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Tracking Firms' Adaptation to COVID-19 in Albania

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Abstract

With the country being closed for a relatively long time, followed by the declining demand for many product categories after the opening, many businesses in Albania faced many difficulties because of COVID-19. The reduction of income to the minimum limits, on the one hand, and the inability to reduce the level of expenses, on the other hand, brought great difficulties to businesses. If we had to emphasize three key and immediate issues arising during COVID-19, they would be debt management, lack of liquidity, and fear for the future of their businesses. During the research carried out for our paper, we observed that other authors have studied these issues, but our paper brings novelty in terms of drawing comparisons of these issues over the two time spans 2019-2020 and 2019-2021. Our paper aims to study the statistical relationships between factors and their comparison for the "pre-pandemic" period and the post "pandemic lockdown" period, a period that continues with restrictions on life and social activity to manage the spread and fatalities of COVID-19. The bivariate correlation relationships for these two periods are compared by using the Pearson correlation coefficients (PCC).

Keywords: Liquidity, COVID-19, Firm size, Bivariate Correlation Relationships.

JEL Classification: M10, L25, G01.

1. Introduction

Albania experienced two devastating shocks within a very short time: the November 2019 earthquake and the COVID-19 pandemic in the spring of 2020 that forced large parts of the economy to "freeze" (ReSPA, 2020). These shocks have dominated the economic developments and the short-term perspective of the country's economy. Although the earthquake in Albania was soon followed by the initiation of the reconstruction process, the global COVID-19 pandemic was

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beginning to show its first effects in the country, effects that are obscure and entirely different from other shocks or crises that our country may have gone through. COVID-19 was expected to have a strong impact on all economic and financial indicators of the country. Like many other countries, Albania took various measures to prevent the spread of the pandemic, inflicting on the other hand serious problems on businesses. As anywhere else in the world, in Albania, the impact that the pandemic had on this category was inevitable and quite visible. Albania undertook two instruments of measures to cope with the current situation, the focus of which was debt financing by changing loan terms and employment support. Various countries, including Albania, in order to prevent the spread of the virus, took the measure of closing state borders for a certain time span. Obstacles to the movement of goods across borders affected both importers and exporters during this period.

During 2020, the lending standards for businesses, both for investment loans and liquidity, were considerably tightened. According to the Bank of Albania (2021), the tightening of these standards emerged as commercial banks perceived an increased risk due to the pandemic conditions for reduced solvency and the lack of liquidity that was observed throughout 2020. Thus, one of the main challenges of the Albanian market today, after harshly facing the consequences of COVID-19, has been the survival of entrepreneurs from the pressures of global manufacturers/suppliers who supply the Albanian market with quality and competitive prices. Our paper aims to study the correlation relationships of several factors for the "*pre-pandemic*" period and the post "*pandemic closure*" period during COVID-19. In order to have continuity and a good coordination of what has happened to businesses in our country during these two periods, the authors have come up with important results.

2. Literature Review

The COVID-19 pandemic has significantly affected businesses worldwide by reducing demand, hampering operations, tightening supply chains, and restricting access to financing (Krammer, 2021). In Hadiwardoyo’s study (2020), the most affected sectors were crowd-based sectors, such as tourism and tourism-supporting businesses, including mass transportation, hotels, and tertiary products businesses, whose sales depend on public savings funds, properties, and lending institutions. The decline in commercial activities and lack of income made many firms dependent on their cash reserves to meet their obligations (Dörr et al., 2021). While temporary liquidity shocks may be overcome after economic activity resumes, an extended period of low income may eventually cause solvency problems (Guerini et al., 2020).

In their study, Wieczorek-Kosmala et al. (2021) found that firm size is a factor influencing firms' perceptions of the aggravating effect of outages that COVID-19 causes on costs, sales, financial liquidity, and access to credit, as well as business survival. Higher borrowing and higher levels of debt between firms and households during this time make short-term shocks stronger compared to previous pandemics (Boissay, Rungcharoenkitkul, 2020).

