IMPACT OF DEBT AND EQUITY FINANCING ON FIRM PERFORMANCE DURING COVID-19 PANDEMIC IN SRI LANKA EMPIRICAL STUDY IN THE APPAREL AND TEXTILE INDUSTRY IN THE WESTERN PROVINCE

Raja Bandara, A.P.N.[1], Sujenthirai, G.[2], Senevirathne, W.A.R.[3]
[123]Department of Accounting and Finance, Faculty of Management Studies
The Open University of Sri Lanka.
[1]nishadi.praveena@gmail.com ,[2]Sujiraj391@gmail.com, [3]asankaousl@gmail.com

ABSTRACT

One of Sri Lanka's top industries for earning foreign currency is clothing and textiles. However, the Covid19 pandemic adversely hampered the performance of the textile sector and seriously affected the company's economic operations. To continue in business Whatever the state of affairs are in the nation and the world, capitalizing is a must. There are primarily two forms of funding the business for that. Those are debt and equity financing. Accordingly,the study's primary objective is to investigate the effects of capital structure on business performance during the Covid-19 pandemic of small and medium scale enterprises in Sri Lanka’s apparel and textile industry. The study was a quantitative research study, employed a survey research strategy. A structured questionnaire was administered to collect primary data from responses and data was analyzed through statistical software SPSS 23.0. Sample size consists of 154 SMEs in apparel and textile industry in western province in Sri Lanka and sampling technique was stratified sampling technique. Employing Pearson's correlation analysis and multiple linear regression analysis, the conceptual framework was evaluated. The empirical findings from the use of multiple linear regression analysis showed that debt financing had a significant and positive influence on business performance whereas equity financing had a significant and negative influence on firm performance. The goodness of fitness of the overall model presented 55%. Out of nine hypotheses, three hypotheses were rejected through regression analysis. Borrowings, Other payables, Owner’s intangible assets were not significantly influenced on firm performance.Trade payables, contractual obligations, owners' cash on hand, and owners' physical assets all had a substantial impact on the operating activities of the garment and textile business during the Covid-19 outbreak.Based on the findings of the study, it was concluded that, SMEs in the apparel and textile industry employed both short-term debt and equity (retained earnings) to finance the operating activities of the firm during the Covid-19 pandemic and debt financing and equity financing significantly impacted on firm performance of the company.

Keywords: ***Debt, Equity, Covid-19, Apparel industry, Performance***

Corresponding Author: nishadi.praveena@gmail.com
ORCID: https://orcid.org/0000-0002-3768-1490

1. INTRODUCTION

In Sri Lanka, apparel and industry is a most substantial and dynamic contributor to the country's economy. The sector earns 52% proceeds from exports of apparel industrial products (Sri Lanka Export Development Board 2020). Along with the domestic market, the United States, United Kingdom, Italy, Germany, Netherlands, Belgium, Canada, India, Australia, and France are major export markets for Sri Lanka's apparel industry. The two biggest international buyers are the United States and the United Kingdom (Sri Lanka Export Development Board 2020).Export performance in the apparel sector has increased gradually over years. In 2020 the export performance decreased up to US $ million 4405.83 (Sri Lanka Export Development Board 2020). The Covid-19 pandemic is the prime reason for this sharp decrease in the export performance in the apparel sector (Sri Lanka Export Development Board 2020). The garment and textile industry is one of the economic sectors most vulnerable to the pandemic among all the other impacted industries. This is because of the Covid-19 pandemic. Countries were locked down and imposition of restrictions to prevent the spreading of Covid-19, impacting to reduce the performance of the textile and clothing industry (Sen et al. 2020). As a result, the labor force and firm performance of the apparel & textile industry subject to a huge threat. The virus becomes a huge barrier to operating the business smoothly. Capitalization is a must for the firm to survive, regardless of the economic circumstances in the nation or the world. There are mainly two sources for financing the business. Those are debt and equity financing. It is known as the capital structure of the company. There are mainly two purposes for financing a business such as to expand the business and to run the daily operating activities of the company (Khawaj 2020). Hence financing is a major element of every business. Internal funds, Debts, and equity are major sources of financing a company (Dhingra 2022). Capital structure affects the firm performance and it should be the optimal mix of debt and equity financing (Shubita & Alsawalhah, 2012). If it is not the optimal mix, firm performance is affected imperfectly. In this research study, debt and equity financing are independent variables and firm performance is dependent variable. Debt financing includes long-term debt and short term debt. Long-term debt refers to borrowings and short term debts refer in the perspective of accrual expenses of the business only for carrying out operation of the business such as trade payables, legal obligation and other payables(CFI Team 2022).Equity financing emphasizes equity of SMEs controlled and managed by the owner such as owners' funds,owners' tangible assets and owners' intangible assets.The investigation emphasizes what type of capital structure is supported to carry out the operations of textile and clothing during this economic crisis (Covid-19).

Accordingly, this study examines how businessmen (SMEs) who involve in the apparel and textile industry finance their daily operating activities during the businesses under the Covid-19 pandemic and to attempt the effect of financing sources on firm performance.Further, how borrowed capital and owners' capital

Corresponding Author: nishadi.praveena@gmail.com
ORCID: https://orcid.org/0000-0002-3768-1490

impact running the operational activities of SMEs in garment industry during the Covid-19 pandemic while how this selection of capital structure influences firm performance.The investigation helps to learn that businesses in the epidemic heavily rely on loan finance, equity funding, or a combination of the two.

1.1.Research Questions

What is the impact of debt financing on firm performance?

What is the impact of equity financing on firm performance?

