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THE ROLE OF LEGISLATION AND CONSUMER PERCEPTION IN SHAPING CIRCULAR ECONOMY BEHAVIOUR

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Abstract

The concept of the circular economy (CE) brings about significant and radical changes in consumption patterns, especially in the habits and decisions of consumers, who are key participants in this model. Understanding how organisational barriers, laws, and circular economy strategies affect consumer preferences in the circular model can help manufacturers develop efficient and profitable strategies that respond to market needs and encourage sustainable consumption. Therefore, the paper aims to examine how personal, organisational, and financial barriers affect circular economy strategies and perceptions of them to achieve the effect of legislation on consumer decisions regarding sustainable consumption, consumer behaviour, and support for circular initiatives. The results of empirical research have shown that all proposed hypotheses are accepted, with a special emphasis on the impact of legislation on consumer decisions, which can significantly shape consumer behaviour in sustainable consumption and provide incentives for the circular economy. Based on the influence of factors, this paper can serve as a roadmap for decision-makers in creating regulations and for consumers to participate actively in circular initiatives towards sustainable consumption.

Keywords: circular economy, customer behaviour, sustainable production, legislation

1. INTRODUCTION

The circular economy is advancing through strong global cooperation, innovation, effective regulations, and a profound transformation of consumer and business awareness towards sustainability (Geissdoerfer et al., 2017). Hence, the

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circular economy as a regenerative model encourages product reuse, repair, and recycling to extend their life and reduce waste (Goyal et al., 2018). However, the success of the transition towards a circular economy is conditional upon consumers' adoption of sustainable consumption behaviour. In this framework, legislation and consumer perception are key in encouraging responsible behaviour and acceptance of sustainable practices (Vidal-Ayuso et al., 2023).

The latest research indicates that the implementation of circular strategies is still in the initial phase, given that the transition from linear to circular initiatives in companies encounters numerous organisational, technical, financial and market challenges and barriers (McDowall et al., 2017; Shevchenko et al., 2023). Barriers significantly impact the adoption and application of circular economies and how consumers perceive them. Barriers influence customers' perceptions of sustainable consumption and slow businesses' adoption of innovative initiatives. Laws and regulations also significantly shape customers' decisions about sustainable goods and services, impacting their initiative and conduct.

Implementing circular economy strategies involves integrating legal measures, technological innovation and responsible resource management. Legislation sets the framework for implementing sustainable practices, while consumer perception influences the adoption of products designed per circularity principles (Shevchenko et al., 2023). The application of various laws and regulations directs the behaviour of economic entities and consumers towards sustainable production and consumption (European Commission, 2020). In this way, state instruments support the implementation of circular economy strategies and shape consumer perceptions, encouraging their support for circular initiatives. Policies and regulatory frameworks, including legislation, guidelines and incentives, can amplify the effect of sustainable practices and enable a societal transition towards circularly oriented behavioural patterns (Patwa et al., 2021).

Various studies have examined consumer contributions to the development of CE, such as green behaviour (Testa et al., 2020), awareness of product circularity (Keramitsoglou et al., 2023), and demand for circular packaging (Liu et al., 2023). However, there is a lack of research that would explore in more detail the impact of the legislative framework and regulations on consumer decisions and the mechanisms that encourage consumers to actively implement CE strategies in the context of sustainable consumption (Skurpel & Bakalarczyk, 2023).

Hence, this paper aims to investigate the impact of personal, organisational and financial barriers on the development and implementation of circular economy strategies, as well as on consumers' perceptions of these strategies, with a focus on analysing the effect of legislative measures on consumers' decisions regarding sustainable consumption, their behavior and support for circular initiatives. Research conducted under the Eco4All COST action CA22124 shows that the perceived effectiveness of legislation has a statistically significant and positive impact on consumer decisions regarding sustainable product consumption, behavioural change and engagement in incentive-driven circular initiatives. The results of empirical research can be helpful for decision-makers, who,

based on the established impacts of legislation on consumer decisions, can create more effective proposals and policies to encourage the circular economy. Also, this work can serve as a guideline for consumers to actively participate in circular initiatives and direct their decisions towards sustainable consumption, which will contribute to greater responsibility in choosing products and services.

