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"Debt Determinants of Shari'ah Approved Firms: Empirical Evidence from Pakistan"

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ABSTRACT
History
Thisresearchattemptstodevelopcomprehensivemodelsthatexaminethe impactofa combination ofexternal fundamentals and internal features onbusiness performance, as well as whether there are any differences betweenShariah-compliant and non-Shariah-compliant firms. As a result, the purpose ofthisresearchistoexaminetheimportantrelationshipbetweenexteriorfundamentals and interior features. This study is unique in that it focuses oncompanieswhoseequitieshavebeenauthorizedbythePakistanSecurities

Inflation Islamic Banking CommissionasShari'ahcompliant.Thisstudyexaminesadiversegroupof15 Shariah-compliantenterprisesregisteredonthePakistanStockExchangeovera five-year period. This study uses a static panel regression model to achieve itsgoal. The empirical model is also subjected to a robustness test in this study.Several factors were investigated, and the findings revealed that some firm-specific variables, such as profitability, growth opportunity and size, interestrate,GDPandinflationareimportantdeterminantsofafirm'sdebt.AlsoProfitability,GrowthandSizearefoundt obesignificantdeterminantsofShariah-approved firms' debt. And Inflation, GDP and Interest rate are non-significant variablesforSharia'ah approved firms.

Keywords
Shari'ahCompliance
Debt RatioProfitability

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I. Introduction:

Marks et al. (2009) mentions decisions about capital structure needs to be executed andplanned effectively and properly, a procedure of managing risk of debt repayment as wellas ensuring the availability of equity for future expansion. Koller et al. (2011) argues thatunderstanding how to construct a flawless optimal capital structure to pursue businessvalue is assessed is extremely crucial for top management in firms. The Shariah AdvisoryCouncil (SAC) has established several standard criteria for assessing Shariah-compliantactivity.Shariahprinciplesarefollowedby thecompanies intheiractivitieswillbeclassed as Shariah-compliant securities if certain prerequisites are met (Haron, R., &Ibrahim,K.2012).Theliteratureoffinancialeconomy,severaltheoremshasbeendeveloped for achieving the optimal capital structure of a company. Under particularassumptions, propositions, and conditions, each theory offers a distinct explanation ofcorporate funding (Haron, R., & Ibrahim, K. 2012). Interest rates, as measured by bondyield spreads, are inversely related to board independence, according to Mansi and Reeb(2004).

Capital is required for businesses to thrive and expand. They have the option of obtainingloan or equity financing. In the end, an optimal capital structure leads to the maximizationofshareholdervalueandthecompany'ssurvival.Inmostcapitalstructurestudies,themostefficientand optimalcombination ofdebtandequity thatacorporationshouldfollow in its financial decisions to ensure maximum firm value is discussed (Haron, R., &Ibrahim, K. 2012).According to Eriotis, Vasiliou, and Ventoura-Neokosmidi (2007), anineffective debtstrategy cancausefinancialdifficulty and leadtobankruptcy.Whatfactorsinfluenceacapitalstructurethatisoptimal?Thesearesomeofthemostoftenasked questions when it comes to capital structure decisions. According to Fraser, Zhang,and Derashid (2006), larger and more lucrative enterprises with political patronage aremore likely to use debt financing. Nonetheless, not all Arrow Securities would fulfillShari'ah prerequisites, as some might well address unexpected obligation agreements toconvey a decent foreordained measure of cash if a given condition of world happens(Bacha,O.I.,&Mirakhor,A.2019).

Company's capital structure is affected by profitability as higher profitability companiesdid not use debt financing rather they use their own internal resources, that is congruouswithpecking order theory. This suggesteda negativerelation between capitalstructureandprofitability (Getzmannetal., 2014; Dang&Garrett, 2015;Trangetal., 2016;Nguyenetal.,2019).Theprofitablecompanywiththecapacityofhigherdebtthateventually benefits the company from higher tax (Um, 2001).Hassan (2003) founds in anempirical study that higher the capital and loan to asset ratio lead towards the higherprofitability.

Islamic finance, which consists of financial organizations and products that adhere to thecore concepts of Sharia (or Islamic law), is one of the fastest-growing parts of the globalbanking industry (El-Qorchi 2005).Islamic finance is described as a financial service thatis primarily implemented in accordance with Sharia law's basic precepts (or Islamic law).The Holy Quran, Hadith, Sunna, Ijma, Qiyas, and Ijtihad are the basic sources of Sharia(Gait,A.H.,&Worthington,A.C.2007).

Accordingto Croquet&Colot(2007)the determinantsofthecapital structure ofBelgian groups showed the advantageous impact of the increase variable, which shows theimportance of growth possibilities for companies' use of debt. According to Abbas S. K.,Hassan, Hashmi, &Waqar, (2018) the significance of capital markets in the expansion ofenterprises and acountry's economic progress cannotbeoverstated.

