What were the main factors that influenced the turnover of Romanian retail companies?

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Abstract

The purpose of this research is to identify the best retail companies in Romania according to turnover. In this sense, a sample of 15 companies was identified and selected. With the help of hierarchical regression and mediation and moderation analyses, we were able to discover that the turnover of the most important Romanian retailers is influenced by the size of their capital and the costs they incur. The moderating effect of inventories in the relationship between capital and turnover is even greater the lower their level. In addition, the number of employees has a low mediation effect in the relationship between capital and turnover. Our study has a pronounced novelty character, considering the actuality of the data on the most important retail companies in Romania, but also the analyzes carried out on them. Additionally, research has useful practical implications related to success factors in obtaining the highest possible turnover.

Keywords

Retail, turnover, e-commerce, moderate and mediate effect.

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Introduction

The retail sector in Romania has undergone a significant transformation in recent years, influenced by changing consumer preferences, economic factors, and technological advancements (Baicu et al., 2022). The retail market in Romania is characterized by diversity, with various formats ranging from traditional mom-and-pop stores to modern hypermarkets and e-commerce platforms. According to Confederația Patronală Concordia - dialog pentru dezvoltare (in English Concordia Employers' Confederation - dialogue for development) (2023), the retail sector contributes a significant portion to the country's GDP and plays a vital role in driving economic growth.

Factors such as inflation, fluctuating exchange rates, and political instability pose challenges to retailers, affecting consumer spending patterns and business operations. The presence of global retail giants such as Carrefour, Auchan, and Lidl poses stiff competition to local retailers, particularly small independent stores. Despite advances, Romania's infrastructure and logistics network still face challenges, impacting the efficiency of supply chains and last mile delivery for e-commerce (Ionescu et al., 2023; Vela, 2023).

Investing in digital technologies and omnichannel strategies presents opportunities for retailers to improve customer experience, streamline operations, and capture larger market share (Kraus et al., 2021). Retailers can differentiate themselves by offering unique products, niche categories, and experiential shopping experiences to attract and retain customers (Gielens and Steenkamp, 2019).

1. General characteristics of Romanian retail

The lifting of all COVID-19 restrictions in Romania in March 2022 prompted a change in consumer behavior, with more people opting for in-store shopping over e-Commerce and home deliveries (Szász et al., 2022). This preference for physical stores, driven by a desire for freedom and hands-on product experiences, led to a higher growth rate in offline retail compared to e-Commerce throughout 2022 (Volintiru et al., 2023).

However, Romania faced significant inflation in 2022, reducing consumers' purchasing power. Rising product prices forced many to prioritize essential purchases, cut back on spending, or wait for sales. Despite increased product costs and renewed interest in in-store shopping post-pandemic, overall retail growth slowed compared to the previous year (Stanciu et al., 2019).

The dominance of grocery retailers persisted as Romanians relied on government aid to navigate inflationary pressures. High inflation particularly affected food prices and basic groceries became more expensive. Government initiatives, such as compensation for utility costs and social vouchers for grocery purchases, eased some financial stress (Strătilă (Irimia), 2022).

Relaxation of restrictions also affected retail by diverting spending to travel, both domestically and internationally. While outbound tourism cost some money abroad, domestic tourism flourished, fueled by surplus demand and government-issued vacation vouchers. This shift in spending away from non-essential retail products affected the industry (Corboș et al., 2023).

High inflation continued in Romania into 2023, further squeezing consumers' purchasing power. This is likely to dampen overall retail sales and grocery retailers will remain in a strong position. Challenges such as high cereal prices and trade deficits are expected to persist, impacting product costs and consumer spending habits (Stanciu et al., 2019; Stanca et al., 2023).

According to the data from Table no. 1, in 2022, e-Commerce has continued to increase comparative with the previous year, but at a lower rate than physical retail. As such, the share of e-Commerce has decreased, being at the same level as in 2020.