1.2. Research Objectives

To examine the impact of debt financing on firm performance

To explore the effect of equity financing on firm performance

2.LITREATURE REVIEW

The apparel and textile industry is one of the major shaken sectors from the coronavirus disease (Sen et al. 2020). China is a major supplier of textiles and clothing. Hence lockdown of the China caused the shivering apparel and textile industry globally. Factories shut down according to the instructions of the Chinese government. As a result, adverse consequences impact on global apparel and textile supply chain. Production of textiles and clothing is stopped in manufacturing factories due to the shortage of raw materials. Raw material shipment is delayed during the pandemic and production factories are temporarily closed. Interruption of the supply chain from the main supplier leads to generate adverse consequences in dependent countries such as Bangladesh, and Myanmar where manufacturing factories of apparel and textiles are available (Sen et al. 2020). Such huge negative consequences impacted due to the crisis.Firms can finance their investment using either equity capital or debt capital or both of them. It is the capital structure of a company. As assured by the literature, Capital structure is the combination of debt and equity used by a company in financing its business operations (Shubita & Alsawalhah 2012). Ohaka, Edori and Ekweozar (2020) argues it is imperative for the survival of the firm. Debt Financing reflects how much debt is used to finance the asset of the company. Although Omaliko and Okpala (2020) state firm's debt financing reflects a mix of the firm's financial liabilities. Various measures are available to evaluate the debt financing of an organization among that financial ratios are the most popular and convenient measure. Among the financial ratios, most research studies used the debt-equity ratio to measure debt financing, evidence from the journal of the effect of debt-equity financing on firm performance in Nigeria (Orji et al. 2021) and the journal of the relationship between capital structure and profitability (Shubita & Alsawalhah 2012), etc…Even though some researchers demonstrate debt financing from various perspectives. It is all about division as current and non-current liabilities. Thus there are research studies that emphasize on short –term/ current debt financing and long-term/ non-current debt financing to finance the business operation. Because of the

Corresponding Author: nishadi.praveena@gmail.com
ORCID: https://orcid.org/0000-0002-3768-1490

difficulty to obtain long-term borrowings from commercial banks. Based on the above division, scholars calculate various financial ratios such as short debt to total asset ratio and non-current liability to total asset ratio (Shubita & Alsawalhah 2012). Accordingly, the research findings of scholars of Shubita & Alsawalhah through the evaluation of debt-equity ratio as a common division of current and non-current as well. Although some researchers argue for medium-term debt as well (Ahmad 2012). Nzotta (2018) emphasizes debt to the equity ratio was used to measure the percentage of the firm's funds generated from creditors or liabilities and investors. As well as, it estimates the strength of the organization to meet its long-term business obligations. The company can raise funds through long-term debts or short-term debts (Shubita & Alsawalhah 2012). Long-term debts are borrowings, lease financing, warrants, issuing of convertible bonds, forward contracts and trade bond swaps, etc. (Abor 2005). The purpose of long-term debt financing is for the growth and expansion of the organization (Khawaj 2020). When the company lacks money in the short run, it has to run its operating activities based on an accrual basis relevant to the daily expenses such as utility bills payables, tax payables, rent payables, salary payables, etc. (Khawaj 2020). It is an example of financing the company through short-term debts (Khawaj 2020). This situation can be arisen within the company itself due to inefficiency of fund management as well as due to the country's economic environment such as the economic crisis "Covid- 19 pandemic" (Khawaj 2020). Asset composition of the firm, lifetime(duration) of the firm, and export standing are major determinants of long-term debt ratio while risk, size, and profit margin of the business are key determinants of short-term debt ratio (Bassey et al. 2013).In contradict to debt financing, owner's funds, owner's assets, common shares, preferred stocks, and retained earnings are pertinent to the equity. When firms finance their investment activities using equity, it is known as equity financing (Orji et al.2021). The ratio is higher when a larger percentage of its assets are owned by the company and its investors. It reflects the company is less leverage.Most of the scholars reveal through their research findings equity-asset ratio is one of the most valuable measurements that can be applied to ascertain the financial performance of the company (Cho 2014) (Mesquita & Lara, 2003) (Orji et al. 2012) and (Nwude & Anyalechi 2018). As well as raising funds by issuing equity can include angel investors, ploughed back profit, friend contributions, and retained profits (Njagi, Maina & Kariuki 2017). This study is about the small and medium enterprises. Therefore equity financing defines equity of SMEs which controlled and managed by the owner such as owners' funds,owners' tangible assets and owners' intangible assets. Investing of owners' cash at hand and bank(Owners' funds), already occupied equipment and premises(owners' tangible assets) and reputed goodwill, Owners' skill, patents, trademark (owners' intangible assets) supported to continue the business (Gill, Amarjit, Biger & Mathur 2011). Financial performance primarily exhibits results and business outcomes, demonstrating the business sector's overall financial health during a specific time period. (Naz, Ijaz & Naqvi 2016). Firm performance gets various aspects either may be sales, profits, net wealth, or return on investment and these are indicators of firm performance. In contrast, it can be financial ratios such as total asset growth rate, loan

Corresponding Author: nishadi.praveena@gmail.com
ORCID: https://orcid.org/0000-0002-3768-1490

growth rate, and earnings growth rate (Omaliko, Okeke, and Obiora 2021). The study about the effect of the equity and debt financing on firm performance ranges from the context of the apparel and textile industry to other form of industries such as the oil and gas sector, health care sector, ICT sector, and manufacturing sector. As evident from literature, a strong and favorable association has been found between debt-equity financing and business performance in the oil and gas sector, health care sector, and ICT sector, according to the journal of the influence of debt-equity financing on firm performance in Nigeria that was referenced. (Orji et al. 2021). Aziz and Abbas (2019) stated debt capital and equity capital are well structured, the cost of capital could increase which will lead to an increase in the profit of the firm. Leverage has a positive correlation with profitability, according to Sarkar and Zapatero (2003). It demonstrated that there is an unfavorable correlation between debt financing and the company's profit. Similarly, the study of Patrick (2013) proved that high gearing has a significant negative influence on firm performance than low gearing firms: evidence from 100% geared firm's firm performance reduced by 17% while less geared firm's firm performance declined by 15%. In Contrast, to the above findings, a research study of Gill, Amarjit, Biger and Mathur (2011) discovered in both the service sector and the manufacturing sector, there is a positive correlation between short-term debt to total assets and profitability as well as a positive correlation between total debt to total assets and profitability.Similar conclusions have been reached by Abor (2005) regarding the ratio of short-term debt to total assets and return on equity, however it has been discovered that there is a negative correlation between the ratio of long-term debt to total assets and return on equity.In their 2007 study, Raheman, Zulfiqar, and Mustafa looked at the impact of capital structure on profitability in non-financial enterprises and found that it had a significant impact on profitability. Dissimilar to the positive and negative findings, Raheen (2016) concluded that no significant relationship between return on asset/ return on equity and capital structure. However, Samo and Murad's (2019) empirical findings was debt financing negatively and significantly influence on profitability and liquidity positively and significantly influence on firm performance in the apparel and textile industry.Samo & Murad (2019), Orji et al. (2021) and Shubita & Alsawalhah (2012) studies have been investigated using quantitative research strategy. Literature review of former related studies guided to determine the dependent and independent variables and their indicators. Orji et al. (2021) supported to select the dependent variable as firm performance and Samo & Murad (2019), Orji et al. (2021), Gill, Biger & Mathur (2011) and (Abor 2005) are supported to select two independent variables to accomplish the research problem Successfully such as debt and equity financing.