II. Literature Review:

In recent years, the growth of Shariah-compliant firms has been a positive trend in globalfinancialmarkets.Shariahfirmshaveattractedaconsiderablenumberofreligious(particularly Muslim) and ethical investors to invest in stock markets because they complywith religious and ethical investment standards (Elgari 1993, Omran 2009). The increasedinterest of these investors in Shariah-compliant businesses has culminated in the creationof a special fund. Customers for these organizations, necessitating a greater understandingof the Shariahfirm's financial operations policies; Despite this, there appears to be ascarcityofstudyonShariahenterprisesinparticular. Especiallywhenitcomestofinancial decisions, this article is an attempt to look at Shariah capital structure decisions.Firms thatplaceastrong emphasison their loan maturitystructure

Agency theory, according to Jensen and Meckling (1976), refers to a conflict between management and ownership.The thesis describes a shaky link between a corporation's owners and control (Fama and Jensen, 1983).Further discussions of the theory focus on agency issues that arise when the principals' (management)goaldifferswiththeagent'sgoal(employees).Accordingtothe theory of agency,risingcompanieswillwant to issuestocks to support their operations and investments as a signal to outsiders that they are notunderinvested. Problems with asset substitution as a result, growth is projected to belinked.

Debtfinancinghasanegativeimpact(N.Hassanetal2012).Thishypothesishypothesizes a positive relationship between profitability and debt ratio. Firms' use of debtpreferenceposesadanger.Firm'sInfluence therelationshipbetweensizeandcapitalstructureisstillunclear(Jensen,Meckling1976).Accordingtotheargument,companieswithfewer tangibleassetsprefer debtfundingtoavoidincurringgreater informationcosts(Dang, 2013). The predictions of pecking order theory are also in line with agency theory.Modigliani and Milller (1958) laid the theoretical groundwork for a company's decision totakeonshort-term orlong-term debt.InthesamemannerthatMM'sirrelevanceargumentappliestodebtmaturity,italsoappliestodebtratio.Shariahcompliance,forexample,requiresbusinessestokeeptheirdebtratiosunderaspecifiedlimit1.Thematchingconcept,ontheotherhand,appliestoShariahfirmsuntiltheirborrowingcapacityfallsbelowthemaximumdebtratioallowedunderShariahscreeningrules.AccordingtoKatper,N.K.,MADUN,A.,SYED,K.B.S.,andTunio,M.N.(2017),companieswithlowerdebtratiostendtoborrowforashorter periodoftime.

Modigliani and Milller (1958) laid the theoretical groundwork for a company's decision totake on short-term or long-term debt. In the same manner that MM's irrelevance argumentapplies to debt maturity, it also applies to debt ratio. Shariah compliance, for example,requiresbusinessestokeeptheirdebtratiosunderaspecifiedlimit1.Thematchingconcept,ontheotherhand,appliestoShariahfirmsuntiltheirborrowingcapacityfalls

below themaximum debtratioallowed underShariahscreeningrules.AccordingtoKatper, N. K., MADUN, A., SYED, K. B. S., and Tunio, M. N. (2017), companies withlowerdebtratios tendtoborrowfor ashorterperiodof time.

Smaller enterprises' ownership is more concentrated than bigger ones, raising their agencycosts since managers with a larger stake in the company are less risk averse.

Anotherreasonwhysmallerenterprises'agencyexpensesriseisbecausetheyhavemoreinvestmentopportunities(Whited1992).AccordingtoMyers(1977),inatypicalinvestmentsituationwherethemajorityoftheprofitsfromaprojectflowto lenders,equityinvestorsmaybeunwillingtoengageinevenapositiveNPVproject.Suchproposalrejections resultin amajorunderinvestment problemwithin acompany.
Incomparisontoshareholders,managersofacompanyarethoughttohavemoreinformationandaccesstothetruevalueofthecompany'sassetsandgrowthopportunities. According to Byoun (2011), organizations' proclivity to use their financialflexibilitytosupportfuturegrowthmayalsoinfluencetheimpactofgrowthonleverage. Al-Najjar and Taylor (2008), Al-Najjar and Hussainey (2011), and Tongkong(2011)allshowapositiveassociationbetweengrowthopportunityanddebtlevel(2012).

H1:GrowthHasaSignificantRelationwithDebtRatio

Profitable businesses generate more taxable income, resulting in a positive correlationbetween profitability and debt maturity. Because choosing long-term debt versus short-term debt might create a tax timing option to repurchase and re-issue debt, taxability canimpactacompany'sloanmaturity.Profitabilityisusedtoassessacompany'sperformance, and it is quantified using classic financial measures such as ROA and ROE.Qudah and Jaradat (2013) and Obeidat et al. (2013) revealed that increasing the moneysupplyhasapositivesignificantinfluenceontheprofitabilityofJordanianIslamicbanks.