Table no. 1. Romanian retailing

Category	2017	2018	2019	2020	2021	2022
Retail (RON million)	157.747,8	172.274,8	188.466,4	197.870,0	219.653,5	230.770,9
Retail Offline (RON million)	150.742,3	162.278,6	174.669,1	179.960,9	199.369,7	209.840,1
Retail E-Commerce (RON million)	7.005,5	9.996,2	13.797,3	17.909,0	20.283,8	20.930,8
Share of e-commerce in retail (%)	4.44	5.80	7.32	9.05	9.23	9.07

Source: Euromonitor International, 2023

Despite these challenges, retail e-Commerce is projected to see growth, driven by consumer appreciation for its convenience, especially after the pandemic. Online marketplaces are expected to thrive, offering opportunities for smaller retailers and streamlining the shopping experience for consumers (Purcărea et al., 2022; Szász et al., 2022).

Analyzing new technologies in Romanian retail reveals a landscape shaped by digital transformation, consumer preferences, and industry competitiveness. Here is an overview of some key trends, such as e-commerce growth, omni-chanel strategies, contactless payments, sustainability initiatives.

Similarly, to global trends, Romania has seen significant growth in e-commerce. Retailers are investing in online platforms that offer convenience and choice to consumers. Technologies such as mobile applications, AI-driven recommendation engines, and chatbots enhance the online shopping experience, driving sales (GPecC Blog, 2023).

Romanian retailers are adopting omnichannel approaches to seamlessly integrate on-line and offline channels. Click-and-collect services, where customers order online and pick up in-store, are gaining popularity. Retailers are using technologies such as RFID for inventory management to ensure accurate stock levels across channels (Dabija and Grant, n.d.).

With the growing emphasis on hygiene and convenience, contactless payment methods like NFC and mobile wallets are becoming increasingly popular in Romanian retail. Retailers are upgrading POS systems to accommodate these payment options, providing a smoother checkout experience for customers (Statista, 2020).

Sustainable practices are gaining traction in Romanian retail, driven by consumer demand and regulatory pressures. Technologies such as IoT sensors and RFID tags enable retailers to track and optimize energy use, reduce waste, and minimize environmental impact throughout the supply chain (Dabija et al., 2020; Corboș et al., 2023; Jercan and Nacu, 2023).

2. Methodology

Our research was based on the acquisition of some secondary data, as shown in Table no. 2. The data used are valid for the year 2022, the last for which the financial year is completed, and the accounting information is final. We selected a sample consisting of the 15 largest retail firms. The main objective was to identify the factors that influence the turnover of the 15 largest retail companies in Romania.

Table no. 2. Top Romanian firms in 2022

Top	Firm	Turnover (Ron mil.)	Costs (Ron mil.)	Total capital (Ron mil.)	Average number of employees	Inventories (Ron mil.)	Debts (Ron mil.)
1	Lidl	18.496	17.743	3.666	10.086	1.786	5.086
2	Kaufland	16.014	15.049	9.593	13.827	1.516	3.588
3	Profi	11.661	12.609	543	13.714	1.518	4.271
4	Dedeman	11.046	9.305	4.991	12.245	2.119	2.806
5	Carrefour	10.399	10.197	1.259	9.487	803	2.121
6	Metro Cash & Carry	9.334	9.341	1.711	3.627	711	1.365
7	Mega Image	8.714	8.576	1.941	10.618	722	1.239
8	Rewe (Penny)	7.176	7.008	502	6.446	852	1.011
9	Dante International (eMag)	7.147	7.101	1.318	3.309	927	2.266
10	Auchan	6.938	6.860	1.196	7.334	554	1.817
11	Altex	6.525	6.510	535	3.639	1.468	1.712
12	Catena	5.908	5.807	432	1.575	501	3.329
13	Selgros	4.274	4.320	1.346	4.733	564	727
14	Dr. Max	3.193	3.216	38	3.532	483	1.390
15	Leroy Merlin	2.949	2.668	1.028	2.870	572	708

Source: adaptation after Euromonitor, 2023 and Top firms, 2023

For this, we used the hierarchical regression method, with turnover as a dependent variable. Variables that have been taken into account were turnover, costs, capital, average number of employees, inventories, and debts. Only capital and costs had a significant effect on turnover. Also, through the bootstrapping method, we wanted to identify if there are mediating and moderating factors that influence the turnover of the companies in the sample. For this purpose, we used SPSS software version 26, with the Process macro.

