



# Assessing Financial Distress in Emerging Markets: An Industry-Level Study from Albania

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## Abstract

This research investigates financial health of 18 financial industries in Albania between 2011 and 2014. The authors have built a dataset of 12 financial ratios, averaging the profitability, liquidity, efficiency and leverage ratio groups of 200 non-financial firms with highest revenues reported in 2014, according to the Albanian National Business Register. We compute the ratios for 4 consecutive years, grouping the companies into industries and tracking industry performance financial health. We rank the top and worst industry performers per ratio group and per year. We compare the financial health of industries at the beginning of the observation period (2011) and at the end of the observation period). This study classifies the companies into financially distressed and non-financially distressed. The authors average the financial ratios of these two groups and observe the most impactful differences that discriminate between financially distressed and non-distressed firms. The empirical results of this research confirm that drilling is the industry with highest financial health, while health care is the worst performing industry over the period 2011-2014, based on the metric and data used. Furthermore, the authors observe that financial health industries such as e-commerce, electricity trade and hydropower have improved over time, based on the observation period. According to this study, liquidity, leverage and efficiency ratios discriminate well between distressed and non-distressed firms, while profitability indicators show limited differences between the two groups.

**Keywords:** Industry Analysis, Financial Ratios, Financial Distress, Emerging Markets

## 1. Introduction

This study investigates financial characteristics of firms appertaining in different industries in Albania. Furthermore, it studies how the financial characteristics differ between financially distressed firms and non-financially distressed firms. The financial characteristics are studied through financial ratios.

Albania transitioned from a centralized economy to a market-oriented system after 1990, a step that brought impactful structural changes and challenges. The change resulted in rapid economic growth in the period 1993-96, which collapsed because of the massive ponzi schemes in the country in 1997. This later resulted, among other things, into economic contraction. Despite challenges, Albania has moved ahead with almost full economic privatization. Change has been slow and uneven, though, resulting in a complex economic and financial environment. In such a situation, often top performing companies change with the change of the political landscape. As a result, resilience has been a challenge for every business.

However, it is important to understand resilience across various industries in an economic cycle. By identifying the industries with stronger financial health through a business cycle in Albania, the study can inform financial institutions for credit growth strategies & policy decisions in normalizing economic growth & financial health through government incentive programs in economic sectors of strategic importance.

This study investigates financial characteristics of firms operating in different industries in Albania. Furthermore, it studies how the financial characteristics differ between financially distressed firms and non-financially distressed firms. The financial characteristics are studied through financial ratios.

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This study aims to fill the existing research gap by analysing the financial ratios of different industries over a four-year period, encompassing various phases of the business cycle. By doing so, it seeks to identify the key drivers of financial distress and resilience within Albania's unique economic context, providing insights that are valuable for policymakers, investors, and scholars interested in the dynamics of emerging economies.

In this research we explore the differences between liquidity, profitability, efficiency ratios among different industries in Albania for the period 2011-2014. Furthermore, we analyse the difference of these ratios between firms in financial distress and firms not in financial distress, applying the classification methodology following a research that has adapted something similar considering the local context (Dhamo, 2019).

This research provides a novel contribution in the financial distress literature for industries in emerging countries.

1. Prior empirical studies have exhausted firm-level financial health prediction (Altman, 1968), limited findings have been provided for industry level financial distress in emerging markets. The analysis of ratios across 18 industries in 4 years provides original insights into how various industries navigate business cycles and political risk. It highlights the sectoral differences in terms of financial resilience, offering valuable evidence for policymakers, investors, and financial institutions who contribute to credit risk strategies.
2. This paper enriches existing methodologies by applying a new framework of classifying firms into financially distressed and non-distressed.
3. While earlier research focuses on established markets (Muñoz et al., 2020; Daryanto & Rizki, 2021), this study presents empirical evidence of an emerging economy with particular but non-unique characteristics, like high informality and political system transition from centralized to an open market economy.
4. This empirical study provides potentially new model input considerations for lending industry and academia regarding default/distress prediction models, through industry resilience key indicators, how they change from one industry to another, and how this difference is persistent in time.
5. Last, but not least, this research provides novel contribution in analyzing financial characteristics of multiple industries in Albania in terms of financial resilience during business cycles and political shifts.