H2:ProfitabilityhasasignificantrelationwithDebtRatio

Firm size has long been regarded as an important factor in determining organizationalprofitability, and studies have looked at the effects of firm size on profitability, withlargely mixed results. Similar to Pervan and Viic, John and Adebayo (2013) used a paneldata model on the Nigerian manufacturing sector and discovered that firm size has afavorableeffectonbusinessprofitability(2012).Nonetheless,NireshandThirunavukkarasu(2014)examinedtheinfluenceofbusinesssizeontheprofitabilityofSri Lankan listed manufacturing enterprises, with mixed results. This research also showsthatfirmsize,developmentpotential,andliquidityallhaveanimpactonShariah-compliant firms' performance (Ho, C. S., &Mohd-Raff, N. E. N. (2019). For Shariah-approved enterprises in Malaysia, Ahmad and Azhar (2015) were unable to find anyindicationofasubstantial associationbetweensizeand debtintheconsumersector.

H3:SizehassignificantrelationwithDebtratio

TheGDPgrowthrateofacountryrevealshowquicklythatcountryisdeveloping.Apartfromfirm-specificdrivers,GDPandinflationratehavealsobeenfoundtoinfluence

capital structure decisions (K. Joeveer, 2013). This study hypothesizes that GDP, whichgauges the country's growth, will have a positive connection with debt. GDP growthindicates a healthy economy and consequently higher investment opportunities. The debtratio, on the other hand, shows no meaningful relationship with profitability, GDP growthrate, or inflation rate (Ahmad et al, 2015). This study hypothesizes that GDP, whichgauges the country's growth, will have a positive connection with debt. GDP growthindicatesahealthyeconomyandconsequentlyhigherinvestmentopportunities.Businesses will seize this opportunity to expand by taking on debt. This is in line with theTOT, whereas the POT is supported by the negative association (Ramli, N. E., &Haron,R.,2017).

H4:GDPhasnon-significantrelationwithDebtratio

Interest rates, money supply, exchange rates, and trade all have an impact on a country'sgross domestic product and the level of economic activity, which in turn has an impact oncompany performance. Cliff and Willy (2014) looked into the effects of macroeconomicfluctuations on the financial performance of listed manufacturing firms in Kenya, anddiscovered that foreign exchange, interest rates, and inflation rates all have a significantimpactontheperformanceoffirmsintheconstructionandmanufacturingsectors.AccordingtoZulfiquarand Din,interestrateisshowntobepositiveandhighlysignificant in determining returns in Pakistan, similar to Maysami and Koh (2000) onSingapore (2015). According to Qudah and Jaradat (2013) and Obeidat et al. (2013), thegrowth of the money supply has a positive significant impact on the profitability ofJordanian Islamic banks.

H5:InterestRatehasnon-significantrelationwithDebtratio

An economic theory of total expenditure in the economy, according to Keynes (1930),wouldaffectoutputandinflation.t.CliffandWilly(2014)lookedintothemacroeconomic fluctuations effects on the financial performance in Kenya for the listedmanufacturing firms, and discovered that foreign exchange, interest rates, and inflationrates all have a significant impact on the performance of firms in the construction andmanufacturing sectors. For Shariah-compliant enterprises, the rate of inflation is onlyminimally negatively relevant; with higher inflation resulting in a lower rate of ROE andvice versa. This discovery is in line with the findings of Kanwal and Nadeem's research(2013).

H6:Inflationhasnon-significantrelationwithDebtratio

Intheirinvestigationsemployingmultipleregressionanalysisonthelisted Shariahauthorized enterprises on Bursa Malaysia, Hassan et al. (2012) and Haron (2017) foundthat profitability is strongly negatively connected to debt. AccordingtoHall, (2012)Companies with higher asset tangibility can take on more debt since their physical assetscan be used as collateral. In his study of enterprises in Central and Eastern Europe, Hall(2012)foundapositivesignificantassociation.betweenthetangibilityofassetsandthe amount of debt Baharuddin et al. (2011) and Mustapha et al. (2011) have a lot in common.Malaysian businesses experienced the same outcome. Hassan et al. (2012) compared thelistedcompaniesintheirstudy.InMalaysia,bothShariahandnon-Shariahcertifiedbusinesseshaveconcluded thattangibilityhasafavorable impact.

Corporate Governance has become a buzzword in Pakistan's business world in recentyears. The Securities and Exchange Commission of Pakistan (SECP) is the driving forcebehind the current focus on corporate governance and its importance (Mumtaz, M. 2021).Regulatory organizations have made it mandatory for all publicly traded corporations tofollow traditional corporate governance norms and to report annually to all interestedparties. This increased interest in corporate governance in Pakistan is mostly due to thefactthatitiscriticaltothedevelopmentofacommercialmarketintransitioningeconomiessuchasPakistan.Asaresult, asanIslamicstate,Pakistanassuresthatcorporate enterprises are managed in accordance with the highest fundamental ethical andefficacystandards.