Firms are part of the real economy that supply and are supplied with money through a series of channels (Sokol, Pataccin, 2020). Nevertheless, this pandemic might have catastrophic consequences resulting from the sudden severance of mutual relations between firms and others (Gourinchas, 2020). According to Carsslon et al., (2020), to understand the negative shocks that COVID-19 has brought to the economies of each country, it is important to understand the economic transmission channels, such as the *direct impact* (by immediately reducing the consumption of goods and services); *indirect impact* (through financial market shocks); *supply interruptions* (supply chains).

3. Methodology

The data collected for conducting this study are divided into secondary and primary data. Secondary data are collected mainly from articles in scientific journals or official websites and books, which are related to the literature review, carried out in order to establish the theoretical model used, and investigate the preliminary studies and approaches followed by them. Secondary research serves as a good starting point for any research process. Secondary research also allows researchers to collect data in a shorter period and at a lower cost. Whereas, the primary data were collected from the questionnaires addressed to a sample of selected businesses that are included in our study. Primary research is ideal if a researcher is seeking for new findings or wants to explore new aspects of their field of study. Primary research is also used to provide individual, reliable results related to a topic being researched. In order to study the correlations between economic factors for the "*pre-pandemic*" period and the relationships between economic factors for the period following the "pandemic closure", the data processing and analysis in this article were performed using SPSS software. Pursuant to the purpose of this paper, as well as with the aim of coming up with novelties and conclusions in this study, the correlation relationships (evaluated by PCC) between the factors have been considered comparatively. These relationships are compared from the following perspectives:

(i) *Qualitative*: The change in the direction of the correlative interaction between factors for the two periods. So, sign (PCC before the pandemic) ≠ sign (PCC during the pandemic);

(ii) *Quantitative*: For the relationships that maintain the direction of statistical interaction, we have compared their level of strength for significant changes (greater than 0.05);

(iii) *Statistical significance*: Qualitative change of the significance level by turning the correlation relationship into statistically insignificant and vice versa.

4. Results and Discussions

'Liquidity' Analysis According to Bivariate Correlation Relationships

In times of crisis, the management of activity and working capital, in particular, takes on a special importance, as even a small mistake may cause a loss of liquidity for firms (Chang et al., 2019). Liquidity was one of the most severe consequences of COVID-19 for individuals, firms and countries. The lack of liquidity due to the closure and restrictions burdened firms with obligations, which they continue to carry even today. This crisis knew no age, stratum, or power. In the sample analysis considered in the study:

(i) it is clearly noted that the age of Albanian firms, which bears *per se* their maturity and financial stability in the market, did not affect their response to the crisis.

(ii) the increase in the size of firms is in a positive relationship with exports, and this relationship is stable even in times of pandemics, although it has no impact on the firm's income. This suggests that firms concentrate their revenue mainly in the domestic market.

(iii) in 2019, the changing rate of income has no statistically significant relationship with any of the other factors taken into consideration, such as loan financing, or collection and payment policies. The private sector was in a status quo in terms of economic and financial activity.

4.1 TheCOVID-19Pandemic Year: The Response of Firms under the Unexpected Regime of Restrictions

The following analyses will consist of comparing the 2019-2020 bivariate correlational relationships to the relationships that changed arising from the need to survive.

Table 1. Comparison of bivariate correlation replationships 2019-2020

		Firm Size	**Firm Age**	**Loan Financing**	**Average Collection Period**	**Average Repayment Period**	**Export Sales**	**Revenues Growth Rate**
Firm Size	PCC	1	.336*	**.376***	.350*	.267	.552**	.103
	Sig. (2-t)		.027	**.013**	.022	.084	.000	.512
Firm Age	PCC	.336*	1	.021	-.103	-.122	.049	-.174
	Sig. (2-t)	.027		.893	.509	.435	.753	.266
Loan Financing	PCC	**.290**	-.020	1	.279	**.537****	.075	.023
	Sig. (2-t)	**.059**	.900		.070	**.000**	.633	.884
Average Collection Period	PCC	.347*	.015	.225	1	.695**	.439**	.120
	Sig. (2-t)	.023	.926	.146		.000	.003	.444
Average	PCC	.243	-.151	**.250**	.678**	1	**.129**	.090