This paper continues with the description of methodology and data. It follows with the empirical investigations of ratio differentials across different industries. Section 3 explores the performance differential between distressed and non-distressed firms. Last section summarizes the concluding remarks of the research.

## **2. Literature Review**

This section summarizes the most relevant previous empirical research regarding relevant financial distress symptoms in financial ratios. Part of the previous research explained in this section focuses on emerging markets.

The first investigation for default factors of firms is published more than 50 years ago, in research that introduced multi-discriminant analysis techniques in discriminating financial ratios impacting default from public firms (Altman, 1968). The same author presented to refined versions of the original Z-Score models, with  $Z'$  and  $Z''$  being adapted to private firms (Altman & Heyne, 1977).

He further investigates country specific characteristics, using logistic regression, and how does it impact default, while expanding the initial 5 financial variables, by including firm size, age, industry, geographic region (Altman et al., 2017).

More recent research affirm that  $Z''$ -score models help assessing sector-specific default risk and the impact to the latter of global events (Muñoz et al., 2020) (Daryanto & Rizki, 2021).

A paper focusing on Indian companies proposes credit risk models using MDA & logistic regression methods, with inputs financial information from 600 firms over a 15-year period (Verma, 2022). Another research focusing on Indian automobile sector finds that the decline in financial performance post-2007-08 has been a result of underutilization of capacity,

excessive debt, and lower asset efficiency. It signals an impactful increase of likelihood of failure at industry level, being a real threat if policy makers do not intervene (Ray, 2011).

A study on Chinese listed companies enriched the default prediction model by using industry-specific default heterogeneity, showing the importance of industry default behaviour in credit risk models (Ni et al., 2023).

Research focusing on the indirect costs of non-financial firms in terms of distress examines industry risk in Pakistan using ratios such as liquidity, profitability, efficiency, leverage across multiple industries (Farooq et al., 2021). The authors find that highly leveraged industries, construction, manufacturing, those with frequent investment policy changes, such as technology or energy, and sectors that report high intangible assets, like pharmaceuticals or media, are mostly exposed to financial distress.

Research focusing on the impact of working capital management on firm profitability in Cyprus shows that cash conversion cycle and the underlying constituents have negative correlation with ROA, implying that team with better liquidity management show stronger profitability (Charitou et al., 2010).

A recent study on Indonesian’s construction industry, investigates indicators like ROA, leverage, trade credit, technology investments. Higher leverage and, surprisingly, increased investment in technology, have an negative impact on form performance, according to this research (Wildan & Nalurita, 2025).

These studies collectively justify the methodology employed in this paper, demonstrating the relevance of financial ratio analysis and industry comparison in predicting corporate defaults.

### **3. Methodology and Data**

In this research, we use the financial ratios listed in Table 1 to check the financial health of various industries operating in Albania:

*Table 1: Financial Ratio Explanation*

<b>Ratio family</b>	<b>Ratio name</b>	<b>Formula</b>
Liquidity Ratios	Average Current Ratio	Current assets / Current liabilities
Liquidity Ratios	Average Acid-test ratio	(Current assets – Inventories) / Current liabilities
Liquidity Ratios	Average Operating cash flow ratio	Operating cash flow / Current liabilities
Liquidity Ratios	Average Cash ratio	Cash and Cash equivalents / Current Liabilities
Profitability Ratios	Average Operating margin ratio	Operating income / Net sales
Profitability Ratios	Average Gross margin	Gross profit / Net sales
Profitability Ratios	Average Return on assets ratio	Net income / Total assets
Efficiency Ratios	Average Inventory turnover ratio	Net income / Shareholder’s equity
Efficiency Ratios	Average Receivables turnover	Net credit sales / Average accounts receivable
Efficiency Ratios	Average Days sales in inventory ratio	365 days / Inventory turnover ratio
Efficiency Ratios	Average Asset Turnover Ratio	Net sales / Average total assets
Leverage Financial Ratios	Average Debt service coverage ratio	Operating income / Total debt service
Leverage Financial Ratios	Average Interest Coverage Ratio	Operating income / Interest expenses

We estimate the average financial ratio per industry in each year, between 2011 and 2014. The sample source is the Albanian non-financial companies with highest revenues in fiscal year 2014. Each company is classified in an industry. The authors have extracted the financial statements from the Albanian National Business Register<sup>1</sup> for each of the fiscal period 2011, 2012, 2013 and 2014.