2.1. Empirical Gap

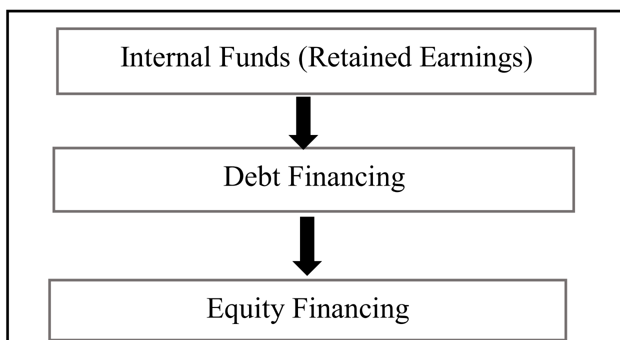
There has been limited study on the impact of debt and equity financing on firm performance during Covid-19 pandemic in Sri Lanka although many attempts regarding the impact of capital structure on firm performance. There have been no studies investigated in Sri Lanka to evaluate the impact of capital structure on firm performance during the covid-19 pandemic in the apparel and textile industry.

Corresponding Author: nishadi.praveena@gmail.com
ORCID: https://orcid.org/0000-0002-3768-1490

2.2. Theoretical Framework

2.2.1. Pecking Order Theory

Donaldson first proposed the capital structure theory in 1961, and Myer refined it in 1984. The notion is referred to as modified pecking order theory (Dhingra 2022).The theory suggested that there is an order of raising the funds for an organization (Abeywardhana 2017). The hierarchy of financing is (Dhingra 2022),



Source: Dhingra (2022)

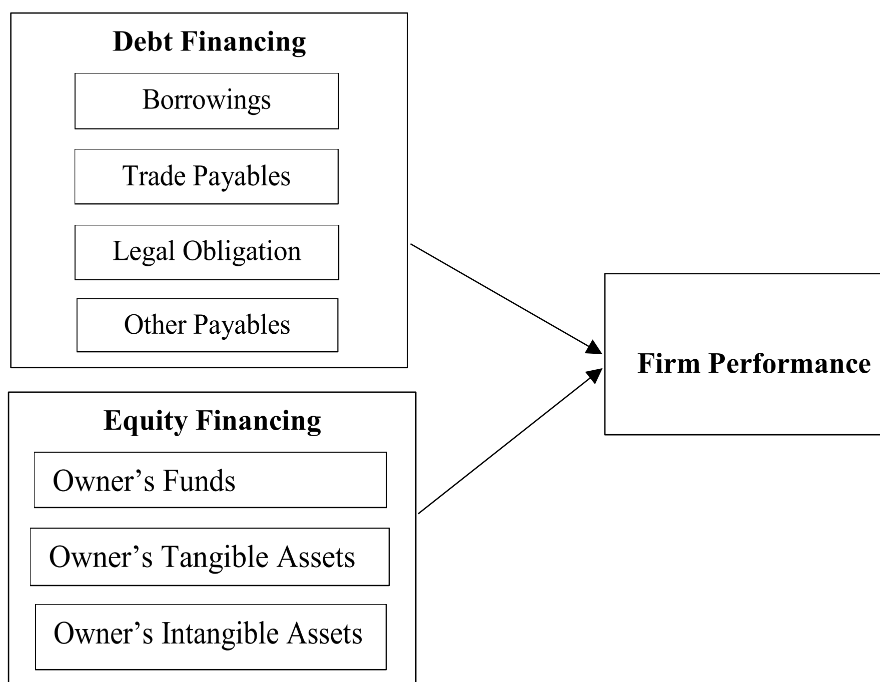
Figure 1: Pecking order theory

Management of the company is given the preference of raising funds according to the above mentioned hierarchy. It indicates managements' first preference is to raise funds to the company using internal funds due to, it does not have issue cost (Dhingra 2022). Then, issue debt because it is a cheaper source of funds as compared to equity as well as it offers tax benefits (Abeywardhana 2017). Finally, as the last alternative, issue equity capital to raise funds to the company (Abeywardhana 2017). Equity financing is high cost consumed than debt financing (Thomas 2021). Due to asymmetric information the cost of internal financing less than the external financing (Yusup 2021). It is about the pecking order theory. To successful achievement of research problem and objectives, researcher studied and employed pecking order theory.

3.METHODOLOGY

The study employed positivism philosophy, deductive research approach, mono method quantitative methodological choice, survey research strategy, cross-sectional time horizon, primary data collection and statistical package for social science(SPSS) and regression analysis. Primary data gathered employing two type of direct- data survey such as online and self- administered questionnaire. The respondents are business men/ owners who involve in apparel and textile industry in Sri Lanka. The study is limited to Colombo district. Sample size is 154 respondents. They are small and medium enterprises who running businesses in apparel and textile industry.The population of the apparel and textile industry consists with the businessmen who produce all type of apparel products and manufacturing textile products. In the population retailers, wholesalers, exporters, manufacturers and importers of apparel and textile products are including. The sample size derives applying stratified

sampling technique. Selecting the 154 respondents from 4 divisional secretaries in Colombo district in Sri Lanka such as Colombo, Maharagama, Kaduwela and Homagama. Strata consist with divisional secretaries in Colombo district. All 13 divisional secretary have in Colombo district. Thus strata recognize based on divisional secretary in Colombo district. Randomly select 4 divisional secretaries/ strata from all 13 strata. Thereafter choose 154 business owners randomly from above selected 4 divisional secretaries respectively 40 from Colombo, 70 from Maharagama, 25 from Kaduwela and 19 from Homagama. Thus, based on above rationale author select the stratified sampling technique to select the sample size randomly from sampling frame. Questionnaire survey method is the main research instrument applied to gather first-hand information.



