu.my.

<sup>&</sup>lt;sup>4</sup> Normaz Wana Ismail, School of Business and Economics, Universiti Putra Malaysia, Malaysia, email: nwi@upm.edu.my.

Alaamshani, I. K., Hamzah, H. Z., Kaliappan, S. R., Ismail, N. W. (2021). Impact of Trade Facilitation on Extensive Margin.

faced by developing country exporters and delay in processing cargo can be equivalent to a country distancing itself from its trade partners by about 70 km (Djankov et al., 2010; Hummels, 2007). Although the Doha Round was successful; however, the tariff cut contributed relatively small to increase the exports in developing countries (Amiti, Romalis, 2007).

Figure 1 shows the world, developing and developed countries cost to export and import per container. The figure discloses a sharp increase in the cost of export and import of developing countries. It is observed that the cost to export and import per container in developed countries has increased marginally by 5 and 3 percent respectively from 2008 to 2014. On the other hand, developing countries have experienced a severe increase in the average cost to export and import of 22 and 26 percent over the sample period. Figure 2, in turn, shows that the number of products exported and imported in the world since 2008 has reduced from 4,918 and 4,801 units to 4,949 and 4,870 units in 2014, respectively.

World Trade Organization (WTO) initiatives of trade facilitation negotiations in December 2013 at the outset of the Bali Ministerial Conference aimed to address the remaining trade costs and ease the movement of goods and services. Those costs are related to non-tariff barriers such as customs clearance administrative costs, national regulation and documentary requirements for international trade transactions (Dennis, Shepherd, 2011). One aspect of trade facilitation is providing more transparency in terms of information and government regulation. Information incompleteness can reduce extensive margin more than the intensive margin, and that is due to larger obstacles that necessitate more information in introducing new goods (Martincus et al., 2010).





With the ratification of two-thirds of WTO member countries, the trade facilitation agreement has entered into force and became an integral part of the WTO working agenda on 22 February 2017. Trade facilitation is often defined in two ways. Firstly, the narrow definition, which includes the border procedures, such as customs procedures or time for the product to cross borders. Secondly, in a broad definition, it refers to processes behind borders such as institutional efficiency, regulatory environment, service (Zarzoso, Ramos, 2008).

There are several ways to measure trade facilitation. Due to the growing importance of trade facilitation at WTO during the last 15 years, many different trade facilitation indicators have been constructed and used following the narrow or broad definition of trade facilitation to reflect the diverse nature and scope of trade facilitation (ESCAP et al., 2015). For instance, Persson (2013), Dennis & Shepherd (2011), Portugal-Perez & Wilson (2012) utilizes the World Bank's Logistics Performance Index (LPI) and Doing Business Indicators (DBI) as proxies in measuring trade facilitation. Beverelli et al. (2015) used the OECD Trade Facilitation Index to measure trade facilitation. Another measurement by Lawrence et al. (2008) is Enabling Trade Index (ETI), a comprehensive index that measures the factors, policies, and services, simplifying the free flow of goods across borders and the destination. As an innovation in this paper, we measure trade facilitation using the Enabling Trade Index that ranks the nations according to factors and policies facilitating the free movement of goods across countries and to different destinations (Geiger et al., 2016).

In the present study, we intend to use the broad definition of trade facilitation because it is believed that production capacity is primarily determined by the country's internal border policies, particularly market economies and development in the business sector infrastructure, therefore, necessitate beyond the border trade procedures (Duval & Utoktham, 2009). By the extensive margin, we mean the change in the export and import quantity of

Alaamshani, I. K., Hamzah, H. Z., Kaliappan, S. R., Ismail, N. W. (2021). Impact of Trade Facilitation on Extensive Margin.

new goods that not previously exported (Kehoe & Ruhl, 2013). We measure the extensive margin as a number of a country exports to different destinations, which introduced by Hummels & Klenow (2005). The increase in the extensive margin has a necessary consequence on the number of exporters (sectors or firms), degree of specialization and the volatility of the economy to the external shocks. According to Melitz (2003), due to high fixed costs, only a few highly productive firms could manage to export and make enough profits to cover their fixed costs required for export. Therefore, the Melitz model suggests a reciprocal and unilateral decrease in trade cost and market entry cost variables positively associated with extensive margin (Dennis, 2007; Irarrazabal et al., 2010). Entry cost can significantly determine the volume of trade flows between countries (Yeo, Deng (2019).

The remainder of this paper is structured as follows. The next section provides a review of the recent literature on trade facilitation and extensive margin. Section 3 lays out the econometric model and describes the methodology and measurement of variables. Section 4 describes the data and provides summary statistics. Section 5 estimates and presents the results. Section 6 concludes and provides policy recommendations.

#### 2. Literature Review

In the past ten years, there were quite some studies, that examined the role and benefit of trade facilitation facets on different aspects of economics. An important issue that has brought along the attention of researchers by Moïsé & Sorescu (2013) was constructing the indicators which could efficiently capture trade facilitation measures. In this regard trend in the empirical literature is incorporating several aspects of trade facilitation or multi-dimensional model which include barriers explicitly related to trade facilitation (Zaki, 2008). Dennis & Shepherd (2011), Portugal-Perez & Wilson (2012), Persson (2013) and Beverelli et al. (2015), pushed the researches more to this direction.

The literature on trade facilitation generally has divided into two main strands of researches. The first was the link between trade facilitation and trade flows. Previous literature has emphasized more the improvement effect of different trade cost factors on trade flows such as transport cost, borders, and the number of days required to trade (Zarzoso, Ramos, 2008; Huang, 2007; Baier, Bergstrand, 2001; Limão, Venables, 2001). Likewise, other studies linked the improvement in trade facilitation through the effect of transport cost on trade performance (Zarzoso, Ramos, 2008; Raballand et al., 2005). Moreover, A series of research empirically explores the benefit associated with improvements in customs, regulatory environment, and standards harmonization, business mobility, and electronic commerce (Wilson et al., 2002; Van Beers et al., 2003; Grainger, 2008; Terzi, 2011).

Some studies also focused more on the efficient way of trade facilitation implementation. For instance, Grainger (2011) emphasized that trade facilitation is inherently an operation-targeted topic and merits to be approached internationally and not domestically. Iwanow & Kirkpatrick (2009) show, that trade facilitation should accompany with the improvement in regulatory quality and infrastructure to improve the export performance. Djankov et al. (2010); Nordås (2007); Zaki (2008) estimate a gravity model by incorporating different aspects of trade facilitation in developed and developing countries. They found that

transaction time for imports and the number of documents for exports harm trade. Wilson et al. (2005) concluded that improvement in all four forms of trade facilitation such as ports, regulatory barriers, trade and enhancement in customs and use greater e-business of the 'below-average' countries 'halfway' to global average yields an increase in world trade of \$377 billion.

The second strand of researches emphasizes the role of trade facilitation on export diversification (intensive and extensive margin) with more limited empirical evidence on the extensive margin. Previous empirical results show the positive impact of trade facilitation on extensive margin Beverelli et al. (2015); Persson (2013). For example, Dennis & Shepherd, (2011) examined the trade facilitation effect on new product margin through market entry and trade facilitation. They concluded that 10 percent reduction in the cost of exporting, international transport or market entry increase diversification by 3, 4 and 1 percent, respectively. Iwanow & Kirkpatrick (2009) find that improvements in on-the-border and behind-the-border policies yield a higher return in terms of increasing manufacturing export performance. Zaki (2008) asserted that trade facilitation improves export diversification in those sectors that are more sensitive to time, such as food, textiles, and electronics.

Martincus et al. (2013) and Hummels & Schaur (2013) shows that delays have a significant negative impact on the growth rate of exports, especially for time-sensitive products and trade in parts and components. In the same way, more, Yadav (2014) find the trade facilitation measures are stronger for promoting parts and components than for final goods trade. Persson (2013) investigated the trade facilitation effect on extensive margin products of the developing countries for two different types of differentiated and homogeneous product for the cross-sectional static data and concluded that export transaction cost proxied by the number of days required to export would rise exported differentiated and homogeneous products by 0.7 and 0.4 percent respectively. On the trade facilitation effect on extensive margin studies such as Beverelli et al. (2015) and Persson (2013) mostly centred on quantifying the cross-sectional effect, which may not represent the comprehensive outlook of trade facilitation capacity. Finally, Feenstra & Ma (2014) investigated the impact of trade facilitation proxies by port efficiency on export variety using gravity regression and concluded that the port efficiency contributes significantly to the extensive margin of exports.

#### 3. Research Methodology

In this section, we used the traditional gravity model augmented with trade facilitation elements to analyzing the impact on the extensive margin of a sample of 111 developed and developing countries from 2008 to 2014. The focus of this study is to find out the linkage between trade facilitation and extensive margin. The empirical robustness of the gravity model made it a modern analytical tool. Although, the gravity equation has been used as a successful analytical instrument in many fields; environment, tourism, single currency initiation, education, and health. However, the model estimation with the traditional technique of OLS has been proved to work insufficiently in detecting zero value trade which can underpin the growth of extensive margin (Felbermayr, Kohler, 2006). The log-linear gravity regression only picks up the first-order approximation and leaves the higher-order

Alaamshani, I. K., Hamzah, H. Z., Kaliappan, S. R., Ismail, N. W. (2021). Impact of Trade Facilitation on Extensive Margin.

moments in the residuals (Silva, Tenreyro 2006). Therefore, when the variance of the error term in the equation depends on the regressors (e.g. GDP, distance), the conditional expectation of ln(eij) will also depend on the regressors, violating the condition for consistency of OLS.

The gravity model of trade mechanism works in considering only the observations of countries that have strictly positive trade flows. However, in reality, countries do not send all of their products to all other countries, also, larger country sample and a higher level of product disaggregation cause more common zero entries, particularly in developing countries (Dennis, Shepherd, 2011). In this regard, some studies suggest using some techniques to deal with zero trade and biased estimation (Burger et al., 2009; Silva, Tenreyro, 2006). For example, Silva, & Tenreyro (2006) pointed out that using ordinary least square for analyzing the log-linear parameters of gravity model under heteroscedasticity that arise due to Jensen inequality leads to inconsistency and biased estimation of real elasticities. They suggested addressing the constant elasticity model in multiplicative form using Poisson Pseudo-Maximum-Likelihood (PPML) as an alternative estimation technique for overcoming heteroscedasticity and zero value of the dependent variable. Although the PPML model can solve zero trade value, it is not reliable when the number of zero predicted by the estimated model is less than a number of observed zero values (Burger et al., 2009).

In its multiplicative form (for the sake of estimation accuracy), our regression is based on the following gravity model of bilateral trade adapted from Feenstra & Ma (2014):

$$\begin{split} (NEP)_{ijt} &= \exp[\beta_0 + \beta_1(OI)_{it} + \beta_2(OI)_{jt} + \beta_3 ln(MA)_{it} + \beta_4 ln(MA)_{jt} + \beta_5 ln(BA)_{it} + \\ \beta_6 ln(BA)_{jt} + \beta_7 ln(TCI)_{it} + \beta_8 ln(TCI)_{jt} + \beta_9 ln(BE)_{it} + \beta_{10} ln(BE)_{jt} + \beta_{11} ln(GDP)_{it} + \\ \beta_{12} ln(GDP)_{jt} + \beta_{13} ln(DIST)_{ij} + \beta_{14} (Border)_{i,j} + \beta_{15} (Colony)_{i,j} + \beta_{16} (Colony \ 1945)_{i,j} + \\ \beta_{17} (CU)_{i,j} + \beta_{18} (LANG)_{i,j} + \beta_{19} (FTA)_{i,j} + \beta_{20} (RTA)_{i,j} + \beta_{21} (EU)_{i,j} ] + \\ \lambda_t + \varepsilon_{ijt} \quad (1) \end{split}$$

Where:

 $(NEP)_{iit}$  dependent variable denotes the exported number of products from country i to j in year t. Overall index (OI) consist of sub-index of Market access, border administration, Transport and Communication Infrastructure and business environment. Market Access (MA) is extend to which the policy and cultural framework of the country welcome foreign goods into the country. Border Administration (BA) is extend to which the administration at the border facilitates the entry of goods. Transport and Communication Infrastructure (TCI) necessary to facilitate the movement of the goods from the border to the destination. Business Environment (BE) regulatory and security environment is impacting the transport business in the country. GDP<sub>i</sub> is Gross Domestic Product of country i. GDP<sub>i</sub> is Gross Domestic Product of country *j*. *DIST*<sub>*i*,*i*</sub> distance between nation *i* and *j*. Border (dummy) is whether countries share the same borders. Colony (dummy) is whether the country had a colonial relationship with its trade partner. Colon 1945 (dummy) is whether countries have common colonizer post 1945. CU (dummy) shows whether two countries i and j are participating in same Custom Union. LANG (dummy) is whether they have a common official language. Free Trade Agreement (FTA), Regional trade agreement (RTA) and European Union (EU) are dummies show whether two countries share the same agreement.  $\lambda_t$  is a vector with yearspecific dummies.  $\varepsilon_{ijt}$  is the random error term.

In this study, to check the robustness of our results, we utilized the hackman sample selection estimation. The sample selection framework is another way to handle zero observations; therefore, the cause of using sample selection is the same for using PPML. Since OLS dropping the zero value trade due to undefined logarithm of zero hence produce biased and inconsistent parameter estimates and provides unreliable results and, as noted by Heckman (1979), non-random selection of a sample from the population results in ordinary specification error or omitted variables bias. The main idea behind this is that in the existent of selectivity in the model as a result of trade and nontrade data, the coefficient will not represent the entire trading and no trading countries together. Maddala (1983, p. 233-234) suggests that the 'condition for identification for the simultaneous-equations model are well known; namely, Cov (u1, u2) = 0 [i.e. ui,  $\varepsilon_i$  in this study] or there is at least one variable in Xi not included in Zi. These are the conditions for identification in Heckman's model'. This condition is known as the exclusion restriction and in practice, this is rarely feasible because finding an acceptable exclusion restriction needs judgment.

Studies used different variables to account for exclusion restrictions and check the liability and stability of the results. For example, Disdier and Marette (2010) and Haq et al. (2013) used the insignificant variable in their models as the exclusion based on the argument that excluding insignificant variable will not affect the result of the selection model. Disdier and Marette (2010) used common language while Haq et al. (2013) used Gini variable as the exclusion variable. Yadav (2014) used the entry cost variable to satisfy exclusive restrictions for Heckman's selection estimation. We follow Disdier and Marette (2010) and Haq et al. (2013) the same argument because in most of our estimated model's of OLS, and PPML the common border is statistically insignificant. Therefore, we use this variable for pair countries as the exclusion variable.

## 4. Data Source

The dependent variable for a number of exported products (NEP) varies between 0 and 5171. We estimate the dependent variable at a level. The superiority of estimating at level is identifying a different set of variables and coefficients to determine the probability of censoring the value of the dependent variable, no multicollinearity problems, in addition, it provides a rationale for zero trade flow (Linders and De Groot, 2006; Martin, Pham, 2015). The number of the exported products are extracted from United Nation Statistic Division Commodity Trade Statistic database (COMTRADE) disaggregated Harmonized System HS6 digit 2002 bilateral trade data. The extensive margin of trade measured by the number of HS6 digit subheading products exported to the destination. For a given country, the accuracy of the import data is higher than the export because the importer country is concern about determining tariff revenue. Therefore, we use mirroring data (using information from the import of partner country or reporter). GDP data is extracted from World Bank.

Table 1 provides descriptive statistics on ETI trade facilitation export and import overall index and sub-index. The main variables are consist of the overall index, Market Access, Border Administration, Transport and Communication Infrastructure and Business Environment. Statistics are reported for both developed and developing countries for five

Alaamshani , I. K., Hamzah, H. Z., Kaliappan, S. R., Ismail, N. W. (2021). Impact of Trade Facilitation on Extensive Margin.

indexes. Specific statistic characteristics of dependent variables are reported on the level. The mean and standard deviation respectively show the average behaviour as well as the distribution of the corresponding variable. For our sample countries, the score is less for transport and communication infrastructure. Each sub-indicator ranges between 0 and 7 and table shows countries have substantial variation with the best and lowest performance.

Table 1

Variable	Obs	Mean	Std.Dev.	Min	Max
nep	60581	475.56	815.483	0	5132
Exp GDP	60610	5.92	1.75	1.61	1.74
Imp GDP	60610	5.92	1.75	1.61	1.74
Exp-overalindex	60610	4.177	0.719	2.7	6.14
Imp-overalindex	60610	4.177	0.719	2.7	6.14
ExMA	60610	4.087	0.724	1.8	6.66
ImMA	60610	4.092	0.726	1.8	6.66
ExBA	60610	4.256	1.041	2.25	6.56
ImBA	60610	4.256	1.041	2.25	6.56
ExTCI	60610	3.929	1.027	2.01	6.1
ImTCI	60610	3.928	1.026	2.01	6.1
ExBE	60610	4.421	0.766	2.61	6.29
ImBE	60610	4.421	0.766	2.61	6.29
Dist	60610	7473.784	4421.845	105.804	19649.83
Common border	60610	0.023	0.15	0	1
Colony	60610	0.017	0.128	0	1
Colonizer after 1945	60610	0.058	0.234	0	1
Custom union	60610	0.073	0.26	0	1
Common language	60610	0.108	0.31	0	1
RTA	60610	0.276	0.447	0	1
European Union	60610	0.054	0.227	0	1

Descriptive Statistics of Trade Facilitation and Extensive Margin

The sample is restricted to the data on trade facilitation proxies by ETI comprising of Market Access, Border Administration, Transport and Communication Infrastructure and Business Environment as well as other gravity variables. Independent variables in this study measured the level of trade facilitation in each country during the period 2008 onward 2014 and extracted from World Economic Forum. The complete data for the dependent variable "number of exported products" is not available for most of the countries after 2014. However, the measurement of trade facilitation (ETI) is available till 2016. Geographical distance, Common border, Common language, Colony, and Common Colonizer after 1945 are obtained from CEPII. Finally, control variables regarded to trade agreements are extracted from "Mario Larch's Regional Trade Agreements Database", which used in the following paper (Egger, Larch, 2008). Dummy variables in the model are binary that takes 0 and 1 value.

## 5. Results and Discussion

To examine the role of trade facilitation on the extensive margin, we consider several factors that motivated this study. First, the link between trade facilitation and the extensive margin is indecisive, specifically because trade facilitation requires coordination from all the countries since the supply chain is a process that involves different countries. Second, the implementation of trade facilitation encounter challenge and costs, for example, capital expenditure for trade facilitation range between EUR 3.5 million and EUR 19 million, whereas yearly operating costs is less than EUR 2.5 million (Moïsé, 2013). Therefore, the prosperity of the trade facilitation effect may not be secured and consistent as it relies on economic and geopolitical factors.

Table 2 reports the estimation outcome of the gravity model using OLS and PPML on the overall trade facilitation indicators for developed and developing countries and ranges from 1 to 7 in which 7 shows the best trade facilitation status for a country.

The column (1) of Table 2 presents the logarithm of export for the dependent variable, which leaves out pair countries zero bilateral trade. The column (2) shows Poisson Pseudo Maximum Likelihood (PPML) estimates with the multiplicative error term form and does not assume that conditional variance is proportional to the conditional mean (Silva & Tenreyro, 2006). The PPML is advantageous in naturally accounting for zero trade pairs in the data. The effect of trade facilitation on extensive margin appears positive under both OLS and PPML for all the models.

The expected sign of our primary variable overall trade facilitation for both exporters and importers in the gravity model are statistically significant, indicating the importance of overall trade facilitation on the number of exported and imported products. The results of column (2) show that approximately a 3.4% increase in the number of exported products is expected when there is a 10% improvement in trade facilitation of exporter countries. Moreover, 1.4% further increase in the number of exported products will be achieved when importer countries improve their trade facilitation by 10%. We find support for the theory that trade facilitation has a statistically significant and positive effect on trade margin.

The results hold for all our 4 main variables Market Access, Border Administration, Transport and Communication Infrastructure and Business Environment in table (2) and (4), excluding the results of exporter and importer market access which show significant with a negative sign. The negative sign for market access is reasonable when developing and least developed countries that previously have preferential trade access obtain additional market access (Djankov et al., 2010; Amiti, Romalis, 2007). The first point to note is that all the coefficients in PPML are significantly different than those, resulting from OLS estimates. One of the advantages of using PPML over OLS model is the heteroscedasticity, in which PPML is robust to the heteroscedastic error. In comparison, the PPML coefficient on exporter and importers trade facilitation index, GDP and distance are lower than OLS, suggest a smaller role for all three variables on the extensive margin. OLS estimates of geographical distance and GDP are significantly higher, which supports the findings of past studies such as Krisztin & Fischer (2015) and this happens since OLS significantly exaggerates the role of these variables on trade.

Alaamshani, I. K., Hamzah, H. Z., Kaliappan, S. R., Ismail, N. W. (2021). Impact of Trade Facilitation on Extensive Margin.

Table 2

Regression Results for Overall Index on Extensive Margin							
	(1)	(2)	(3a)	(3b)			
	OLS	PPML	Heckman ML	Selection			
overalindexexp	0.677***	0.345***	0.640***	0.142***			
*	(0.017)	(0.013)	(0.017)	(0.024)			
overalindeximp	0.373***	0.149***	0.317***	0.370***			
<b>L</b>	(0.016)	(0.014)	(0.017)	(0.021)			
Exp loggdp	0.696***	0.487***	0.663***	0.204***			
	(0.006)	(0.007)	(0.007)	(0.008)			
Imp loggdp	0.361***	0.206***	0.319***	0.232***			
	(0.006)	(0.006)	(0.007)	(0.009)			
Log dist	-0.704***	-0.411***	-0.681***	-0.193***			
	(0.022)	(0.025)	(0.020)	(0.026)			
Common border	-0.036	-0.101		0.106			
	(0.095)	(0.074)		(0.127)			
Colony	0.425***	0.335***	0.447***	0.060			
	(0.082)	(0.079)	(0.076)	(0.151)			
Common colonizer 1945	0.436***	0.303***	0.411***	0.131**			
	(0.059)	(0.063)	(0.059)	(0.058)			
Custom union	0.524***	0.315***	0.487***	0.439***			
	(0.101)	(0.075)	(0.098)	(0.127)			
Common language	0.585***	0.232***	0.521***	0.359***			
~ ~ ~	(0.040)	(0.038)	(0.041)	(0.055)			
RTA	0.104***	0.118***	0.102***	0.020			
	(0.031)	(0.037)	(0.030)	(0.033)			
European union	-0.631***	0.028	-0.497***	-0.879***			
	(0.109)	(0.074)	(0.107)	(0.136)			
Athrho				-0.764***			
				(0.072)			
Insigma				0.254***			
				(0.010)			
Rho				-0.643			
				(0.042)			
Sigma				1.289			
				(0.013)			
Lambda				-0.830			
				(0.062)			
Wald Test				110.16			
			<u>.</u>	$(0.0000)^{***}$			
cons	35.490***	22.113***	35.923***	5.410**			
	(1.948)	(2.192)	(1.801)	(2.326)			
Obs.	53922	60577	60610	53922			
R-squared	0.693	0.602					

Notes: The equations use annual data from 2008 to 2014 and allow for clustering of the error terms over time for country pairs. In OLS regressions, the gravity equation is estimated in its logarithmic form. In PPML, the gravity equation is estimated in its multiplicative form. Bilateral trade cost variables have been corrected for multilateral resistance, according to Baier and Bergstrand (2009). Time dummy is included but not reported for brevity. Models estimated using ordinary least square and Poisson-Pseudo Maximum Likelihood Stata reg & ppml commands. Standard errors are in parenthesis \*\*\* p<0.01, \*\* p<0.1.