As the sample is somehow biased towards the largest Albanian firms, the approach gains on financial transparency. Companies declaring more revenue are usually more exposed to the attention of the fiscal authorities & the media, have more exposure in the community, and have more to loose from fiscal evasion as compared with smaller firms. As a result, in an economic reality where informality is present, financial ratios of bigger firms are closer to reality than those of smaller firms.

The historical extracts of business are downloaded for each of the 187 companies. In the historical extracts, among other information, are found the uploaded financial reports for fiscal year 2011, 2012, 2013 and 2014 in a non-standardized format. The authors have downloaded four financial statements for each year under consideration, specifically balance sheet, income statement, statement of changes in capital, and cash flow statement. The downloaded reports are not filed in a standardized template across companies. Therefore, a structured approach has been followed by the authors to obtain consistent results when comparing among companies/industries/years. Afterwards, we applied adjustments based on differences in reporting standards followed, where this information was available, with the purpose of obtaining similar financial indicators. Once input for each of the financial ratios is obtained, financial ratios are calculated. Then, data was cleaned to avoid inconsistencies, like missing values, errors, unrealistic outliers, and discrepancies that might come as a results of reporting variations. We use simple average financial ratios per industry. The methodology described in this paragraph has been consistent across industries, companies and years.

Then, the authors estimate the financial ratio average per industry each year. The industries considered in this research are Agriculture, Automobile, Construction, Drilling, E-commerce, Education, Electricity Trade, Gambling, Health care, Hydropower, Information technology, Manufacturing, Mining and quarrying, Pharmaceutical, Retail, Telecommunication, Tobacco, Transportation. We summarize the financial ratio average per industry in each year considered in section 3.

We classify companies in financial distress and non-financial distress following the methodology of one of the authors of the research in an earlier study (Dhamo, 2019). For each category, it is estimated the average financial ratio considering all observation years, not each year separately. The difference between financial ratios of distressed and non-distressed firms is examined in section 4 of this research.

#### **4. Empirical Analysis: Financial Health of Industries**

In this section we present an empirical analysis on how various industries have performed over the period 2011-2014, based on the average ratios per industry measuring liquidity, profitability, efficiency health of businesses' financials. There are cases few values are missing. This is either because industry representativeness is numbers is limited, or averages are biased from multiple outliers. In general, we remove outliers from our dataset.

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<sup>1</sup> [www.qkb.gov.al](http://www.qkb.gov.al)

Table 2 summarizes the average values of 9 financial ratios for 11 industries, based on financial statements reported on fiscal year 2011. In terms of liquidity ratios, the best performer is education, and the worst performer is Tobacco. Profitability indicators are dominated by education in 2011, while the worst industries in terms of profits are health care and electricity trade. Education is the top performer also in terms of efficiency, while the worst are E-commerce and electricity trade.

*Table 2: Industry Average financial ratios for fiscal year 2011*

<b>Industries</b>	<b>Average Current Ratio</b>	<b>Average Operating margin ratio</b>	<b>Average Acid-test ratio</b>	<b>Average Cash ratio</b>	<b>Average Gross margin</b>	<b>Average Receivables turnover</b>	<b>Average Return on assets ratio</b>	<b>Average Return on equity ratio</b>	<b>Average Operating cash flow ratio</b>
Automobile	3.23	0.06	0.58	0.25	0.14	23.34	0.09	0.18	(0.12)
E-commerce	1.62	0.10	1.62	0.30	0.83	3.89	0.22	0.52	
Education	2.00	0.19	1.98	1.21	0.89	104.18	0.22	0.38	1.76
Electricity Trade	2.13	(0.02)	1.11	0.46	(2.33)	2.97	0.09	0.04	(0.51)
Gambling	1.16	0.44	1.11	0.32	0.74		0.22	0.35	0.87
Health care	1.31	(0.45)	0.87	0.28	0.66	10.38	(0.04)	(0.09)	(0.52)
Hydropower	0.40		0.40	0.18			(1.34)	1.00	(0.43)
Mining and quarrying	1.63	(0.29)	1.01		1.00	123.53		1.21	0.18
Pharmaceutical	1.86				0.09		0.09	0.36	
Tobacco	0.74		0.23	0.02	0.30		(0.00)	0.07	0.03
Transportation	2.70	0.11			0.64		0.08	0.63	0.43