2.0 ConceptualFramework:

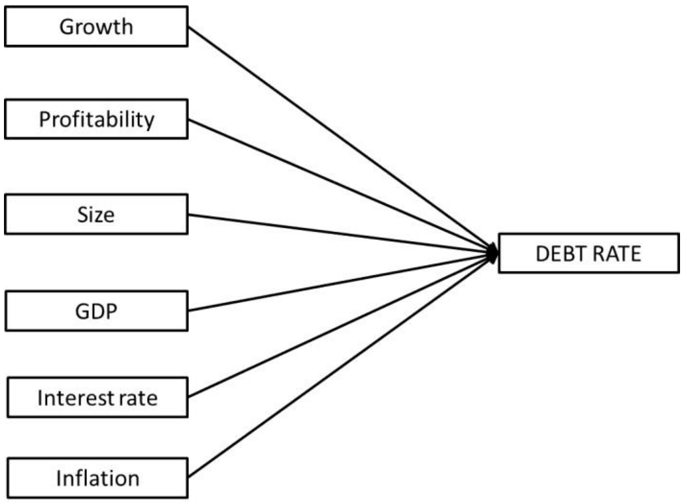

Figure2.1-StructuralFramework

III. **Methodology**:

a. Sample:

The research spans a period of 5 years. This research is conducted in Pakistan, 1st 20companies of Shariah compliance and data of 5 years were taken. The sample firms in thisstudy are all Shariah-approved firms from various sectors that were listed on the PakistanStock Exchange throughoutthetime period.

b. Samplingprocedure:

During the selection of the firms, some criteria and assumptions were added and imposed.However,themajorcriterionthatmustbemetbytheenterprisesisthattheymustbe

Shariah-compliant.Othercriteriaincludethefollowing:
a) Accordingtothe SCPakistanShariahlisting, thefirmsmusthave beenShariah-approved for severalyears.
b) Duetomergerandacquisition(M&A)andtake-over(T&O)activities,thestudypredicted that certain Shariah-approved enterprises will alter their corporate names. Thisissuewasoverlookedbecause it wasnot the study's primaryconcern.
c) The research also projected that some Shariah-compliant enterprises will face changesin their trading board and/or trading sector. This issue was also overlooked because it wasnot thestudy'sprimaryconcern.
d) Financial institutions were omitted since they are subject to a different set of norms andrestrictionsset byappropriateauthorities,such asthePakistan Central Bank.

Theselectionofthefirmsisadifficultprocessbecausesomeorganizationsmayexperienceproblemswithsurvivalduringtheresearchperiod.Economicconditions,organizational and management problems, unanticipated events, and other reasons areamong the probable variables that prevent businesses from continuing to operate andcompel them to shut down. Unfortunately, resolving the question of company survival ischallenging (Welch,2007).

We used a quantitative research method for analysis and data collection in thisstudy.We’ve used STATA to run the collected data and regression analysis, in this study.Quantitative research is defined as a "methodology for collecting and evaluating data thatstressesquantification(Bryman& Becker, 20 2).Furthermore,theexpertsappliedquantitative methods to numerical records in order to obtain answers to study issues.Inaddition to information, quantitative techniques require use of a few mathematical andstatistical skills. With the help of Bryman and Becker (2012), there are a few middlehighlights for thequantitativemethod;

1. Thisexaminestheconceptandaidsindeductiveorienting (FU syed et al., 2021).
2. Itiscompatiblewiththenotionofphysicaltechnologythatgovernsactivism.
3. It is also fits well with the objectivism ontological viewpoint. Statistical evaluationdevice(SAS),Statisticalpackagesofsocialsciences(SPSS),SouthTexasArtTherapy and evaluation of second structure (AMOS) are examples of software that can be utilised for quantitative interpretation and records study in the field (Hair, Black, Babin,Anderson, &Tatham,2006;Pallant,&Manual,2010).

c. SamplingMethod:

In a view to motive of the take a look at in line with the consultant facts collecting, non-possibility method of sampling is carried out in this take a lookatto acquirestatistics(Miles,Huberman,1994). Thisresearchfollowsconveniencesamplingapproachtogatherstatistics.

Theresearcher decidedonthe convenience sampling becausethesubjectsare easilyavailable and in all styles of the research, it'dbeperfect to examinetheentirepopulace,howeverin a few instances the populace the population is simply too large that it is not feasible to testeachperson.Thatisthecausewhymanyscholarsusethissamplingapproachbecauseit is rapid, less expensive and topics are gladly to be had. In addition, it is very vital for thestudent to decide which sampling method is to be used. when the subjects are chosen dueto the near proximity to a scholar this is the one that are simpler for the scholar o gain getrightofentrytoit'dbeperfectto applyhandysampling(Etikan,Musa,&Alkassim,2016).

d. Variablemeasurement:

Tablebelowhighlightsthevariablesbeingresearchedafterathorough studyofthepastliterature. The next sections contain information on how to measure the variables andwhattheyare.