The paper is structured as follows. The second section provides a literature review on factors influencing consumer behaviour, sustainable consumption, and incentives for CE, and it defines the hypotheses tested in the proposed model. The third section, which deals with the methodology, explains the development of the questionnaire, the data collection process, and the methods and software used in the analysis. The fourth section focuses on the data analysis and presentation of the results. The fifth section discusses the interpretation of the results, while the sixth section highlights the main conclusions, research limitations and suggests possible directions for future research.

2. LITERATURE REVIEW

The shift to a circular economy (CE) indicates a core change from conventional linear production models, but its execution encounters considerable barriers on various fronts. Studies identify three main factors that affect CE implementation: barriers, circular strategies, and regulatory frameworks (Paino Diaz, 2024; Palombi et al., 2024). Grasping their interplay is essential for promoting sustainable consumption and production, customer behaviour, and incentives for circular initiatives.

Psychological and social factors significantly influence customers' integration of circular economy practices. The theory of planned behaviour (Ajzen, 1991) offers a solid framework for comprehending these interactions, wherein attitudes, subjective norms, and perceived behavioural control together shape intentions towards sustainable consumption. The Directive on Empowering Consumers for the Green Transition, adopted in March 2024 (EU Parliament and Council, 2024), amends existing EU consumer law to require precise and reliable information on the sustainability attributes of goods and services.

Recent studies highlight substantial personal and cognitive barriers that impede the uptake of circular strategies that foster sustainable production and consumption. Consumers frequently display a “disposable mindset” (Mugge et al., 2017), indicating an unwillingness toward product longevity and repair, arising from entrenched consumption behaviours. These behavioural tendencies constitute a significant barrier to circular initiatives, as they diminish the efficacy of legislative measures intended to promote responsible consumption. Furthermore, the transition to circular models faces substantial organisational obstacles. Kirchherr et al. (2017) identify four major barrier categories: cultural (resistance to change), market (lack of consumer demand), regulatory (unfavourable policies), and technological (lack of innovation). Financial constraints prove particularly challenging, as circular business models often require significant upfront investment while delivering uncertain or long-term returns (Ranta et al., 2018). The following hypothesis was developed based on these considerations:

H1: Personnel, organisational, and financial barriers positively influence the implementation of Circular Economy Strategies.

For customers, financial considerations significantly impact engagement with circular models. While price premiums for sustainable products remain a barrier (Gleim et al., 2013), new research identifies more nuanced economic dynamics. Hazen et al. (2017) found that consumers evaluate circular products through a total cost of ownership lens, where durability and potential resale value can offset higher initial prices. Based on the mentioned considerations, the following hypothesis has been developed:

H2: Personnel, organisational, and financial barriers positively influence the perception of circular strategies.

The European Union's Circular Economy Action Plan exemplifies comprehensive policy approaches, combining waste directives with eco-design requirements and investment in innovation (European Commission, 2020). However, policy effectiveness varies significantly by context. In developing economies, weak enforcement of circular strategies often undermines regulatory impact (Schröder et al., 2019). Emerging research emphasises the importance of policy sequencing. Van den Bergh et al. (2021) propose that information campaigns and perception of CE strategies should precede regulatory measures to build public support, while economic incentives work best when targeted at specific behavioural pain points. The following hypothesis was developed:

H3: Circular Economy Strategies positively influence the perceived effect of legislation on consumer decisions.

Also, legislative measures, through the establishment of strategic actions and mandatory standards, enable a structural transformation from a linear economic model, based on the exploitation, consumption and disposal of resources, towards a circular paradigm that promotes the efficient use of resources, extended product lifespans and the prevention of waste (Ofak, 2024). Based on the above, the following hypothesis was developed:

H4: Perception of circular strategies positively influences the perceived effect of legislation on consumer decisions.

Government interventions significantly shape business practices and consumer behaviour in CE contexts. Calisto Friant et al. (2021) categorise effective policy measures into regulatory instruments that indicate extended producer responsibility for sustainable production, economic incentives that enable tax benefits for circular products, and information-based tools such as labelling. Accordingly, the following hypothesis was formulated.

H5: The perceived effect of legislation on consumer decisions has a positive influence on the consumption of sustainable production.