Source: Author constructed

Figure 2: Conceptual framework

Table 1: Operationalization Table

Variable/s	Dimensions	Indicators	Measurement Scale	Source
Firm performance	Sales Profit Net wealth Profitability	Cash Sales Credit Sales Gross profit Net Profit Ownership Debt to equity rate Inventory turnover rate Creditors turnover rate	Likert Scale questionnaire	Orji et al.(2021) Samo and Murad (2019)
Debt Financing	Borrowings Trade Payables Legal Obligations Other payables	Bank loan Interest Capital repayment Default interest Tax payable	Likert Scale Questionnaire	Abor (2005) Gill, Amarjit, Biger and Mathur (2011)
Equity Financing	Owner's Funds Owner's Tangible assets Owner's Intangible asset	Owner's Premises Owner's Skill Goodwill	Likert Scale questionnaire	Gill, Amarjit, Biger and Mathur (2011)

Source: Author constructed

4.RESULTS AND DISCUSSION

4.1.Findings from Demographic Characteristics

Gender, age, educational level, monthly income and years of experience from apparel and textile industry were included in the survey representing demographic characteristics. The output of analyzed data about the demographic characteristics depicts via a table as a summary.

Table 2: Demographic Characteristics of Respondents

		Frequency	Percentage (%)
Gender	Male	56	36.4
	Female	98	63.6
Age	Below 25 years	8	5.2
	25-35 years	43	27.9
	35-45 years	45	29.2
	45-55 years	48	31.2
	Above 55 years	10	6.5
Average Monthly Income	Below Rs.50,000	35	22.7
	RS.50,000- RS. 80,000	51	33.1
	RS.80,000- RS. 100,000	59	38.3
	Above RS. 100,000	9	5.8
Educational Level	Ordinary Level	91	59.1
	Advanced Level	38	24.7
	Diploma	21	13.6
	Graduate	4	2.6
Experience from Apparel and textile Industry	Below 5 years	51	33.1
	5 Years- 10 Years	57	37
	Above 10 Years	46	29.9

Source: Author constructed

4.2. Findings from Descriptive Statistics

In this research study, debt and equity financing are independent variables and firm performance is dependent variable. Debt financing includes long term debt and short term debt. Long term debt refers to borrowings and short term debts refer in the perspective of accrual expenses of the business only for carrying out operation of the business such as trade payables, legal obligation and other payables (CFI Team 2022). All these 4 constructs to measure the debt financing. Descriptive statistics table 3 depicts respondents' responses about debt financing.

Table 3: Results of constructs of debt financing

	N	Minimum	Maximum	Mean	Std. Deviation
Borrowings	154	1.00	5.00	2.1247	.96692
Trade Payables	154	1.00	5.00	2.4870	.95819
Legal Obligation	154	1.00	5.00	2.2273	1.04333
Other Payables	154	1.25	5.00	2.8994	.69164
Firm Performance	154	1.00	5.00	1.9919	.95376

Source:Author constructed

4.2.1. Discussion of the Results of constructs of Debt Financing

Other payables have highest mean among four constructs. It indicates, according to the respondents' responses, other payables were the major construct that determined the debt financing. Second highest mean is from trade payable and third highest mean is from legal obligation. It reflects trade payables and legal obligation were influenced respectively to determine the debt financing. But in those two constructs, the degree of determining debt financing was less than the other payables during pandemic. Borrowings resulted in the lowest mean. It shows that there was less of a need to take on long-term debt to fund corporate operations during the COVID-19 pandemic. This is supported by A.T. Khawaj's (2020) research, which indicated that during the COVID-19 epidemic, SMEs refrained from applying for bank loans in an effort to preserve their companies' liquidity.Because during pandemic outbreak, lack of possibility of expansion of the business and high uncertainty in the market. Therefore, accessing to long-term debt get reduced as per the responses. Thus lowest mean value was for borrowings (long term debt) (Khawaj 2020). Shubita and Alsawalhah (2012) stated Firms in Jordan mostly finance their operating activities using short term debt compare to the long term debt. Since mean value of the responds for firm performance was 1.9919 and it more close to 2, reader can conclude that SME business owners in apparel and textile industry believed that their assessment of firm performance moderately lower during pandemic.

Table 4: Results of constructs of equity financing

	N	Minimum	Maximum	Mean	Std. Deviation
Owners’ Funds	154	1.00	5.00	4.5065	.76266
Owners’ Tangible Asset	154	1.00	5.00	4.3084	.89150
Owners’ Intangible Asset	154	2.50	5.00	4.1494	.67671
Firm Performance	154	1.00	5.00	1.9919	.95376

Source: Author constructed

4.2.2. Discussion of The Results of Constructs of Equity Financing

Other independent variable is equity financing. Equity financing refers to merely owners’ investment to the business using owners’ funds and assets (Murray 2022).Since equity financing measured via above three constructs that is mentioned in table 4. Respondents’ responses about the determinants of equity financing during Covid-19 pandemic has been exhibited under descriptive statistics table 4.The responses were from 154 records.Highest mean value was from owners’ funds. It indicates owners’ funds was the major construct that most influenced to determine the equity financing during pandemic to run the operating activities of the business than other two constructs. Second highest mean value was from Owners’ tangible assets. Owners’ tangible asset referred to owners’ premises and capital investments that owner made to run the business during pandemic (Ward 2021). Its impact on equity financing was less. It reflects owners’ tangible assets was not more influenced construct like owners’ funds to determine equity financing during pandemic. Owners’ intangible assets depicted least mean among 3 constructs. Owners’ intangible assets included goodwill, brand identification of the company and owners’ ability and skills used to run the business (The Economic Times 2022) (Gill, Amarjit, Biger & Mathur 2011). According to responses of the respondents, their assessment was least impact of owners’ intangible asset on equity financing due to was not possessing strong and reputed brand identification and fair skills and abilities possessed in owners of the business. Since mean value of the responds for firm performance was 1.9919 and it more close to 2, reader can conclude that SME business owners in apparel and textile industry believed that their assessment of firm performance moderately lower during pandemic.Further assurance and to provide a more meaning for above results, researcher run inferential statistics as well.

4.3. Reliability Analysis – Cronbach’s Alpha

4.3.1. Discussion of The Results

The findings revealed that the debt financing scaled with 11 items and α =.828, equity financing measured with 5 constructs and α = .609 and firm performance scaled with

04 items and α= .751. It reflects constructs that used for independent and dependent variables were reliable.

Table 5: Cronbach's Alpha of independent variables and dependent variable

Constructs	Cronbach's Alpha (α)	No of Items
Debt financing	.828	11
Equity Financing	.609	05
Firm Performance	.751	04

Source: Author constructed

4.4. Validity of The Research Instrument

There are various types of validity, including construct validity, face validity, content validity, and criterion validity. Through the presentation of the questionnaire to the supervisor, the face validity of the instrument was confirmed. The literature's support and an expert examination of the content helped to confirm its legitimacy. High correlation analysis between the independent and dependent variables ensured criterion validity. Since validity of the research instrument was ensured through face validity, content and criterion validity.