***Table:3.1*VariableMeasurements**

Variables	Definitions	Whatto Measure	How to measure	References

Growth	According toByoun (2011),organizations'p roclivity touse theirfinancialflexibility tosupport futuregrowth mayalso influencethe impact ofgrowthon leverage.	Firm'sgrowthopport unities	$\frac{P_1 - P_o}{P_o}$	Byoun, S. (2011). Financialflexibility and capitalstructure decision.https://doi.org/10.2139/ssrn. 1108850
Profitability	researchers have found thatfactors such asprofitability,tangibili ty,liquidity, andfirm sizeinfluence acompany'scapitalstruc turedecision(N.Y.(201 5),I. Chakraborty,(2013),N. A. SheikhandZ. Wang,(2011).	The netprofitmargin of acompany	$\frac{Income}{Sales}$	N. A. Sheikh and Z. Wang,Managerial Finance 37, 117(2011).Chakraborty,I.(2013).Doescapita lstructuredependongroupaffiliation?Ananal ysisofIndianfirms. *JournalofPolicyModeling*, *35*(1),110-120.
Size	Hassan et al.(2012) indicate thatthe size of aShariah-approvedcompany has abeneficialimpacton the debt level ofthefirm.	Firm'ssize	$Ln(TA)$	Hassan,N.N.N.M.,Shafi, R. M., & Mohamed, S.(2012). The determinants ofcapitalstructure:EvaluationbetweenSha riah-compliant and conventionalcompanies. In 2012International Conference onInnovationManagement and Technology Research(pp.205–209).Ieee.

InterestRate	The interestrate exposureof Islamicequitiesportfolios isgenerallynegative, withthe mostrelevantinterest rateelementappearing tobe suddenchanges in thelevel factor ofthe US yieldcurve, whichis closely tiedto long-terminterestrates (Umar,et al;2018).	Company'sinterest	$Official$ $IR of Pakistan$	Ahmad,N.,&Azhar,N.N.(2015). Investigating ofShariah compliantcompany'sCapital Structuredeterminants. *AdvancedScience Letters*,*21*(6), 1986-1989.
Inflation	Due to marketconcerns,Shariah-approvedbusinesseslimit their debtlevels duringinflation(Ahmad, N.,& Azhar,N.N.; 2015).	Annualinflation	$Official$ $Inflation Rate$ $of Pakistan$	Ahmad,N.,&Azhar,N.N.(2015). Investigating ofShariah compliantcompany'sCapital Structuredeterminants. *AdvancedScience Letters*,*21*(6), 1986-1989.

GDP	The GDPgrowth rate ofa countryreveals howquickly it isincreasing(Ahmad,N. ,& Azhar, N. N.;2015).	GDP growth	$Official\ GDP$of $Pakistan$	Ahmad,N.,&Azhar,N.N.(2015). Investigating ofShariah compliantcompany'sCapital Structuredeterminants. *AdvancedScience Letters*,*21*(6), 1986-1989.
DebtRatio	Largerorganizationsma y prefer toemploy stockrather thandebt in theabsence ofinformationasymmet riesdifficulties,resultin g in alower debtratio(M.C.Jensena ndW. H.Mackling, 1976).	Firm's totaldebt	$\frac{TotalDebt}{TotalAssets}$	. M. C. Jensen and W. H.Meckling, Journal ofFinancialEconomics3,350 (1976).

IV. Analysis:

4.0 AnalysisandResults

This section explained about the statistical analysis that has been done in the form of dataextraction, pooling data into SPSS 21 and Stata software and Ordinary Least SquareAnalysis of the extracted data known as OLS regression. Further the values of the outputhave also been interpreted well and hypotheses are tested via OLS regression method andresults are deliberated accordingly. Both tabular and descriptive forms of the fallouts arementioned.

4.1 Missingvalueanalysis

Thedataisgatheredfromthe07Shari'ahCompanies'TotalAssets,TotalDebts,profitability from two tiers, Growth, firm size, , inflation rate via CPI and Interest rate andGross domestic product. Then the missing data is analyzed through validation of data inExcel.Therearenocompanieswithmissingvaluesfromthedatasetandthedatasheetis maintainedto7Shariahs'statisticswithnomissingvaluesforfurtherseamlessanalysis.

4.2 Summaryofvariables

Table below shows the summary of dependent variables that is Debt ratio and independentvariables (inflation, firm size, profitability, growth, gross domestic product and interestrate).TotalNumberofobservationsis35aswehavecollecteddatafrom7ShariahApproved firms and 05 years data is collected. The Maximum average is of firm size13.27729 with standard deviation 5.04607 and minimum average is profitability ratio0.0097624 with standard deviation 0.0075059. The complete summary is given belowtable:

Table4.1Summaryofvariables

Variables	Obs	Mean	Std.Dev	Min	Max
DR	35	0.2745579	0.2963596	-2.15452	0.9052784
GR	35	1.083763	0.755186	0.250625	1.190726
PR	35	0.0097624	0.0075059	-0.035644	0.0290739
FS	35	13.27729	5.041607	5.78394	36.0521
GDP	35	4.1156	1.229667	1.607	5.53
INF	35	7.1849	3.606881	2.54	13.881
IR	35	8.726	2.568812	5.75	13.5

4.3 Ordinaryleastsquareanalysis

The OLS analysis is done after pooling the data into the SPSS software interface. Thelinear regression analysis is run on the software for the purpose of investigation of theimpactofgrowth,profitability,Firm size,grossdomestic product,inflationrate andinterest rate on the Debt ratio. First the model R square is determined in order to checkwhether the variance in the overall model that is obtained by the investigation is good forthehypothesistesting.