<b>-</b>	1 1		•
l a	h	le.	- 1

1105		wite for 1014			•••••••••••••••••••••••••••••••••••••••			angin
	(1)	(2)	(3a)	(3b)	(4)	(5)	(6a)	(6b)
	OLS	PPML	Heckman	Selection	OLS	PPML	Heckman	Selection
			ML				ML	
Exp market	-0.195***	-0.122***	-0.159***	-0.202***				
access	(0.024)	(0.011)	(0.024)	(0.044)				
Imp market	-0.001**	-0.042**	-0.000	0.181***				
access	(0.000)	(0.017)	(0.000)	(0.014)				
Exp border					0.528***	0.276***	0.502***	0.153***
admin					(0.012)	(0.009)	(0.012)	(0.017)
Imp border					0.257***	0.117***	0.217***	0.307***
admin					(0.011)	(0.010)	(0.013)	(0.015)
Exp loggdp	0.825***	0.543***	0.765***	0.214***	0.671***	0.478***	0.647***	0.193***
	(0.005)	(0.006)	(0.006)	(0.008)	(0.006)	(0.007)	(0.007)	(0.008)
Imp loggdp	0.427***	0.236***	0.349***	0.277***	0.359***	0.201***	0.329***	0.222***
	(0.006)	(0.006)	(0.007)	(0.009)	(0.006)	(0.006)	(0.007)	(0.009)
Log dist	-0.709***	-0.420***	-0.675***	-0.181***	-0.708***	-0.409***	-0.689***	-0.192***
	(0.024)	(0.028)	(0.022)	(0.027)	(0.022)	(0.026)	(0.020)	(0.026)
Common	-0.039	-0.109		0.134	-0.038	-0.078		0.037
border	(0.094)	(0.070)		(0.126)	(0.094)	(0.074)		(0.129)
Colony	0.439***	0.345***	0.474***	0.089	0.424***	0.315***	0.440***	-0.050
-	(0.082)	(0.077)	(0.075)	(0.141)	(0.083)	(0.080)	(0.078)	(0.150)
Common	0.425***	0.322***	0.384***	0.125**	0.442***	0.303***	0.422***	0.135**
colonizer	(0.065)	(0.063)	(0.064)	(0.055)	(0.059)	(0.063)	(0.058)	(0.059)
1945	, ,	( )	. ,	· · /	. ,	, ,	· · · ·	. ,
Custom	0.499***	0.254***	0.443***	0.418***	0.533***	0.324***	0.502***	0.396***
union	(0.100)	(0.070)	(0.100)	(0.155)	(0.100)	(0.076)	(0.098)	(0.121)
Common	0.564***	0.257***	0.473***	0.362***	0.586***	0.240***	0.536***	0.369***
language	(0.044)	(0.037)	(0.044)	(0.054)	(0.040)	(0.038)	(0.041)	(0.056)
RTA	0.109***	0.122***	0.110***	0.012	0.093***	0.120***	0.091***	0.048
	(0.034)	(0.037)	(0.033)	(0.034)	(0.031)	(0.037)	(0.031)	(0.035)
European	-0.563***	0.236***	-0.356***	-0.770***	-0.650***	-0.012	-0.544***	-0.855***
union	(0.112)	(0.072)	(0.110)	(0.162)	(0.107)	(0.075)	(0.106)	(0.132)
Athrho				-1.147***				-0.587***
				(0.056)				(0.077)
lnsigma				0.355***				0.230***
				(0.008)				(0.011)
Rho				-0.816				-0.528
				(0.018)				(0.055)
Sigma				1.426				1.258
				(0.012)				(0.013)
Lambda				-1.165				-0.665
				(0.034)				(0.075)
Wald Test				410.64				58.30
			(	0.0000)***				(0.0000)***
cons	35.480***	22.794***	36.058***	4.348*	37.371***	22.677***	37.447***	5.993***
	(2.104)	(2.389)	(1.916)	(2.368)	(1.941)	(2.231)	(1.801)	(2.355)
Obs.	54107	60801	60830	54107	53922	60581	60610	53922
R-squared	0.647	0.585	00050	0.107	0.699	0.606	00010	22722
oquan ed	0.017	0.000	8		0.077	0.000		8

Regression Results for Market Access and Border Administration on Extensive Margin

Notes: The equations use annual data from 2008 to 2014 and allow for clustering of the error terms over time for country pairs. In OLS regressions, the gravity equation is estimated in its logarithmic form. In PPML the gravity equation is estimated in its multiplicative form. Bilateral trade cost variables have been corrected for multilateral resistance, according to Baier and Bergstrand (2009). Time dummy is included but not reported for brevity. Models estimated using ordinary least square and Poisson-Pseudo Maximum Likelihood Stata reg & ppml commands. Standard errors are in parenthesis \*\*\* p<0.01, \*\* p<0.1

Alaamshani, I. K., Hamzah, H. Z., Kaliappan, S. R., Ismail, N. W. (2021). Impact of Trade Facilitation on Extensive Margin.

However, both GDP for exporters and importers are statistically significant and positive, whereas distance has a negative effect on the trade, which is consistent with the concept of gravity theory. The border effect is insignificant for all tables. The empirical evidence shows that the border could also have no significant effect. For incidence, Dalton (2017) implicitly indicates that the highest increase in export and import was between Austria and the countries that have no common border. In our model, the variable Common colonizer shows whether the country had a common colonizer after 1945 and that is different from variable Colony, which indicates whether a country has ever had a colonial link. Colony, Common Colonizer, Custom Union, and Common language are all statistically significant and compatible with the theory. The variable Custom Union (CU) turn to be also significant for the trade of developed and developing countries. The regional trade agreement (RTA) variable is significant for the trade between developed and developing countries showing a positive impact on the trade margin. Finally, the EU trade agreement effect on the extensive margin shows negative with statistically significant effect probably the reason is that 22 out of 111 countries are in EU and their foreign trade policy is unanimous, and any country obligated to go through EU trade regulation and policy in its relationship with other countries. The negative sign of the EU agreement is not unusual, for example, Frankel et al. (1997) find that the European community over many years has had a considerable negative impact on the bilateral trade flows of its members (see Table 6.4, p. 136, and Table 6.5a, p. 141 in Frankel, Stein, Wei, 1997).5

#### 5.1 Robustness Check

To verify the robustness of our results, we use the Heckman selection maximum likelihood model. The strategy for the application of the model is that it is including two equations. First is the outcome equation that shows the relationship between extensive margin and amount of trade with those of control variables. The second is the selection equation which shows whether we observe bilateral trade or not and explicitly concerns about the probability of trade (Disdier, Marette, 2010). In practice, both models are estimated simultaneously using the maximum likelihood method or two-step.

Table 2, 3, 4 column 6a report the estimation outcome of the Heckman selection model on the trade facilitation main indicators and its components. To deal with county-pair unobserved heterogeneity and account for the multilateral trade resistance effect, we follow the proposed procedure by Baier and Bergstrand (2009). The third and fourth columns respectively show the trade equation and selection equation for Heckman ML that both are the function of trade cost. The positive and significant sign of the selection equation parameters points out that the probability of trade increases with the improvement in the trade facilitation of exporters and importers. On the other hand, the estimated parameters with negative sign on the trade cost factors increase. All the variables of the selection equations for developing and developed countries are significant except variable Common border and historical Colony. Moreover, the results of the Heckman selection indicate that all outcome parameters in PPML are robust, excluding the discrepancies on the side of regional trade agreements (RTA) with the baseline model.

<sup>&</sup>lt;sup>5</sup> This fact has been reported by Tenreyro (2007).

#### Table 4

			LAU		Igill			
	(1)	(2)	(3a)	(3b)	(4)	(5)	(6a)	(6b)
	OLS	PPML	Heckman ML	Selection	OLS	PPML	Heckman ML	Selection
Exp TCI	0.555***	0.305***	0.532***	0.066***				
<sup>^</sup>	(0.013)	(0.011)	(0.013)	(0.018)				
Imp TCI	0.303***	0.122***	0.255***	0.308***				
	(0.013)	(0.012)	(0.013)	(0.018)				
Exp business					0.434***	0.345***	0.403***	0.073***
environment					(0.015)	(0.013)	(0.015)	(0.018)
Imp business					0.233***	0.149***	0.213***	0.078***
environment					(0.015)	(0.014)	(0.015)	(0.016)
Exp loggdp	0.631***	0.446***	0.599***	0.213***	0.758***	0.487***	0.712***	0.203***
	(0.007)	(0.007)	(0.008)	(0.009)	(0.006)	(0.007)	(0.006)	(0.008)
Imp loggdp	0.324***	0.191***	0.286***	0.201***	0.395***	0.206***	0.331***	0.273***
	(0.007)	(0.007)	(0.008)	(0.010)	(0.006)	(0.006)	(0.007)	(0.010)
Log_dist	-0.702***	-0.416***	-0.679***	-0.188***	-0.705***	-0.411***	-0.678***	-0.176***
	(0.022)	(0.025)	(0.020)	(0.026)	(0.023)	(0.025)	(0.021)	(0.025)
Common	-0.033	-0.113		0.146	-0.034	-0.101		0.142
border	(0.095)	(0.073)		(0.133)	(0.096)	(0.074)		(0.121)
Colony	0.418***	0.315***	0.442***	-0.066	0.430***	0.335***	0.459***	-0.075
	(0.082)	(0.079)	(0.076)	(0.170)	(0.082)	(0.079)	(0.075)	(0.138)
Common	0.426***	0.301***	0.398***	0.127**	0.428***	0.303***	0.394***	0.121**
colonizer 1945	(0.059)	(0.063)	(0.058)	(0.058)	(0.062)	(0.063)	(0.062)	(0.057)
Custom	0.524***	0.308***	0.484***	0.413***	0.516***	0.315***	0.467***	0.409***
union	(0.100)	(0.075)	(0.097)	(0.121)	(0.104)	(0.075)	(0.102)	(0.136)
Common	0.591***	0.240***	0.525***	0.332***	0.578***	0.232***	0.500***	0.359***
language	(0.041)	(0.038)	(0.041)	(0.053)	(0.042)	(0.038)	(0.042)	(0.055)
RTA	0.103***	0.140***	0.100***	0.009	0.107***	0.118***	0.105***	0.005
	(0.031)	(0.037)	(0.030)	(0.033)	(0.032)	(0.037)	(0.031)	(0.033)
European	-0.642***	-0.061	-0.504***	-0.823***	-0.604***	0.028	-0.432***	-0.836***
union	(0.107)	(0.075)	(0.105)	(0.132)	(0.114)	(0.074)	(0.111)	(0.144)
Athrho				-0.781***				-0.957***
				(0.068)				(0.066)
Insigma				0.253***				0.306***
				(0.010)				(0.010)
Rho				-0.653				-0.743
				(0.039)				(0.029)
Sigma				1.288				1.358
				(0.013)				(0.013)
Lambda				-0.842				-1.009
				(0.057)				(0.048)
Wald Test				128.56				206.27
			(	0.0000)***				(0.0000)***
_cons	38.774***	24.213***	39.022***	6.125***	34.681***	22.113***	35.432***	4.324***
	(1.964)	(2.213)	(1.809)	(2.300)	(2.026)	(2.192)	(1.848)	(2.252)
Obs.	53922	60581	60610	53922	53922	60577	60610	53922
R-squared	0.694	0.612			0.672	0.602		

Regression Results for Transport and Communication Infrastructure and Business Environment on Extensive Margin

Notes: The equations use annual data from 2008 to 2014 and allow for clustering of the error terms over time for country pairs. In OLS regressions, the gravity equation is estimated in its logarithmic form. In PPML the gravity equation is estimated in its multiplicative form. Bilateral trade cost variables have been corrected for multilateral resistance, according to Baier and Bergstrand (2009). Time dummy is included but not reported for brevity. Models estimated using ordinary least square and Poisson-Pseudo Maximum Likelihood Stata reg & ppml commands. Standard errors are in parenthesis \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Alaamshani, I. K., Hamzah, H. Z., Kaliappan, S. R., Ismail, N. W. (2021). Impact of Trade Facilitation on Extensive Margin.

The null hypothesis of F-statistic tells that the model has no explanatory power. The p-value of the model for F-statistic is 0.000, which shows the value of the coefficient is different from zero. The test of the error between two equations is shown by *rho*, which use to decide the existence of the selection biased. Since the coefficient of *rho* estimation in Table 4 is -0.64 the null hypothesis of rho=0 are rejected and the applying OLS yield biased results; therefore, Heckman provides more efficient and consistent estimates. Alternatively, the significant sign of *Athrho* supports the choice of the parameter associated with the ratio (i.e., the ratio of means of two random variables) in the model, is an outcome of (rho\*sigma). Wald test also witnesses significant sign, which is an indication of the right level of model explanation. The interpretation of *rho* and *Athrho* estimation can be seen through all the tables and their significance in all the models indicates that ignoring zero trade results in biased estimation.

## 6. Conclusion

We aim to contribute to the line of research by using the composite Enabling Trade Index, an alternative comprehensive measure for trade facilitation. On the other hand, we used highly disaggregated data in measuring trade margin. Our results highlight that better trade facilitation leads the countries to export, import and it became more diversified with a wider range of products. Despite economic integration, there is a considerably stronger effect on the side of exporter's trade facilitation, which shows large unexploited gains to be reaped on the side of exporter countries. Making more effort on facilitating trade and reducing the trade restrictions by exporter countries can increase the gain from trade. However, multilateral initiatives should be considered by all the countries involving in trade facilitation in order to make it successful.

Moreover, results show that on both the exporter and importer side, the business environment that represents the comprehensive regulatory and security environment has the greatest impact on the extensive margin. Quantitatively, improvement in the business environment and transport and communication infrastructure in trade facilitation yield the highest return in term of increasing the number of exported products. Border administration coming as the second most important factor in affecting extensive margin. As it has highlighted in majority of researches, the importance of considering the cost of trade facilitation implementation. This study did not estimate the cost of trade facilitation implementation, which may overestimate the potential gain of the policy.

Future studies should also concentrate on the way to simulate more countries toward economic integration, specifically by reducing fixed entry cost in order to reap more benefit from trade facilitation. Trade facilitation not only needs collective actions by all the participating countries but also further economic integration from all non-participating parties. The more companies supply and participate to sell abroad, the more they benefit from trade facilitation measures. Reforms in terms of introducing, modernizing and intensifying Information and Communication Technology (ICT) such as e-Customs services are important for developing and least developed countries in order to reduce the use of paper documents and customs bureaucracy customs procedures.
#### References

- Arvis, J.-F., Duval, Y., Shepherd, B., Utoktham, C., Raj, A. (2016). Trade Costs in the Developing World: 1996-2010. – World Trade Review, 15(03), p. 451-474.
- Amiti, M., Romalis, J. (2007). Will the Doha Round lead to preference erosion?. IMF Staff Papers, 54(2), p. 338-384. https://doi.org/10.1057/palgrave.imfsp.9450009.
- Baier, S. L., Bergstrand, J. H. (2001). The growth of world trade: tariffs, transport costs, and income similarity. Journal of International Economics, 53(1), p. 1-27.
- Baier, S. L., & Bergstrand, J. H. (2009). Bonus vetus OLS: A simple method for approximating international tradecost effects using the gravity equation. Journal of International Economics, 77(1): 77–85.
- Burger, M., Van Oort, F., Linders, G. J. (2009). On the specification of the gravity model of trade: zeros, excess zeros and zero-inflated estimation. – Spatial Economic Analysis, 4(2), p. 167-190.
- Beverelli, C., Neumueller, S., Teh, R. (2015). Export Diversification Effects of the WTO Trade Facilitation Agreement. – World Development, 76, p. 293-310.
- Dalton, J. T. (2017). EU Enlargement and the New Goods Margin in Austrian Trade. Open Economies Review, 28(1), p. 61-78. https://doi.org/10.1007/s11079-016-9399-7.
- Dennis, B. S. A. (2007). Trade Costs, Barriers to Entry, and Export Diversification in Developing Countries. Working Paper 4368.
- Dennis, A., Shepherd, B. (2011). Trade facilitation and export diversification. World Economy, 34(1), p. 101-122. https://doi.org/10.1111/j.1467-9701.2010.01303.x.
- Disdier, A. C., Marette, S. (2010). The combination of gravity and welfare approaches for evaluating non-tariff measures. – American Journal of Agricultural Economics, 92(3), p. 713-726. https://doi.org/10.1093/ajae/aaq026.
- Djankov, S., Freund, C., Pham, C. S. (2010). Trading on Time. Review of Economics and Statistics, 92(1), p. 166-173. https://doi.org/10.1162/rest.2009.11498.

Duval, Y., Utoktham, C. (2009). Behind the border trade facilitation in Asia-Pacific: cost of trade, credit information, contract enforcement and regulatory coherence (No. 67). ARTNeT Working Paper Series.

Egger, P., Larch, M. (2008). Interdependent preferential trade agreement memberships: An empirical analysis. – Journal of International Economics, 76(2), p. 384-399.

Feenstra, R. C., Ma, H. (2014). Trade Facilitation and the Extensive Margin of Exports. – Japanese Economic Review, 65(2), p. 158-177. https://doi.org/10.1111/jere.12031.

- Felbermayr, G. J., Kohler, W. (2006). Exploring the Intensive and Extensive Margins of World Trade. Review of World Economics, 142(4), p. 642-674.
- Frankel, J. A., Stein, E., Wei, S. J. (1997). Regional trading blocs in the world economic system. Washington, DC: Peterson Institute.
- Grainger, A. (2008). Customs and trade facilitation: from concepts to implementation. World Customs Journal, 2(1), p. 17-30.
- Grainger, A. (2011). Trade Facilitation: A Conceptual Review. Journal of World Trade, 45(1), p. 39-62. Access from the University of Nottingham repository:

http://eprints.nottingham.ac.uk/1769/1/TRAD\_45%281%29\_Andrew\_Grainger.pdf.

- Geiger, T., Battista, A. D., Doherty, S., Soininen, I. (Eds.). (2016). The Global Enabling Trade Report 2016. World Economic Forum: Geneva, Switzerland.
- Haq, Z. U., Meilke, K., Cranfield, J. (2013). Selection bias in a gravity model of agrifood trade. European Review of Agricultural Economics, 40(2), p. 331-360.
- Heckman, J. J. (1979). Sample selection bias as a specification error. Econometrica. Journal of the econometric society, 47(1), 153-161. https://doi:10.2307/1912352.

Hummels, D., Klenow, P. J. (2005). The Variety and Quality of a Nation's Exports. – American Economic Review, 95(3), p. 704-723. https://doi.org/10.1257/0002828054201396.

- Hummels, D. (2007). Transportation costs and international trade in the second era of globalization. Journal of Economic perspectives, 21(3), p. 131-154.
- Hummels, D., Schaur, G. (2013). Time as a trade barrier. American Economic Review, 103(7), p. 2935-2959 http://dx.doi.org/10.1257/aer.103.7.2935.
- Huang, R. R. (2007). Distance and trade: Disentangling unfamiliarity effects and transport cost effects. European Economic Review, 51(1), p. 161-181. http://doi:10.1016/j.euroecorev.2005.11.004.

Hornok, C., Koren, M. (2015). Administrative barriers to trade. – Journal of International Economics, 96(S1), p. S110-S122. https://doi.org/10.1016/j.jinteco.2015.01.002.

Irarrazabal, A. A., Moxnes, A., Opromolla, L. D. (2010). The Tip of the Iceberg: Modeling Trade Costs and

Alaamshani , I. K., Hamzah, H. Z., Kaliappan, S. R., Ismail, N. W. (2021). Impact of Trade Facilitation on Extensive Margin.

Implications for Intra-Industry Reallocation, mimeo, Dartmouth College.

- Iwanow, T., Kirkpatrick, C. (2009). Trade facilitation and manufactured exports: Is Africa different?. World Development, 37(6), p. 1039-1050. https://doi:10.1016/j.worlddev.2008.09.014.
- Kehoe, T. J., Ruhl, K. J. (2013). How Important Is the New Goods Margin in International Trade?. Journal of Political Economy, 121(2), p. 358-392. https://doi.org/10.1086/670272.
- Krisztin, T., Fischer, M. M. (2015). The Gravity Model for International Trade: Specification and Estimation Issues. – Spatial Economic Analysis, 10(4), p. 451-470.
- Lawrence, R. Z., Blanke, J., Hanouz, M. D., & Moavenzadeh, J. (Eds.). (2008). The global enabling trade report 2008. World Economic Forum. Geneva.
- Linders, G. J., & De Groot, H. L. (2006). Estimation of the gravity equation in the presence of zero flows. Tinbergen Institute Discussion Paper No. 06-072/3
- Limao, N., Venables, A. J. (2001). Infrastructure, geographical disadvantage, transport costs, and trade. The World Bank Economic Review, 15(3), p. 451-479. https://doi:10.1093/wber/15.3.451.
- Maddala, G. S. (1983). Limited-Dependent and Qualitative Variables in Econometrics. New York, NY: Cambridge university press
- Martineus, C. V., Carballo, J., Graziano, A. (2013). Customs as doorkeepers: What are their effects on international trade. Inter-American Development Bank.
- Martin, W., & Pham, C. S. (2015). Estimating the gravity model when zero trade flows are frequent and economically determined. The World Bank. Policy Research Working Paper 7308
- Martineus, C. V., Estevadeordal, A., Gallo, A., Luna, J. (2010). Information barriers, export promotion institutions, and the extensive margin of trade. – Review of World Economics, 146(1), 91-111.
- Martinez-Zarzoso, I., Márquez-Ramos, L. (2008). The effect of trade facilitation on sectoral trade. The BE Journal of Economic Analysis & Policy, 8(1). https://doi:10.2202/1935-1682.1927.
- Melitz, M. J. (2003). The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity. Econometrica, 71(6), p. 1695-1725. https://doi.org/10.1111/1468-0262.00467.
- Moïsé, E. (2013). The costs and challenges of implementing trade facilitation measures. OECD Trade Policy Papers, N 157, OECD Publishing, Paris.
- Moïsé, E., Sorescu, S. (2013). Trade Facilitation Indicators: The Potential Impact of Trade Facilitation on Developing Countries' Trade. OECD Publishing.
- Nordås, H. K. (2007). Time as a trade barrier. OECD Economic Studies, N 42, 2006/1. https://doi.org/10.1787/eco\_studies-v2006-art4-en.
- United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), Organization for Economic Cooperation and Development, Asian Development Bank, World Bank, International Trade Centre, World Customs Organization, United Nations Conference on Trade and Development, United Nations Network of Experts for Paperless Trade and Transport in Asia and the Pacific, China International Electronic Commerce Center, & New Zealand Ministry of Foreign Affairs and Trade. (2015). *Indicators for Trade Facilitation: A Handbook version 1.0.* Retrieved from http://tfig.unece.org/pdf\_files/Indicators-for-Trade-Facilitation-ESCAP-OECD-Handbook.pdf
- Persson, M. (2013). Trade facilitation and the extensive margin. The Journal of International Trade & Economic Development, 22(5), p. 658-693. https://doi.org/10.1080/09638199.2011.587019.
- Portugal-Perez, A., Wilson, J. S. (2012). Export Performance and Trade Facilitation Reform: Hard and Soft Infrastructure. – World Development, 40(7), p. 1295-1307.
- Raballand, G., Kunth, A., Auty, R. (2005). Central Asia's transport cost burden and its impact on trade. Economic Systems, 29(1), p. 6-31. https://doi.org/10.1016/j.ecosys.2005.02.004.
- Silva, J. S., Tenreyro, S. (2006). The log of gravity. The Review of Economics and statistics, 88(4), p. 641-658. http://www.jstor.org/stable/40043025.
- Terzi, N. (2011). The impact of e-commerce on international trade and employment. Procedia Social and Behavioral Sciences, 24, p. 745-753. https://doi.org/10.1016/j.sbspro.2011.09.010.
- Tenreyro, S. (2007). On the trade impact of nominal exchange rate volatility. Journal of Development Economics, 82(2), p. 485-508. https://doi:10.2139/ssrn.648225.
- Van Beers, C., van Bergh, J. C. D. (2003). Environmental regulation impacts on international trade: aggregate and sectoral analyses with a bilateral trade flow model. – International Journal of Global Environmental Issues, 3(1), p. 14-29. https://doi:10.1504/ijgenvi.2003.002409.
- Wilson, J. S., Mann, C., Woo, Y. P., Assanie, N., Choi, I. (2002). Trade facilitation: A development perspective in the Asia Pacific Region. APEC Committee on Trade and Investment.
- Yadav, N. (2014). Impact of Trade Facilitation on Parts and Components Trade. International Trade Journal, 28(4), p. 287-310. https://doi.org/10.1080/08853908.2014.922040.