		Firm Size	Firm Age	Loan Financing	Average Collection Period	Average Repayment Period	Export Sales	Revenues Growth Rate
Repayment Period	Sig. (2-t)	.117	.335	**.105**	.000		**.411**	.566
Export Sales	PCC	.582**	.131	.130	.475**	**.307***	1	.247
	Sig. (2-t)	.000	.403	.406	.001	**.045**		.111
Revenues Growth Rate	PCC	.177	-.207	.131	.208	.202	.223	1
	Sig. (2-t)	.256	.184	.404	.180	.194	.151	

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Authors's calculations.

a) The statistical relationship between *'Firm Size'* and *'Loan Financing'* in 2019, was a non-significant, positive and weak relationship ($PPC_{2019} = 0.290$). During the pandemic shock year (2020), it becomes significant, positive and moderate in terms of strength ($PCC_{2020} = 0.376$*). This result reinforces the role that business size plays in credit access and financial situation (Wieczorek-Kosmala et al., 2021). In the study conducted by the Bank of Albania (2021), taking out loans to cover current expenses has marked a significant increase for all sizes of enterprises, thus reflecting the situation brought about by SARS-Cov-2 pandemic. However, small businesses have felt that financing costs and access to credit during this period have been a hindrance for them.

b) The statistical relationship between *'Average Repayment Period'* and *'Loan Financing'* changed in terms of statistical significance and quantity. From an insignificant relationship for businesses, it turned into not only a significant relationship, but also a very strong one. (PCC greater than 0.05). The average repayment period in the first year of the pandemic experienced an extension due to the very restrictions imposed by governments on reducing the transmission of virulence and tolerant policies regarding the payment of taxes and bank loans (Mano et al., 2021). However, the limited activity led businesses from banks to 'fill' their cash-boxes under reduced revenue stagnation.

c) The statistical relationship between *'Average Repayment Period'* and '*Export Sales'* changed qualitatively, losing its statistical significance during the 2020 pandemic year. Prior to the pandemic, the phenomenon of business expansion to foreign markets (exports) was accompanied by a prolongation in the timeframe of settlement of obligations to third parties. During the "pandemic closure" period, these two phenomena did not statistically interact with each other.

4.2 A Year Later, in the Presence of the COVID-19 Pandemic: Adapted Behaviour of Firms

The year 2021 is known as the year that firms began to actively adapt to the pandemic and, in a certain way, to reconfirm the manner of doing business under the new conditions. In this paper, we endeavoured to interpret this through statistical relationships between factors and their comparison for the pre-pandemic period and the post "pandemic closure" period, a period that continues with restrictions to life and social activity to manage the spread and fatalities of COVID-19.

Table 2. Comparison of bivariate correlation relationships 2019-2021

		Firm Size	**Firm Age**	**Loan Financing**	**Average Collection Period**	**Average Repayment Period**	**Export Sales**	**Revenues Growth Rate**
Firm Size	PCC	1	.336*	.295	.373*	.187	.627**	-.069
	Sig. (2-t)		.027	.055	.014	.230	.000	.660
Firm Age	PCC	.336*	1	-.009	.009	-.158	.091	-.040
	Sig. (2-t)	.027		.955	.957	.310	.561	.801
Loan Financing	PCC	.290	-.020	1	**.313***	**.593****	.111	-.292
	Sig. (2-t)	.059	.900		**.041**	**.000**	.479	.057
Average Collection Period	PCC	.347*	.015	**.225**	1	.764**	.525**	**-.367***
	Sig. (2-t)	.023	.926	**.146**		.000	.000	**.016**
Average Repayment Period	PCC	.243	-.151	**.250**	.678**	1	**.251**	**-.540****
	Sig. (2-t)	.117	.335	**.105**	.000		**.104**	**.000**
Export Sales	PCC	.582**	.131	.130	.475**	**.307***	1	-.051
	Sig. (2-t)	.000	.403	.406	.001	**.045**		.747
Revenues Growth Rate	PCC	.177	-.207	.131	**.208**	**.202**	.223	1
	Sig. (2-t)	.256	.184	.404	**.180**	**.194**	.151	
*. Correlation is significant at the 0.05 level (2-tailed).								
**. Correlation is significant at the 0.01 level (2-tailed).								