4.3.1 Correlationanalysis

Correlationanalysisisusedtodeterminethestrengthoftherelationshipamongindependent variables. The value should be ranged between positive and negative 1 (Hairet al., 2010). The positive value indicates a positive relationship amongst the independentvariables whereas the negative values show a negative relationship in the form of thedirection of the relationship.For further details the correlation values determines theextent of relationship among the variables. The extremes values (such as 1.00 or -1.00)means that the relationship is perfect between two variables. The table given below namedCoefficient Correlation indicates the values of the coefficients of the correlations amongtheindependentvariablesofthepresentstudytakingDebtratioasadependentvariable.

Table4.2Correlationanalysis

CoefficientCorrelations

ModelVariables		INR	FS	PR	GR	GDP	IR
1	INR	1.000					
	FS	-.084	1.000				
	PR	-.014	.192	1.000			
	GR	-.037	.296	.645	1.000		
	GDP	.546	.023	-.029	-.063	1.000	
	IR	-.712	.109	-.018	.000	.152	1.000

a.DependentVariable:Debtratio

The correlation between INR and INR same variable values explaining that the variable isperfect. FS and INR

variables .084 correlation between but the negative sign is associatedwith the value which indicates that the direction of the relationship is negative. Thecorrelation between PR and INR is .014 which is weak and the negative sign shows thatthe direction of the link is negative. The correlation between PR and FS is .192 whichdemonstratesapositiverelationshipdirectionandaweaklymoderateinstrengthrelationship. Correlation between GR and IR is negative and weak as shown by thecorrelation coefficient value .037 and the minus sign. The correlation between GR and FRis .296 that indicates a moderate correlation relation which is positive in direction.
ThecorrelationbetweenPRandGRis0.645whichisastrongcorrelationvaluethatdeterminesthattherelationshipis positiveandstrong.
ThecorrelationbetweenGDPandINRis0.546whichshowsthatthecorrelationcoefficient value demonstrating a strong relationship and the direction of relationship ispositive. The coefficient of correlation is .023 between GDP and FS which shows that therelationship between these two variables is week but positive. The value of coefficient ofcorrelation between GDP and PR is .029 demonstrating a negative relationship which isweak as well. GDP and GR have coefficient of correlation with value 0.06 with a negativesignthatdemonstratesaweakcorrelationandthedirectionofthatrelationisnegative.
The correlation between IR and INR is quite high and strong but opposite in direction orthe direction of relationship is negative as indicated by the negative sign and the strengthof the relationship can be seen with a value of correlation coefficient which is 0.712.CorrelationcoefficientofIRandFSis.109whichisdemonstratingaweaklymoderatebut a positive relationship. Similarly the relationship between IR and PR is weak as givenby the value of correlation coefficient 0.018 but due to the presence of negative sign thedirectionoftherelationisnegative.CorrelationbetweenIRandGRnotpresentasitis
0.00 and there is no link is demonstrated by these two variables with one another. Thecorrelation between IR and GDP is 0.152 which is weakly moderate and positive indirection.

4.5. HypothesisTesting

The significant impact of the independent variables of the present study on the dependentvariableisseenwiththehelpofrunningthelinearregressionwithordinaryleastsquare method on SPSS software. The significance is determined by the criteria given by Hair etal. (2010). According to the criterion for the hypotheses testing, the t statistics or thecritical ratio and probability value of significance or p value is checked. If the t value isgreater than 1.92 and p value is less than or equivalent to 0.05 then the hypothesis or therelationship is accepted otherwise not. But in the same time the regression coefficient isalso present to explain the variance in the dependent variable because of each independentvariable separately and the way the independent variable constructively or negativelyvariant the dependent variable. The standard coefficient of regression is denoted by beta,critical ratio is given as t statistics and the p value is denoted as Significance level or Sig.inthe table.

4.5.1 HousmanTest

TablebelowshowstheHousmantestwhichindicatedthatendogenousrepressors(predictor variables) in a regression model. Endogenous variables have values that aredetermined by other variables in the system. We develop hypothesis for Housman test,NullhypothesisindicatesthatRandomeffectmodelisappropriateandalternativehypothesis is fixed effect model is appropriating. Since the significant value is 0.0033908whichislessthan0.05,thismeansthatwewillrejectouralternativehypothesisandacceptthenullhypothesiswhichisRandomeffectmodelisappropriate.Sointhisresearch we are optingfor Randomeffectmodel.