India

Italy

Guyana

Kazakhstan

Luxembourg

Mauritania

Mongolia

Nepal

Nigeria

Panama

Poland

Slovenia

Sri Lanka

Venezuela

Tunisia

Kyrgyz Republic

**Russian Federation** 

United Arab Emirates

Yeo, A. D., Deng, A. (2019). The trade policy effect in international trade: case of Pakistan. - Journal of Economic Structures, 8(1), p. 43. doi:10.1186/s40008-019-0169-8.

Zaki, C. (2008). Does Trade Facilitation Matter in Bilateral Trade ?. - CES Working paper. Maison des Sciences Économiques, Paris.

# APPENDIX A

Albania	Algeria	Argentina	Armenia
Australia	Austria	Azerbaijan	Bahrain
Bangladesh	Belgium	Benin	Bolivia
Bosnia and Herzegovina	Brazil	Bulgaria	Burkina Faso
Burundi	Cambodia	Cameroon	Canada Guyana
Chile	China	Colombia	Costa Rica
Croatia	Cyprus	Czech Republic	Denmark
Dominican Republic	Ecuador	Egypt	El Salvador
Estonia	Ethiopia	Finland	France

Guatemala

Hungary

Israel

Jordan

Kuwait

Mali

Lithuania

Moldova

Namibia

Pakistan

Nicaragua

Philippines

Romania

Singapore

Thailand

Ukraine

Uruguay

Zimbabwe

Spain

Greece

Ireland

Japan

Lesotho

Mexico

Oman

Peru

Qatar

Senegal

Uganda

Zambia

South Africa

Switzerland

United States

Malaysia

Mozambique

New Zealand

Korea Rep

Hong Kong SAR

List of 111	Developed	l and Deve	eloping	Countries

Germany

Honduras

Indonesia

Jamaica

Kenya

Latvia

Madagascar

Mauritius

Morocco

Norway

Paraguay

Portugal

Slovakia

Sweden

Turkey

Vietnam

Saudi Arabia

United Kingdom

Netherland



Yuliia Sotnikova<sup>1</sup> Oleg Ivanisov<sup>2</sup> Olena Lebedynska<sup>3</sup> AnastasiiaMaliukina<sup>4</sup>

Volume 30 (4), 2021

# PROFESSIONAL MOBILITY OF YOUTH: TRENDS, PROBLEMS AND PROSPECTS

In the article, the analyses of existing definitions of the category "professional mobility" has been conducted. The approachestothestudyofprofessionalmobilityhave been analyzed. Statistical data about professional mobility of the youth has been analyzed, peculiarities of the migrationofworkersabroadbyagegroups have been determined. Problems in the sphere of youth employment in Ukraine have been defined. JEL: J62

#### Introduction

In today's conditions of labour market demand and supply, the concept of "professional mobility" is becoming more widespread. It is absolutely certain that the employee is always looking for the best job. But, because of their psychological features, not everyone is able to change their usual place of work. It is easier for young people to change their place, character or mode of activity. Researchers, when considering the movement of the population, focus on its causes, consequences, measurements in numbers, but do not define the subject of discussion. But there is a need for a clear definition and it becomes more urgent when we consider that the mobility of young people in the labour market occupies an important and rather poorly researched niche.

The purpose of the article is to clarify the essence of professional mobility of youth, determine its trends and problems.

<sup>&</sup>lt;sup>1</sup>Yuliia Sotnikova, PhD (Economics), Associate Professor, Simon Kuznets Kharkiv National University of Economics, Phone: +380636202344, e-mail: Sotnikova\_yuliia@hneu.net.

<sup>&</sup>lt;sup>2</sup>Oleg Ivanisov, PhD (Economics), Associate Professor, Simon Kuznets Kharkiv National University of Economics, Phone: +30972717074, e-mail: Ivanisovoleg@ukr.net.

<sup>&</sup>lt;sup>3</sup>Olena Lebedynska, PhD (Economics), Associate Professor, Simon Kuznets Kharkiv National University of Economics, Phone: +380673863402, e-mail: Lebedinskayls@ukr.net.

<sup>&</sup>lt;sup>4</sup>AnastasiiaMaliukina, PhD (Economics), Associate Professor, Simon Kuznets Kharkiv National University of Economics, Phone: +380953186919, e-mail: anastasiiamaliukina@gmail.com.

To achieve the goal, the following tasks were solved:

- to consider existing approaches to defining the concept of "professional mobility";
- to monitor statistical data about youth employment;
- determine existing problems in the sphere of youth employment;
- find the ways of solving existing problems.

To solve the tasks in the article, the following research methods have been used: theoretical generalization, systematic analysis and scientific classification – to determine the essence and structural content of the concepts of "professional mobility", statistical analysis – to assess the state of youth mobility in Ukraine and abroad, content analysis – to define the approaches to the study of professional mobility; graphic method – for a visual representation of the stated provisions of the article.

# 1. Literature Review

The essence of mobility is sufficiently covered in the works of leading foreign and domestic scientists such as: Cairns D., Dabasi-Halász S., Jennissen R., Manafi I., Malaj V., Mayda A. M., Neubecker N., Roman M., Yechina L., Ponomarenko B., Nazarova G., Khomyuk I., Kovalisko N., Ivanchenko E., Kugel S., Igoshev B., Zayonchkovska J., Vitkovskaya G., who in their writings reveal the essence, role and importance of managing the mobility of personnel for organizations and enterprises as a whole. In works (Echina, 2010; Ivanisov, 2008; Vitkovskaya, 2005; Chomuk, 2011) have been found out that stable tendencies of increasing attention to qualitative characteristics of employees are formed at the labour market. However, the problem remains urgent and requires new and improved approaches to the formation of an effective occupational mobility system at the micro and macro level.

# 2. Findings

Professional mobility is a form of social mobility and became very important for shaping and updating the structure of society. The key role in this process is played by young people, as it belongs to social groups whose activity is most oriented towards the future, has relatively high innovative potential and, in the presence of appropriate conditions, can determine the prospect of social development.

Definitions of the category "professional mobility" are presented in Table 1.

Sotnikova, Y., Ivanisov, O., Lebedynska, O., Maliukina, A. (2021). Professional Mobility of Youth: Trends, Problems and Prospects.

Table 1

Defining the concept of the category "professional mobility"

Demining the concept of the category professional mosting			
Author	Definition		
L. V. Echina	level of generalized professional displacement or readiness for prompt movement for realization of professional and optimal ways of performing various tasks in the field of a certain profession (Echina, 2010).		
Ivanisov O. V.	Aggregate characteristics of personal and group professional and production character movements of the staff, that effectively fulfil their professional responsibilities in order to fulfil the strategic goals of the organization (Ivanisov, 2008).		
Chomuk I. V.	Result of the interaction of economic, social, socio-psychological, demographic and other factors that form the movement of labour resources (Chomuk, 2011).		
Kovalysko N. V.	Employee's ability to having a system of generic professional techniques and the ability to effectively apply them to perform any task in related industries and relatively easy to move from one activity to another (Kovalysko, 1999).		
Ivanchenko E. A.	available resources and potential opportunities (reserves) for employment in society (Ivanchenko, 2004)		
Kugel S. A.	generalizing characterization of measure and quality high level of generalized professional knowledge, readiness for prompt selection and realization of optimal ways of performing various tasks in the field of certain profession (Kugel, 1983)		
Igoshev B. M.	predicted intellectual, professional and human resource relocation (Igoshev, 2008)		
Vitkovskaya G. S.	one of the forms of socio-economic mobility, which is the process of changing the place of employment of workers, which changes the place of the worker in the system of social division of labour (Vitkovskaya, 2005)		

Source: Research result, 2019.

Professional mobility has two main functions:

- economic, that is, assisting in providing the economy with labour and improving production efficiency;
- social, is realized through improving the social structure of society, the most complete satisfaction of the needs of the employee in the labour sphere, as well as by creating conditions for self-realization and development of the individual.

Professional mobility of employees can be characterized by groups of factors as follow (Chomuk, 2011):

- 1. Factors that strongly recommend changes in labour mobility (changes in the current situation, opportunities to improve working conditions, life).
- 2. Factors, reflecting the desirability of mobility, due to changes that may occur due to socioeconomic circumstances (the status of the employee in a new place, the possibility of career advancement).

- 3. Factors, by which mobility can be assessed based on a system of characteristics that either contribute to or interfere with it (objective and subjective characteristics, degree of change, costs of movement).
- 4. Factors, reflecting human awareness of possible optionsmobility (information on job vacancies, cost and reliability of information).

Of course, professional mobility can occur at the initiative of the employee (in this case, there is a non-organizational form of mobility), and also at the initiative of the organization, that is, the organizational form of labour mobility. Thus the organizational form can be carried out either by the process of professional, qualification, job advancement – «career planning», or transferred in time, or by transfer of the employee to another workplace within the framework of one company – personnel rotation.

It is worth to mention that professional mobility is most common among the younger generation. This is primarily due to the fact that young people want to build a successful professional career and are not tied to one company.

The young population is the most mobile, and if something does not work in one place, it is easy to move to another company. But also, in most cases, young people are afraid to take the initiative and to take responsibility, the youth labour mobility is aimed at implementing new ideas and developing new equipment. At present, the most mobile are labour migrants (the type of migration according to which territorial displacement of the population for the purpose of employment occurs).

In a market economy, the employee must, throughout the entire period of employment, develop and realize the ability and willingness to change the place of work, position and function in the field of work. The employee has many changes during his working life – in the midst of 40 years of work (average). According to the data provided by the State Statistics Service of Ukraine, an employee under 20 years of age changes his or her job more willingly than at a more mature age (Figure 1).

Consequently, professional mobility is most common among the younger generation. This is primarily due to the fact that young people want to build a successful professional career and not be tied to one company. If something does not suit you at one place of work, you can easilymove to another company.

Young people, having been educated, integrate into the socio-professional structure. This process is related to the acquisition of certain economic freedom, the formation of their professional career strategy. An important point here is the opportunity for the society to provide young people with the conditions to realize their career aspirations, achieve the desired economic, educational and professional status.

The inconsistency of professional mobility of young people with its subjective harassment leads to destabilization of social relations at the level of society, and at the level of individuals to disappointment and endless search for themselves, which can be expressed in the form of destructive behaviour, illegal activity, self-destruction. In this regard, the study of the processes related to the professional mobility of young people in modern society is extremely relevant. Sotnikova, Y., Ivanisov, O., Lebedynska, O., Maliukina, A. (2021). Professional Mobility of Youth: Trends, Problems and Prospects.



Figure 1 Dependence of the employee's age and his/her readiness to change jobsin the worldin 2019

Source: State Statistics Service of Ukraine, 2019.

The professional mobility of young people could beanalyzed on the basisof the following approaches, which are presented in Figure 2. Figure 2



Source: Systematized on the basis of Echina, 2010; Vitkovskaya, 2005; Chomuk, 2011; Kovalysko, 1999.

The first approach is labour mobility or relocation. Labour mobility (relocation) is one of the types of social mobility that is manifested in the change of place of work and, accordingly, of the place of the worker in the system of the social division of labour. Labour mobility is the ability of an employee to meet the demands of society, the level of development of science, technology, and the willingness to change or move.

The labour mobility as a form of social mobility, says K. Mikulsky, is a prerequisite for the success of state programs to combat unemployment and implies a willingness and ability of the population to change their place of work, profession, position, residence and even lifestyle

in general. The process of labour mobility for each individual employee is realized in the form of a working career (working life of a person) or career mobility, which reflects the movement of a person in the space of organizational positions, which, in turn, imply a consistent change of status functions, socially-economic status (Ivanisov, 2008). The beginning of a career depends on the choice of profession and graduation from a vocational or higher education institution (Figure 3 and Figure 4).



Figure 3 Structure of professional-technical educational institution's graduates in Ukraine, 2019 (%)





Source: State Employment Service, 2019.

Sotnikova, Y., Ivanisov, O., Lebedynska, O., Maliukina, A. (2021). Professional Mobility of Youth: Trends, Problems and Prospects.

Analyzing the latest data from the State Employment Service of Ukraine for 2019, we can identify the following trends: one-third of university graduates studied in the field of social sciences, business and law, 13% had an engineering degree, 12% – studied health and 11% – in the field of humanities, arts, among graduates of professional-technical educational institution, 34% are skilled workers with the tool, 33% – workers in the field of trade and services.

In addition, according to the data of the State Employment Service of Ukraine, this service provided activities to the population (young people under 35) in accordance with Table 2.

Table 2

Oktanie under the dge of 55(thousand)					
			Deviation		
Indicator	January- March 2018	January- March 2019	Relative,%	Absolute, thousand people	
Had the status of unemployed	186,9	164,5	88,0	-22,4	
Got a job (including before becoming unemployed)	68,8	70,1	101,9	1,3	
Employed for new jobs with cost-effective employer compensation	1,1	1,9	y 1,7 p.	0,8	
Have undergone professional training	18,1	18,9	104,4	0,8	
Participated in community and other temporary work	13,9	14,0	100,7	0,1	
Number of unemployed covered by guidance services	170,0	147,9	87,0	-22,1	
	<u>As c</u>	<u>of:</u>			
	01.04.2018	01.04.2019	Deviation		
Indicato			Relative,%	Absolute, people	
Had the status of unemployed	122,6	103,3	84,3	-19,3	
of these, persons under the age of 18 years	66	103	1,6	37	
They received unemployment benefits	93,9	80,3	85,5	-13,6	

Information on the provision of services by the State Youth Employment Service of			
Ukraine under the age of 35(thousand)			

Source: State Statistics Service of Ukraine, 2019.

Analyzing the data of Table 2, we can see that almost 19 000 people after graduation received vocational training for retraining, that is, they became participants of labour mobility as one of the approaches.

At the same time, it is worth noting that young people in most cases are afraid to take the initiative, as well as take responsibility, but the labour mobility of young people is aimed at implementing new ideas, developing new equipment, introducing innovations and finding

new ways to solve old problems. Currently, the most mobile are labour migrants (a type of migration according to which there is a territorial movement of the population for the purpose of employment).

The connection between labour mobility and labour migration cannot be neglected either, as these are both displacements in order to realize their own work opportunities, skills and knowledge.

According to the analysis of statistical data, mobility among young people is heterogeneous in different European countries. 60% of unemployed Italians aged 20 to 34 do not agree to move for work. The situation is similar for Malta's youth -73%, the Netherlands -69% and Cyprus -68%. It is worth noting that the European average reaches 50% versus 65% in Ukraine. The youth of Europe are staggering: almost 90% of them find jobs at their place of residence. The variation reaches 98% of young people in Italy and 60% in Ireland (EuropeanStatisticsService, 2019).

As can be seen from Figure 5, the workers in European countries are more likely to be permanent. This article does not present any post-socialist country, but as noted by a wellknown search site in Ukraine, workers are boldly changing jobs in 1-2 years. All this leads to a high turnover rate, especially in the field of services and catering (the most popular areas due to the opportunity to realize themselves and gain the first experience). It is worth paying attention to the positive aspects of such mobility in young people, because due to a comprehensive study of the profession in different companies, the value and value of the employee as a specialist increases significantly. Of course, there are downsides - frequent changes in the employer's place of work raise the question of what is wrong with the applicant, how reliable he is, whether it is worth the cost of his adaptation and training. Therefore, it is possible to reveal yourself as an active member of the team, to achieve success in mastering the profession, and becoming a highly productive specialist in a period of 2 to 5 years, because over these years there you will develop a clear vision of problems and their solutions andhave experience workingwith different employers.





Average duration of an employee's stay in one workplace, 2018 (years)

Sotnikova, Y., Ivanisov, O., Lebedynska, O., Maliukina, A. (2021). Professional Mobility of Youth: Trends, Problems and Prospects.

The most negative trendthat has been identified in the study is that, among all Ukrainian workers that migrated abroad, the largest proportion amount young people aged 25-35 (Figure 6).

Migration of workers from Ukraine abroad by age groups, 2019

Figure 6



Source: Ptoukha Institute for Demography and Social Studies, 2019.

Studies of various statistical sites have made it possible to conclude that the most popular countries for working with Ukrainians are (Top 5 countrieswhereUkrainiansgotowork, 2019):

Poland is one-third of the total labour market abroad;

Czech Republic -1000 dollars for handymen, bakers, packers, machinists, forklifts;

Germany – a maximum of 41 000 UAH for a handyman, sorter, driver;

Slovakia – 25 000 UAH for a handyman, sorter, driver, welder and cook;

Hungary - similarly, but for 18 000 UAH;

Israel - 55 000 UAH for a cleaner, packer or handyman;

Canada – 97 000 UAH, but the opportunity to find a job there is scanty.

Bulgaria and Turkey offer wages to Ukrainians at the Ukrainian level – about UAH 15,000, but demand has been increasing since the second half of 2018.

For young people, there is another area of seasonal mobility abroad – the Scandinavian countries, namely the collection of berries (cranberries, blueberries and cloudberries). Earnings here reach about 1500 euros per month.

Speaking of more prestigious work, this is the UK. There you can practice yourself in the field of IT or jurisprudence under the mandatory condition of perfect command of English.

It is argued that the higher the level of education, the more willing the population is to migrate. In Italy, according to Eurostat, 13% of young people with tertiary education, 6%

with secondary education and 4% after school are ready to move for new jobs (European Statistics Service, 2019).

The socio-economic approach examines the impact on youth displacement by the impact of various social institutions, in particular, the labour market and education. According to UNDP 2018, Ukraine ranks 44<sup>th</sup> in the World Education Index (Rating of the countries of the world in terms of education, 2019). At Figure 7 has been presented the most educated countries, so it can be concluded that the above statement holds.

Figure 7



Ranking of the countries of the world by education index 2018

The young man chooses a future profession by the vocation and necessity of the labour market, but the latter is unstable and changes the lists of the most needed and high paying professions within four years. At Figure 8 respectively presented the TOP-5 professions in 2015 (The rating of the most prestigious among the Ukrainian professions, 2015).

At Figure 9 respectively presented the TOP-5 professions in 2019 (The most prestigious professions, 2019).

The aforementioned studies make it possible to conclude that the Internet-related areas are becoming popular now: site development, new content, social media promotion, advertising and online sales. Maximum development of the service sector stimulates the country's actual potential and helps it contribute to the talent rating. Alongside the virtual service sector, there are also services for people with real problems. In 2019, the working professions were also lagging behind, and they are popular even abroad.





However, in 2020, COVID-19 had a significant impact on the labour market and all its main indicators. Since March, the number of unemployed has grown in Ukraine steadily, from 349 thousand people in the third month of the year to 517 thousand people in June. Since July, there has been some stabilization, but as the figure of more than 500,000 patients in November shows, the lockdown is approaching. One of the striking characteristics of the labour market is the median average wage according to vacancies and resumes. The main search sites Work.ua and Rabota.ua provide approximately the same figures, on average about 12 000 UAH(Job site of Ukraine, 2020). Are wage expectations of applicants, and employers are willing to provide such wages in March – July, but in August, appetites grow, but companies are not ready to provide a higher salary.

At the same time, there was a reorientation to young professionals, such as ambitious owners of "soft skills", which are cheaper but ready to develop their own ideas and learn something new. "soft skills" include: independence in decision-making and responsibility for them, independence of opinion, adequacy and clarity of assessment, ability to work in a team and others.

The main problem, according to the authors, is the inflated expectations of young professionals for their evaluation in monetary terms. 72% of employees want to get more, without being able to soberly assess their knowledge, skills, abilities that they can invest in the company. An interesting study was conducted by the website Rabota.ua: in the article "Lack of experience, age and low salary: Ukrainians said that prevents them from finding a job"(Job site of Ukraine, 2020). The table shows the answers of respondents to the question: what problems do you have during the search? (Figure10).

#### Figure 10



What problems did you have when looking for a job, in Ukraine (%)

The main problem is the level of wages, then the lack of experience and unclear requirements, i.e. lack of communication between the recruiter and the customer.

The stratification approach is unequal access to resources of different social groups, because low or high resource groups reach different heights when moving in a vertical move (ie career ladder). The main criteria for population stratification are: income, power, education, prestige. Sotnikova, Y., Ivanisov, O., Lebedynska, O., Maliukina, A. (2021). Professional Mobility of Youth: Trends, Problems and Prospects.

The system of valuesthat prevails in society will determine the dominant in the ratio of four criteria. In most closed societies, including totalitarian (Soviet) societies, proximity to power was crucial, with access to decision-making that made it possible to rise to the top of the social pyramid by all indicators. Modern society is focused on financial success, the achievement of which opens great prospects in the acquisition of power. Revenue, power, prestige and education determine the aggregate social status of the individual, that is, its position and role in society, socio-stratification structure. Each privileged execution objectively seeks to consolidate and redeem from its heirs a prestigious status, to convert their own acquired status into a descriptive one for posterity, or at least to facilitate their process of obtaining a privileged status. At the same time, the more influential is the execution, the more it has such opportunities, for example, through the transfer of the accumulated wealth inheritance, through the creation of conditions for better education, etc. (Chomuk, 2011).

Quite an unpleasant fact, but only a few young professionals who look at old problems from a new perspective can succeed without the influence of influential acquaintances (remember 35 cases out of 100). The statistics are still not on the side of youth: only 28% of job seekers were able to convince employers of their need for the company even without experience, while 72% simply spent their time and increased the company's costs to find staff, because even with a quality recruitment system one review costs about 1 dollar USA.

The psychologically-oriented approach consists in the employee motivation, ambition, ability to self-development. The motivational and volitional processes in this approach ensure success. The main motives are high salaries, recognition in the workforce, good relations with the management, the ability to make decisions and be responsible for their results. To do this, young people go for advanced training, gain additional skills, improve their language skills, which in general will help them reach new heights.