In the circular economy, legislation has a more active role in influencing consumer behaviour and market dynamics than in guaranteeing regulatory compliance. By integrating circularity principles into legally binding rules, the European Union mandates

that manufacturers adopt sustainable practices and provide consumers with the information, rights, and confidence they need to participate actively in the circular economy (Paganizza, 2020). In line with the previous discussion, the following hypothesis has been established.

H6: The perceived effect of legislation on consumer decisions positively influences customer behaviour.

Therefore, legislation supports a strong, inclusive, and environmentally sustainable European economy by catalysing systemic socioeconomic development (Ballke & Kietz, 2020). In this light, the following hypothesis was developed:

H7: The perceived effect of legislation on consumer decisions positively influences the implementation of incentives for the circular economy.

The measurement model was created based on the developed hypotheses (Figure 1).

3. METHODOLOGY

3.1. Sample and data collection

This study presents the findings of a survey conducted within the Eco4All COST Action CA22124 framework (https://www.cost.eu/actions/CA22124/), which investigates how consumers contribute to sustainable behaviour to promote a circular economy. A structured online questionnaire was used to analyse consumers' attitudes, knowledge and behaviour regarding the circular economy. In addition, the role of consumers in shaping business strategies and decision-making in companies and their influence on public policy-making was examined. The online questionnaire was distributed to Eco4All COST action members to collect as many surveys as possible from the countries participating in the Eco4All COST action. The period of distribution of the questionnaire was from November 2024 to March 2025. Respondents from 35 different countries participated in the survey, which provided a broad perspective and international insight into circular consumption. The questionnaire was distributed via email through the ECO4ALL

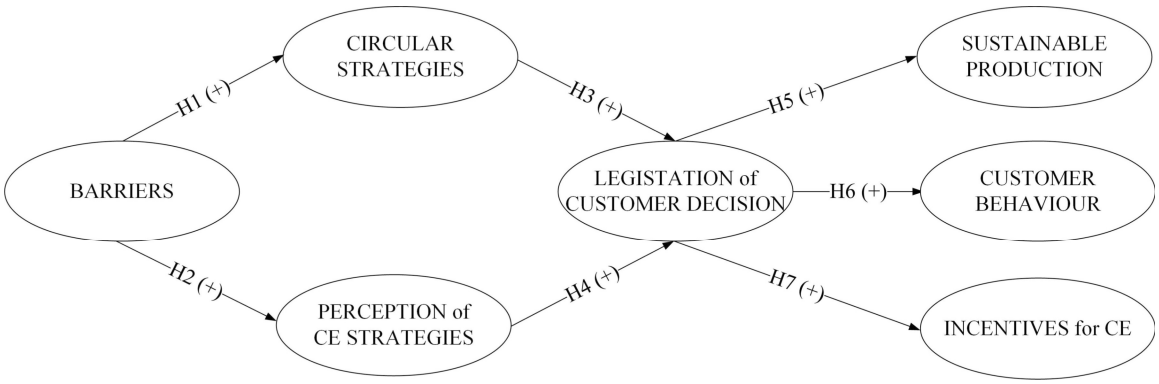

Figure 1. Measurement model

COST Action CA22124 network. All participating countries in the ECO4ALL action were involved in the research, and members of the action were kindly asked to further disseminate the questionnaire through their national contacts in order to reach the widest possible group of respondents in their respective countries. In this way, diverse demographic groups—including different age categories, education levels, and professional backgrounds, were successfully represented. A total of 350 questionnaires were distributed, out of which 270 were deemed valid and included in the final analysis, resulting in a validity rate of 77.1%. The invalid questionnaires were excluded due to incompleteness or inconsistent responses. These 270 valid responses covered various age groups, education levels, and work experience, providing a solid basis for a comprehensive analysis. The five-point Likert scale was utilised for respondents to express their opinions. One of the key aspects of the research was to assess the level of consumer awareness of their rights, obligations, and opportunities in the context of the circular economy and strengthen their role in the transition to more sustainable consumption models. The findings were used to quantitatively analyse current challenges and barriers to implementing circular practices and formulate concrete recommendations that can contribute to improving public policies and strategic frameworks at the national and European levels.