*Source: Albanian National Business Centre, Author's computations*

Data in Table 3 show top performer among industries in terms of liquidity is drilling, while the worst performer is healthcare in 2012. In terms of profitability, drilling leads the way, while the worst performer is healthcare, followed by mining and quarrying. Hydropower and pharmaceuticals are the most efficient industries in 2012, while the worst performers are health care and education. Drilling is the industry that performs best across all financial ratios considered in 2012, while the worst performer is health care.

*Table 3: Industry Average financial ratios for fiscal year 2012*

<b>Industries</b>	<b>Average Current Ratio</b>	<b>Average Operating margin ratio</b>	<b>Average Acid-test ratio</b>	<b>Average Cash ratio</b>	<b>Average Gross margin</b>	<b>Average Receivables turnover</b>	<b>Average Return on assets ratio</b>	<b>Average Asset Turnover Ratio</b>	<b>Average Return on equity ratio</b>	<b>Average Operating cash flow ratio</b>
Information technology	2.02	0.12	1.39	0.58	0.35	15.83	0.27	4.75	0.55	1.40
Gambling	0.81	0.42	0.79	0.26	1.20		0.16	1.33	0.27	0.69
E-commerce	2.07	0.23	2.07	0.68	0.89	4.62	0.24	1.93	0.61	0.65
Electricity Trade	3.61	0.03	3.47	0.84	0.04	10.34	0.10	5.36	0.55	0.33
Hydropower	1.03	0.12	0.95	0.13	0.67	6.27	0.27	5.17	1.53	0.11
Pharmaceutical	2.33	0.08	0.96	0.06	0.18		0.09	1.88	0.33	0.08
Tobacco	0.79	0.01	0.22	0.10	0.28		-0.04	4.37	0.06	0.03
Mining and quarrying	0.35	-0.19	0.17		1.00	119.61	-0.10		0.31	0.03
Health care	0.44	-0.29	0.18	0.02	0.70	11.44	-0.11	0.58	-0.21	-0.05
Agriculture	1.26	0.03	0.89	0.00	-0.33		0.03	2.06	0.40	-0.09
Automobile	3.10	0.04	0.91	0.15	0.13	15.60	0.05	1.66	0.09	-0.12
Transportation	7.97	0.10	7.86	2.45	0.59		0.09	0.94	0.23	-0.24
Drilling	13.63	0.33	7.43	1.09	0.80	7.45	0.61	2.40	0.77	-2.61
Education	1.73	0.18	1.72	1.13	0.85	86.56	0.15	0.65	0.23	
Manufacturing	2.58	0.16			0.31	4.45	0.05	1.37	0.14	

*Source: Albanian National Business Centre, Author's computations*

According to Table 4, which summarizes financial performance for 2013, in terms of liquidity indicators, there is no dominance of 1 industry. Hydropower is the worst performing industry in terms of liquidity. Information technology, education and drilling are the top 3 performing industries in terms of profitability referring to FY 2013 data, while construction is the worst performing one. FMCG is the most efficient industry in 2013. Transportation is the least efficient industry in 2013.

Overall, Drilling and FMCG are the top performing industries in 2013 across the 10 financial ratios considered. Healthcare and Hydropower are the worst performing ones.