Professional mobility of young people in conditions of instability is a very important element of development, because the ability to acquire new skills, quickly apply them, change their home to something less comfortable, but more profitable, provides the employee with confidence in the future. Although the current trend shows the consequences of COVID-19: employees are looking for the most reliable job, the statement that "people need to eat always" with the introduction of the "weekend" quarantine has ceased to be an axiom.

Occupational mobility of young people in conditions of instability is a very important element of development, because the ability to acquire new skills, to apply them quickly, to change a seat to something less comfortable, but more profitable, provides the employee with confidence in the future.

The current labour market for young people now has quite negative trends: a significant decrease in employment rates in the 25-29 age group; an increase in youth unemployment; an increase in the number of young people pursuing their own economic activity in the shadow economy; the presence of more promising areas of work abroad.

As a result, it is necessary to say that the decisive expediency of youth work in a certain company is the inability to self-develop, moving on the career ladder, as well as the inability

to raise their own social status. Young workers are ready to leave the company if their contribution to employment is not proven by decent and fair pay.

Studying the professional mobility of young people in the context of the process of their professional self-determination, selection and formation of their own trajectory of development will allow to understand the specifics, because it is the motive for choosing the future profession and status that are the most significant factors of development.

Labour mobility contributes to the optimal allocation of economic resources and provides regulation of the labour market. By far, the most mobile are labour migrants, namely the younger generation.

However, the question of the inability of the state to respond to the demands of the everevolving, flexible labour market is becoming more and more relevant in Ukraine. S. Prilipko and O. Yaroshenko write: "The current situation on the Ukrainian market is a consequence of the ineffective combination of economic reforms and state employment policy. The measures are taken to improve the economy, create the conditions for productive work and jobs are not adequate to the real situation. Employment policy is formed without the idea of a holistic model that needs to be achieved in the long run, but rather lacking in-depth mechanisms and levers of influence on the labour market. As a consequence, the latter is full of people who do not find a use of their professional potential" (Prilipko, 2018).

There is no doubt that the youth segment of the labour market in Ukraine is the most problematic part of the national labour market. Searching for the first job, the lack of level and quality of education received, professional responsibilities, lack of work experience, the inconsistency of youth inquiries and employers' proposals add to the strain on the labour market. Insufficient state attention to such problems, lack of a systematic regulatory program, and outdated legislation can be grounds for social and economic upheavals in the country.

The problem of young people in a job search is that the employer wants to get a ready-made employee who will come and immediately begin to perform the amount of work that they will be given, performing all the tasks and responsibilities that will be assigned to them. This situation is complicated by the situation on the labour market because the amount of free labour is significant and the employer can choose. This was the case before the quarantine was introduced and until August 2020, when employees are ready to work for work. After the labour market recovered, a large number of not only applicants but also vacancies appeared. On average, as on November 9, 2020, there are 5.6 applicants per vacancy on the Rabota.ua website (Job site of Ukraine, 2020).

The first major step in solving youth employment problems in Ukraine is to improve employment legislation. According to the Law of Ukraine "On Employment", which came into force on January 1, 2018, orphans, children deprived of parental care, as well as persons under the age of 15 who, with the consent of one of the parents or their parent replaces, may, exceptionally, be employed, belong to persons who have additional guarantees in favour of employment (Lazor, 2015). Persons with additional job placement guarantees include young people who have completed or stopped their education in general, vocational, technical and higher education institutions, have been released from full-time military or alternative (nonmilitary) service (within six months of graduation) and services) and first hired (Prilipko, Sotnikova, Y., Ivanisov, O., Lebedynska, O., Maliukina, A. (2021). Professional Mobility of Youth: Trends, Problems and Prospects.

2018). For their employment, enterprises, institutions and organizations with more than 20 employees are assigned a quota of 5% of the average number of full-time employees for the previous calendar year.

This rule protects the most vulnerable category of young people. A similar rule existed in the previous Law, and its preservation in the labour legislation is extremely important for the promotion of youth employment. However, at present, this job reservation rule is not able to reach its full potential.

Many small businesses and private entrepreneurs are now hiding the real numbers of their employees and not properly arranging employment relationships with them. Because of this, many employers avoid booking jobs. Therefore, there is a catastrophic lack of jobs available for booking today. This situation poses one of the many problems for the employment of Ukrainian youth. In order to address this problem, we consider it necessary to significantly increase control over the use of hired labour. Regular checks on employers in the private sector for the actual number of employees should be introduced in Ukraine. As a result of such inspections, employers should be obliged to formalize their employment relationship with their employees. This will improve the booking system for youth employment. These actions implemented by the State Employment Center, which, in accordance with current legislation in Ukraine, is the main executing and controlling entity in this area.

According to the Law of Ukraine "On Employment of Population" a young employee – a citizen of Ukraine under 35 years, a graduate of a vocational or higher educational institution, who within six months after graduation, employed independently or under the direction of an educational institution or a territorial body of a central body, executive body which implements the state employment and labour migration policies and continues to work for three years according to the qualification he acquired during his studies, including regardless of the place of employment of the first (On employment of the population: Law of Ukraine, 2015).

The current legislation stipulates conditions for engaging young workers to work in villages and towns. A young worker who has signed an employment contract for at least three years with enterprises, institutions and organizations located in such settlements is provided housing for his term of work and one-time targeted assistance at ten times the minimum wage at the expense of the State Budget of Ukraine in order and according to the list of professions (specialities) approved by the Cabinet of Ministers of Ukraine. If a young employee has been employed in such a settlement for at least ten years, the housing shall be transferred to the property. These perspectives have a positive impact both in demographic and socio-economic terms, since in recent years, it has become difficult, almost impossible, to involve a young specialist (doctor, teacher) in rural work.

At the same time, the legislator provides enhanced opportunities for youth competitiveness. The Law states that students of higher education and students of vocational schools who have completed the initial cycle of education in such institutions and have obtained qualification at the educational-qualification level "skilled worker", "junior specialist", "bachelor", "specialist" have the right to undergo internships at enterprises, institutions and organizations, regardless of ownership, type of activity and management, natural persons using hired labour, including on the terms of fixed-term employment contract (On employment of the population: Law of Ukraine, 2015).

The aforementioned is of positive importance for the student, who, during the course of study, may undergo an internship in order to master the peculiarities of his chosen profession. It is very important that the trainee's employment record should be recorded on the internship. Thus, after graduation, having obtained an educational qualification level, the young specialist will already have a certain length of service, which is a strong argument for the employer. Such specialists are competitive in the labour market as they have not only theoretical but also practical skills in a particular field. However, in today's marketplace, employers are not interested in organizing an internship: first, there is an additional cost to pay for the internship manager's services – at least 5% of the basic salary; second, the employer must develop an individual internship program for the trainee; third, in the performance of the trainee certain professional functions, he should be paid wages.

Domestic legislation should further stimulate employers to promote young workers' acquisition of practical professional skills. Some tax breaks should be provided to encourage employers to organize an internship. In this way, it is possible to ensure the implementation of additional guarantees for youth employment.

Particular attention should be paid to the ways of stimulating employment of citizens, who are not competitive in the labour market (Onemploymentofthepopulation: Law of Ukraine, 2015), envisaged by the Law of Ukraine on employment of the population, which include certain categories of young people (minors and persons who have completed vocational training and have no work experience). In order to encourage employers to employ underserved citizens in the labour market, including youth representatives, the Law provides for state compensation for the actual costs of a single compulsory state social insurance contribution for the persons concerned for each month for which this contribution is paid. With regard to youth representatives, such compensation is paid at the expense of the State Budget of Ukraine for providing young people who have received vocational or higher education, the first workplace by profession (speciality).

The obligatory conditions for receiving by the employer the specified compensation of actual expenses in the amount of a single contribution to the compulsory state social insurance are: – previous presence of the status of an unemployed person by the employed person and referral of the territorial body implementing the state policy in the field of employment; – Employment should last at least two years (On employment of the population: Law of Ukraine, 2015).

It should also be noted that in accordance with the Law of Ukraine "On Promoting the Social Development and Development of Youth in Ukraine", the state guarantees able-bodied youth with equal rights with other citizens the right to work. The state shall provide to able-bodied youth the first job for at least two years after graduation or termination of education in general, vocational-technical and higher educational establishments, completion of vocational training and retraining, as well as after dismissal from military or alternative (non-military) military service. The two-year term of the first job is calculated taking into account the time of work of the young citizen prior to the conscription for military or alternative (non-military) service.

Sotnikova, Y., Ivanisov, O., Lebedynska, O., Maliukina, A. (2021). Professional Mobility of Youth: Trends, Problems and Prospects.

Young citizens who have applied to the state employment service in search of work receive free information and professional advice to choose their type of activity, profession, place of work and, if necessary, undergo vocational training and retraining.

The state promotes the creation of youth centres of work, as well as youth public organizations (agencies, exchanges, bureaus, etc.) to ensure youth employment, implementation of vocational training programs for young people and improvement of their professional skills. The typical provision for youth centres of work is approved by the Cabinet of Ministers of Ukraine.

In case of refusal to employ young citizens within the established quota, enterprises, institutions and organizations shall be fined fifty times the non-taxable minimum income of citizens for each such refusal. These funds go to the Compulsory State Social Insurance Fund of Ukraine in case of unemployment and are used to provide employers with grants to create additional jobs for young people and their vocational training and retraining.

The state promotes the activity of youth labour units, the founders of which are the executive authorities, local self-government bodies, youth public organizations, general educational, vocational and higher educational institutions, youth labour centres. The typical provision for youth labour units is approved by the Cabinet of Ministers of Ukraine.

# 6. Conclusions

Today, the employment system of both young people in general and graduates of higher education has significant disadvantages. The legislation provides for a number of guarantees for young people and university graduates seeking employment, but they are often faced with a lack of interest on the part of employers to provide employment for young people, especially those with little or no education and work experience. Thus, the legislation of Ukraine can stimulate employers to encourage young workers. This is a positive trend towards additional employment for young people.On the other hand, without finding a job in a speciality, a young person begins to look for other ways to earn a living, thereby losing their qualifications and skills acquired during their studies. After all, some young people lose the desire to formally work in general, contributing to the growing shadow economy, corruption and crisis. Given that labour market conditions are currently dictated by the rigid requirements of a market economy, which is usually favourable to professionals with experience, it is very difficult for young workers to get a job.

The only possible way out of the mentioned social crisis is to bring the current regulatory framework in line with the provisions of the Basic Law of Ukraine and the leading world social practice, as well as to provide quality state supervision of maintaining the mechanism of employment of youth and university graduates in Ukraine.

Modern trends are increasingly ingrained in the consciousness of the impossibility of decent development in one's own country. The lack of jobs that really correspond to the capabilities of applicants, the inability to carry out a qualitative assessment of their work both in material and non-material terms leads to an "outflow of brains" from the country.

#### References

Chomuk, I. V. (2011). Definition of the concept of "mobility" in the terminology of formation of professional mobility of future engineers. Vinnytsia University. [in Ukrainian].

- Echina, L. V. (2010). External labour migration in Ukraine: causes and consequences [Strategy for development of financial – economic and social relations: regional aspect]. Kharkiv University, p. 233-234 [in Ukrainian].
- Igoshev, B. M. (2008). Development of professional mobility of specialists a promising area of activity of a pedagogical university [Pedagogical education and science]. – Scientific and pedagogical journal, 6, p. 24 [in Russian].
- Ivanchenko, E. A. (2004). Professional Mobility of Future Professionals: A Handbook. Odesa. p. 120 [in Ukrainian].
  Ivanisov, O. V. (2008). Management of labour potential: training manual. Dorovs'koy. Kharkiv University, 392 p. [in Ukrainian].

Job site of Ukraine [Retrieved fromhttps://www.work.ua/ru/][in Ukrainian].

Kovalysko, N. V. (1999).Labour mobility in the conditions of the regional labour market: Dis. Candidate of Social Sciences: 22.00.07. Lviv, 184 p. [in Ukrainian].

Kugel, S. A. (1983). Professional mobility in science. Moscow, p. 544 [in Russian].

Lazor, L. I. (2015). Youth labour in a market economy: new conceptual approaches. – Actual problems of law: theory and practice: coll. of sciences, Lugansk, 23, p. 9-16 [in Russian].

Official site of the European Statistics Service [Retrieved from https://ec.europa.eu/eurostat/home?].

Official site of the Ptoukha Institute for Demography and Social Studies of the National Academy of Sciences of Ukraine [Retrieved from http://www.idss.org.ua/].

Official site of the State Employment Service [Retrieved from https://www.dcz.gov.ua/analitics/view].

Official site of the State Statistics Service of Ukraine [Retrieved from http://www.ukrstat.gov.ua/].

On employment of the population: Law of Ukraine. Off. hanging Of Ukraine. – 2015. – № 63. – Art. 2565 [in Ukrainian].

Prilipko, S. M. (2018). Labour Law of Ukraine: a textbook. Kharkiv, 664 p. [in Ukrainian].

Rating of the countries of the world in terms of education [Retrieved from https://gtmarket.ru/ratings/education-index/education-index-info].

- The most prestigious professions in 2019 [Retrieved from http://kudapostupat.ua/top-10-najbil-sh-zatrebuvanihprofesij-v-ukrayini/].
- The rating of the most prestigious among the Ukrainian professions in 2015 was published [Retrieved from https://www.5.ua/suspilstvo/opublikovano-reitynh-naiprestyzhnishykh-sered-ukraintsiv-profesii-u-2015-rotsi-98944.html].
- Top 5 countries where Ukrainians go to work (2019) [Retrieved from https://news.finance.ua/ru/news/-/444025/top-5-stran-kuda-ukraintsy-edut-na-zarabotki].

Vitkovskaya, G. S. (2005). Forced migrants. Bad or Good. - Man and Work, 11 [in Ukrainian].



Maria Bakalova<sup>1</sup>

Volume 30 (4), 2021

# EDUCATION AND MIGRATION: THE (NON)RETURN OF BETTER EDUCATED MIGRANTS TO BULGARIA<sup>2</sup>

The article discusses the connection between education and re-migration with a focus on the return to Bulgaria of highly educated migrants, and especially those who have been educated abroad. The underlying hypothesis is that in the absence of specific personal or family reasons or clear economic motives, the return of highly educated migrants, and especially those who received education abroad, back to Bulgaria is due to the inability to find the realisation of their education abroad. Furthermore, the integration of returnees who have graduated abroad on the Bulgarian labour market is not without problems. The hypothesis is tested against qualitative and quantitative data from a 2017 national survey and 100 in-depth interviews with Bulgarian returnees. The analysis of the data reveals that the return of highly educated migrants back to Bulgaria is rather an exception in the overall picture of return, especially when it comes to migrants who have received their education abroad. Upon the return of highly educated remigrants, along with personal and family reasons for return, the rational dichotomy of "push" from the country of immigration (impossibility to find a job there) and "pull" to the homeland (availability of work in Bulgaria) stands out. For the highly educated (including those educated abroad) the "push" and "pull" factors act differently depending on the field of the received education. Moreover, professional realisation and finding a job are to a much greater extent determined by the field of education and not so much by the educational and scientific degree. Understanding the motives behind the return of highly educated Bulgarian emigrants to Bulgaria, as well as their separation into categories according to the specifics of their education and qualification, would help develop adequate incentives to support the return and reintegration into the Bulgarian society and economy. JEL: A14; F22; J60

### Introduction

As part of the growing interest in the migration issues, in recent years, the return migration or emigrants' return to their homeland has attracted increasing attention. Within this frame, a specific focus is placed on the return of highly qualified and educated migrants to their

<sup>&</sup>lt;sup>1</sup> Maria Bakalova is Associate Professor at the Department on International Relations, University of National and World Econoomy, e-mail: bakalova@unwe.bg.

 $<sup>^2</sup>$  The paper is prepared on the base of information received in the framework of the scientific project "Returning Migrants: Segmentation and Stratification of Economic Mobility", funded by the Bulgarian National Science Fund with the Ministry of Education and Science, Competition for Financing of Fundamental Scientific Research – 2016.

country of origin. Especially in the CEE and SEE countries, this issue is particularly significant due to the considerable outflow of highly qualified and educated migrants from these countries in the last decades. The end of the Cold War and the lifting of a number of political and administrative restrictions on travel and resettlement have led to a considerable increase in emigration. The latest waves of EU enlargement in 2004, 2007 and 2013 have further contributed to the steady emigration from these countries. Furthermore, uneven economic development and differences in living standards and pay levels create a breeding ground for the "brain drain" of the less developed countries (Lang, 2013). Especially in the field of science, the availability of better conditions for scientific work and development abroad is a serious factor for scientific emigration (Gaulé, 2011).

For net "exporters" of labour, the need to return highly skilled and educated migrants in order to reverse the negative effects of the "brain drain" and enhance knowledge-based development (Conway, Potter, 2007 and Ammassari, 2004, cited in Bartram, et al., 2014, p. 124; Dustmann, Weiss, 2007 and Klagge, et al., 2007, cited in Smoliner et al., 2013, p. 21) boosts the search for policies of "brain gain" and stimulates research of such returns (WMR, 2013; UNDP, 2007; IOM, 2004; Lang, 2013; Gittins, Fink, 2015). For Bulgaria, the return of emigrants "back home" is a relatively recent phenomenon, in which emigrants by far outnumber returnees (Nonchev, Hristova, 2018). In other words, Bulgaria continues to be among the net "exporters" of labour, with the outflow of skilled labour and educated migrants being particularly sensitive. Therefore, issues related to attracting and returning highly qualified and educated migrants back to the country are of particular research interest.

The present article aims to discuss education as a factor of return, the focus being on the return of highly educated emigrants to their country of origin. Empirical data on such returnees to Bulgaria are analysed in terms of the reasons and motivation for return, on the one hand, and professional realisation and re-migration plans, on the other. The object of study are the highly educated migrants and those for whom migration and/or re-migration is associated with higher education. Special focus is placed on remigrants who have received their education abroad in the implementation of a previous migration project. Several interrelated hypotheses are being tested. Education as a factor is not unambiguously linked to migration projects. It can be part of both the motivation to emigrate and to return. In the absence of specific personal or family reasons or clear economic motives, the return of highly educated migrants (especially those who have been educated abroad) back to Bulgaria is due to the inability to find a job abroad. The integration of graduates abroad who return to Bulgaria on the Bulgarian labour market is not without problems.

The rationale behind such hypotheses stems from the understanding that in educationrelated emigration, there may be a transformation of the initial migration project after graduation and an attempt to stay abroad and seek a job there. The failure of the transformed migration project (in case of a successful initial migration project, namely receiving education abroad) leads to return and an attempt to effectively use at home the educational and qualification resources generated abroad. Although it seems to be related to the assumptions of neoclassical economics that return is a consequence of structural – educational and economic – failure (de Haas, Fokemma, 2011), the return of the highly educated should rather be seen in the context of the structural approach, the theory of social

networks and transnationalism (Cassarino, 2004) as theoretical paradigms to return migration. Understanding the motives for the return of highly educated Bulgarian emigrants to Bulgaria and their segmentation into separate categories according to the specifics of their education and qualification would help develop adequate incentives to support their return and reintegration into the Bulgarian society and economy.

The article is structured in several parts. The first part presents the theoretical discussion on return migration with a focus on the return and reintegration of highly qualified and educated migrants. Data and results of other research on the return of highly educated migrants are presented. The second part of the article presents the methodology and empirical research that underlies the analysis. The questions from the conducted representative empirical sociological study (ESS) and in-depth interviews are indicated, the answers of which are analysed in connection to the research hypotheses. The third part examines and analyses the data from that ESS and especially the qualitative part in the form of in-depth interviews with a special focus on the cases of return of persons with higher education and those who have initially emigrated for education. The data are compared with the results of the quantitative ESS. The last part presents the conclusions reached regarding the return of highly educated migrants in Bulgaria and the possible implications for the development of targeted policies to attract this group of returnees.

# **Theoretical Discussion and Relevant Research Findings**

Certainly, education is a possible motivating factor for initial (outgoing) migration. Some authors specifically note that there are immigrants with a "pull" incentive who have migrated for educational reasons (Kunuroglu, et al., 2016). Achieving the goal of the initial migration project – namely getting an education abroad, would lead to two possible strategies: a) returning home after the success of the migration project (graduation abroad), or Battistella (2018) calls it a "return of achievement"; and b) transformation or upgrading of the migration project after completing the education abroad and seeking professional realisation there. In other words, these are students who leave to study abroad and originally may intend to return to their home country, but subsequently decide to stay after the end of their studies. Thus, an intention to return exists, but it keeps being postponed and ultimately fails to occur (see the classification of re-migration originally proposed by F. Bovenkerk and developed by King, 2000).

Building on the variety of theoretical understandings of return migration (following Cassarino, 2004), the importance and role of education as a factor of return can be inferred in several ways. For example, neoclassical economics (NCE) views migration as an investment in human capital and an attempt by an individual to maximise his/her usefulness by moving to a place where he/she can be more productive. In this paradigm, the return is seen as a result of structural – educational and economic – integration failure (de Haas, Fokemma, 2011). However, when the return is due to the fulfilment of migration goals (receiving education), it cannot be seen as a failure but rather as a "return of completion" (Battistella, 2018). Yet, the NCE logics suggests that the individual would rather choose the

second strategy, namely to seek realisation abroad. In this case, the failure of an upgraded migration project can lead to a return, which is seen as a failure of/by the migrant.

The New Economics of Labour Migration (NELM) analyses migration processes in terms of the interdependence between migrants and their families. In these understandings, it is normal for the migrant to choose the first of the above strategies and, after successfully achieving his/her goals (completion of education abroad), to return to one's homeland and to family and relatives. The limitation of this understanding is that the mode of explanation is rationalistic, and the focus is mainly on economic factors (which in the case of education are obviously inconclusive) and the individual success-failure dichotomy, without taking into account the wider social conditions of the environment, to which the learned migrants return.

Contrary to these understandings, the Structural Approach (SA) examines migration processes and migration and return decisions in a more holistic and global context, identifying all the elements that are likely to affect migration and return (economic environment, technology, social environment, political factors). The SA perspective, according to which migration occurs in "migration systems" (Bartram, et al., 2014, p. 122), is relevant to the specifics of scientific and educational migration insofar as the return is linked to the general context understood in terms of unequal relations between the centre (host countries with better educational services and better conditions for scientific work, including in terms of payment) and the periphery (sending countries, where the conditions for education and scientific work are perceived as not so good). The SA is specifically focused on the extent to which returnees can influence the societies of origin upon return, which is also relevant to the return of educated and skilled migrants. The main shortcoming of the SA is the assumption based on the structural dichotomy that little information is exchanged between the sending and the receiving country, and hence the understanding that the return is due to incomplete information about the country of origin, and return-related expectations are clarified within the structural context in the origin country only after the arrival back home. With regard to educational re-migration, this criticism may not be entirely unfounded, as it can be assumed that a migrant who has graduated with two or more educational and scientific degrees abroad may not be fully informed about the institutional culture and procedures in the academic and scientific circles in the homeland and may face different than expected realities upon return.