3.2. Methods

Invalid questionnaires were excluded, while fully completed answers were selected and prepared for further evaluation. Software packages SPSS v.25 and AMOS v.22 were employed for data analysis. The Exploratory Factor Analysis (EFA) was carried out over the whole sample, permitting the testing of sample adequacy and exclusion of indicators with significant errors and/or low loading values. Thus, the quality of the latent constructs used for further modelling was improved. Also, using Harman's one-factor test, standard method bias (CMB) was tested to assess bias in the dataset. CMB occurs when respondents respond to independent and dependent variables simultaneously, which can lead to an artificial increase in covariance and result in incorrect conclusions about a relationship between them. The absence of CMB can be confirmed if we determine from EFA analysis that the factor that combines all variables explained less than 50% of the total variance, indicating a negligible impact of common method bias (Fuller et al., 2016). Finally, Confirmatory Factor Analysis (CFA) was conducted to assess convergent and discriminant validity, and Structural Equation Modelling (SEM) was utilised to test hypotheses.

4. DATA ANALYSIS AND RESULTS

After data collection, incomplete responses were excluded from the final database, and a sample of 270 questionnaires was established. Table 1 demonstrates the demographic characteristics of the respondents.

4.1. Exploratory factor analysis

Exploratory factor analysis (EFA) was used on 48 items to examine the factor structure. The Kaiser-Meier-Olkin (KMO) test was used to assess the overall adequacy

Table 1. The demographic characteristics of the respondents

Measure	Item	Frequency	%
Gender	Male	93	34.5
	Female	175	65.5
Age	18 - 30	71	26.2
	31 - 40	76	28.2
	41 - 50	76	28.2
	51 - 60	37	13.7
	61 - 65	3	1.1
	65+	7	2.6
The level of education	High school diploma or less	17	6.3
	Higher school	18	6.7
	Basic academic studies	31	11.5
	Master studies	43	15.9
	Doctoral studies	161	59.6
Years of working experience	none	11	4.1
	up to a year	19	7.1
	from 1 to 5 years	47	17.5
	from 6 to 10 years	32	11.7
	from 11 to 20 years	81	30.1
	from 21 to 30 years	48	17.7
	from 31 to 40 years	26	9.6
	40+ years	6	2.2
Region	**Included Countries**	**Frequency**	**%**
Balkans	Armenia, the Czech Republic, Estonia, Georgia, Hungary, Latvia, Lithuania, Moldova, Slovakia	126	46.7
Eastern Europe	Armenia, Czech Republic, Estonia, Georgia, Hungary, Latvia, Lithuania, Moldova, Slovakia	58	21.5
Western Europe	Austria, Denmark, France, Germany, Ireland, Italy, Portugal, Spain, Sweden, United Kingdom	49	18.2
Mediterranean / Middle East	Cyprus, Israel, Turkey, Malta	63	23.4
Africa & Asia	Algeria, Indonesia, Taiwan R.O.C.	3	1.1

of the sampling. The KMO test is 0.868, which is a high value. In addition, the adequacy of the sample is assessed using Bartlett's test of sphericity, which showed statistical significance at the new level (p<0.001) (Ho, 2006; Coakes, 2013). Principal component analysis and varimax rotation with Kaiser normalisation were employed as the rotation method for factor extraction (Coakes, 2013), and factor reduction was performed. The results of the EFA confirmed the factor structure consisting of seven factors and 44 indicators, as presented in Table 3. The identified factors account for 54.836% of the variance in the model. Then, the EFA was performed with all indicators belonging to one factor—the results of the Harman one-factor test account for 24.406% of the variance. The literature states that less than 50% of the total variance, common method bias is not considered a serious concern (Podsakoff et al., 2003; Schaller et al., 2015; Fuller et al., 2016).

4.2. Measurement model validation

The collected data were processed and statistically analysed using SPSS AMOS 18.0 with the maximum likelihood method to estimate some fit, assess the goodness-of-fit model, and test the significance of loadings and correlations between constructs.

Examining fit indices, which evaluate the model's fit to the data, is the first step in determining whether a measurement model is adequate (Mulaik et al., 1989; Hu & Bentler, 1995; Hair et al., 2019). The chi-square/degrees of freedom (χ^2/d*f*), root mean square error of approximation (RMSEA), comparative fit index (CFI), incremental fit index (IFI), and Tucker Lewis index (TLI) are among the model fit criteria and suggested cutoff values shown in Table 2. The demonstrated values determine whether the model meets the recommended thresholds. Therefore, the measurement model can be considered valid for further interpretation.