*Table 4: Industry Average financial ratios for fiscal year 2013*

Industry	Average Current Ratio	Average Operating margin ratio	Average Acid-test ratio	Average Cash ratio	Average Gross margin	Average Receivables turnover	Average Return on assets ratio	Average Asset Turnover Ratio	Average Return on equity ratio	Average Operating cash flow ratio
Information technology	1.80	0.09	0.10	2.03	0.33	6.93	2.42	1.34	10.10	5.06
Telecommunication	6.62	0.10	6.58	3.84	0.54				0.93	3.88
Gambling	1.54	0.12	1.52	0.92	0.61	32.62	0.25	0.90	0.33	1.87
E-commerce	2.45	0.27	2.45		0.88	19.33	0.34	1.55	0.54	1.68
Education	1.23	0.30	1.22	0.70	0.86	10.57	0.12	0.69	0.20	1.48
Manufacturing	2.07		1.41	0.10			0.04		0.13	0.59
Retail	1.69		0.62	0.20			-0.35	1.32	0.29	0.19
Transportation	4.99	0.11	4.91	1.63		2.71	0.05	0.76	0.15	0.15
Tobacco	6.58	-0.03	1.31	0.01	0.13	32.68	-0.14	1.50	0.36	0.09
Mining and quarrying	1.29	0.09	0.76	0.08	0.42		-0.09	0.91	-0.14	-0.03
Health care	0.60	-0.16	0.37	0.02	0.71	14.73	-0.07	0.79		-0.05
Pharmaceutical	2.54	0.07	1.55	0.12	0.22	9.16	0.10	1.30	0.26	-0.09
Automobile	2.42	0.05		0.07	0.13	21.66	0.06	1.34	0.11	-0.18
Hydropower	1.06	0.05	1.05		0.11	0.82	0.05	2.43	0.86	-0.68
Drilling	34.05	0.28	32.91	1.03	0.84	5.46	0.45	1.19	0.52	-7.24
FMCG	28.72	0.03	0.01	0.64	0.19	119.54	0.23	1.70	1.67	
Construction	26.44	-0.04		2.95	0.30	3.56	0.03	1.17	-5.43	
Electricity Trade		0.05			0.06	4.45				

*Source: Albanian National Business Centre, Author's computations*

Table 5 presents 10 average financial ratios of 18 industry for fiscal year 2014. The most liquid industries are gambling, drilling and telecommunication in 2014, based on the sample of data considered in this research. The least liquid industry is agriculture. Based on the data from Table 5, the most profitable industry is Information technology, followed from education, and the least profitable ones are Tobacco and Health Care. In terms of the efficient use of the asset in 2014, hydropower leads the way. Tobacco and Gambling show the highest collection policies in 2014. Drilling is the top performing industry in 2014, as measured by the financial ratios used in this research, with agriculture and healthcare being the worst performing ones.

*Table 5: Industry Average financial ratios for fiscal year 2014*

<b>Industry</b>	<b>Average Current Ratio</b>	<b>Average Operating margin ratio</b>	<b>Average Acid-test ratio</b>	<b>Average Cash ratio</b>	<b>Average Gross margin</b>	<b>Average Receivables turnover</b>	<b>Average Return on assets ratio</b>	<b>Average Asset Turnover Ratio</b>	<b>Average Return on equity ratio</b>	<b>Average Operating cash flow ratio</b>
Agriculture	1.11	0.03	0.46	0.00	-0.34	17.52	0.03	1.55	0.34	0.04
Automobile	2.23	0.05	0.90	0.18	0.14	21.66	0.06	1.56	0.14	-0.06
Construction						3.56		1.85		
Drilling	9.67	0.27	9.53	0.06	0.85	5.46	0.43	1.37	0.60	1.15
E-commerce	2.61		2.61	0.34		19.33		1.95	414.93	0.00
Education	1.12	0.28	1.09	0.52	0.87	10.57	0.11	0.77	0.16	0.39
Electricity Trade	1.99	0.04	1.92	0.22	0.04	4.45	0.08		0.43	-0.01
Gambling	4.28	0.24	4.24	0.82	0.62	32.62		1.61	0.45	2.11
Health care	0.57	-0.22	0.25	0.03	0.72	14.73		0.88	-0.44	
Hydropower	1.46	0.05	1.42	0.01	0.12	0.82	0.18	3.19	0.53	2.38
Information technology	3.49	0.37	1.93	0.52	-1.10	6.93	0.26	0.83	1.11	1.60
Manufacturing	1.94	0.04	1.31	0.11	0.24		0.02	0.96	0.06	0.33
Mining and quarrying	1.48		0.73	0.08	0.38		0.05	1.10	0.08	-1.13
Pharmaceutical	2.72	0.08	1.48	0.12	0.17	9.16	0.06	1.49	0.25	0.00
Retail	2.84	0.05	1.35	0.41	0.30		0.10		0.24	0.40
Telecommunication	5.11	0.13	5.08	0.60	0.53		0.10		0.14	
Tobacco	2.69		1.00	0.05	0.12	32.68	-0.31	1.49	-27.19	-0.01
Transportation	4.25	0.15	4.17	1.24	0.63	2.71	0.04	0.88	0.02	0.36