In contrast, the paradigm of Transnationalism features a different understanding of return, where the focus is on the dynamics and maintenance of regular contacts and migration links between the origin and host countries, and migration is the result of the interaction of social networks in these two places (Schiller, et al., 1995). Return is seen as part of a circular system of social and economic relations and exchanges that facilitates the reintegration of migrants and through which knowledge, information and forms of belonging and participation are transferred. The possibilities for relating transnationalism to a more specific case of educational and research migrants are limited insofar as transnationalism considers the return on the basis of the assumption of maintaining cross-border ethnic and kinship ties between the country of origin and the host country and the construction of transnational identities. However, participation in an academic community gives also a sense of community identity, and contacts within that community can also be (and are)

maintained transnationally. The other important focus of this paradigm is on the actions and policies of the sending government to organise and maintain relationships with the community, and hence to capitalise on the benefits of return. For example, special attention is paid to goal-oriented initiatives, which have gradually been institutionalised as a result of interaction and coordination with the government of the sending country (Gamlen, 2006). This focus is relevant since the governments of net "exporters" of labour are presumably interested in attracting highly skilled and educated migrants and take action and develop policies accordingly.

In a fashion similar to transnationalism, the Social Network Theory (SNT) considers the return as a first step in the completion of the migration project and the returnees - as bearers of tangible and intangible resources, and assumes that they maintain strong connections to previous locations of establishment in other countries. In most general terms, social networks are defined as connections and relationships between individuals that vary in strength, type, and duration (Granovetter, 1973). They increase the availability of resources and information by supporting the success of returning migrants' endeavours. When analysing network membership practices, other elements of the analysis may highlight the various ways in which actors are involved, as well as the types of organisations that influence their behaviour. Second, in a given context, different network structures offer different opportunities, and hence different orientations and strategies. Thus, thanks to the transnational approach and TCM, return is no longer considered the end of the migration cycle, but a stage in the migration process (Cassarino, 2004, p. 268). This perspective is particularly relevant in the study of educational and scientific re-migration, on the one hand, because alumni contacts (even if not institutionalised in an organisation or structure) can definitely be seen as a network that, in the case of education abroad, is transnational in nature. On the other hand, contacts established in scientific circles after training or specialisation abroad can also be considered as forming transnational social networks, in which information flows, which involve the participants in different ways and influence their behaviour.

Theorising return in terms of different paradigms exposes the various interpretations of education as a factor for outgoing and reverse migration, as well as of educated returnees as a specific target group of origin countries' policies to "attract brains". Specific research studies reveal a rather diverse picture. Most studies do not unequivocally connect motivation for return and migrants' (potential returnees') level of education (De Haas, Fokkema, 2011; Bonifazi, Paparuso, 2018). In some studies, education is considered as one of the many migrants' background characteristics (Bonifazi, Paparuso, 2018).

The issue of the education of migrants (potential returnees) and its connection to the motivation is a central focus in some studies. A specific empirical survey of this connection analyses the education level, its type and the country, where it is received. An important educational variable, which influences the return migration, is the quite advanced education: the migrants, who work below their education level, express stronger intentions to return back home, and the education, acquired in the receiving country, improves the outlook for subsequent socialisation in the home country (Pungas, et al., 2012). Similarly, in some surveys, the emphasis is placed on professional and work qualifications and it is

claimed that migrants of higher qualification are more likely to return than the less qualified ones (Aydemir, Robinson, 2008, cited in Gittins, Fink, 2015).

Other studies show that returnees have a higher education than those who remain in the country, and what has been originally a "brain drain" can become a "brain gain", when skills and knowledge acquired abroad can increase human capital at home (UNDP, 2007; Kovács, et al., 2013; Dustmann, et al., 2011, cited in Gittins, Fink, 2015). Such a statement builds on the following understanding: the return to the homeland after studying abroad reveals that the increase of education abroad can be highly valued in the country of origin and in this sense, can become a motivating factor for the return (Borjas, Bratsberg, 1996, cited in Pungas, et al., 2012, p. 4; Îçduygu, 2009, cited in Biligli, Siegel, 2014). Remigration projects by students developing forms of career migration with the ambition to capitalise on their foreign education are one of the features of the so-called "liquid migration" – a phrase coined to capture newer, more flexible and less predictable forms of mobility (Domínguez-Mujica, Díaz-Hernández, 2019).

Some studies focus specifically on the return of highly educated and qualified migrants to their homeland. For example, a study of the motivation and decisions of academic scientists in hard sciences (chemistry) to return to their country of origin estimates that only 9% of immigrant scientists in the USA return home while developing a professional career, while the most successful scientists (also understood in terms of strong publication records) are less likely to return. At the same time, the data from this study show that for those scientists who decide to return to their homeland, return migration seems to have no negative effect on their scientific productivity after an adjustment period at home (Gaulé, 2011). Another study within the transnationalism paradigm addresses the return of skilled young Spaniards to Spain following the outward migration during the 2008 economic crises. Building on the concept of a "liquid migration", which captures "more fluid schemes of mobility from the perspectives of return dilemma", the authors link re-migration to transnational political activism and the feelings of belonging, and conclude that new transnational communities have appeared, being "an example of the interactive role that Spanish international migration has taken on during the crisis" (Domínguez-Mujica, Díaz-Hernández, 2019).

Closely related to the focus of the current analysis is a study of the return intentions of Estonian migrants to Finland, which focuses on education as a central variable. The results show that education level is not associated with the intention to return, while working below one's training (i.e. over-education) leads to higher intentions to return back home. At the same time, education obtained in the host country improves the socialisation prospects in the host society later on and thus reduces intentions for re-emigration (Pungas, et al., 2012).

In Bulgaria, the issues of return of highly qualified migrants are considered from several points of view: return policies and their tools, professional trajectories of returnees, problems of reintegration and sustainability of return (Krasteva, 2014; Ivanova, 2015; Ivanova, 2020).

# Methodology and Data

The current article analyses data from a qualitative and quantitative empirical sociological survey (ESS), conducted in 2017 within the research project "Returning migrants: Segmentation and Stratification of Economic Mobility".<sup>3</sup> Within the project, a nationally representative survey of returning migrants is conducted among adult Bulgarian citizens (aged 18+) who have been at least once abroad for a minimum period of 3 months during the last 10 years prior to the survey (2008-2017) and whose return to Bulgaria is permanent or who periodically return to Bulgaria (i.e. they are not back for holidays, family meetings, medical treatment or alike). The survey is conducted in 9 regions of the country, located in all administrative regions and in different types of settlements (capital, district centre, town, small town, and village). The number of people surveyed in each area is proportional to the number of the adult population in them. The planned sample size is 600 individuals and the completed sample includes 604 respondents distributed in 60 units with 10 persons interviewed in each. The data collection method is a face-to-face interview at the respondent's home. The fieldwork is completed in the period October 28th - November 20th, 2017.<sup>4</sup> The qualitative study consists of 100 in-depth interviews with returned migrants who meet the same conditions as the respondents to the representative survey. This study also covers different types of settlements throughout the country. Respondents of different ages, sex, education and length of stay (both abroad and in Bulgaria after return) are interviewed.

The current article analyses the survey data related to the relation between education and (re)migration. These are the quantitative and qualitative data on whether the goal of the outgoing migration is to increase migrants' education, as well as the main reasons for their return to Bulgaria. Subjective assessments of return are also analysed, including perception-related difficulties and problems and the need for support. Another relevant question is about the occupation of the remigrants after their return, as well as plans for their subsequent departure. Attention is paid to the answers related to the knowledge and evaluation of policies and measures supporting return. The analysis is illustrated and supported by specific answers to the above questions from the in-depth interviews, and the citations are indicated by a number in square brackets, which shows the sequence number of the respective in-depth interview in the whole set of interviews. The Appendix lists the interviews from which quotations are used, the respondents being presented according to their sex, age (at the time of the interview), level of education and country of education, and host country.

<sup>&</sup>lt;sup>3</sup> The project is funded by the Bulgarian National Science Fund (Contract No. DN 05/6 of 14.12.2016), is implemented by University of National and World Economy and Economic Research Institute of Bulgarian Academy of Science. Coordinator of the research team is Assoc. Prof. Andrey Nonchev. For the methodology and parameters of the research, see http://remigrants.tyssoftware.com/.

<sup>&</sup>lt;sup>4</sup> For more information of the national representative survey conducted within the project see Nonchev, Hristova, 2018.

# Education as a Factor for Initial Migration and Return

Young and educated Bulgarians should be among the country's most desirable returnees and hence they should figure prominently in the overall picture of in-flow returnees. However, surveys show a different picture – most returnees have a higher average age and lower education than the country's population. Data from the national survey show that less than 5% of returnees to Bulgaria are under 30 years old and with higher education (Nonchev, et al., 2020, p. 338). In comparison, other studies of return in Eastern European countries find that "except Romania, all countries appear to attract returnees who have received more years of formal education than non-migrants" (Martin, Radu, 2011, cited in Lang, 2013, p. 22).

Education as a factor of return is in direct inverse dependence on education as a factor for initial migration. The National Statistical Institute's Infostat data reveal an upward line of emigration of the age groups 20-24 and 25-30 years for the 10-year period prior to the survey (Table 1). These are the age groups associated with acquiring higher education in an average lifecycle. The beginning of this period coincides with Bulgaria's accession to the EU. The increase of outgoing migration in these two age groups is related to the opening of new opportunities in the educational market outside Bulgaria. The last two columns of Table 1 show that the number of returnees from these two age groups is consistently lower than that of those leaving. Since part of the outgoing migration in these two age groups is undoubtedly related to receiving education abroad, the fewer returnees can also be interpreted as non-return after receiving study abroad.

Tal	ble	1

	Outo	aina	Inco	Incomina	
Vear	Outg	Outgoing		incoming	
i cui	20-24 years old	25-29 years old	20-24 years old	25-29 years old	
2007	340	584	94	120	
2008	239	422	89	121	
2009	1670	2963	400	383	
2010	1768	3406	128	246	
2011	888	1516	426	477	
2012	2386	2674	1475	1224	
2013	3333	3425	2580	2071	
2014	4263	4342	2340	2594	
2015	3643	3817	2044	2235	
2016	4701	4653	1450	1807	
2017	5064	4972	1862	2312	

Outgoing and incoming migration by age – total for the country\* (number)

\* Includes only the persons who have declared to the administrative authorities a change of their domicile due to relocation abroad of relocation back home.

Source: National Statistical Institute (https://infostat.nsi.bg).

This general picture is reaffirmed and further precisioned by the data from the conducted ESS. First of all, the data show that, in general, the educational structure of the returning migrants is relatively stable and is not significantly influenced by accomplished migration movements. The share of returning migrants with higher education is slightly increased

(from 19.4% to 22%) and the share of people with a scientific degree doubles (from 0.5% to 1.2%). These are mostly the people whose main motive for migration is to increase their education (4%) (Nonchev, Hristova, 2020, p. 120-121).

Correlation of the results with the answers to the questions about the three primary economic and the three primary non-economic reasons for a return show that reasons for return can be the completion of education, search for better career realisation or impossibility for professional realisation abroad, willingness to contribute to the development of the Bulgarian economy and society, nostalgia for home and family, and others. According to the results of the quantitative survey within the conducted project, only 3.47% of returned migrants place the provision of better education among the top 3 most important reasons for the initial outgoing migration, and only 1.6% put the provision of better education first. As a consequence, the share of respondents answering "I improved my education" to the question "What skills did you acquire abroad?" is only 2.5%. The data can be taken as indirect indications that outgoing migration for education "stays out" and does not return. Regarding the sustainability of return, the share of returnees with higher education among the respondents who prefer to stay in the home country for good ("the stayers") is lower than their share in the total sample (Minchev, Boshnakov, 2018, p. 52).

The results of the qualitative research support similar conclusions, though they reveal a richer and more diverse picture of the education factor in the entire migration cycle. It should be noted that in almost half of the in-depth interviews, education has nothing to do with the respondents' migration projects and migration trajectories. This can also be considered as indirect support for the claim that there is no mass return of emigrants who have gone abroad for education. Among the other returnees, several categories can be distinguished (apart from migrants who have received education abroad and then return to Bulgaria).

**Return FOR EDUCATION in Bulgaria**: This is part of the group of returnees who leave for fixed short periods with the main purpose of earning money and a clear intention to return to Bulgaria. In this sub-group (13 in-depth interviews) are people in the age group 20-25 years, who are students in Bulgaria and leave short-term for some seasonal work abroad. This group is differentiated by the explicit relation between the goals of migration and education – the achievement of the financial goals of the migration project enables the returnee to support financially his/her education. The answers to the questions "Why did you leave?", "Why did you return?", and "What did you invest in?" are of the type:

What I had gone for was accomplished ... for these 3-4 months, I succeeded to earn the money I needed. ... I voluntarily returned to Bulgaria because I had to finish my higher education (Appendix, [12]).

I needed funds to continue my education and to support myself. I was studying for a Bachelor degree in higher education (Appendix, [6]).

I saved a small amount of money that I invested in my higher education in Bulgaria (Appendix, [1]).

The investment I made was mainly in my education. The money helped me to continue my studies without financial worries (Appendix, [6]).

Usually, for the remigrants from this group, the return does not pose serious challenges – the stay abroad is short, pre-fixed as time, the return is specified in advance and in many cases, it is clear what comes next. In other words, reintegration is not a problem. However, in this group – due to the relatively young age and the acquired migration experience – potential future emigrants can also be sought, including those who seek to continue their education abroad (for example, a Master's degree abroad after completing a Bachelor degree in Bulgaria). Then the initial migration becomes a *reconnaissance: The purpose of my emigration was to investigate the situation, to get acquainted with life in the country and to explore the options for education there* (Appendix, [17]).

**Return of graduates AFTER WORK ABROAD**: The study shows that less than 1/4 of Bulgarian migrants are with college (3.8%) and higher education (19.9%), prior to their initial departure for abroad (Zareva, 2018b, p. 104-105). According to the nature of work abroad, there are two main groups in this category.

**Return of graduates** <u>after low-skilled work abroad</u>: In this group (10 in-depth interviews) are people with higher education, whose main goal of emigration is financial and material and stems from financial constraints and inability to meet important needs of family and children in Bulgaria. Their main goals are to financially support themselves and their families, to repay loans, to provide funds for the education of children. Abroad, they engage in low-skilled but better paid (compared to Bulgaria) work – caring for sick and elderly people, house cleaning or agricultural work for women, construction and repair work and agricultural work for men. They return after achieving the migration goals or when it is impossible to continue working abroad.

This group can be further differentiated according to the age of the migrants. Although the specifics of the migration experience and the success of the migration project are of major importance, in the lower age groups of graduates working abroad under their qualification and education is not perceived as humiliating and harmful to their self-respect:

The work was hard and difficult -I was a general worker in a company for external insulation of buildings. I received a salary of 1200 EUR. ... At the end of 2011 there you less work in the company, respectively my salary went down and I temporarily looked for additional work. I delivered brochures and catalogues to several companies ... for a monthly salary of 450 EUR. ... In Germany I acquired skills as a general construction worker, no matter that I am an engineer. ... During my stay in Germany I learned everything – it was something like doing for again my compulsory military service. My expectations for work and high income came true. Overall, I'm happy with my work there (Appendix, [48]).

For older graduates (aged 50+) who, despite their education, cannot find a well-paid job in Bulgaria, the combination of education, relatively older age (and hence lower adaptability), and the need to engage in low-skilled labour leads to some of the most bitter assessments:

I was looking forward to beginning work there. I worked in two large houses, with many rooms and stairs ... difficult to clean. I was very tired, I was 53 years old and I could already feel my age. I have discopathy, my lower back and legs are constantly hurting. The owners were kind, they paid well. But I couldn't stand it. It wasn't the job for me. My strength is in accounting, not cleaning. I have studied, I have invested in education, courses, advanced training. I have gained a lot of knowledge, experience and skills in this field. And

now where am I – cleaning houses. I felt offended. Money is not everything. A person has also dignity, a person should respect oneself (Appendix, [3]).

In this group, the problems after return are basically the same as the problems that have provoked the departure in the first place, namely finding a job and providing sufficient income. Difficulties in this regard lead to the search for subsequent emigration abroad, even if one would want to stay in Bulgaria:

It is all about money. Salaries are very low. And that's why people go back to other countries. There are women who return from Greece to Bulgaria, stay here for several months. They find a job, but it is low-paid. This does not satisfy them and they go to Greece again, even if they have said that they no longer want to go there (Appendix, [91]).

**Return of graduates** <u>after work that matches one's educational background or other</u> <u>skilled work abroad</u>: This group of returnees is very small in the overall set of in-depth interviews. These are people who have acquired various degrees of higher education in Bulgaria and go abroad for a good job that adequately matches their educational background or to perform other qualified work. The motivation to leave is related to opportunities to gain specific experience, to work on a specific project of interest. This is the group of more mobile migrants – with education, in a relatively low age range, mostly single, with a desire for professional development and often – with a job in Bulgaria before leaving:

The motives for leaving... I was offered a job related to my education, which was a perfect opportunity for professional development. In addition, that was an opportunity for experience in large oil and gas companies in which I worked. Such an opportunity could not possibly be missed. There were some things that were vague, uncertain, but I made my mind ... I was young and I had to take risks and pursue my career and development (Appendix, [51]).

I worked in our Sofia center and then our manager decided to promote me and another colleague and we had to move to the central office in Manchester. In fact, that's why I left then. ... It was not a business trip type, as I left the Bulgarian office and signed a new contract in the office in England, because there were two different registered companies. ... In fact, the promotion and the new responsibilities I would have with the new position seemed very interesting to me. ... Many of my seasoned colleagues worked in the office in England and I wanted to learn more from them about the profession itself. ... I wanted to gain as much experience there as possible, no matter how many years it would take. ... First, I learned to do this type of research and, second, I learned a lot about a new industry that I may one day decide to work in and then I would be more prepared on how to do it, what to expect and where to focus in the industry itself (Appendix, [55])

I went to improve my language skills and look for possible job opportunities for a longer period of time outside the country... My expectations were to gain new knowledge and skills, exchange experience with colleagues from other countries and generally to find a different perspective on my work ... I saw my stay in Germany as a chance for a longer stay abroad. ... I trained young people in the field of civic education (Appendix, [80])

The return occurs at the expiration of the agreed work engagement or project and/or for other (family, personal) reasons:

The internship was over. I was able to keep my place in the Ministry of Youth [and Sports]. And I was given the opportunity to apply the skills [I acquired abroad] back to the national level (Appendix, [21]).

In fact, the most important and major reason I came back was that I applied again to a university that was completely different from the one I had studied before, for a program that was different from anything I had ever done. In Bulgaria it would have been much easier for me financially to get the degree I wanted. In England I had to take extra courses. I also had to obtain another degree they required in order to apply to their university and study in that particular program. The second important reason is that I had almost no social circle there, I had no friends there... I didn't need much help, because it's easier to go back to where you have already lived than to go to a new place (Appendix, [55]).

I had decided when my son began school to be in a Bulgarian school... My wife was called to work in Bulgaria. I went to several interviews in Sofia. Before I returned, I received an offer that suited me, and we quickly decided to return (Appendix, [74]).

When there is a willingness to return and the return is planned, reintegration in Bulgaria and finding a job after return are not perceived as problematic. In cases where the return is due to inability to find another project or work abroad, and the migrant's aspiration is to stay abroad, the return may be perceived as problematic in some respects:

The stay was successful. I accomplished the project I had left for. I acquired new skills and got acquainted with interesting practices. I adapted there without a problem [but] My expectations for a longer stay there did not come true [this is unrelated to the organisation in which she worked]... After my return, I had more difficulties due to the lack of a specific plan for professional realisation in Bulgaria, as my original plan was to stay in Germany for a longer period (Appendix, [80]).

The second time I spent about a year or so in Canada. I worked as a research assistant, research activity. [I found the job] Through a conference I visited on the spot and met one of the professors and he literally created this position for me. ... Excellent relationships; I can't complain about anything. The point is that there was work during the project and there was funding; after it was over, there was no more work. ... As I could not find another job, I returned (Appendix, [62]).

**Return AFTER EDUCATION ABROAD**: Undoubtedly, this is the most interesting category of remigrants – those who initially emigrated in order to receive education abroad, and after fulfilling the goal of migration – return to Bulgaria. This group includes 1/10 of the interviewed. Within this group, different profiles can be outlined according to the preliminary attitudes and motivation for return, the migration (including educational) trajectory and the realisation in Bulgaria after the return.

An interesting distinction is made when the answer to the question of the initial willingness and intention to return of emigrants for education is taken into account. On the one hand, there is a clearly drawn profile of the educational emigrant of the type "I'm going abroad to study and to stay there". Preliminary plans for returning to Bulgaria after graduation are always conditional, but in some cases, there is a clear desire to stay abroad after graduation and for professional realisation there:

I did not link the departure only with education. Abroad, education often means further development. I.e. my motivation was also not to return to Bulgaria, because I was somewhat sure that when I went to study, I would find a job there and I would be able to settle there (Appendix, [100]).

I had no intention of returning to Bulgaria. My goal was to get an education there, find a job according to my education and settle in the Netherlands (Appendix, [101]).

I had no intention of returning to Bulgaria. But I succeeded in finding an internship for my educational background, which by coincidence was in Sofia (Appendix, [21]).

It can be expected that, under equal other conditions, the return – when the original goal is to stay abroad after graduation and is not changed over time – is perceived as a failure of the migration project:

I was simply forced to return. Personally, I did not want to return and I do not want to be in Bulgaria (Appendix, [99]).

In other cases, the options are more open and uncertain, and the aspiration for permanent emigration is not absolute:

I left to study. My expectations were to get a good education, to gain valuable experience and eventually to get a realisation in professional terms – whether there or back in Bulgaria. I have never seen myself as a person who goes to emigrate 100%. I had no such idea of myself. It is always an option – you study, you work, you stay (Appendix, [65]).

I cannot answer with certainty whether I initially had the intention of returning to Bulgaria, because at that stage, it all depended on whether I would find a job after graduating in Turkey... I had no intention or rather I was not aware of when and whether I would return to Bulgaria (Appendix, [87]).

The initial plan was to get an education and possibly find a job, but this possible finding of a job was a bit delayed on my part. ... Yes, I intended ... in fact, I don't really think I had decided it for most of my stay there. Maybe last year I thought about returning to Bulgaria and looking for a professional career here (Appendix, [78]).

It's hard to say... it's rather an "yes", I thought that one day I would return if I found a lucrative job in my academic field of political science. But I realised that everything depends on the development of things in a purely academic plan. Mostly I wanted to get an education in a country with a good reputation in terms of the quality of education, but I was counting on to return to Bulgaria one day (Appendix, [63]).

In some cases, from the very beginning, migration was seen as a project with a fixed deadline set by the completion of the relevant educational program:

I did not intend to stay there, I planned to return after the end of the program (Appendix, [62]).

The migration trajectories of educational migrants are also very diverse. Among them are those who, after completing their education abroad, work abroad for a certain (sometimes quite long) period before returning to Bulgaria:

In the Netherlands, I was first a student and worked to support myself. Then I worked in accordance to my educational background - as a programmer - for 5 years. It was

originally like an organised internship from the university. In the third year we had to be interns for about 6 months, and after the internship, I stayed to work there. Then I developed my own business for two years (Appendix, [100]).

From Germany, where I graduated, I went to Belgium... I had interests in the field of the European project and I wanted to get acquainted with it from the inside, so I started looking for a job related to the European institutions. ... I went to work there and to gain professional experience with the idea to find a realisation as an economist in this field. ... I worked for the European Parliament as an economic adviser to a Bulgarian MEP. I was involved in the work of the Committee on Economic and Monetary Affairs of the European Parliament, of which the MEP I was advising was a member (Appendix, [65]).