Confirmatory factor analysis (CFA), the measurement model of structural equation modelling (sem), depicts the pattern of observed variables for latent constructs in the hypothesized model. CFA's significant components assess the reliability and validity of the observed variables. Additionally, factor loadings, unique variances, and modification indices are examined to determine the most representative indicators of latent variables before testing the structural model (Schreiber et al., 2006).

The reliability of the measurement scale was assessed to assess the internal consistency among the indicators of each construct. For this purpose, Cronbach's alpha and Composite reliability were used. The results of the internal consistency of each construct of the model are presented in Table 3. The results show a high level of reliability, with a reliability coefficient of 0.70 or more considered acceptable (Cronbach, 1951), while values above 0.6 are also regarded as acceptable (Hair et al., 2017). Furthermore, construct validity was assessed regarding both convergent and discriminant validity. The correlation between items in the same factor is the foundation of convergent validity (AVE) (Kaplan, 2000). According to the criteria of Fornell and Larcker (1981) on the measurement scales, which state that item loadings must be significant and above 0.5, CR must be above 0.7, and AVE for each factor must be above 0.5, Table 3 demonstrates that the factor loadings achieved convergent validity except for two constructs where they are close to the recommended value (Hair et al., 2017). Consequently, it may be said that the constructions satisfied convergent validity and reliability requirements.

Each construct's square root of AVE is larger than its correlations with any of the other constructs and greater than 0.5, as seen in the diagonal of Table 4. All AVE square roots are above 0.7 and significantly greater than cross-correlations, as Table 4 illustrates. This finding suggests that the items exhibit more variation in common with their respective constructs than with other constructs, thereby demonstrating the discriminant validity of the constructs (Fornell & Larcker, 1981).

4.3. Structural model assessment and hypotheses testing

To confirm the proposed research hypotheses and establish the extent to which the suggested factors are causally related, structural equation modelling (SEM) was used (Hair et al., 2019). The structural model fit the data well (χ^2/d*f* = 1.46, RMSEA = 0.041, CFI = 0.924, IFI = 0.962, and TLI = 0.915). Figure 5 displays the findings of the structural equation modelling (SEM) to assess the research hypotheses.

The standardised regression coefficients of the path analysis for the structural model and the t-values are presented in Table 5. In

Table 2. Model fit indices for the measurement model

	χ^2 / df	RMSEA	CFI	IFI	TLI
Sample values	1.66	0.045	0.92	0.92	0.91
Recommended value	*to* ≤3.00	*to* 5 ≤0.05	*to* 0 ≥0.90	*to* 0 ≥0.90	*to* 95 ≥0.95

Table 3. Factor loadings, reliability, and convergent validity of reflective constructs

Construct	Items	Item loading	Composite reliability CR≥0.70	Average Variance Extracted AVE ≥0.50	Cronbach Alpha α≥0.70
Personnel, organisational, and financial barriers (Barr)	Barr_1	0.659	**0.899**	**0.501**	**0.871**
	Barr_2	0.765			
	Barr_3	0.777			
	Barr_4	0.759			
	Barr_5	0.738			
	Barr_6	0.782			
	Barr_7	0.662			
	Barr_8	0.665			
	Barr_9	0.525			
Circular Economy Strategies (LCE)	LCE_1	**0.**800	**0.925**	**0.673**	**0.899**
	LCE_2	0.888			
	LCE_3	0.812			
	LCE_4	0.875			
	LCE_5	0.835			
	LCE_6	0.698			
Perception of Circular Strategies (Ce_strat)	CE_strat_1	0.850	**0.894**	**0.632**	**0.848**
	CE_strat_2	0.779			
	CE_strat_3	0.841			
	CE_strat_4	0.851			
	CE_strat_5	0.630			
Effect of Legislation on Consumer Decisions (LEG)	LEG_1	0.868	**0.879**	**0.709**	**0.794**
	LEG_2	0.800			
	LEG_3	0.857			
Sustainable production (SP)	SP_1	0.592	**0.850**	**0.591**	**0.745**
	SP_2	0.778			
	SP_3	0.850			
	SP_4	0.828			
Customer Behaviour (CB)	CB_1	0.679	**0.863**	**0.476**	**0.822**
	CB_2	0.693			
	CB_4	0.734			
	CB_5	0.736			
	CB_6	0.610			
	CB_8	0.700			
	CB_9	0.667			
Incentives for Circular Economy (INC)	INC_1	0.556	**0.884**	**0.435**	**0.853**
	INC_2	0.628			
	INC_3	0.637			
	INC_4	0.642			
	INC_5	0.706			
	INC_6	0.697			
	INC_7	0.734			
	INC_8	0.713			
	INC_9	0.709			
	INC_10	0.544			