*Source: Albanian National Business Centre, Author's computations*

Some of the implications at industry level based on the 4 year performance are:

- Education: Initially top performer, but financial declined by 2014, specifically in asset efficiency. This suggests challenges in adapting the business model to changes in market structure or operational inefficiencies being more impactful on the daily business in time. Educational institution would have needed to revisit their cost structure, optimize asset utilization, and exploit new revenue sources.
- Drilling: Showed strong financial health in terms during 2012-2014. This suggests strong financial management, cash generation and resilient operational model. Businesses operating in this sector can build on top of financial muscles by investing in technology, strategic acquisitions with an eye on external risk (utility market prices).
- Health care: The worst performing industry, independently from the financial year. It suggests financial management issues, possibly because of lack of control on costs and non-optimal resource allocation. These companies should focus on better cost management, process optimization, probably through information technology, and strong reconsiderations of the pricing model.
- E-commerce: Showed improved efficiency from 2011 to 2014. It may be because of better receivable management and profit margins. The industry should continue to have a critical look on operational efficiency, supply chain optimization and investment in technology.
- Hydropower: Strong improvement in financial health over time, although liquidity indicators have been fluctuating. Businesses in this sector should abide to financial discipline while investing in infrastructure and technology that will enable cash flow stabilization, considering the industry being capital intensive.
- Tobacco: An industry showing weakness in profitability and liquidity, though receivable turnover improved in 2014. Short term improvements in cash management do not address structural issues. Operators in the industry might want to consider new sources of revenues to address regulatory pressure and declining demand in traditional products.
- Information Technology: The industry showed strong profitability in 2013-14 but weak asset utilization. Firms operating in the industry should consider better resource allocation while maintaining agility in adapting to new technological progress.
- Agriculture: The least liquid industry in 2014, being highly exposed to the risk of short-term financial shocks, maybe because of seasonality of revenues and capital constraints. Firms in the sector should reconsider working capital management, diversification to address seasonality, and financial instruments that properly address their needs.
- Mining & Quarrying: Worsening of financial health over time, possibly showing exposure to external shocks such as commodity prices, operational inefficiencies and/or cost of capital. Businesses should consider innovation, better control of costs and diversification to mitigate these challenges.
- Transportation: Inefficient through all period under consideration, weak receivable turnover, suggesting problems in cash flow management. Companies in this industry should consider digitalization to improve efficiency, streamline operations, and tighten payment terms.

This analysis offers insights that extend beyond Albania’s economic landscape, enriching the understanding of financial health in emerging markets. The analysis of industry specific financial indicators over a time range of 4 years identifies insightful trends of resilience and weakness of sectors.

Our results support recent research that stress out the importance of tailored distress prediction models in emerging economies. A paper focusing in Malaysia, for instance, showed the importance of including corporate actions and classical financial ratios in improving the financial distress prediction accuracy (Mohamad et al., 2021). In a similar line of thought, our analysis shows the importance of including industry classification in distress prediction, as different industries show different patterns of financial health in time.

Furthermore, the identification of the most fluctuating financial ratios per industry as reliable source of distress may be used as insight in the analysis for developing early warning systems. These systems are important for predicting & mitigating financial stress, allowing policy makers, lenders & other relevant stakeholders to proactively manage expected downfalls (Namaki et al., 2023).