In some cases, the educational emigrant has the opportunity to work abroad, but does not take advantage of it and goes home:

After graduating, I had the opportunity to start working on a job that matched my education. I could certainly start work. It's about working professionally, not some general work. This did not in any way affect my assessment [of returning to Bulgaria] (Appendix, [78]).

With regard to migration trajectories, an interesting (and rare for returnees) category of "educational nomad" can be distinguished, who travels around different countries for the purpose of education and acquires different degrees:

In 2003, after finishing 10<sup>th</sup> grade, I went to Canada, where I spent another 2 years in high school and then studied for another Bachelor degree for another year on an exchange basis in Germany, Tübingen. So between 2003-2007 in Canada; then 2007-2008 – in Germany, and in 2008-2009 I completed my studies in Canada and received a Bachelor degree... a 1-year Master's degree in the Netherlands (2009-2010)... and then a PhD study at the University of Bath, UK (Appendix, [63]).

Given the different preconceptions regarding return and diversity in migration trajectories (see also Nonchev, Hristova, 2018), the motivation for the return of educational emigrants is predictably complex and multilayered. On the one hand, there are the rational motives related to the impossibility to find a job abroad and respectively the opportunity to work in Bulgaria:

I did not [achieve my goals] when it came to finding a permanent job. I couldn't find a permanent job and that was one of the reasons I came back (Appendix, [62]).

I returned because of the career opportunity that was given to me. I sat at an interview for a car designer [in Bulgaria] and I got the job (Appendix, [75]).

*I* was certain that with the experience *I* gained there, it would be easier for me to find a job here. Indeed, *I* got a job from there before *I* came home (Appendix, [101]).

Very often, however, rational motives are strongly intertwined with personal and family considerations for return (Bakalova, Misheva, 2018). From the words of the interviewed, it is sometimes difficult to understand what was leading:

I returned to Bulgaria immediately after graduation. I decided to return because being with my family was a priority for me. I didn't find a realisation after I graduated. My education

was in an area where I needed more support from local leaders. After all, I was a foreigner, so the graduates who were Turkish citizens had a better chance (Appendix, [87]).

Mainly economic reasons -I did not have the funds to buy a house, and renting a flat without income was also quite expensive. There were also family reasons -I realised that my father and mother would be happy to have me near them, to be in Bulgaria again. ... Rather voluntarily, I really wanted to go home, but to some extent I was pressured by the circumstances, because given that I could not find a job quickly, it was not a good idea to stay there for a long time (Appendix, [63]).

I came back for two reasons. The first was for love. He has a serious profession here, and it was not reasonable for him to wait and to begin looking for realisation abroad. The other reason was that after completing the state-sponsored Master's program, the sponsorship stopped, and I could not afford to search for work even a month without additional income because my family could no longer help me. For purely financial reasons, I had to return (Appendix, [99]).

I came back mainly because I missed my family, I missed Bulgaria. In the Netherlands we did not have many social contacts or any social life outside of work and this prompted me to think about returning [after 10 years there]... I want to try to realise myself professionally in Bulgaria. ... The idea of being in the IT sector was reassuring. I knew I would find a job. If I had no confidence that I would find a professional realisation here, I would not have returned at all (Appendix, [100]).

The post-return professional realisation also shows large differences among educational migrants. There are those who have returned because of a job offer or those who very soon after their return are able to find a job related to their educational background and with good pay:

Senior car designer. I have a team that I work with. My work is related to the organisation of the process (Appendix, [75]).

No, I have not encountered any problems at all. For a person with my educational background, there are lots of job offers in Sofia. I have not experienced any difficulties. ... I currently work as a contract programmer in a software company. I found it through jobs.bg after I was already in Bulgaria (Appendix, [78]).

It should be noted that most returnees in this category have a technical or IT/programmer education (Minchev, Boshnakov, 2018). For this group of educational migrants, assessments of return are generally positive:

It [the return] can't be considered a backslide, because since I came back to Bulgaria and for the last 8 years, my life has been developing in an upward direction. I wouldn't say that it's because of some external intervention or effort, but rather because of my targeted action in this direction (Appendix, [65]).

At the same time, after studying abroad and upon their return to Bulgaria, some of the returnees cannot find quickly a job that matches their educational background and are forced to work below their qualifications and education. Understandably, in these cases, the subjective assessments of the return are negative and it is perceived as a professional regress:
As a professional regress – I could not find a job quickly, and the work I found at first was not better and was paid less. ... Translator, as self-employed, legal work (Appendix, [62]).

I see it as a step back, because little is known in Bulgaria about my field of studies, I cannot work with my education at all in the private sector, possibly I could work in the public sector, but what I learned from my stay here is that if you want to be appointed to a government job on a position that is related to international criminal law and international humanitarian law, you need to have very strong connections everywhere. Positions in international organisations also pass through political appointment (Appendix, [99]).

Negative assessments are found even from respondents who have not had a problem finding a well-paid job matching their education, but perceive the environment and the opportunities it provides as less favourable:

From a professional point of view, it's a step back in terms of opportunities for professional development and satisfaction with what you're doing. In this country, the Bulgarian is a little rigid in his views – we know everything, we can do everything, without even looking slightly elsewhere (Appendix, [101]).

Naturally, educated returnees who have difficulty finding work point this as the main type of support they have needed after returning:

[I needed] Assistance in finding a job. Assistance for professional realisation in the field of my education (Appendix, [87]).

[I needed support] *Especially with finding a job, psychological support for adaptation to Bulgarian realities* (Appendix, [62]).

The following relation can also be deduced – the greater the educational experience abroad, the more laborious and slow the integration after the return. The above mentioned "educational nomad", who travels to different countries for education and receives different degrees, finds it difficult to find a job upon his return:

I did not need financial support, as well as support for housing. I needed mostly psychological support and support in finding a job. Because I still had no experience on the labour market, all my experience revolved around studying... I was worried about finding a job (despite my good education) (Appendix, [63]).

Even those who have not had a problem finding a job tend to point out the administrative difficulties and obstacles in the reintegration process in Bulgaria:

The same ones [problems and obstacles] that I encounter to this day. ... Administrative ones, the administration is somewhat obsolete (Appendix, [65]).

Since we had been abroad for many years, I expected that the return to Bulgaria would be associated with fewer quarrels and chores, which is not the case (Appendix, [100]).

A specific issue of return, mentioned *en masse* by the representatives of the group of "returning after studying abroad", is the recognition and legalisation of foreign diplomas in Bulgaria (Zareva, 2018a, p. 77), which is problematic both in terms of time and cumbersomeness of the procedure and in terms of the inadequacy of the legalisation criteria:

Bakalova, M. (2021). Education and Migration: The (Non)Return of Better Educated Migrants to Bulgaria.

For example, when legalising my diploma – it was extremely annoying that a university that is known throughout Europe and America here had to be acknowledged by a simple official who had to seal and approve my diploma. It took several months. Apostilles..., people in Germany were involved to go to consulates to put some stamps on my papers. And the only reason was that I was interested in working in the sphere of macroeconomics and banking and I wanted to work at the BNB. For that, the diploma must be legalised. For every other normal employer – you give him a diploma and you start working. [But] because people are reasonable to some extent in the BNB and I am not the first with a foreign diploma to go there, they allowed me to start with the commitment that within some period, I will present the legalised diploma (Appendix, [65]).

I did not even try to legalise my diploma. In the private sector, it is not necessary... In IT there are some technologies that are used here and there. For such type of education, the legalisation of diplomas should be much easier than it actually is (Appendix, [100]).

There are also cases where the recognition of diplomas is not only difficult and slow as a procedure, but is problematic from a substantive point of view. Thus, due to an insufficiently well-defined classifier of specialities, the education received abroad cannot be adequately translated in Bulgaria:

It was explained to me that because I graduated in law in the Netherlands and it is not Bulgarian law, my diploma can be recognised here as a diploma in public administration. And what I have studied has nothing to do with public administration (Appendix, [99]).

**Intentions and plans for re-emigration:** The results of the quantitative study show that the highest share among the individuals with attitudes to leave temporarily or for good belong to persons with secondary vocational and higher education (Zareva, 2018b, p. 113). Qualitative research shows that the intentions of highly educated returnees for re-migration vary significantly and depend on many factors of personal and professional nature, such as the possibility of professional realisation, family, living conditions, etc. Good professional realisation and good living conditions of the family can be considered as serious restraining factors:

I have not thought of going abroad again. My family has positioned itself in a not very big city, we are satisfied with the environment, with the social services we receive, and most of all with our child's education, and I am personally satisfied with my work (Appendix, [87]).

On the other hand, highly educated returnees from lower age groups, and especially those who have not yet started a family, do not rule out the possibility of emigrating again:

Yes, I intend to leave to study and work abroad. Nothing permanent, though. I just intend to move ... not to linger too long in one place (Appendix, [62]).

For this category, the main factor is the availability of work:

[Whether I will emigrate again] Depends on the job opportunities... (Appendix, [62]).

The role of return policies: The issue of the impact of policies and specific measures for the return of highly educated migrants is part of the more general question on the availability and effectiveness of the return policies. Data from both quantitative and qualitative research show that such policies and measures, even if they exist, are not effective. They are not known to returnees and hence have in no way influenced their decision to return (Bakalova, Misheva, 2018, p. 97). To the question "Can you indicate any specific measures of the Bulgarian state that have influenced your decision to return?", 90% of the respondents in the survey answer "I can't point out". This picture is also confirmed by the answers in the in-depth interviews. The answers to the questions "Are you aware of policies, measures and initiatives – national or regional, supporting returnees? Did they have any influence on your adaptation after your return?" are mostly negative. Particularly indicative is the presence of negative answers to these questions by the highly educated returnees, who are presumably more interested and more acquainted and looking for this type of information. Not only is the need for return policies explicitly noted, but also the issue of the awareness and familiarity of relevant target groups, as well as the differentiation of measures according to the different categories of remigrants are specifically addressed:

Weaknesses of the policies – I don't know if they exist at all, i.e. the society is not sufficiently informed about such policies. I have no idea how they inform the people who are potential clients of such policies, i.e. people living abroad... whether they are sufficiently segmented and sufficiently well-targeted... whether there are specific tools or it is just talk about this. These are things that can be thought about and worked on. However, the bottom-line should not be the creation of a Facebook page or some antediluvian site of this Agency [for Bulgarians abroad]. You can't be attractive to someone working on a construction site or picking strawberries abroad (although those people are also important to you because our economy is low-tech and there is a shortage of qualified staff in low-tech activities), and at the same time be attractive to someone who speaks several languages and has qualification and education. Such people should also return so they can initiate the elevation to the next level, so that those who are below can uplift to a higher category (Appendix, [65]).

This long quote, on the one hand, is a collective expression of frustration among the highly educated returnees due to the lack of adequate policies of the Bulgarian state, but it is also indicative of their commitment to the issue.

## **Concluding Remarks**

The analysis of the data from the quantitative and qualitative research, conducted in 2017 under the "*Returning Migrants: Segmentation and Stratification of Economic Mobility*" Project, shows that the education factor is not central to the return to Bulgaria. When present in migration projects, education as a factor has different manifestations and significance both in emigration and re-migration. The return of highly educated migrants back to Bulgaria is rather an exception to the overall picture of return, especially when it comes to migrants educated abroad. In other words, outgoing migration for education tends to "stay out" and does not return. Such findings run counter to the findings of other studies, according to which migrants with higher qualification are more likely to return than the less qualified ones (Aydemir, Robinson, 2008, quoted in Gittins, Fink, 2015).

The return of highly educated migrants to Bulgaria and especially those educated abroad is due to various reasons and factors. Along with personal and family reasons for return, the rational dichotomy of "push" from the country of immigration (impossibility to find a job Bakalova, M. (2021). Education and Migration: The (Non)Return of Better Educated Migrants to Bulgaria.

there) and "pull" to the homeland (availability of work in Bulgaria) stands out. The specificity, however, is that, within the set of highly educated (including those educated abroad), the "push" and "pull" factors act differently depending on the field and the specifics of the educational background. The data draw a picture which shows that for graduates in certain fields of academic studies (technical, engineering, IT), the opportunities are greater and finding a job is not a problem neither there, nor here. Such educated migrants can afford to return, driven by personal, family and social motives, but with the clear knowledge that finding a job in Bulgaria would not be a problem for them.

In other areas of education, however, the picture is different. When it comes to education abroad in the field of social sciences, humanities, or law, it is the difficulties in finding a job *there* (abroad) that lead to return to Bulgaria (although personal and family motives cannot be ruled out either). In these cases, the analyses of data from 2017 survey in Bulgaria refutes the conclusions of other studies that the education acquired in the receiving country improves the outlook for subsequent socialisation in the home country (Pungas, et al., 2012). When such Bulgarians educated abroad cannot find an adequate professional realisation for their education in Bulgaria, they remain open and look for new opportunities for outgoing migration. Therefore, it can be concluded that higher or good education does not in itself lead to more successful migration or re-migration. Moreover, professional realisation and finding a job are to a much greater extent determined by the field of educational background, and not so much by the educational and scientific degree.

The study shows that, unlike other CEE and SEE countries (Kovács, et al., 2013), Bulgaria has not developed an effective policy, that returnees are aware of and which stimulates the return of highly educated and qualified migrants. The findings also indicate that the development of policies for "brain gain" should be focused and consistent with the educational profile of the highly educated migrants.

## References

- Bakalova, M., Misheva, M. (2018). Explanations of Economic Rationality Challenged: Contemporary Return Migration to Bulgaria. – Economic Studies, Vol. 27, N 2, pp. 80-102.
- Bartram, D., Poros, M. V., Monforte, P. (2014). Return Migration. In: Key Concepts in Migration. SAGE Key Concepts Series. London: Sage Publication, pp. 121-124.
- Battistella, G. (2018). Return Migration: A Conceptual and Policy Framework. Scalabrini Migration Center. Available at http://cmsny.org/publications/2018smsc-smc-return-migration/ (last accessed January, 2020).
- Bilgili, Ö., Siegel, M. (2014). Policy Perspectives of Turkey towards Return Migration: From Permissive Indifference to Selective Difference. – Migration Letters, Vol. 11, N 2, May 2014, p. 218+.
- Bonifazi, C., Paparusso, A. (2018). Remain or return home: The migration intentions of first-generation migrants in Italy. – In: Population Space and Place. e2174. Available at: https://doi.org/10.1002/psp.2174 (last accessed October, 2020).
- Cassarino, J.-P. (2004). Theorising Return Migration: The Conceptual Approach to Return Migrants Revisited. International Journal on Multicultural Societies (IJMS), Vol. 6, N 2, pp. 253-279.
- de Haas, H., Fokkema, T. (2011). The Effects of Integration and Transnational Ties on International Return Migration Intentions. – Demographic Research, Vol. 25, pp. 755-782. Available at: https://www.demographic-research.org/volumes/vol25/24/25-24.pdf (last accessed November, 2017).
- Domínguez-Mujica, J., Díaz-Hernández, R. (2019). The Dilemma of Returning: the Liquid Migration of Skilled Spaniards 8 years down the Economic Crisis. – Canadian Studies in Population, 46, pp. 99-119. Available at: https://doi.org/10.1007/s42650-019-00010-x (last accessed October, 2020).

- Gamlen, A. (2006). Diaspora Engagement Policies: What are they and what kinds of states use them? Centre on Migration. Policy and Society, Working Paper N 32, University of Oxford.
- Gaulé, P. (2011). Return Migration: Evidence from Academic Scientists. In Semantic Scholar. Available at: https://www.semanticscholar.org/paper/Return-Migration%3A-Evidence-from-Academic-Scientists-Gaul%C3%A9/c2d3e7d38a61147e98ddc18cb1c243d5f28f6ac6 (last accessed October, 2020).
- Gittins, T., Fink, M. (2015). Return Migration. Informal Learning, Human Capital Development and SME Internationalization in the CEE Region: A Systematic Literature Review. – Journal for East European Management Studies, Vol. 20, N 3 (July 1. 2015), pp. 279+.

Granovetter, M. (1973). The strength of weak ties. – American Journal of Sociology, 78(6), pp. 1360-1380. Available at: http://links.jstor.org/sici?sici=0002-

9602%28197305%2978%3A6%3C1360%3ATSOWT%3E2.0.CO%3B2-E (last accessed May, 2020). IOM. (2004). Return Migration: Policies and Practices in Europe. Geneva: IOM.

- Ivanova, V. (2015). Return Policies: Comparative Analysis of Highly-Qualified Migration in Bulgaria and Bosnia and Herzegovina. PhD Thesis. Sofia: NBU.
- Ivanova, V. (2020). Professional Trajectories and Factors for Sustainable Return of Highly Qualified Bulgarians. In: Return Migrations: European and Bulgarian Perspectives. Conference proceedings. Sofia: Publishing Complex – UNWE, pp. 40-52.
- King. R. (2000). Generalisations from the History of Return Migration. In: Bimal Ghosh (ed.). Return Migration: Journey of Hope or Despair? Geneva: IOM.
- Kovács, Z., Boros, L., Hegedűs, G., Lados, G. (2013). Returning People to the Home-land: Tools and Methods Supporting Remigrants in a European Context. – In: Lang. Thilo (ed.) Return Migration in Central Europe: Current Trends and an Analysis of Policies Supporting Returning Migrants. Leipzig: Leibniz-Institut für Länderkunde, pp. 58-94.
- Krasteva, A. (2014). From Migration to Mobility: Policies and Roads. Sofia: NBU.
- Kunuroglu, F., van de Vijver, F., Yagmur, K. (2016). Return Migration. Online Readings in Psychology and Culture, 8(2). Available at: http://dx.doi.org/10.9707/2307-0919.1143 (last accessed May, 2017).
- Lang, T. (ed.) (2013). Return Migration in Central Europe: Current Trends and an Analysis of Policies Supporting Returning Migrants. Leipzig: Leibniz-Institut für Län-derkunde.
- Mintchev, V., Boshnakov, V. (2018). The Choice of Bulgarian Migrants Stay or Leave Again?. Economic Studies, 27 (2), pp. 45-64.

Nonchev, A., Hristova, M. (2018). Segmentation of Returning Migrants. - Economic Studies, 27 (2), pp. 83-25.

- Nonchev, A., Hristova, M. (2020). Stratification and Social Mobility of Bulgarian Returning Migrants. In: Return Migration: European and Bulgarian Perspectives. Conference Proceedings. Sofia: UNWE, pp. 114-125.
- Nonchev, A., Zareva, I., Misheva, M. (2020). Vmesto zakljuchenie: osnovni izvodi i preporaki za razvitie na migratsionnite politiki. – In: Zavrashtashtite se migranti. Sofia: UNWE, pp. 334-344 ["Instead of a conclusion: major corollaries and recommendations for the development of migration policies". In: The Return Migrants].
- Pungas, E., Toomet, O., Tammaru, T., Anniste, K. (2012). Are Better Educated Migrants Returning? Evidence from Multi-Dimensional Education Data. – Nordface Migration Discussion Paper, N 2012-18.
- Schiller, N., Basch, L., Blanc, C. (1995). From Immigrant to Transmigrant: Theorizing Transnational Migration. Anthropological Quarterly, Vol. 68, N 1, pp. 48-63.
- Smoliner, S., Förschner, M., Hochgerner, J., Nová, J. (2013). Comparative Report on Re-Migration Trends in Central and Eastern Europe. – In: Lang, Thilo (ed.). Return mi-gration in Central Europe: current trends and an analysis of policies supporting re-turning migrants. Leipzig: Leibniz-Institut f
  ür L
  änderkunde, pp. 11-57.
- United Nations Development Programme (UNDP). (2007). Case Evidence on 'Brain Gain'. UNDP Capacity Development Action Briefs 1, New York. Available at: http://lencd.com/data/docs/228-ABbrain%20gain.pdf (last accessed April, 2017).
- WMR/World Migration Report. (2013). Migrant Well-being and Development. Geneva: IOM. Available at: https://publications.iom.int/system/files/pdf/wmr2013 en.pdf (last accessed April, 2018).
- Zareva, I. (2018a). Policies for Encouraging the Return of Bulgarian Migrants to Bulgaria. Economic Studies, 27 (2), p. 65-79.
- Zareva, I. (2018b). Returning Migrants Effects on the Labour Market in Bulgaria. Economic Studies, 27 (2), p. 102-114.

Bakalova, M. (2021). Education and Migration: The (Non)Return of Better Educated Migrants to Bulgaria.

# APPENDIX

# List of interviews from which quotations are used in the text<sup>5</sup>

[1] – male, 28, short-term leave for Canada in 2009, higher education in Bulgaria upon return;

[3] – female, 56, higher education in Bulgaria, finance and accounting, short-term leave for New Zealand;

[6] – female, 25, seasonal work in the UK in 2013, BA degree in "Social work" upon return to Bulgaria;

[12] - female, 27, seasonal work in Cyprus, BA degree upon return to Bulgaria;

[17] - female, 24, twice in Germany for short-time work, studies in a BA program in Bulgaria;

[21] – male, 27; 1.5 years in England for education, 5 months in Belgium for internship;

[48] - male, 40, higher education in Bulgaria (engineering), 3 years unqualified work in Germany;

[51] – male, 27, BA and MA in Bulgaria (engineer – Automation, information and control equipment), considerable work experience abroad (in Italy and Kazakhstan);

[55] – female, 26, BA in Bulgaria, works for 9 months in the UK (qualified works that matches her educational background);

[62] – female, 36, BA in Bulgaria, 12 months in Canada for MA studies, then 9 months in Canada as project researcher;

[63] – male, 30, over 10 years of educational experience abroad (BA, MA and PhD studies in Canada, Germany, the Netherlands and the UK);

[65] - male, 35, BA and MA studies in Germany; 2 years qualified work in Belgium;

[74] - male, 39, BA in Bulgaria (IT and programming); 3 years qualified work in Spain;

[75] – male, 24; 12 months studies in Programming in the UK; 12 months work as a program designer in the Netherlands;

[78] - male, 24; 5 years in Scotland, completed degree studies in Computer Science and Informatics;

[80] - female, 31, higher education in Bulgaria, 6 months qualified work in Germany;

[87] – male, 38; 10 years for degree studies in Turkey;

[91] – female, 63, MA in Pedagogy from a Bulgarian university, 3 years in Greece and 1 year in England for unqualified work;

[99] - female, 29; 6 years in the Netherlands for degree studies in International Law;

[100] – male, 31; 10 years in the Netherlands (degree studies in Computer Programming and qualified work);

[101] – female, 28; 8 years in the Netherlands (degree studies in Law and qualified work).

<sup>&</sup>lt;sup>5</sup> In square brackets is the sequence number of the respective in-depth interview in the whole set of interviews, followed by respondent's gender, age (at the time of the interview), level of education, country of education, receiving country and type of work.