Table4.3:HousmanTest

--Coefficients--

|	(b) Fe	(B) re	(b-B) Differences	sqrt(Diag(V_b-v_B)) S.E.
GR	-1.358136	-1.379084	0.020948	
PR	29.34784	29.29754	0.0503	2.555376
FS	-0.0258165	-0.0153121	-0.0105044	0.0033908
GDP	-0.0219902	-0.027221	0.0052308	

INF	0.054186	0.0066607	0.0475253
IR	-0.0224835	-0.0253322	0.0028487

4.5.2 RandomEffectRegressionanalysis:

For Growth's impact on the Debt ratio, the standard coefficient of regression is -1.379;which is a strong negative value to determine that with the change of -1.379 in beta valueofgrowth, thedebt ratiowilldecrease by 1.379becausethestandardcoefficient ofregression is negative. To check the significance of this value, the critical ratio should bemore than 1.92 and p value should be less or equal to .05, and from the table of theregression analysis it is seen that both of the values are in the significance range of thecriterion (i.e. t = -7.46 (|t|=7.46) and p = 0.000) which means that t > 1.92 and p < 0.05.Thus, the hypothesis 1 (H1), which mentioned that the Growth has significant impact ontheDebtratio,isaccepted.

Profitability and its impact on the debt ratio are also analyzed and it is seen from thecoefficient of regression that it is the main predictor of debt ratio because it possesses thehighest value of coefficient of regression.The value of betais 29.2975 becausetheanalysis is done on multiple linear regression model analysis. This means that with theincrease of 29.2975 in the profitability ratio the dependent variable profitability would beincreased by this value of profitability ratio because the standard coefficient of regressionis positive (β = 29.2975). The significance criterion of the relationship is checked to provethe significance of the suggested relationshipin the hypothesis 2.The t value or thecritical ratio is more than 1.92 and the significance value or the probability value is lessthan0.05whichvalidatesthesignificanceoftherelationshipposedby thevalueofbeta(t =12.75and p =0.000).Therefore,the proposed relationshipofprofitability anddebtratio, which states that the profitability has significant impact on the profitability, isaccepted because of the t and p values are in ranges of the significant check criteria. Also,it is the main predictor of the Debt ratio as provided by the highest value of the regressioncoefficient.Thus,Alternativehypothesis2(H2) isaccepted.

The risk assessment of a Shariah measures the firm size in the case of present researchwork and it also has an impact on the Debt ratio of the Shariah Companies as can be seenfromthevalueofthecoefficientofregression.Thevalueofbetaisgiveninthetableas-0.015whichmeansthatwiththeincreaseof-0.015theDebtratiowillbedecreasedby 0.015 of firm size. The significance of the relationship is seen by the value of critical ratioand probability value. The t statistic is -4.27 which more than the given significant criteriaof 1.92 are. The probability value is less than 0.05 and is 0.000 which means that therelationship is significant and negative as well. Therefore, the hypothesis 3 (H3) whichsuggestedthatthefirmsizehassignificantnegativeimpactontheDebtratio,isaccepted.

ForGrossdomesticproduct'simpactontheDebtratio,thestandardcoefficientofregression is -0.027 which is a weak value to determine that with the change of -0.027 inbeta value for the gross domestic product, the debt ratio will decreased by -0.027 of grossdomestic product because the standard coefficient of regression is negative. To check thesignificance of this value, the critical ratio should be more than 1.92 and p value should beless or equal to .05, and from the table of the regression analysis it is seen that both of thevalues are not in the significance range of the criterion (i.e. t = -0.88 and p = .376) whichmeans that t < 1.92 and p > 0.05. Thus, the hypothesis 4 (H4), which mentioned that thegrossdomesticproduct hassignificantimpactontheDebt ratio,isnot accepted.

For Interest rates impact on the Debt ratio, the standard coefficient of regression is .04which is a weak value to determine that with the change of -0.025 in beta value for theinterest rate, the Debt ratio will decrease by 0.025 of interest rate because the standardcoefficient of regression is negative. The impact of interest rate is however more thangross domestic product but it is not as much important because both are weak in impact.To check the significance of this relationship or impact value, the critical ratio should bemore than 1.92 and p value should be less or equal to .05, and from the table of theregression analysis it is seen that both of the values are not in the significance range of thecriterion (i.e. t = -1.22 and p = .224) which means that t < 1.92 and p > 0.05. Thus, thehypothesis5(H5),whichmentionedthattheinterestratehassignificantimpactonthe

Debtratio,isnotaccepted.

ForInflationrate'simpactontheDebtratio,thestandardcoefficientofregressionis-0.006 which is a weak value to determine that with the change of 0.006 in beta value forthe inflationrate, thedebtratiowillincrease by 0.006ofinflationrate because thestandard coefficient of regression is positive that explains that the increase in beta willdecrease the dependent variable.The impactofinflation is howevermorethan interestrate but it is not as much important because both are weak in impact to the debt ratio. Tocheckthesignificanceofthisrelationshiporimpactvalue,thecriticalratioshouldbemore than 1.92 and p value should be less or equal to .05, and from the table of theregression analysis it is seen that both of the values are not in the significance range of thecriterion (i.e. t = 0.53 and p = 0.597) which means that t < 1.92 and p > 0.05. Thus, thehypothesis 6 (H6), which mentioned that the inflation rate has significant impact on theDebt ratio, is not accepted. Given below is the table on the verdicts of the hypothesis'sacceptance or rejection. Out of six hypotheses, three hypotheses are accepted as the valuesof standard coefficient of regression for Growth, profitability and firm size are positive aswell as the growth and profitability ratio have strong values of beta. Profitability is termedto be the main predictor of Debt ratio in the current study because the beta value is morethan 1 for multiple regression analysis. The other threehypotheses are not accepted astheir beta values are quite low as well as the t and p values have not matched the criterionof the significance by Hair et al. (2010). Therefore, H1, H2, H3 are accepted and H4, H5and H6 are not accepted in terms of the current study's ordinary least square analysis donewith the help ofMultipleregressionrun ontheSPSS software.