the SEM, squared multiple correlations (R^2) indicate the percentage of variance in a dependent variable that the independent variables can explain. The R^2 value accounts for 21.1% of the variance in SP, 53.8% in INC, and 91.2% in CB. Those results are highly acceptable for determining the linear relationship between the constructs (Bar,

Table 4. Descriptive statistics, correlation matrix and discriminant validity

	Mean	S.D.	Barr	LCE	CE_strat	LGE	SP	CB	INC
Personnel, organisational, and financial barriers (Barr)	3.66	0.77	**0.707**						
Circular Economy Strategies (LCE)	4.71	1.08	0.181**	**0.797**					
Perception of Circular Strategies (Ce_strat)	3.67	0.68	0.292**	0.444**	**0.795**				
Effect of Legislation on Consumer Decisions (LEG)	4.08	0.98	0.169**	0.199**	0.167**	**0.841**			
Sustainable production (SP)	3.61	0.72	0.362**	0.401**	0.429**	0.190**	**0.769**		
Customer Behaviour (CB)	3.82	0.56	0.386**	0.460**	0.394**	0.609**	0.473**	**0.689**	
Incentives for Circular Economy (INC)	3.85	0.65	0.453**	0.354**	0.383**	0.270**	0.411**	0.609**	**0.659**

Note: For multi-item constructs, the square root of the average variance extracted (AVE) is reported on the diagonal in bold font.
** p < 0.01.

Table 5. Results of path analysis and hypothesis testing

Hypothesis	Path	β coefficients	t - value	Support
H1	Barr → LCE	0.240	3.309*	Accepted
H2	Barr → Ce_strat	0.387	5.005*	Accepted
H3	LCE → LEG	0.435	4.258*	Accepted
H4	Ce_strat → LEG	0.392	4.115*	Accepted
H5	LEG → SP	0.459	4.002*	Accepted
H6	LEG→ CB	0.955	4.932*	Accepted
H7	LEG → INC	0.733	4.050*	Accepted

*p < 0.01

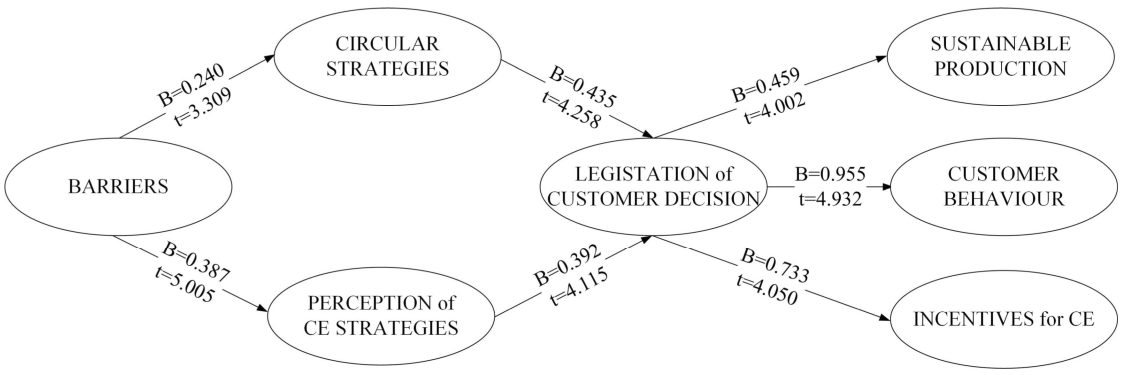

Figure 2. Path coefficients of the structural model (p < 0.01)

LCE, Ce_strat, and LEG) and the dependent constructs, such as SP, CB, and INC.