Mihaela Misheva<sup>1</sup>

Volume 30 (4), 2021

# RETURN MIGRATION AND INSTITUTIONAL CHANGE: THE CASE OF BULGARIA<sup>2</sup>

The article discusses the relation between the return migration flow and the effects for the sending country, especially for the socio-economic change. An institutional approach has been adopted to analyze the possible changes that returning migrants would bring to their homeland. The main goal is to reveal the possible positive effect of international migration on the Bulgarian society and especially on the social institutions. The assumption that returnees may be agents of change is analyzed within the broad framework of institutionalism and data from a sociological survey of returned migrants. The micro and macro level of the "return-socio-economic change" relation is discussed through the broader view of the human capital and social capital transfer. The article presents the migration experience as helpful for the returnee's integration at home and as a possible influence on the institutional environment in the country. JEL: O15; F22; Z1

International migrations are such a complex phenomenon that can be seen and analyzed from multiple perspectives, scientific areas, and research fields. One of the most important issues about migrations is how they influence the societies, both sending and receiving ones. The large emigration flow from Bulgaria since the 1990, combined with a negative birth rate, caused an indisputably troublesome effect on numerous aspects of the social life from the labour market to the educational, political and health system. Governmental strategy documents admit that Bulgaria has fallen into a serious demographic crisis.<sup>3</sup> Population decline as a result of external migration, measured by the coefficient of net migration (the ratio of net migration to the average annual population during 2018 (per 1000 people), is - 0.5‰. According to a report of the Ministry of labour and Social Policy in Bulgaria, entitled "Medium-term and long-term forecasts for the development of the labour market in Bulgaria. Employment and labour market imbalances" (Simeonova-Ganeva, Vassilev, Ganev, Dimitrov, 2019), in 2024, the working-age population (15-64) is expected to be 163 200

<sup>&</sup>lt;sup>1</sup> Mihaela Misheva is assistant professor at the Department of Economic Sociology of University of National and World Economy, Sofia, Bulgaria, phone: 00359-886-540023, e-mail: mmisheva@unwe.bg.

 $<sup>^2</sup>$  The paper is prepared on the base of information received in the framework of the scientific project "Returning Migrants: Segmentation and Stratification of Economic Mobility", funded by the Bulgarian National Science Fund with the Ministry of Education and Science, Competition for Financing of Fundamental Scientific Research – 2016.

<sup>&</sup>lt;sup>3</sup> Actual national strategy for demographic development of the Republic Bulgaria Population (2012-2030).

people less than in 2020. It means it will shrink down by 3.7%. The report claims that the shrinking population and labour supply will have a negative impact on the labour market over the next few years. The most popular view to international migration for a sending country as Bulgaria is the "brain drain" discourse and the negative demographic effect it has on the country's depopulation and ageing. However, recent studies show that international migrations can be productive for the sending countries in several ways and this is the main focus of this article: to reveal the possible positive effect of the international migration on the Bulgarian society and especially on the social institutions. The analysis is based theoretically on the work of de Haas (2007), Cassarino (2014), and Piore (1979), and empirically on data from National Statistical Institute and from project "Returning Migrants: Segmentation and Stratification of Economic Mobility" (a national representative survey conducted in October 28 – November 20, 2017 in Bulgaria and in-depth interviews with returnees conducted in 2018). The project is financed by Bulgarian Science Fund. The Survey covered adult Bulgarian citizens (18+) who had worked abroad for more than three months during the last 10 years (2008-2017).<sup>4</sup>

## Main Definitions and Methodology

## Return migration

United Nations Statistical Division clarifies a definition of return migrant, commonly used in studies as "Persons returning to their country of citizenship after having been international migrants (whether short-term or long-term) in another country and who are intending to stay in their own country for at least a year" (UN, 1998). Return is seen as part of the migration process consistent of multiple departures, several and differenced in time duration returns followed by possible new departures. Cassarino (2004) defines returnees as persons returning to their country of origin after being international migrants (whether short or long term) to another country. Returns may be temporary or permanent.

## Return migration and institutional change

In sociology, the term institution is core and vital for any social analysis. The institutional structure of society is that all socially significant activities are structured in a system of rules, positions and roles, according to the idea of the way in which certain goods (goods and services) will be produced and distributed. Through the institutions are realized some of the most important social connections between people in the society (Stoilova, 2017 in Stoyanov, Nonchev, Stoyanova, Petrunov, Misheva).

The institutional approach to development is developed first by Theodore Schultz. In his famous book *Investing in Human Capital: The Role of Education and Research* (1972), Schultz argued that institutions are the first to change to drive the whole society on the path of development. Institutions in Schultz understanding are various behaviour and conduct models including monetary relations, organizational structures, contractual relations,

<sup>&</sup>lt;sup>4</sup> Project site: http://remigrants.tys-software.com/.

cooperatives, property rights, but also rights over property, labour laws, human capital, material, and technical infrastructure. In his research on the agricultural sector, Schultz found that one of the obstacles to higher yields for farmers is the lack of information among farmers themselves. This is the original idea of human capital, to which Schultz refers not only direct costs such as education, training in secondary and higher education, but also self-education, work experience, investment in health, education and science (Schultz, 1972). It is the investments in human capital, the increasing importance of human labour, that are the main development factors of the economy and the transformation of social and economic institutions (Schultz, 1961).

The institutional approach is important for the problems of socio-economic change because it includes the economic subsystem as well as a wide range of non-economic aspects: formal and informal institutions, culture, value system (Sabotinova, 2013). The focus of the institutional approach does not limit its approach to economic indicators of development as GDP, but also reflects on the measures against declining growth, inequality, increasing employment, and the quality of the workforce and human capital in general. Schultz sees investments in human capital as qualification and university degrees but also as skills development, self-education and investments in education, health care and science. Precisely these "investments" and the increasing value of the human labour, according to Schultz (1972), will become the motors of economic development and institutional change.

The effect of international migration on sending country institutions has been studied by several scientists in different fields. The main question they pose is whether or not international migration results in the depletion of active voice that promotes better institutions in the home country (Ivus, Naghavi, 2014). Recent studies argue that institutional norms, such as democratic values, may in fact be transferred to the home country and the change of institutional norms can be linked with the mobility of knowledge and technology through migration networks build from migrants, returnees and diaspora members. The most significant way of transfer is the return migration of skilled and educated migrants. Studies are focused on two components: political ideas and social norms. Returning migrants could pass on political ideas at home concerning the quality of political institutions, practices and policies, thus raising awareness and demand for political accountability and increasing direct participation in the political system. In an interesting article, Spillimbergo (2009), using a comprehensive set of data on international students over 50 years, found that individuals educated abroad lead to democratic change in their home, if they have finished their high education in democracies. Spilimbergo's study concerns the relation between the quality of institutions in students' countries of origin and those in which they have completed higher education. There are two variables that are interesting for his research: the share of students abroad in the total percentage of students in the country and levels of democracy in the host student countries (because of the types of institutions with which students interact). The data from these studies show that individuals who have completed higher education in a country with democratic institutions spread democratic values at home too. He calls this phenomenon "transfer of norms".

Concerning the effects of the transfer of ideas in South-North migration to Europe, also optimistic is the statement that returning migrants "open" the communities, or more precisely – increase the pressure on traditional communities to liberal, democratic ideas, modern

knowledge and education (De Haas, 2007). Especially highly skilled migrants increase the speed of knowledge dissemination between sending and receiving countries. Examples are the Polish diasporas around the world. In 1989 alone, 19.3 million Polish citizens went abroad, making up half of the country's population (Łukaszewicz, 2019). Returnees in the early 1990s were among the first entrepreneurs in the country and had a major influence on the country's market reforms (Kaczmarczyk, 2013). Polish return migration phenomena are an example for another aspect of the effect return migration renders on institutions at countries of origin. In an ethnographic study, Budyta-Budzynska (2017) revealed that acquisition of new skills, improvement of qualification, and acquisition of new models of work and life abroad, is not a prerequisite for returning migration. More polish researchers share their observations about the latest wave of returning migrants to Poland, some of whom admit that they have not learned either the language of the host country or any new skills. Such a migratory "conservatism" is typical of several polish migration communities. A small municipality in the Masurian Lakes, called Yusk, where Polish sociologists conduct ethnographic studies, sends about half of its inhabitants to two towns in Iceland and, more precisely, to fish factories there. The migration to Iceland has been going on for 20 years, and two interesting things have been observed among the already returning Polish citizens. First, they have become more traditionalists than before (Budyta-Budzyńska, 2017). In addition, Bukraba-Rilska writes, emigration preserves traditional lifestyles: "Returnees perceive Western life with disapproval, with a certain sense of superiority, although they enjoy and appreciate the practical facilitations of Western life and culture, therefore intensive contact with foreign cultural models does not cause erosion of their conservative attitudes, on the contrary, migration arises an unplanned re-traditionalization" (Bukbara-Rylska, 2010).

Although there are different motives driving the migration, finding a better job is still one of the most important reasons to migrate. Acquired knowledge and newly acquired skills from working and living abroad of the returnees can be a source of positive change for migrants to make at home. The concept that supports this thesis is popularly called "brain gain", as opposed to the "brain drain" used for emigration. A number of studies, such as Dewan and Tewari (2001), Saxenian (1999), show how returning migrants and the processes they drive can have an expansionary effect on the developing economy by disseminating knowledge, which in turn narrows the technological gap between the host and source economies, which could lead to fewer people emigrating and more emigrants returning. According to Saxenian, 82% of Chinese and Indian engineers working in Silicon Valley in the United States share information about the technology with colleagues at home. On an everyday basis, information are sharing 28% of immigrant engineers in the Silicon Valley. According to Devan and Tewari (2001), countries with negative net migration should mobilize the "mental resources" of the diaspora abroad, use the talents of emigrants, and encourage emigrants to play a more active role in the economic development of their home countries. These tips are supported by empirical material in their publications on the success of India and China in using the so-called "Brain Banks" abroad (Dewan, Tewari, 2001).

In many parts of the world, the "brain drain" gives way to the "brain circulation" process, as talented immigrants who have studied and worked abroad increasingly return to their home countries to look for promising opportunities there (Saxenian, 1999). When engineers or other professionals return home – temporarily or permanently – they transfer not only technology and social capital, but also management, leadership and governance knowledge

to regions that are peripheral to development centres. Migrants also connect local producers directly to the market opportunities and the networks of more developed economies. According to the same author, the brain drain provides a huge advantage for developing regions to accumulate not only knowledge but also capital through returnees' network abroad. Over time, transnational communities can accelerate the technological advancement of the regional economy by providing the necessary skills and managerial knowledge to help local producers move to higher value-added activities. Due to returnees' experience and professional networks, these migrants can quickly identify promising new market opportunities, raise capital, set up management teams and establish partnerships with other specialized manufacturers, even those far away.

## **Contemporary Return Migration in Bulgaria**

For the last nearly 30 years, Bulgaria is an emigration country with a stable tendency of increasing net migration flow. The most reliable source of information is the National Statistical Institute. Figure 1 shows the public accessible data on migration flows. Here the definition of returnee is everyone who has changed the official address of the place of residence for the last year. Return migration flow includes people with Bulgarian citizenship and third-country nationals. Third-country nationals, however, are a very small part of the flow.



Emigration and return migration – Bulgaria, 2012-2019

Source: National Statistical Institute.

After an emigration peak in 2009-2010, caused by the country's accession to the EU and the migration shrinkage through the economic crisis in 2011, the emigration flow from Bulgaria has a stable increasing trend. In 2018 and 2019, it even surpasses the peak in 2010 by 1/3. The data of the National Statistical Institute include only those migrants, Bulgarian citizens, who have declared to the administrative authorities a change of their current address to the country abroad. According to the National Statistical Institute, the most preferred destinations

Figure 1

by the emigrants are Germany (24.4%), the United Kingdom (17.8%), and Italy (7.5%). It is well-known that emigrational waves are always accompanied by immigration, one in a different degree and strength. Since 2012 (public data are for 2012-2018), we can notice the same increasing tendency but on a smaller scale.

There is a clear evidence of migration selectivity by gender – in the pre-accession period until 2011 emigration is a female priority (Figure 2). After 2011, men prevail in the numbers of emigrants, but still, almost half of the migrants are women. Selectivity for migration by gender can show different migration patterns and repercussions in respective analyses and migration policy design.



The return migration data provided by NSI is based on those, who have changed their place of residence from abroad to Bulgaria: includes Bulgarian citizens who have returned to the country and immigrants – citizens of other countries (from EU and third-country nationals) who have received a residence permit or status in the country. The data are mixed with immigration and return migration, but according to the Census there, 7% to 9% are the number of immigrants in overall data of the return flow, called "settled" or "populated". Nevertheless, gender selectivity in return migration is also registered. Regardless of the period (whether it is before EU accession or after, before or after the financial crisis) since 2007, every year, more men than women return and settle in the country.

Another source of information for return migration flow, more detailed and useful for statistical and sociological analysis, are the data from the labour Force Survey (LFS). The

return migration can be distinguished by the question available in the questionnaire: "Country of residence (different from Bulgaria) one year before survey" and "Region of residence (within Member State) one year before survey". The two variables cover the latest return migration flow. Figure 3 presents the data from the LSF in Bulgaria for 2017-2019.

## Figure 3

Return migration flow to Bulgaria and gender selectivity of return migration according to labour Force Survey, Bulgaria, 2017-2019



Source: National Statistical Institute on authors' request.

The data confirm the increasing trend of the return migration flow to Bulgaria, as well as the lack of selectivity by gender in the return. Figure 4 shows the returnees' profile according to their labour status.

## Figure 4



The largest part of the respondents in LFS Bulgaria, who have been in a foreign country 1 year before the survey, are employed. As "inactive", according to the definition of National Statistical Institute, are those under 15 years old and those who do not search for a job because of the following reasons: discouraged, attends school or qualification courses, poor health, personal, family reasons, old age, disability.

More detailed information about returnees' stratification gives the analysis of Nonchev and Hristova (2018). Around 5.6% of the returnees reason their emigration with obtaining higher education. Most significant is the share of returned migrants with secondary (general and vocational) education. The share of returnees with higher education is 22% and those with a scientific degree are 1.2%. The share of respondents without education, with primary and basic education, is 0.8%.

Table 1

Education of the returnees through the first migration, in the first destination country, and on the last return to Bulgaria (% of all respondents)

	First emigration	First destination country	Return
No education	1.0	1.0	0.8
Primary	1.3	1.3	1.3
Basic	17.2	17.2	17.2
Secondary	20.2	19.7	18.5
Vocational	36.4	36.1	35.4
College	3.8	3.6	3.3
Bachelor	9.6	10.1	10.9
Master	9.8	10.1	11.1
PhD	0.5	0.7	1.2
No answer	0.2	0.2	0.2

Source: Nonchev, Hristova, 2018.

The data are from a national representative survey, conducted in 28.10.-20.11.2017 in Bulgaria within the project DN05/6 "Returning Migrants: Segmentation and Stratification of Economic Mobility" (RMSSEM) (hereinafter referred to as "RMSSEM Survey"), financed by Bulgarian Science Fund. The Survey covers adult Bulgarian citizens (18+) who have worked abroad for more than 3 months during the last 10 years (2008-2017). The survey registers both permanent and temporary returns without, however, considering short returns for holidays, family meetings, medical treatment and similar.<sup>5</sup> According to the European Commission's Education and Training Monitor 2019 report, "the number of students from abroad in Bulgaria increases, but not enough to compensate for the large number of Bulgarians studying abroad". According to the national statistics for the academic year 2019-2020, a total of 220 168 students study in Bulgarian higher schools - public and private, of which 140 841 are Bulgarians (in Bachelor and Master's programs). In its report, EC points out that in 2017, for example, 8.1% of high school graduates have chosen to complete their higher education abroad (nearly 4300 people). According to consulting companies for 2018, about 10-12% of high school graduates make this choice. Depending on the size of the class, these are about 4500-5000 to 6000 young people per year. Last fall, the World Education Project has announced that in 2019, about 15% of high school graduates continue to study at foreign universities.

According to the recent European Commission Report on Bulgaria, "shortcomings in the functioning of the institutions are a significant obstacle to the economic and social potential of the country". For several years the country ranks low in corruption control indexes like

<sup>&</sup>lt;sup>5</sup> http://remigrants.tys-software.com/.

Eurobarometer, World Bank's Worldwide Governance Indicators, and European Quality of Government Index. The situation can be described as chronic and lasts for several decades already. In the summer of 2020, large anti-government protests have been held in Bulgaria. Their main claims have been about reforms in the juridical institutions and government resignation. According to a Gallup International survey in July 2020, the profile of the protest's supporters reproduces the traditional structure of opinions on the issue of trust in the government. The 2018 European social survey data on trust show that the highest the education, the less trust declared in the national government.

Table 2

Highest	Less than	Lower	Lower tier	Upper-tier	Advanced	BA	MA
level of	lower	secondary	upper	upper	vocational,	level	level
education	secondary		secondary	secondary	sub-degree		
Bulgaria	8.3	11.7	0	16.9	2.1	11.7	15.4

Trust in country parliament – the answers "do not trust at all"

Source: ESS9-2018, ed.2.0.

The returnees' stratification profile replicates Bulgarian society in terms of education, gender and age. And this might be a base for a hypothesis that returnees value also distrust more that trust in government and institutions. The main difference is that returnees have already a migration experience and can choose to leave again rather than facilitate institutional change or be involved in protests or other social activities on public change.

## Sustainability of Return

Minchev and Boshnakov (2007) present a classification of the returnees, based on their declared intention to migrate again. According to their declarative intentions, there are three types of return migrants: stayers, temporary migrants, and permanent migrants. Based on data from the RMSSEM survey, they present the following picture. Respondents who declare a long-term stay are 60% of all respondents. On the opposite side are those who like to leave again for a short or long term - 28.2% of all respondents. And finally, one in eight respondents would like to leave Bulgaria for good. The difference between declared intentions and real actions, the so-called La Pierre paradox, is a well-known obstacle to intentions' research. A complex proposal on the sustainability of returns is an index of remigration, developed by Misheva, Getova and Bakalova. It is a holistic approach to remigration intentions, combined with economic, social and subjective factors. Economic factors are owning a business or property in Bulgaria, owning another property, being active on the labour market, the income of every member of the household higher than the poverty line, savings from abroad. Subjective factors are return due to family reasons, caring for older or sick parents/relatives, nostalgia, unsuccessful integration abroad, completion of initial emigration goals, declared desire to stay in Bulgaria.

Other subjective factors are subjective social status (defined as above the average), the respondent is married / in a relationship, children under 18 years old, the durability of stay in Bulgaria. The index is from 0 to 20, where 20 is the highest probability of staying (completely

sustainable of return – the "won't emigrate"). It is developed on the data from RMSSEM. Table 3 shows indexes groups from 1 to 4. Group 4 is the smallest but the most sustainable in return. Returnees from this group are in a very low risk of re-emigration and a very high probability of staying "at home". While the probability of staying in Bulgaria for Group 3 is higher, especially for those with values higher than 12, the risk of re-emigration still exists. In this group the non-economic factors could become possible motivator for stay or re-emigration. These are only 1.5 of the respondents. A level below the stochastic failure. Group 1 is the exact opposite of Group 4, here respondents would leave Bulgaria soon. They are 12.5% of all respondents. Group 2 of low probability of staying in Bulgaria. Here the index value interval is between 11 and 15. While the probability of staying in Bulgaria for this group is higher, especially for those with values higher than 12, the risk of re-emigration still exists. In this group, the non-economic factors could become a possible motivator for stay or re-emigration, so the policies should be dedicated to such opportunities (Misheva, Getova, Bakalova 2020).

## Table 3

	Index values	Percentage of respondents
0 1	0	.0
	1.00	.3
Group I High level of re-amigration	2.00	1.0
nrobability	3.00	1.8
probability	4.00	3.3
	5.00	6.0
	6.00	7.3
Group 2	7.00	9.8
Group 2 Low level of re-emigration	8.00	12.9
Low level of re-emigration	9.00	12.4
	10.00	13.9
	11.00	11.4
Group 3	12.00	7.5
Group 5 High probability of staying	13.00	6.8
Fligh probability of staying	14.00	2.5
	15.00	1.7
	16.00	.8
Crown 4	17.00	.5
Very High probability of staying	18.00	.2
Very frigh probability of saying	19.00	.0
	20.00	.0
	Total	100.0

Index of re-emigration probability based on data from the RMSSEM

Source: Misheva, Getova, Bakalova, 2020, authors' adjustments.

# **Transformation of Social Capital**

Transforming social capital between the destination country and the country of origin is also an important factor for the eventual impact of the returnees on the institutions. According to Bourdieu, habitus can change through and in the process of gaining new life experience (Bourdieu, 1993). Such a habit-correcting life experience can be the migration biography, the migration experience and the return to the country of origin (Nowicka, 2015). Social capital, symbolic, cultural or economic, is attributed to habitus. Habitus is the context in which these different forms of capital function, each of which can acquire new significance in the process of international migration (Nowicka, 2015). The "field" in Bourdieu's understanding is the space of rules, of the rules of the social game, which incorporates habit as "at home" - being in a world itself. Migrants as social actors leave the familiar entourage and try new practices, surroundings, where their habitat is located. The clash of habitus in the new field creates practices that are a product of the social order and rules of the "game". Practices are the operational and objective knowledge in society. The practices refer to the objective social structure within which the habitus is created: in critical moments of change, of short but radical transformations, such as migration. The transnational ties created by migrants could be an influential corridor for change because of the elements of social capital as information exchange, trust and reciprocity. The informational exchange does not end after returnees are back at home. In the technological age, transnational contacts thrive and make migration processes resistant to immigration policies and differences in earnings (push and pull factor) and can be original source of comparison between Bulgaria and the destination countries of emigration left by returnees. Table 4 shows the top 10 countries returnees return from.

Table 4

UK	20.7
Germany	19.2
Greece	13.6
Spain	8.8
Italy	7.8
USA	4.8
Turkey	2.3
France	2.6
Netherlands	2.2
Cyprus	2
Austria	1.7

Top 10 countries Bulgarian migrants return from

Source: RMSSEM Survey 2018.

The transformation of norms and social capital through the social migrant networks are a possible positive effect for institutional change. Migrants do not interrupt their connections with receiving countries and the Bulgarian diaspora there. Migration experience of returnees in countries marked high in Human Development Index could lead to new transnational practices of institutional change at home by transforming social migrant capital at home in attitudes, skills and transfers.

## **Remittances and Savings**

The next most important issue in eventual institutional change, caused by migrations, are the money transfers. De Haas describes the current debate on the impact of migration transfers

as "the euphoria of remittances". He claims that this is not a "new" question, and the assumptions that we investigate novelty testify to "a staggering level of amnesia from decades of previous research and policies on the subject" (De Haas, 2007). With regard to returned migrants, transfers have an effect (if there are any and to what extent) on the income of the family and on the accumulation of certain amounts from the family to help the returnee when he/she is back home. Some researchers (Zupi, 2002; Hahn-Schaur, Segeš-Frelak, 2019) emphasize the possibility of transfers becoming savings at home and subsequently an investment upon return. The positive aspects of any accumulated funds from transfers are investments in human capital or entrepreneurial activity, but they can also be used to "finance" new migration strategies. Of course, the strongest influence on institutional change would be the development of new businesses by returnees or helping others to do so. Researchers indicate that tentative entrepreneurship of returnees has played a significant role in the economic development of China, the Arab Republic of Egypt, India, Morocco, Turkey, Tunisia (Saxenian, 1999 Wahba, 2014; Debnath, 2007). Especially in Egypt, the results of a field research of Wahba (2007) prove evidence of a correlation between the returnees' migration biography, such as period of stay abroad, and the entrepreneurship at home - the longer Egyptian migrants have stayed abroad, the higher the probability that upon return they will start their own businesses is (Debnath, 2007). In Egypt, this has caused 15% job creation accomplished by returnees' firms.