4.5. Correlation Analysis

4.5.1. Results and Discussion

Table 6 correlation matrix represents Pearson correlation, sample size and significance at two tail test for independent variables and dependent variable. After analyzing the data, output of correlation analysis was, Correlation coefficient (r) between debt financing and firm performance was 0.712^{**} and p- value for two tailed test of significant was less than 0.05. With this result researcher can conclude that there is a strong and significant positive correlation between debt financing and firm performance during Covid 19 pandemic in apparel and textile industry in Sri Lanka. The correlation is significant at the significance level of 0.01. Based on the findings of the Shubita and Alsawalhah (2012) claimed that debt financing is positively correlated with the firm's profitability in the manufacturing industry due to interest payment are tax deductible. In contrast to apparel and textile industry, Orji et al. (2021) carried out research study on oil and gas sector, health care sector and ICT sector and found out significant and positive relationship (.674*) between debt equity financing and firm performance under economy at the normal condition. Correlation coefficient (r) between equity financing and firm performance was -0.488^{**} and p-value for two tailed test of significant was less than 0.05. Thus researcher can conclude that there is significant and negative association between equity financing and firm performance during Covid 19 pandemic in apparel and textile industry in Sri Lanka. The correlation is significant at the significance level of 0.01.

In contrast to the negative correlation between equity financing and firm performance, Njagi, Maina and Kariuki (2017) concluded that positive and significant

(.656**) impact of equity financing on financial performance in SMEs. Assume, this contradict result was due to different constructs that researcher used to measure the equity financing such as angel investor, ploughed back profit, friends' contributions, retained profit. As well as the time period that the research was conducted. The study by Njagi, Maina and Kariuki (2017) was at normal condition in the economy. Although, this study is during the Covid -19 pandemic when economy is not in a favorable condition.

Table 6: Results of Correlation Analysis

		Debt Financing	Equity Financing	Firm Performance
Debt Financing	Pearson Correlation	1	-.422**	.712**
	Sig. (2-tailed)		.000	.000
	N	154	154	154
Equity Financing	Pearson Correlation	-.422**	1	-.488**
	Sig. (2-tailed)	.000		.000
	N	154	154	154
Firm Performance	Pearson Correlation	.712**	-.488**	1
	Sig. (2-tailed)	.000	.000	
	N	154	154	154

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

Source: Author constructed

4.6. Regression Analysis

4.6.1. Model summary

R value of the model summary table implied overall fit of the model and simple correlation (Islam, Kabir &Nisha 2021). R value was 0.741 for the study. It indicated high degree of correlation. R square value implied total variation in the dependent variable. The R square value for this model was 0.550. It indicated the two independents variables in the model accounted for 55% variance in the dependent variable. It meant debt and equity financing accounted for 55% variance in the firm performance of SME during Covid 19 pandemic in apparel and textile industry. According to the adjusted R square value of 0.544, it would imply that the independent variables (MEF&MDF) in the model can predict 54.4% of the variance in dependent variable (MFP).

Table 7: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.741[a]	.550	.544	.64437

Predictors: (Constant), MEF, MDF
Source: Author constructed

According to the table 8, It depicts p-value was less than 0.05 under the sig. column. It indicated there was a significant impact of debt financing on firm performance and significant impact of equity financing on firm performance at the 0.01 level.

Table 8: ANOVA Table

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	76.480	2	38.240	92.096	.000[b]
	Residual	62.698	151	.415		
	Total	139.177	153			

a. Dependent Variable: MFP
Predictors: (Constant), MEF, MDF
Source: Author constructed

Coefficient table represents the individual impact separately for independent variables. In this table, regression coefficient demonstrate through β value. Accordingly, 0.789 was for debt financing. It indicates strong and positive impact of debt financing on firm performance. β value of -0.342 was for equity financing. It implied weak and negative impact of equity financing on firm performance. These two independent variables significant at the 0.01 level.

Table 9: Coefficient Table

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.552	.498		3.118	.002
	MDF	.789	.077	.615	10.212	.000
	MEF	-.342	.090	-.229	-3.798	.000

Dependent Variable: MFP
Source: Author constructed

4.6.2. Results and Discussion

Debt financing and equity financing significantly predict firm performance. $P < 0.01$ which indicates that the debt financing and equity financing can play a significant impact on firm performance. These results evidently direct the positive (β=0.789**) influence of the debt financing and inverse influence of equity financing (β=-.342**) on firm performance. Moreover, the $R^2 = 0.550$ depicts that the model explains 55% of the variance in firm performance.

Based on the findings of the Shubita and Alsawalhah (2012) concluded that increase in long-term and short-term debt decrease the profitability of the firm as employing high proportion of debt leads to low profitability and another finding is profitable firms more depend on equity as key funding option.

4.7. Hypotheses Testing

Researcher developed two null hypothesis and its alternative hypotheses. Hypotheses tested based on multiple linear regression analysis.

Table 10: coefficients for independent variables from multiple linear regression analysis.

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.552	.498		3.118	.002
	MDF	.789	.077	.615	10.212	.000
	MEF	-.342	.090	-.229	-3.798	.000

Dependent Variable: MFP
Source: Author constructed

The hypotheses were,

Hypotheses 1- Debt Financing

H0: Debt financing does not significantly influence on firm performance

H1: Debt financing significantly influence on firm performance

Hypotheses 2 – Equity Financing

H0: Equity financing does not significantly influence on firm performance

H1: Equity financing significantly influence on firm performance

Table 11: Results of the hypotheses

H	Hypotheses	B-value	Accept/ Reject	Results
H 1	Debt financing significantly influence on firm performance	.789**	Accept	Significant at the 0.01 level
H 2	Equity financing significantly influence on firm performance	-.342**	Accept	Significant at the 0.01 level

Source: Author constructed

4.7.1. Results and Discussion

According to the results of the hypotheses researcher can conclude that both hypotheses (H1&H2) are accepted due to strong evidence against null hypotheses based on regression coefficient. It implied debt financing and equity financing were significantly influenced on firm performance during Covid-19 pandemic for SME businesses in apparel and textile industry to carryout operating activities of the business. According to the results of the hypotheses testing for debt funding, borrowing capital is rejected. Because borrowings are long term debts. Thus SMEs in the clothing industry was not obtained borrowings/ long term debts to carry out the operating activities of the business during the pandemic situation (Khawaj 2020).It did not significantly affect for firm performance. To determine the firm performance, other payables such as accrued expenses did not become significant factor based on the findings of hypotheses testing. Another result of the hypotheses testing for equity financing is owners' intangible assets are rejected. Because these are less liquid asset (Accounting Tools 2022). Since its impact do not significant on firm performance in term of liquidity of the firm.