## **5. Empirical Analysis: Financial Health Differences of Distressed and Non-distressed Firms**

In this section there are compared the average financial ratios of non-distressed vs. distressed firms over the period 2011-2014, as per the definition of financial distress proposed from previous research (Dhamo, 2019).

Table 6 summarizes 22 financial ratio averages, representing indicators of liquidity, profitability, efficiency and financial leverage, grouped into distressed company and non-distressed company averages. The most sizable differences between firms non in financial distress and firms in financial distress are shown from two liquidity indicators, acid-test and operating cash flow ratios respectively, one efficiency ratio, average inventory turnover, the two leverage ratios, average debt service coverage ratio and average interest rate coverage ratio.

Except return on asset, with a modest difference of 0.68, it seems that profitability indicators do not help discriminating between firms in financial distress, and firms not in financial distress, based on the metrics and sample used in this research.

The ratios with the most sizable difference between distressed and non-distressed sub samples may be a starting point for future credit risk modelling, in cases the target of the user is to discriminate companies based on the risk of default using financial ratios.

*Table 6: Financial Health of Distressed and non-Distressed firms*

<b>Ratio family</b>	<b>Ratios</b>	<b>Non-Distressed</b>	<b>Distressed</b>
Liquidity Ratios	Average Current Ratio	7.04	7.03
	Average Acid-test ratio	4.33	2.36
	Average Operating cash flow ratio	8.78	(3.31)
	Average Cash ratio	0.76	0.63
Profitability Ratios	Average Operating margin ratio	0.08	0.08
	Average Gross margin	0.31	0.28
	Average Return on assets ratio	0.79	0.11
Efficiency Ratios	Average Inventory turnover ratio	(7.73)	(17.89)
Leverage Financial Ratios	Average Debt service coverage ratio	25.17	18.28
	Average Interest Coverage Ratio	45.68	(45.43)

*Source: Albanian National Business Centre, Author’s computations*

## **6. Conclusion**

This paper studies the industry-based financial health of Albanian firms for the period 2011-2014. It employs a range of financial ratios to measure industry health, grouped into liquidity, profitability, leverage and efficiency ratios. The annual average of 10 ratios is calculated per industry, across 18 industries. The sample used in this research are the 200 non-financial firms, who declared the highest revenues in 2014. The financial information of these firms is extracted from the Albanian National Business Register. Furthermore, companies are classified into financially distressed and non-financially distressed. The average financial ratios of the two sub-groups are computed and compared.

The findings show impactful differences across industries. The main observations are the persistent underperformance of health care as compared with other industries, while drilling has been the top performing industry, in terms of financial health, based on the methodology applied in this research. In terms of discrimination between distressed and non-distressed firms, distressed firms showed lower liquidity, efficiency and worse leverage ratios. Profitability ratios considered, however, do not help discriminate between distressed and non-distressed firms, based on the sample and metrics used in this paper.

This research enriches the existing literature with empirical analysis of financial distress patterns in Albania. The results have theoretical implications in the area of financial distress models in emerging markets. The importance of industry-specific resilience/vulnerability, measured by financial ratios proposed in this research, does not support the one-size fits all approach of assessing financial health in diverse phases of the business cycle & economic exogenous shocks

A broader consideration of this study fits in the possibility to inform policy actions beyond Albania. Better comprehending financial health of various sectors can help policy makers define targeted interventions to promote economic resilience. Identifying loops in the economy that are relatively vulnerable with what is expected to happen in the foreseeable future, for instance, may inform policy makers to allocate the appropriate resources in supporting those sectors, thus enhancing overall stability.

Moreover, our paper supports early warning systems by highlighting the importance of financial ratios as early indicators of distress. Such systems are important in smoothening out the impact of financial crisis. Facilitating timely responses of policy makers, lenders and other market participants is expected to help better mitigate/amortize the impact of weak season of the business cycle / exogenous economic/political shocks in national, regional and global economies.

Future research can be built on top of our observations, with regards to possible variables to be used into default /financially distressed prediction models, considering the results from section 4 of this research. Furthermore, industrial performance rank can be considered as an additional variable to default prediction models. Last, recent financial data can be investigated to better understand the performance rank changes in terms of financial health across industries.

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