Table4.4Randomeffectregressionanalysis

DR	Coef.	Std.Err.	Z	P>|t|	[95%Conf.Interval]	
GR	-1.379084	0.184812	-7.46	0.000	-1.74131	-1.01686
PR	29.29754	2297956	12.75	0.000	24.79363	33.80146
FS	-0.0153121	0.0035891	-4.27	0.000	-0.02235	-0.00828
GDP	-0.027221	0.307646	-0.88	0.376	-0.08752	0.033077
INF	0.0066607	0.0126021	0.53	0.597	-0.01804	0.03136
IR	-0.0253322	0.208194	-1.22	0.224	-0.06614	0.015473
_Cons	1.97097	0.3452503	5.71	0.000	1.294292	2.647648

Table4.5:VerdictsofAccepting/RejectingHypothesis

Hypothesis	Statement	Verdict
H1	Thegrowthhassignificanteffectonthedebtratioofa Shari'ahapprovedfirms	**Accepted**
H2	Theprofitabilityhassignificanteffectonthedebtratio ofaShari'ahapprovedfirms	**Accepted**
H3	Thefirmsize hassignificanteffectonthe debtratioofa Shari'ahapprovedfirms	**Accepted**
H4	GrossDomesticproducthassignificanteffectonthe debtratioofaShari'ahapprovedfirms	**NotAccepted**
H5	InterestRatehassignificanteffectonthedebtratioofa Shari'ahapprovedfirms	**Not Accepted**
H6	Inflationratehassignificanteffectonthedebtratioofa Shari'ahapprovedfirms	**NotAccepted**

5.0Conclusion:

Many studies have been undertaken to explain which factors influence corporate debt,using various time periods, nations, and methodology. Debt determinants of Shari'ahrecognized enterprises listed in Pakistan are investigated in this study. This research ismotivated by the updated Shari'ah methodology released in 2013, which includes thefinancial ratio as one of the methods for assessing the Shari'ah status of Shari'ah listedcompanies. Certain firm-specific characteristics such as profitability, growth opportunity,and size, GDP, Inflation and Interest Rate have major roles in influencing the debt level ofShari'ah-approved enterprises in Pakistan, according to the study. These Variables havebeen shown to play a substantial effect in determining the debt level of Shari'ah-approvedenterprises in Pakistan. However, based on the study's analysis, growth, size, inflation,interest rate and GDP are all reliable indicators of the debt level of Shari'ah-approvedenterprises inPakistan.

Inflation, interest rate, and GDP are all determined to be important for non-Shari'ah-compliant enterprises; only trade openness and interest rate are proven to be significantHo, C. S., &Mohd-Raff, N. E. N. (2019). But in case of Shari'ah compliance inflation,GDP,andinterestrateare non-significant impactonDebtratio.GDP,Inflationandinterestratehasnon-significantrelationshipbecauseoftheirT-Valueshowsnon-significantrelationwithdebt ratioincontextto Shari'ahcompliancePakistan.

ForShari'ah-compliant enterprises, the rate of inflation is only minimally negativelyrelevant; with higher inflation resulting in a lower rate of ROE and vice versa. Thisdiscovery is in line with the findings of Kanwal and Nadeem's research (2013). Accordingto Qudahand Jaradat (2013) and Obeidat et al. (2013), the growth of the money supplyhas a positive significant impact on the profitability of Jordanian Islamic banks. ForShari'ah-approved enterprises in Malaysia, Ahmad and Azhar (2015) were unable to findany indication of a substantial association between size and debt in the consumer sector. .Qudah and Jaradat (2013) and Obeidat et al. (2013) revealed that increasing the moneysupply has a positive significant influence on the profitability of Jordanian Islamic banks.Al-Najjar and Taylor (2008), Al-Najjar and Hussainey (2011), and Tongkong (2011) allshowapositiveassociationbetweengrowth opportunityanddebtlevel (2012).

Futurestudiescantakemorevariables toanalyzedebtratioinShari'ahcompliancePakistan -I-e- firm age, bankruptcy, economic crises etc., as this study is conducted onProfitability,growth,size,GDP,Inflation,andinterestrate.Alsofuturestudiescananalyze this study with some mediating variables as well. It is expected to provide moreuseful information on the financing behavior of Shari'ah-approved enterprises, which iscurrentlydominatedbystudiesbasedsolelyonfinancialdata.Becausetheyholdprominent positions in the company, their substantial functions will at the very least play aroleindetermining the Shari'ah statusofthe company.

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