5. CONCLUSION

By conducting this research study, the researcher aim was to examine the impact of capital structure on firm performance during covid-19 pandemic in the apparel and textile industry to carry out operating activities. Another way, to identify the sources of funds raised for the functioning of the daily activities of the apparel and textile businesses during the pandemic outbreak and to assess those financing sources' impact on firm performance. Hence research problem is how debt and equity financing impact on firm performance in apparel and textile industry during covid-19 pandemic to functioning of the daily operating activities of the firm. Thus this whole study is accomplished in order to achieve above research problem. Accordingly, all research findings that discussed under results and discussion heading based on the above mention main research problem and those results supported to the research problem. Initially pre-assumed that there is significant relationship between debt and equity financing and the firm performance.

It was proved by having substantial effect on firm performance.Then it can be concluded that, borrowings, other payables and owners’ Intangible asset did not have significant relationship with firm performance. The empirical results of this research accepted both hypotheses.Financing is critical to the survival of businesses (Ohaka, Edori & Ekweozar 2020)). Since this research model impact on variation of 55% on firm performance, there can be so many other factors relevant to firm performance. Therefore, future research should be conducted by differentiating determinants of capital structure variables. Debt and equity financing are sources of raising funds for an organization. It’s known as capital structure. Debt financing can be categorized as long term and short term debt financing. After analyzing the data, research finding is debt and equity financing has significant impact on firm performance. This significant impact of debt financing is positive and equity financing is negative. The positive impact of debt financing on firm performance is in term of liquidity. Because during the crisis, the firms' short-term payables, such as trade payables, tax payables, and other payables, were delayed.This leads to increase the liquidity of the firm in term of firm performance. Through the firm's liquidity, equity financing had a negative impact on corporate performance during the Covid-19 pandemic.Because retained earnings (owners possessed funds), Owners possessed tangible assets) and company brand name, goodwill that is owners’ intangible assets are not quick liquid assets. Since its impact on firm performance is negative. Although, during this crisis (pandemic situation) to operate daily functioning of the business equity financing also affected. It can be assured due to there is a significant impact on firm performance. Ultimately, research study was successes to address for all research questions and research objectives as explained under introduction. SMEs in apparel and textile industry employed both short term debt and equity (retained earnings) to finance the operating activities of the firm during Covid-19 pandemic and both significantly impact on firm performance of the company.

REFERENCES

Abeywardhana, D. K. Y., 2017. Capital Structure Theory: An Overview. *Accounting and Finance Research,* Vol. 6, No. 1(2017 January 28), pp. 133-138.

Abor, J., 2005. The effect of capital structure on profitability: an empirical analysis of listed firms in Ghana. *The Journal of risk finance,* Vol. 6 No. 5(2005), pp. pp. 438-445.

Accounting Tools , 2022. *Order of liquidity, definition.* [Online] Available at: https://www.accountingtools.com/articles/what-is-order-of-liquidity.html#:~:text=Order%20of%20liquidity%20is%20the,Goodwill%20is%20listed%20last

Advisory KPMG Deal, 2020. Impact of Covid 19 on the Sri Lankan economy. *Impact of Covid 19 on the Sri Lankan economy*, 8 April, p. 30.

Ahmad, Z., Abdullah, N. M. H. & Roslan, S., 2012. Capital Structure Effect on Firms Performance: Focusing on Consumers and Industrials Sectors on Malaysian Firms. *International Review of Business Research Papers,* Vol. 8. No.5.(July 2012), p. Pp. 137 – 155 .

Anner, M. S., 2020. The Impact of Covid-19 on workers and businesses at the bottom of global garment supply chains. *Penn State Center for Global 342 workers' rights (CGWR). 29,* Issue March 27, 2020, pp. 1-8.

Aziz, S. & Abbas, U., 2019. Effect of Debt Financing on Firm Performance: A Study on Non-Financial Sector of Pakistan. *Open Journal of Economics and Commerce,* Volume 2, Issue 1,(2019), pp. PP 8-15.

Bain, M., 2020. Coronavirus threatness the livelihoods of garment workers ariound the world.

Banerjee, A. et al., 2009. Hypothesis testing, type I and type II errors. *Statistics Without Tears,* Vol 18(2), pp. 127-131.

Bassey, C., Aniekan, B., Ikpe & Udo, L., 2013. Effect of financing mix on financial performance of firms in Nigeria. *Australasian Accounting, Business & Finance Journal,* 1 (14)(2013), pp. 40-61.

Bolonne, H., 2020. The Effect pf Covid-19 to Apparel Sector, Sri Lanka. *International Conference on Business Research,* pp. 219-232.

Business jargons, 2022. *What is business finance, Definition, Nature, Need, Types,Advantage.* [Online] Available at: https://businessjargons.com/business-finance.html.

Central Bank of Sri Lanka, 2020. *Central Bank of Sri Lanka: Annual report (Chapter 2) 2020.* [Online] Available at: https://www.cbsl.gov.lk/en/publications/economic-and-financial-reports/annual-reports/annual-report-2020.

Central Bank of Sri Lanka, 2020. *GDP growth.* [Online] Available at: https://www.cbsl.gov.lk/en/statistics/statistical-charts

Cernansky, R., 2020. *As coronavirus spreads,supply chain workers face layoff. Voguebusiness.com.* [Online] Available at: https://www.voguebusiness.com/sustainability/coronavirus-causes-closures-and-layoffs-for-workers-bangladesh-india

CFI Team, 2022. *Short term debt - overview, types of debt and Examples.* [Online] Available at: https://corporatefinanceinstitute.com/resources/accounting/short-term-debt/

Cho, Y., 2014. Making the Poor Pay for the Rich: Capital Account Liberalization and Reserve Accumulation in the Developing World. *Globalizations,,* Vol. 11, No. 6(2014 November), p. 809 –825.

Deyshappriya, N. R., 2020. Economic impacts of COVID-19 macro and micro economics evidences from Sri Lanka.. *ResearchGate,* Issue May 2020, p. 19.

Dhingra, A., 2022. *Pecking Order theory of Capital Structure, Donaldson's Theory 1961, Myer Theory 1984,* s.l.: s.n.

Duffin, E., 2020. *Impact of the coronavirus pandemic on the global economy,* s.l.: Statistica Report.