Source: Authors's calculations.

d) The statistical relationship between *'Loan Financing'* and '*Average Collection Period'* changed significantly. From an insignificant relationship, it changed into a significant relationship in business activity. This relationship turning into important positive links shows that, despite the fact that cash collection is an important source, the lack of liquidity in the market causes firms to finance themselves with alternative sources in the financial system. This may also be a competitive strategy that firms apply, so as to maintain their market and preserve their reputation in the sector where they operate, in such times of crisis.

e) Likewise, the statistical relationship between *'Loan Financing'* and *'Average Repayment Period'* changed in two directions, both significantly and qualitatively. This relationship becomes stronger and more significant (PCC_{2021}=0.593**>0.5).The prolongation of deadlines and at the same time loan financing, indicates the need for firms to maintain their business cashboxes supplied.

f) The relationship between *'Average Repayment Period'* and '*Export Sales'* loses its statistical significance in (PCC_{2021}=0.251, p=0.104>0.05), compared to the same relationship in 2019 (PCC_{2019}=0.301*). A similarly insignificant relationship has returned in 2020. This indicates that the strength of the money supply chain of domestic firms through exports has weakened, and they have a negligible impact in relation to their use as an important source for the settlement of liabilities.

g) Significant changes, both qualitative and quantitative, have occurred in the relationships between *'Revenues Growth Rate'* and '*Average Collection Period'* (PCC_{2019}=0.208 andPCC_{2021}= -0.367*)as well as *'Revenues Growth Rate'* and '*Average Collection Period'* (PCC_{2019}=0.202 and PCC_{2021}=-0.540**). From statistically and insignificantly positive relationships, they have turned into statistically moderate and strong relations, but in both cases they are significant and in the opposite direction (negative). This proves that in 2021,forAlbanian businesses, the increase in turnover was accompanied by the resilience to collect cash in in the shortest possible time. It was also accompanied by an increased correctness of the payment of obligations in the shortest possible time.

5. Conclusions

The restriction measures taken by the government in 2020 caused problems in the settlement of liabilities for the businesses under consideration. The decline in revenues due to the global pandemic was not accompanied by a reduction in liabilities. Hence, businesses still had to pay their liabilities to third parties, creditors, suppliers, while they also had to cover operating costs. While measures eased and business activity returned to normal, during 2021, businesses had to pay part of their obligations, slowly returning to the norms of the year before the pandemic.

Referring to the results and analysis of the correlations in our paper, we conclude that the average period of revenue receipts from customers has increased somewhat. This may have been caused by problems that the clients themselves may have had with their liquidity, leading consequently also to the liquidity problem of the sample businesses covered by the questionnaire to provide us with the data. The reason for these changes may have been the reduction of income, the fact that some consumers might have lost their jobs during the lockdown/closure period, etc. However, during 2021, as the situation alleviated, the average collection period has come to a decrease, approaching what it was in the year prior to the pandemic.

The closure of a large part of businesses, the reduction of revenues due to the impact of the pandemic, the increase of the average collection period, has caused businesses to have problems with liquidity. This, coupled with the fact that liabilities have remained almost unchanged, mainly rents, bank loan instalments, taxes, etc., have reduced the ability of businesses to repay liabilities quickly. As previously stated, although the lockdown measures and the pandemic itself in 2020 had a significant impact, in 2021 the situation started to improve. Nevertheless, such a situation has not yet returned to normal, to be the same as the period before the pandemic.

In 2021, we notice that the situation has started going back to normal, and we expect to have an increase in turnover compared to the previous year 2020. This shows that in 2021, the increase in turnover for Albanian businesses was accompanied by their persistence to collect revenues as soon as possible. In addition, Albanian businesses showed an added correctness in settling their obligations in the shortest possible time.

In completion of our work through the analysis of results and findings, we come to a final conclusion for business managers, accentuating the great importance of establishing a serious balance between collection, settlement of debts, and debt financing for their businesses.

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