SEM results indicated that all hypotheses were accepted, as illustrated in Figure 2 and summarised in Table 5. Barriers positively affect CE strategies (H1, β=0.240, t=3.309, p<0.01). Then, barriers have a positive and significant effect on the perception of CE strategies (H2, β=0.387, t=5.005, p<0.01). Furthermore, a positive influence of the CE strategy and perception of circular strategies on the effect of legislation on consumer decisions can be observed (H3, β=0.435, t=4.258, p<0.01; H4, β=0.392, t=4.115, p<0.01), thus confirming H3 and H4. Also, a strong relationship can be observed in H5, H6, H7 (H5, β=0.459, t=4.002, p<0.01; H6, β=0.955, t=4.932, p<0.01; H7, β=0.733, t=4.050, p<0.01), which confirms that the effect of legislation on consumer decisions affects the sustainable production, consumer behavior, and incentive for CE.

5. DISCUSSION

This study evaluates the barriers and legislative measures that influence the development of circular economy strategies and consumer attitudes and behaviour in the context of sustainable consumption.

The results of empirical research showed that barriers positively impact circular strategies, thus confirming hypothesis H1. Similarity to this finding can be seen in the work of García-Quevedo et al. (2020), who point out that although the adoption of circular economy practices involves overcoming various barriers and challenges in line with each firm's circular strategies, this research suggests that the very presence of these barriers can encourage organisations to develop more creative and resilient circular strategy. In this way, barriers gain a constructive role in organisational transformation towards a circular economy.

The following hypothesis, H2, states that personnel, organisational, and financial barriers positively influence the perception of circular strategies, which was also confirmed. This result points to the opposite logical assumption of the author Wuni (2022), who indicates that barriers usually represent an obstacle, not an incentive, in the perception of strategic actions of circularity. However, specific authors suggest that precisely the identification and awareness of these barriers can contribute to the development of a better perception of circular strategies, as it triggers the need for innovations, interventions and a systemic approach (García-Quevedo et al., 2020; Agyemang et al., 2019).

The accepted hypothesis H3, which confirms a significant relationship between circular economy strategies and the perceived effect of legislation on consumer decisions, indicates that consumers are increasingly aware of legal measures that encourage sustainable behaviour. Strategies such as recycling, reuse, product repair, waste reduction and energy efficiency are not experienced in isolation. Such findings could be found in the research by Liu et al. (2023) and Schröder et al. (2019), indicating that legislative mechanisms shape consumer behaviour and strengthen their perception of the importance and relevance of circular practices in everyday decisions.

Also, hypothesis H4 was accepted, indicating a positive impact of the perception of circular strategies on the perceived effect of legislation on consumer decisions. It can be concluded that the more pronounced the awareness of consumers and companies about the advantages of the circular

economy, the more likely it is that legal mechanisms will be realised as relevant and influential. Respondents who recognised the circular economy as socially beneficial, cost-effective, and a business opportunity showed greater agreement with the statements that existing laws impact their behaviour (European Commission 2022). This indicates that the perception of the effectiveness and value of CE strategies serves as a mediator in the understanding and acceptance of legislative measures, and that a positive attitude towards CE enables a greater degree of compliance in consumer behavior, which is also consistent with the findings of the research by van den Bergh et al. (2021).

Acceptance of hypothesis H5, which observes the relationship between the perceived effect of legislation on consumer decisions and the influence on sustainable consumption, indicates that when they recognise legislation as relevant and effective, consumers are more likely to direct their consumption habits towards products that support sustainable production. This implies that the regulatory framework acts repressively and has a motivating role in shaping responsible consumer behaviour. Similar findings are confirmed by studies such as Heidbreder et al. (2020), which indicate that legislative interventions, accompanied by transparent communication strategies, increase trust in the system and influence the individual's intention to make more sustainable decisions. Also, according to Kirchherr et al. (2017), legal frameworks directed towards circular production models have the most significant effect when aligned with consumer values and expectations.

Hypothesis 6, which analyses the effect of legislation on consumer decisions, was confirmed to have a positive impact on customer behaviour. This finding is in line with the research of Agyemang et al. (2019), which emphasises that the role of government and regulatory bodies is crucial in developing infrastructure and raising consumer awareness, which is an essential incentive for their active participation in circular economy initiatives.