Gill, A., Biger, N. & Mathur, N., 2011. The Effect of Capital Structure on Profitability: Evidence from the United States. *International Journal of Management,* Vol. 28 No. 4 Part 1(2011), pp. 3-15.

Humayun Kabir, M. M. K. U., 2020. The impact of COVID-19 on Bangladeshi readymade garment (RMG) workers. *Journal of Public Health,* p. pp. 47–52 .

Islam, M. T., Kabir, R. & Nisha, M., 2021. *Learning SPSS without Pain.* Second ed. Dhaka: ASA Publications.

Kabir, H. M. M. U. K. I. M., 2019. Health vulnerabilities of readymade garment (RMG) WORKERS.

Kelly, A., 2020. *Garment workers face destitution as Covid-19 closes factories.* [Online] Available at: https://www.theguardian.com/global-development/2020/mar/19/garment-workers-face-destitution-as-covid-19-closes-factories

Khawaj, A. T., 2020. *Relevance of pecking order theory of capital structure, during the pandemic,* Wolverhampton : University of Wolverhampton Business School..

Macksoud, L., Schrag, S., Richards, R. E. & Alberts, S. J., 2020. *Covid-19 and its impact on the global economy.* [Online] Available at: https://www.dentons.com/en/insights/alerts/2020/march/11/covid-19-and-its-impact-on-the-global-economy.

Mckeever, V., 2020. *Nearly 25 million jobs could be lost globally due to the coronavirus, UN labor organization estimates.* [Online]

Available at: https://www.cnbc.com/2020/03/19/nearly-25-million-jobs-could-be-lost-globally-due-to-the-coronavirus.html

Mesquita, J. M. C. d. & Lara, J. E., 2003. Capital Structure and Profitability: The Brazilian Case. *In Academy of Business and Administrative Science Conference, Vancouver, Canada,* Issue 2003 July, pp. 11-13.

Murray, J., 2022. *Owner's Equity vs. Retained Earnings: What's the Difference?.* [Online]
Available at: https://www.thebalancemoney.com/owner-s-equity-vs-retained-earnings-397451

Myers, S. C. & Majiuf, N. S., 1984. Corporate financing and investment decisions when firms have information that investors do not have. *Journal of financial economics,* 13(2)(1984), pp. pp.187-221.

Nayak, P., Mishra, V., Singh, M. & Tambuwala, M. M., 2021. Impacts and Consequences of COVID-19 Epidemic on Global Economy. *Bentham Science,* Vol. 2, No. 1(2021,2), pp. 77-88.

Naz, F., Ijaz, F. & Naqvi, F., 2016. Financial perfoemance of firms: Evidence from Pakistan Cement Industry. *Journal of Teaching and Education,* 05(01)(2016), p. 81–94.

Njagi, I. K., Maina, K. E. & Kariuki, S., 2017. Equity Financing and Financial Performance of Small and Medium Enterprise in Embu Town, Kenya. *International Academic Journal of Economics and Finance,* Volume 2(2017), pp. pp. 74-91.

Nwude, E. & Anyalechi,, M., 2018. Effect of capital structure on performance of firms in Nigeria. *Journal of Finance, ,* 56(2018), pp. 34-43 .

Nwude, E. C. & Anyalechi, K. C., 2018. Impact of Capital Structure on Performance of Commercial. *International Journal of Economics and Financial Issues,* 8(2)(2018), pp. 298-303.

Ohaka, J., Edori, D. & Ekweozor, U., 2020. Debt financing and firms performance in Nigeria. *Account and Financial Management Journal,* 5(2)(2020), pp. 2106-2113.

Omaliko, E. L., Okeke, P. C. & Obiora, F. C., 2021. Impact of Covid-19 Pandemic on Liquidity and Profitability of Firms in Nigeria. *International Journal of Academic Research in Business and Social Sciences,* 11(3)(2021 March), pp. 1331 - 1344.

Omaliko, E. L. & Okpala, E. N., 2020. Effect of Financing Mix on Financial Performance of Health Care. *International Journal of Banking and Finance Research,* Vol 6. No. 3 (2020), pp. 63-77.

Orji, A., E.O., N. & N., A., 2021. Effect of Debt-Equity Financing on Firms Performance in Nigeria. *Journal of Accounting and Financial Management E-ISSN 2504-8856 P-ISSN 2695-2211 Vol 7. No. 3,* Vol 7. No.3(2021), pp. 73-81.

Ozili, P. & Arun, T., 2020. Spillover of COVID-19: impact on the Global Economy. *Munich Personal RePEc Archive,* Paper No. 99850(26 Apr 2020).

Patrick, A., 2013. The impact of capital structure on firms' performance in Nigeria. *Munich\ Personal RePEc Archive,* Issue 2013, p. Paper No. 45986.

Raheen, M., 2016. What do we know about capital structure in China? some evidence from\international data. *Journal of Finance, (50), 1421-1460.,* (50)(2016), pp. 1421-1460.

Raheman, A., Zulfiqar, B. & Mustafa, 2007. apital Structure and Profitability: A Case of Islamabad Stock Exchange". *International Review of Business Research Papers,* 3(5)(2007), pp. pp.347-61..

Ramachandran, K.K. and Madhumathy, M., 2016. A study on capital structure and financial performance of Indian textile industry. *International Journal of Management*, *7*(3).

Roshana, M., Kaldeen, M. & Ranu, A. R., 2020. Impact of Covid-19 outbreak on Sri Lankan economy. *Journal of Critical Reviews ISSN- 2394-5125,* VOL 7(ISSUE 14, 2020), p. 11.

Samo, A. H. & Murad, H., 2019. Impact of liquidity and financial leverage on firm's profitability :an empirical analysis of the textile industry of Pakistan. *Research Journal of Textile and Apparel,* Vol. 23 No. 4,(2019), pp. pp. 291-305.

Sarkar, S. & Zapatero, F., 2003. The Trade-off Model with Mean Reverting Earnings:Theory and Empirical Tests. *The Economic Journal,* 113(490)(2003), pp. pp.834-860.

Sen, S., Sen, S., Antara, N. & Chowdhury, S., 2020. The apparel workers are in the highest vulnerability due to COVID-19: a study on the Bangladesh Apparel Industry. *Asia Pacific Journal of Multidisciplinary Research,* Volume 8, No. 3(August 2020), p. 8.