The research hypotheses were the following:

- H1: The capital of retail companies has a significant influence on their turnover.

- H2: The costs incurred by the retail companies have a significant influence on their turnover.

3. Results and Discussion

As table no. 3 shows that capital and costs of retail firms have a significant effect on turnover. Capital has a 48% influence on turnover, while capital and costs have an effect of 99%. Furthermore, the F values for the ANOVA were significant at a level of .01 for capital and even .001 for costs.

Table no. 3. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.689[a]	.475	.435	3.30353	.475	11.774	1	13	.004
2	.996[b]	.992	.990	.43066	.517	752.949	1	12	.000

a. Predictors: (Constant), Capital
b. Predictors: (Constant), Capital, Costs

Table no. 4. ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	128.491	1	128.491	11.774	.004[b]

	Residual	141.873	13	10.,913		
	Total	270.364	14			
2	Regression	268.138	2	134.069	722.871	.000[c]
	Residual	2.226	12	.185		
	Total	270.364	14			

a. Dependent Variable: Turnover
b. Predictors: (Constant), Capital
c. Predictors: (Constant), Capital, Costs

Table no. 5. Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	6.188	1.115		5.549	.000	3.779	8.597		
	Capital	1.228	.358	.689	3.431	.004	.455	2.001	1.000	1.000
2	(Constant)	.133	.264		.503	.624	-.443	.709		
	Capital	.207	.060	.116	3.475	.005	.077	.337	.611	1.636
	Costs	.962	.035	.919	27.440	.000	.886	1.039	.611	1.636

a. Dependent Variable: Turnover

The tolerance values range from 0.61 to 1.00, while the value of the inflation factor (VIF) ranges from 1.00 to 1.64, indicating that multicollinearity is not a concern.
The findings of the hierarchical regression analysis (see Table no. 6) demonstrate that capital accounted for 48% of the variance in turnover (R^2 = 0.48, ΔR^2 = 0.48, F (1,13) = 11.77, p <.004), with evidence of a significant effect of capital on turnover (β = 0.69, CI = 0.46, 2.00, p <.004). Therefore, we can confirm research hypothesis 1. Furthermore, the introduction of cost into model 2 increased to 99% the variance in the prediction of turnover (R^2 = 0.99, ΔR^2 = 0.52, F (1,12) = 752.95, p <.000), and significantly predicted turnover (β = 0.92, CI = 0.89, 1.04, p <.000). Therefore, we accept research hypothesis 2.

Tabel no. 6. Results of the hierarchical regression analysis

Variables	Model 1		Model 2	
	β	CI: 95%	β	CI: 95%
Capital	0.69**	0.46, 2.00	0.12**	0.08, 0.34
Costs			0.92***	0.89, 1.04
Model fit statistics				
F-value	11.77**		752.95***	
R^2	0.48		0.99	
ΔR^2	0.48		0.52	

*Notes. *p < .05, **p < .01, ***p < .001. Standardized coefficients are used.*

Although inventories did not have a significant influence on turnover, we wanted to see if they could moderate the relationship between capital and turnover. the results from table no. 7 demonstrates that the interaction of capital and stocks has a significant effect on turnover. As can be seen from Figure no. 1, in predicting turnover, the interaction effect is statistically significant. Therefore, inventories improve the relationship between capital and turnover to the point where under the condition of low inventories the association is positive at a higher level, while under the condition of high inventories the positive association is smaller.

Table no. 7. Summary of the regression analysis and its coefficients

Predictor	*b*	SE	Sig
Capital	0.29	5.28	.000
Inventories	1.70	2.30	.042
Interaction	-1.72	0.72	.036