Suppose customers perceive the effects of relevant legislation more positively. In that case, they are more likely to support and implement incentives that promote a circular economy, such as returnable packaging systems, financial incentives for repairs or recycling, thus accepting hypothesis H7. This aligns with van den Berg et al. (2021) findings, who point out that regulations gain greater effectiveness when social support and public understanding exist. Also, Kirchherr et al. (2017) emphasise that integrating legislation with incentive measures is key to the broader adoption of CE practices, especially when consumers recognise the benefits and fairness of these measures.

Although the region or country of origin of the respondents was not used as a moderating variable in the structural model, the discussion reflects cross-contextual similarities in the perception of circular strategies, legislative impacts, and barriers, suggesting that, despite geographic diversity, common patterns in consumer behaviour and regulatory influence are observed.

6. CONCLUSION

This study contributes significantly to the existing literature on the circular economy by developing and empirically verifying a proposed model that links barriers, perceptions of circular strategies, legislative

effects, and key outcomes such as consumer behaviour, incentives, and sustainable production. Unlike previous research that has mainly analysed isolated components, this paper examines their interaction. In particular, the integrated impact of barriers on the implementation of circular strategies and the formation of perceptions of their value, as well as the relationship between these strategies and the perceived effectiveness of regulatory measures, is highlighted. Furthermore, the paper shows that the observed effects of legislation significantly impact consumer decisions, support for circular initiatives, and the transition to sustainable production. Such a comprehensive analysis has been lacking in the literature so far and represents the main scientific contribution of this study. Therefore, this study advances previous research by clearly demonstrating how legislative measures, when perceived as effective, directly influence consumer behaviour and support for circular economy initiatives.

These results confirm the importance of a multidimensional approach to circular economy policymaking. The observed effect of legislation acts as a key mechanism for inducing changes in consumer behaviour and implementing incentives, thereby contributing to the broader adoption of sustainable practices. Calisto Friant et al. (2021) also point out that only integrating regulatory, economic and information tools allows for a consistent and effective transformation towards a circular economy. Therefore, decision-makers need to design legislative measures that regulate, motivate, educate and engage consumers.

The findings of this study provide relevant guidance for policymakers, businesses and consumer protection organisations, highlighting the need for a coordinated approach to remove barriers that limit the implementation of circular strategies. Simultaneously, enhancing the favorable view of these strategies and creating efficient regulatory measures are crucial in safeguarding consumer rights and promoting their welfare. It is essential to form regulations that foster the acceptance of circular models and protect consumers' interests, guaranteeing their safety and clarity in production and consumption processes. Future research should examine the contextual differences in implementing this integrated model in different economic, cultural and regulatory environments to ensure maximum consumer protection and well-being.

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УЛОГА ЗАКОНОДАВСТВА И ПЕРЦЕПЦИЈЕ ПОТРОШАЧА У ОБЛИКОВАЊУ ПОНАШАЊА У ЦИРКУЛАРНОЈ ЕКОНОМИЈИ

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Извод

Концепт циркуларне економије (ЦЕ) доноси значајне и радикалне промене у обрасцима потрошње, посебно у навикама и одлукама потрошача, који су кључни учесници у овом моделу. Разумевање како организационе баријере, закони и стратегије циркуларне економије утичу на преференције потрошача у циркуларном моделу може помоћи произвођачима да развију ефикасне и профитабилне стратегије које одговарају на потребе тржишта и подстичу одрживу потрошњу. Стога, циљ рада је да испита како личне, организационе и финансијске баријере утичу на стратегије циркуларне економије и перцепцију истих како би се остварио утицај законодавства на одлуке потрошача у вези са одрживом потрошњом, понашањем потрошача и подршком циркуларним иницијативама. Резултати емпиријског истраживања показали су да су све предложене хипотезе прихваћене, са посебним акцентом на утицај законодавства на одлуке потрошача, што може значајно обликовати понашање потрошача у одрживој потрошњи и пружити подстицаје за циркуларну економију. На основу утицаја фактора, овај рад може послужити као путоказ доносиоцима одлука у креирању прописа и потрошачима да активно учествују у циркуларним иницијативама ка одрживој потрошњи.

Кључне речи: циркуларна економија, понашање купаца, одржива производња, законодавство

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