Sen, S., Sen, S., Antara, N. & Chowdhury, S., 2020. The Unprecedented Pandemic " COVID-19" Effect on the Apparel Workers by shivering the Apparel Supply Chain. *Journal of Textile and Apparel, Technology and Management,* volume 11(Issue 3, 2020), p. 20.

Shubita, . M. F. & alsawalhah, J. M., 2012. The Relationship between Capital Structure and Profitability. *International Journal of Business and Social Science ,* Vol. 3 No. 16(Special Issue – August 2012), p. 9.

Sri Lanka Export Development Board (SEDB), 2020. *Sri Lanka Export Development Board: Core Strengths of Sri Lankan apperl.* [Online] Available at: https://www.srilankabusiness.com/apparel/competitiveness.html

Sri Lanka Export Development Board(SEDB), 2019. *SED : Sri Lanka Apparel Products.* [Online] Available at: https://www.srilankabusiness.com/apparel/apparel-products-ebrochures.html

Sri Lanka Export Development Board(SEDB), 2020. *SEDB: Major Apparel & Textile Exporters.* [Online] Available at: https://www.srilankabusiness.com/exporters-directory/

Sri Lanka Export Development Board(SEDB), 2020. *SEDB: Sri Lankan apparel products.* [Online] Available at: https://www.srilankabusiness.com/apparel/sri-lankan-apparel-products.html

Sri Lanka Export Development Board(SEDB), 2020. *SEDB: The textile manufacturing industry in Sri Lanka.* [Online] Available at: https://www.srilankabusiness.com/apparel/textile-manufacturing-industry.html

Sri Lanka Export Development Board(SEDB), 2020. *SEDB:Apparel Export Performance.* [Online] Available at: https://www.srilankabusiness.com/apparel/about/export-performance.html

Sri Lanka Export Development Board(SEDB), 2020. *Sri Lanka Export Development Board: Sustainability & ethical practices.* [Online] Available at: https://www.srilankabusiness.com/apparel/about/garments-without-guilt.html

Sri Lanka Export Development Board(SEDB), 2021. *Sri Lanka Export Development Board -Apparel Export Performance.* [Online] Available at: https://www.srilankabusiness.com/buyers/export-performance-report.html

The Economic Times, 2022. Business. *What is 'Intangible asset'*, 14 December, p. 1.

Thomas, C., 2021. *Pecking Order Theory,* Bengaluru, Karnataka, India. : Faculty, Department of Commerce (UG), Kristu Jayanti College (Autonomous).

Ward, S., 2021. *What Is Capital Investment?.* [Online] Available at: https://www.thebalancemoney.com/capital-investment-2948114

World Health Organization, 2020. *Coronavirus Disease 2019 (COVID-19).* [Online] Available at: https://www.who.int/

Yusup, A. K., 2021. *Capital structure theory(Corporate Finance Series),* Indonesia: s.n.

Appendices

List of glossary

Constructs	Type of construct	Constructs refers to:
Borrowings	Long term debt	Bank loan , Leasing
Trade payables	Short term debt	Trade payables
Legal obligation	Short term debt	Tax payable
Other payables	Short term debt	Rent payable, Salary payables, Utility bill payables
Owners' funds	Equity of SMEs which controlled and managed by the owner	Cash in hand, cash at bank
Owners' tangible assets	Equity of SMEs which controlled and managed by the owner	Already occupied equipment and premises that support to run the business such as building machines and other PPE.
Owners' intangible assets	Equity of SMEs which controlled and managed by the owner	Reputed goodwill, Owners' skill, Patents, Trademark.

Questionnaire

Demographic factors

1. **Gender**
   - Male
   - Female
2. **Age**
   - Below 25 years
   - 25-35 years
   - 35-45 years
   - 45-55 years
   - Above 55 years
3. **Average Monthly income**
   - Below RS. 50,000
   - RS.50,000-80,000
   - RS.80,000-100,000
   - Above 100,000
4. **Highest Level of education attained**
   - Ordinary level
   - Advanced level
   - Diploma
   - Graduate
5. **Experience in apparel and textile industry**
   - Below 5 years
   - 5-10 years
   - Above 10 years

Likert Scale questionnaire

1- Strongly disagree, 2- Disagree, 3- Neutral, 4- Agree, 5- Strongly agree

Firm performance	**1**	**2**	**3**	**4**	**5**
1. The cash earned **income** from my business during Covid 19 pandemic time period was higher than before the Covid -19 pandemic.					
2. During the period of the Covid-19, **Credit sales** were higher compared to the period before the Covid-19 pandemic.					
3. **Net profit** of my business was higher during Covid-19 pandemic time period than pre Covid 19 pandemic time period.					

4. Inventory of unsold garments and textiles was higher during the Covid-19 pandemic as compared to the pre-Covid-19 pandemic period.					
5. Due to adequate cash supply during the Covid-19 pandemic, **payments to creditors** were made on time					
Debt financing					
6. The **external debt** taken during the Covid-19 pandemic period was higher than the external debt (bank loans/lease facilities) taken during the pre-Covid-19 pandemic period					
7. The business paid the **bank loan installment repayments** before/on due date during the pandemic period)					
8. During the pandemic, the business was able to pay the **interest** on external loans.					
9. **External debt payments** were not delayed due to reduced business income during the pandemic.					
10. Due to non-repayment of external loans on the due date, the owner was able to reach an agreement with the external loan stakeholders for a loan relief period, not to pay **penalty interest** on the business during the epidemic period.					
11. My business has had more financial stability to pay **income taxes** during the pandemic than before the Covid-19 pandemic					
12. During the Covid-19 pandemic, my business earned enough income to provide the **employees' required salary** scale on time.					
13. During the pandemic, the business did not **lay off employees** due to low revenue.					
14. During the Covid-19 pandemic, the business managed to pay **the electricity bills and water bills** on time.					
15. My business is running in a **rented place** and during the covid-19 pandemic, the income earned from the business decreased and **accrued rental payment** was not created.					
16. During the Covid-19 pandemic, the business had sufficient cash supply to **repay trade creditors** without difficulty)					
Equity Financing					
17. I run my business from **my own business location thus I save on business rental fees**.					
18. Most of the **owner's assets (equity**) are invested in the business.					
19. Invested more **owner's capital** than external debt to keep the business going during the Covid pandemic.					

20	The **owner's skills, knowledge, experience and management** are used more than the skills, knowledge and experience of the employees to run the business.					
21	Even during the period of the Covid epidemic, customers continued to purchase the products of business because the company has a **recognized brand** that has won the trust of customers.					