According to Bulgarian National Bank data, remittances from emigrants in 2018 are 1.1 billion BGN. About 20% of remittances are sent from Germany; from the USA – 18.6%; from Spain - nearly 12%; and from Great Britain - 8.6%. Data from the RMSSEM project show that the remittances are used to support relatives in Bulgaria (during returnees' stay abroad) and entrepreneurial and investment activity upon return. Around 7% of the returnees in the 2017 RSSSEM survey have declared that they invest their savings in new businesses. The main economic activities where the returnees focus to the entrepreneur are the retail, small shops for cosmetics or clothes (35.7%), manufacturing sector (23.8%), such as the production of orthopedic shoes, furniture, joinery and etc., followed by investments in various types of services (21.4%) and transport (11.9%) (Minchev, Boshnakov, in Nonchev et al., 2020). According to the Survey data, about 25% of returning migrants are unemployed. Also, 21.9% of returnees state that all the help they need upon return is finding a job. Hypothetically, such a negative labour performance of returnees could emanate from a high savings from their work abroad. The survey data contradict such a hypothesis, since the average stated amount of savings for half of the respondents is 6000 EUR. About 3.5% of the returnees are self-employed and 5.5% have declared that they own a business.

According to the data from the RMSSEM survey, the fact that returnees have migration experience does not lead to an active participation on the labour market. About 25% of the returning migrants declare problems with finding a job at home and are unemployed. Another 21.9% of the respondents who work at the moment of the survey, state that they need help upon their return to find a job.

## Entrepreneurship

Entrepreneurial activity in Bulgaria has increased last year, reaching its highest level since 2015. The share of people, who have started their own business, has reached 6%, compared to 3.7% a year earlier. This is shown by the results of the latest Global Entrepreneurial Monitoring (GEM) survey, in which the country has participated for the fourth year. Nevertheless, the level of entrepreneurial activity in the initial phase in Bulgaria remains among the lowest of the 49 countries surveyed in the world. The level of Bulgarian returnees' entrepreneurship is around 9% (3.5% are self-employed and 5.5% own a business). The differences in years of the studies and in methodology are not giving us a clear comparison foundation, but still, both levels are not high as for example in neighbouring Greece (14.33%), or Poland (12.76%), for the same indicator "Established business ownership".

Table 5

Percentage of 18-64 population	currently an ov	wner/manager of	f an established	business –
	GEM 20	018		

Greece	14.33
North Macedonia	8.00
Poland	12.76
Slovakia	5.88
Slovenia	8.45
Bulgaria	8.35
Slovakia	4.55
Slovenia	6.84

Entrepreneurship is a process that does not depend only on personal qualities, but also on a range of contextual factors (Misheva in Nonchev at al., 2017). The low percentage of entrepreneurial activities among returnees in Bulgaria could be a result of the low sustainability of return. Problems with returnees' reintegration at home could lead to emigration again and in Bulgaria, even more than emigration, the return is directed by family-based decisions, including problems of adaptation (Misheva, Getova, Bakalova, 2020). When the remigration plans are made, they are because of unsuccessful reintegration on the labour market and are driven by economic factors, such as payment and finding a job, rather than emotional reflexivity factors (Bakalova, Misheva, 2018).

## Acquisition and Improvement of Skills

Migration, particularly labour migration, is commonly perceived as a skill and qualification booster. It is perceived as an investment in human capital that could pay off after returning at home. The data from RMSSM are contradictory – almost every third of the returnees in the survey declares that he has not acquired any new skills. Half of the respondents have learned a new, foreign language, and 10% claim that they have got acquainted with improvements in the labour process.

Returnees, who claim a decrease in qualification and loss of skills, are 1% of the respondents. This share is the same for those who have improved their educational level.



Several studies show that returned migrants earn on average about 16% more than nonmigrants (Ambrosini, et al., 2012; Lacuesta, 2010; Wahba, 2014). Although half of the difference in observed wages between returnees and non-migrants is due to observable characteristics, such as age and education, other inconspicuous characteristics represent another quarter of this difference in wages. Lower educated returnees earn only 10% more than non-migrants, compared to those returning with higher education who earn 24% more. The positive effect from the duration of migration peaks at six years stay abroad and leads to a salary increase of about 27% more than non-migrants (Wahba, 2014).

The impact of acquired skills depends on the educational level of the migrant. Wahba states that nearly 53% of returning graduates have felt that skills acquired abroad are useful for their current job after their return. In comparison, only 33% of the less educated and 22% of the illiterate believe that this is the case. Therefore, the experience gained abroad provides more opportunity for the educated migrant to improve human capital.

This is not the prevailed situation in the case of Bulgaria's returning migrants. Table 6 shows returnees' monthly income, declared in the RMSSEM Survey.

Table 6

	Percentage of respondents (%)
No income	18
Up to 800 BGN	41
801-1600 BGN	17.5
1601-2400 BGN	2.2
Over 2400 BGN	1.5
No answer	17.3

Personal income of returnees in Bulgaria

Source: RMSSEM Survey.

Data from the survey show, that the average monthly income of the respondents who state a specific value of their income (57%) is 1340 BGN, and its variance is 816 BGN (Nonchev, Hristova, 2020). According to NSI, in the second quarter of 2020, the average gross monthly salary has reached 1337 BGN. Compared to the 1.5% of returnees declaring income over 2400 BGN and 2.2% who claim to earn 1601-2400 BGN, it seems that the migration experience has not contributed to higher pensions of returnees in Bulgaria.

#### Conclusion

Emigration processes from Bulgaria are accompanied by a steady, increasing flow of returnees, mainly from developed democracies. Return migration is one of the most desired by the sending countries' governments with a potential to contribute to an institutional change and socio-economic development. It allows return migrants to transfer social and human capital at home, to use the accumulated savings abroad for starting a business. There is a 10% of returning graduates, who can skillfully use the acquired knowledge and skills, but also increase the demand for political responsibility among the institutions. The returnees are graduates from countries with a high ranking of democracy and human development. Another positive characteristic of migration flow is that the emigration and return migration are not gender-selective in the case of Bulgaria.

Returnees in Bulgaria, especially the highly qualified ones, are a potential push factor for an institutional change, according to their qualification, skills, and the fact that their migration experience has been gained in highly developed countries. However, according to the data from the RMSSEM survey, the fact that returnees have migration experience does not lead to an active participation in the labour market and returnees do not earn higher wages when they return. Migration abroad does not lead to a "surcharge" on returnees' wages at home. The return at home might be declared as permanent but, a large group of Bulgarian returnees are planning a way back to foreign destinations. The circularity of migration is strengthened by problems with reintegration at home of returnees and the fact that migrants participate in a vital social net, pulling them to migrate again. Whether the real benefits from return migration flow reach institutional development depends on individual and social conditions: the migrants' success in accumulating savings and human capital but also on the society's ability to use them. To benefit from returnees, homeland governments need policies that encourage labour market reintegration and returnees' entrepreneurship.

## References

Ministry of labour and Social Policy. (2012). Updated National Strategy for Demographic Development of the Population in the Republic of Bulgaria (2012-2013). Sofia.

Ambrosini, et al. (2012). The Selection of Migrants and Returnees in Romania: Evidence and Long-Run Implications. UC Davis, CA.

Bakalova, M., Misheva, M. (2018). Explanations of Economic Rationality Challenged: Contemporary Return Migration To Bulgaria. – Economic Studies, N 2.

Bourdieu, P. (1993). The Field of Cultural Production. Cambridge, UK: Polity Press.

Budyta-Budzyńska, M. (2017). Emigracja powrotna – zyski i straty, kapitały i przekazy migracyjne. Na przykładzie reemigracji z Islandii do Starych Juch. – CMR Working Papers, 101/159.

- Bukraba-Rylska, I. (2010). Migracje zarobkowe ludności wiejskiej: oceny i wyceny zjawiska. In: Grzymałą-Moszczyńska, H., Kwiatkowska, A., Roszak Drogi, J. i rozdroża (eds). Migracje Polaków w UE po 1 maja 2004 roku. Analiza psychologiczno-socjologiczna, Kraków: Zakład Wydawniczy NOMOS, p. 283-292.
- Cassarino, J. P. (ed.). (2014). Reintegration and Development, Return migration and Development Platform (RDP). EUI Robert Schuman Centre for Advanced Studies.
- De Haas, H. (2007). Remittances, Migration and Social Development. A Conceptual Review of the Literature, UNRISD.
- Debnath, P. (2016). Leveraging Return Migration for Development. KNOMAD Working Paper 17.
- Devan, Janamitra, Parth S. Tewari. (2001). Brains abroad. The McKinsey Quarterly, Autumn, p. 51. Gale Academic OneFile Accessed 29 May 2020.
- Education and Training Monitor 2019, Luxembourg, Publications Office of the European Union, available at: https://ec.europa.eu/education/sites/education/files/document-library-docs/volume-1-2019-education-andtraining-monitor.pdf, last accessed on 19.11.2020.

European Social Survey: https://www.europeansocialsurvey.org/, last accessed on 19.11.2020.

- Gallup International Bulgaria, Express opinion poll, from 16 July 2020, available at: https://www.gallupinternational.bg/43663/express-opinion-poll/, last accessed at 18.11.2020.
- Hahn-Schaur, Justyna Segeš-Frelak. (2019). Co-authors: Mathias Czaika, Anna Faustmann, Agnieszka Fihel (Warsaw University), Paweł Kaczmarczyk, Return Migration Background, Practice Examples and Policy Options for Intra-EU Mobility – Focus on Poland, International Centre for Migration Policy Development, Vienna, Austria.
- Ivus, O., Naghavi, A. (2014) Migration, technology diffusion and institutional development at the origin, Chapters. – In: Robert, E., Lucas, B. (eds.). International Handbook on Migration and Economic Development. Chapter 10. Edward Elgar Publishing, p. 267-287.
- Kaczmarczyk, P. (2013). Matching the skills of return migrants to labour market needs in Poland. In: OECD. Coping with Emigration in Baltic and East European Countries. OECD Publishing, p. 112-125.
- Lacuesta, A. (2010). A Revision of the Self-Selection of Migrants Using Returning Migrants' Earnings. Annales d'économie et de statistique, 97(97-98), p. 235-259.
- Łukasiewicz, S. (2019). Poland. In: Mazurkiewicz, A. East Central European Migrations During the Cold War: A Handbook, Walter de Gruyter GmbH & Co KG.
- Minchev, V., Boshnakov, V., (2007). Stay or leave again? New evidence for Bulgarian Return Migration. Economic Thought Journal, p. 107-126
- Misheva, M., Getova, T., Bakalova, M. (2020). Returnees' reintegration "back at home" and sustainability of return. – In: Return Migration: European and Bulgarian perspectives. Collection with papers from a scientific conference held at UNWE, 28.02.2020.
- Nonchev, A., Hristova, M. (2018). Segmentation of Returning Migrants. Economic Studies, N 2.
- Nonchev, A., Minchev V., Zareva, I., Boshnakov V., Bakalova, M., Misheva, M., Hristova, M. (2020). Returning Migrants. UNWE Publishing House, Sofia.
- Nowicka, M. (2015). Habitus: Its Transformation and Transfer through Cultural Encounters in Migration. In: Costa, C., Murphy, M. Bourdieu, Habitus and Social Research. Palgrave Macmillan, London.
- Piore, M. J. (1979). Birds of passage: Migrant labour and industrial societies. Cambridge, UK: Cambridge. University Press.
- Sabotinova, D. (2013). Institutional change and economic development. Conference proceedings, Bourgas Free University, Bourgas, Vol. 3.
- Saxenian, A. (1999). Silicon Valley's New Immigrant Entrepreneurs. San Francisco: Public Policy Institute of California.
- Schueltz, T. (1961). Investment in Human Capital. American Economic Review, Vol. LI, N 1.
- Schueltz, T. (1972). Investment in Human Capital: The Role of Education and of Research. New York: Free Press. Simeonova-Ganeva, R., Vassilev, A., Ganev, K., Dimitrov, L. (2019). Medium-Term and Long-Term Forecasts for
- the Development of the Labour Market in Bulgaria: Employment and Labour Market Imbalances, Determinants Of Labour Supply (2008–2034), Human Capital DZZD, Ministry of Labour and Social Policy
- Spilimbergo, A. (2009). Democracy and Foreign Education. American Economic Review, 99(1), p. 528-543.
- Stoyanov, A., Nonchev, A., Stoilova, V., Petrunov, G., Stoyanova, M., Misheva, M. (2017). Economic Sociology. Sofia: UNWE Publishing House.
- Wahba, J. (2014). Return Migration and Economic Development. In: Robert, E., Lucas, B. (eds.). International Handbook on Migration and Economic Development. Chapter: 12. "Edward Elgar Publishing" Ltd.

World Education Project. Available at https://www.youthworldeducationproject.com/, last accessed at 19.11.2020. Zareva, I. (2018). Returning migrants – effects on the labour market in Bulgaria. – Economic Studies, N 2.

# **SUMMARIES**

Riddhish N. Joshi Yogesh C. Joshi

# AN ASSESSMENT OF CETSCALE IN LIBERALISED ECONOMY

The study aims to empirically assess the dimensionality, reliability and validity of the consumer ethnocentrism tendency scale (CETSCALE) in the liberalised economy, India. Data are collected using a structured questionnaire from urban and rural regions to evaluate the CETSCALE. A total of 900 valid responses were collected. The dimensionality, reliability and validity have been assessed for the urban sample of 455 and the rural sample of 445 separately, as well as for the collective sample of 900. It was established that CETSCALE is not unidimensional in India. It comprises two dimensions, termed as, protective ethnocentrism and patriotic ethnocentrism, in all three samples. The bidimensional CETSCALE is also found reliable and valid. The study advances the existing pool of information in the field of international economics, consumer psychology and global marketing. It also assists domestic producers to get an improved understanding of consumers' ethnocentric tendencies, which in turn would benefit them to choose superior marketing strategies and boost their sales. Progress of inland manufacturers will help the nation to grow and the overall quality of life of people will improve. The study will not only deliver certain social and policymaking insights to the domestic firms and Government but also to the foreign firms functioning or planning to operate in India.

JEL: M31; F1; F10

Mariya Georgieva Evgeni Stanimirov

# MARKETING PROJECTIONS OF SOCIALLY RESPONSIBLE BRANDING ON CONSUMER LOYALTY

The current market reality is strongly influenced by the development of the concepts of "sustainable development" and "Experience economy". The latter forms a new business model – B2H (Business to human) – a human-centered business. Together with the increasing percentage of sophisticated customers, this is becoming a serious challenge for the businesses. In this context, socially responsible branding is positioned as a relevant tool that serves, on the one hand, to satisfy the pursuit of social, economic and environmental justice, and on the other hand, makes the relationship "company-client" to be a form of experience beyond the rational framework of market exchange. The study presents an author's model of the marketing projections of the application of socially responsible branding. In a mirror perspective – in terms of end-users and business, the relationships between the individual constructs of the model have been empirically tested with an emphasis on exploring the possibilities of socially responsible branding to influence the level of consumer loyalty, which is often considered a priority goal for companies. In conclusion, specific arguments are formulated for the practical applicability and significance of such a study. JEL: M31

Petar Peshev

# ANALYSING CFD RETAIL INVESTORS' PERFORMANCE IN A POST MIFID II ENVIRONMENT

In this scientific article, the performance of retail investors trading contracts for differences offered by EU regulated investment firms has been analysed. The aim of the study is to identify common patterns of behaviour and the determinants of holding period returns and risk aversion in general and in a post-MiFID II environment. More than 80% of clients in this sample are losing money and a panel econometric examination reveals that low equity and high used margin-to-equity ratios are among the biggest contributors for negative holding period returns. Used margin-to-equity ratios are affected by equity size and by the holding period returns. Regulatory changes due to MiFID II implementation and due to the introduction of a restriction on the sale of contracts for differences are affecting holding period returns and used margin-to-equity ratios, perhaps not as intended and expected.

JEL: F31; G11; G15; G41

Juhee Singh Verma Pritee Sharma

# VULNERABILITY OF SMALL FARMERS TO HIGH FOOD PRICES – A CASE STUDY OF INDIAN FARMERS

Food price spikes increase the vulnerability of poor, marginalized people to food insecurity and are often associated with landless rural or urban poor. Nevertheless, high food prices are commonly understood as instrumental in increasing farm incomes. For this reason, agriculture price policies are used to provide higher incomes to farmers. Income gains could be real for farmers with large landholdings but often attributed to all farmers without regard to their holding-size. Farmers with small holdings are typically net food buyers of essential food commodities and thus vulnerable to rising food prices. Fluctuations in food prices globally have increased the significance and the probable policy response to such price rise in recent years. Studies in different countries have revealed that household responses depend upon the region's market structure where the household is situated. However, the extent of vulnerability is rarely accessed in any such analysis.

In this context, the present study uses India as a case study to understand the distributional impact of food prices on farm households and their vulnerability position. Many of these farm households are net food buyers such that the effect of high food prices is counterproductive for them. Results show that about sixty-four percent of producer households in India are net buyers of food, and nearly two-thirds of these lie in the lowest quintile. Around one-third of these agriculture households are significant food buyers, further increasing their vulnerability to high food prices. Short-term policy interventions like income transfers and, in the long run, better livelihood opportunities in other sectors would be required to shield such farmers from the detrimental effect of increased crop prices. Results also suggest the need for reexamining the role of price policy instruments as a tool to increase the incomes of all farmers in India.

JEL: D31; H23; Q12; Q18

Yuliia Sotnikova Eka Stepanova Nikita Nazarov Andrey Semenchenko

## FEATURES OF CREATIVE CLUSTERS FORMATION IN UKRAINE

In this article, the definition and concept of the term "creative industry" have been considered. The definition of creative clusters from the point of view of domestic and foreign scientists has been given. A number of creative clusters features have been identified and the own definition of this term has been formed. The experience of developed countries in the formation of creative clusters has been analyzed. The analysis of the population of Ukraine by the indicators of employment, employment by type of economic activity has been conducted. Examples of creative hubs organization in Ukraine have been considered and their economic activity has been analyzed. The main types of creative clusters have been identified and the principles of their formation have been outlined. JEL: C38; O15; O24

Reshmi Banerjee Avani Desai

# A STUDY OF COMPETENCIES AND CHALLENGES OF INDIAN WOMEN ENTREPRENEURS

Entrepreneurs are innovators, job providers and people who perform economic activities while fulfilling responsibility towards the society (Ahmad N & Seymour R, 2006). According to the 6<sup>th</sup> Economic Census released by the Ministry of Statistics and Programme Implementation, there are 58.5 million entrepreneurs in India, of which 14 % are women entrepreneurs. The aim of the research paper is to outline empirical research on the competencies required by women entrepreneurs to start a business and to sustain the same successfully. This paper also aims to discuss the problems and challenges encountered by women entrepreneurs in running their business. A survey of women entrepreneurs was conducted in Gujarat using a structured questionnaire and personal interview. The questionnaire was designed with a list of competencies, problems and challenges faced by the women entrepreneurs that were compiled from previous theoretical and empirical research. The entrepreneurs were asked to give their ratings based on their perception and experience on five-point Likert scales. A factor analysis was conducted in order to identify clusters of competencies that loaded onto each group. The most common problems and challenges faced by women entrepreneurs were identified statistically.

The factor analysis identified 9 clusters of competencies from the list of 36 competencies, which are necessary for entrepreneurs to start the business and sustain with it. The results show that the major problems faced by the women are lack of finance, difficulty in work-life balance and high socio-cultural barriers over the life of the business.

The outcome of this paper can be used by researchers, government agencies, non-government organisations and incubation centres to understand and develop policies that help more and more women to become entrepreneurs and run their business successfully. JEL: L26

Imad Kareem Alaamshani Hanny Zurina Hamzah Shivee Ranjanee Kaliappan Normaz Wana Ismail

## IMPACT OF TRADE FACILITATION ON EXTENSIVE MARGIN

This paper examines the link between trade facilitation and extensive margin for 111 countries over the period of 2008 to 2014. The study employs a panel pseudo-maximum likelihood (PPML) method to estimate the model. We measure trade facilitation using more comprehensive measures of enabling trade index (ETI); market access, border administration, transport and communication infrastructure, and business environment. The novelty in using ETI is a comprehensive index that takes into account the effects of factors, policies, and services facilitating the free flow of goods over borders and to the destination. The paper has four major findings. Our results highlight that better trade facilitation leads the countries to export, import more diversified, and a wider range of products. Second, improvement in the business environment and transport and communication infrastructure in trade facilitation yield the highest return in terms of increasing the number of exported products. Third, border administration coming as the second most important factor in affecting extensive margin. Forth and most interestingly, despite economic integration, there is a considerably stronger effect on the side of exporter's trade facilitation, which shows large unexploited gains, to be reaped on the side of exporter countries trade facilitation.

JEL: F13; O24; C13

Yuliia Sotnikova Oleg Ivanisov Olena Lebedynska Anastasiia Maliukina

# PROFESSIONAL MOBILITY OF YOUTH: TRENDS, PROBLEMS AND PROSPECTS

In the article, the analyses of existing definitions of the category "professional mobility" has been conducted. The approaches to the study of professional mobility have been analyzed. Statistical data about professional mobility of the youth has been analyzed, peculiarities of the migration of workers abroad by age groups have been determined. Problems in the sphere of youth employment in Ukraine have been defined. JEL: J62

#### Maria Bakalova

# EDUCATION AND MIGRATION: THE (NON)RETURN OF BETTER EDUCATED MIGRANTS TO BULGARIA

The article discusses the connection between education and re-migration with a focus on the return to Bulgaria of highly educated migrants, and especially those who have been educated abroad. The underlying hypothesis is that in the absence of specific personal or family reasons or clear economic motives, the return of highly educated migrants, and especially those who received education abroad, back to Bulgaria is due to the inability to find the realisation of their education abroad. Furthermore, the integration of returnees who have graduated abroad on the Bulgarian labour market is not without problems. The hypothesis is tested against qualitative and quantitative data from a 2017 national survey and 100 in-depth interviews with Bulgarian returnees. The analysis of the data reveals that the

return of highly educated migrants back to Bulgaria is rather an exception in the overall picture of return, especially when it comes to migrants who have received their education abroad. Upon the return of highly educated remigrants, along with personal and family reasons for return, the rational dichotomy of "push" from the country of immigration (impossibility to find a job there) and "pull" to the homeland (availability of work in Bulgaria) stands out. For the highly educated (including those educated abroad) the "push" and "pull" factors act differently depending on the field of the received education. Moreover, professional realisation and finding a job are to a much greater extent determined by the field of education and not so much by the educational and scientific degree. Understanding the motives behind the return of highly educated Bulgarian emigrants to Bulgaria, as well as their separation into categories according to the specifics of their education and qualification, would help develop adequate incentives to support the return and reintegration into the Bulgarian society and economy.

JEL: A14; F22; J60

#### Mihaela Misheva

# RETURN MIGRATION AND INSTITUTIONAL CHANGE: THE CASE OF BULGARIA

The article discusses the relation between the return migration flow and the effects for the sending country, especially for the socio-economic change. An institutional approach has been adopted to analyze the possible changes that returning migrants would bring to their homeland. The main goal is to reveal the possible positive effect of international migration on the Bulgarian society and especially on the social institutions. The assumption that returnees may be agents of change is analyzed within the broad framework of institutionalism and data from a sociological survey of returned migrants. The micro and macro level of the "return-socio-economic change" relation is discussed through the broader view of the human capital and social capital transfer. The article presents the migration experience as helpful for the returnee's integration at home and as a possible influence on the institutional environment in the country. JEL: O15; F22; Z1