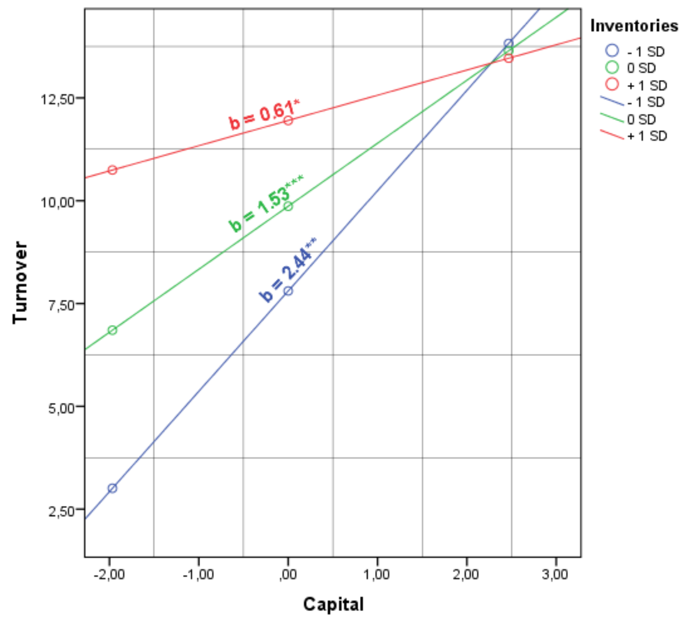

Figure no. 1. Relation between capital and turnover moderated by stock

Another aspect pursued in the investigation was that if there is a mediating effect of the number of employees in the relationship between capital and turnover. The data for this mediation relationship are shown in the tables no. 8 and no. 9 and in figure no. 2. According to these data, the direct and indirect (mediated) relationships between capital and turnover are significant.

Table no. 8. summary of the regression analysis and its coefficients

Path	β	SE	Sig
X → M	0.62	0.22	.000
X → Y (total)	0.69	0.27	.000
X → Y (direct)	0.63	0.18	.004
M → Y	0.53	0.13	.001

Legend:
- X = Capital
- Y = Turnover
- M = Number of employees

Table no. 9. Indirect (mediation) effect analysis

Path	Effect	SE	$LL_{95\%}$	$UL_{95\%}$
X → M → Y	0.33	0.14	0.04	0.60

Notes. LL = lower limit of a 95% confidence interval. UL = upper limit of 95% confidence interval.

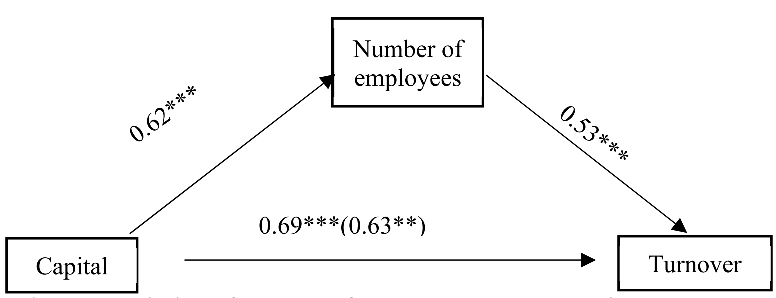

Figure no. 2. The mediation of number of employees between capital and turnover

*Notes. *p < .05, **p < .01, ***p < .001. Standardized coefficients are used.*
The coefficient in parentheses reflects the direct effect (with the mediator included).

As can be seen from Table no. 9, the indirect (mediation) effect is statistically significant, such that the number of employees is a partial mediator between capital and turnover. In other words, the number of employees has little effect on the relationship between capital and turnover.

Conclusions

In conclusion, the retail sector in Romania is dynamic and evolving, driven by changing consumer behaviors and market dynamics. While challenges persist, there are ample opportunities for retailers to innovate, expand, and thrive in the competitive landscape. By staying abreast of trends, using technology, and focusing on customer needs, retailers can position themselves for sustainable growth in the Romanian market. Romanian retail is undergoing a digital transformation driven by new technologies that enhance the customer experience, optimize operations, and drive business growth. Embracing these innovations is essential for retailers to remain competitive in an evolving market landscape.

The mediation analysis revealed that the number of employees does not have a major influence on the turnover of the most important retail companies in Romania. Inventories moderate the relationship between capital and turnover. The moderating effect is all the greater the lower the stock level. In this sense, it is recommended that retailing firms do not keep large stocks but keep them with companies or logistics platforms. The factors that have the greatest influence on turnover are the capital and costs incurred by the retail companies.

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