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Examining the Nexus of Insider Ownership and Institutional Ownership with Dividend Policy in Conventional Mutual Funds Evidence from Pakistan

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Abstract

The research examines how mutual fund ownership patterns influence dividend strategies in Pakistan's conventional mutual funds by studying both insider and institutional ownership data. The study examines ten years of panel data using fixed effects models together with Driscoll-Kraay standard errors to obtain solid findings despite data irregularities. The research results indicate that owners with substantial stakes want to receive more dividends as higher insider ownership results in increased dividend payments. Institutional investors lower dividend payments because they like to put earnings back into the fund. Results supported that fund size and age positively influenced dividend payout but negatively influenced by Fund manager's qualification and experience.

Our study evaluates conventional mutual funds in Pakistan yet faces boundaries due to insufficient data availability and exclusive attention to one market sector. Our study provides important theoretical knowledge on emerging market dividend behavior while supplying practical guidance to financial professionals and government officials despite certain research boundaries. The results show that how companies are owned determines their dividend choices which lets them match their management style to what investors want and strengthen financial strategies for mutual funds.

Keywords: Conventional Mutual Funds, Ownership Structure, Dividend Payouts Policy, Corporate Governance

Introduction

How a company structures its ownership directly affects its dividend policy and reveals its financial condition plus shareholder rewards. In capital intensive growth industries companies design dividend policies to balance giving returns to owners while keeping enough funds for necessary reinvestments. How executives run a business and enforce corporate regulations depends on the mix of insider and institutional stock ownership which shapes dividend choices. The relationship between ownership types and dividend methods in Pakistan's emerging market becomes more complicated due to evolving rules plus problems of unequal information distribution and inefficient markets. Businesses deal with opposing goals when they must reserve profits for business growth and distribute earnings to keep existing shareholders and draw new ones. The growing importance of mutual funds in Pakistan makes it an essential place to study how ownership structures affect dividend policies according to Sindhu et al. (2016) and Khan et al. (2016).

The research examines how executive and board members' equity stakes relate to agency theory in their capacity as company stakeholders. The amount of stock insiders hold affects whether executives make decisions that align with shareholder interests, which determines how dividends are distributed (M. C. Jensen & Meckling, 1979). When executives retain profits to protect their authority or for growth investments, they may harm shareholder returns through lower dividends (Gugler, 2003; Wahjudi, 2020). Conversely, when management teams pay dividends, they establish investor confidence and attract additional funds to the company (Baker & Wurgler, 2004; Bataineh, 2021). Corporate governance weaknesses in Pakistan create direct and powerful effects of insider ownership on how companies decide to pay dividends (Akbar et al., 2023; Khan et al., 2011).

Institutional ownership in organizations represents banks, mutual funds, pension funds, and insurance companies. Institutional investors require stable finances, transparent operations, and steady returns, which leads them to support higher dividend distributions for reliable income streams (Khan, 2022; Short et al., 2002). As institutional investors become more influential within Pakistan's financial markets, they push for better governance practices alongside dividend strategies that align with shareholder interests (Boshnak, 2023; Grinstein & Michaely, 2005). The influence of institutional ownership on dividend decisions varies according to the type of investor, ownership concentration, and company-specific characteristics (Appel et al., 2016; Chen et al., 2005).

The investigation examines how insider ownership and institutional ownership interact with dividend payouts within Pakistan's conventional mutual fund sector. Through its examination of ownership structures as they influence dividend payout policies, the research aims to reveal wider effects on corporate governance and investor trust within emerging markets (Bataineh, 2021; La Porta et al., 2000). The study examines dividend decision factors by considering fund age and size, expense ratios, fund flows, and manager expertise as control variables (DeAngelo et al., 2006; Smith & Watts, 1992).

Objectives of the Study

This study is designed to achieve the following objectives:

- To examine the impact of insider ownership on dividend policy in Pakistan's conventional mutual funds sector.
- To investigate the influence of institutional ownership on dividend payouts in Pakistan's conventional mutual funds sector.

The research into ownership structure connections with dividend policy continues to yield unresolved results in emerging markets like Pakistan. Research shows institutional ownership leads to higher dividends (Hussain & Khan, 2014) yet insider ownership tends to reduce dividends because insiders prefer to reinvest earnings or maintain control power (Ehsan et al., 2013; Ullah et al., 2012). The effect of insider ownership combined with institutional ownership on dividend policies in conventional mutual funds where institutional investors hold major stakes remains unclear. The research explores this research gap through an empirical analysis of how different ownership types influence dividend policy within Pakistan's mutual fund industry.

Significance of the Study

This research represents a dual contribution to academic understanding and practical knowledge about how dividend policies operate in emerging markets exemplified by Pakistan. Existing research shows multiple relationships between ownership structures and dividend distributions across different settings (Farooq et al., 2024; Rizvi, 2011), yet limited research targets the mutual fund sector in Pakistan specifically. The study investigates how insider and institutional ownership affects corporate dividend choices within Pakistan's crucial financial market sector.

The practical applications of this research extend to corporate managers and investors as well as government policymakers. When mutual fund managers analyze ownership structures in relation to dividend policies they achieve better alignment between corporate governance practices and shareholder expectations. As key stakeholders institutional investors can apply research discoveries to gain insight into the effects their investment choices produce on company dividend policies. Financial sector regulators can use this research basis to create transparent and efficient dividend distribution rules.

Research indicates that institutional investment positively affects dividend distribution because institutional investors seek stable financial returns (Hussain & Khan, 2014) but insider ownership produces contrasting outcomes. Insiders retain earnings to fund reinvestment strategies while maintaining company control which leads to lower dividend distributions (Ehsan et al., 2013; Ullah et al., 2012).

The relationship between institutional and insider ownership affecting dividend policies of conventional mutual funds with substantial institutional stakes has not received thorough investigation. The situation stands out in Pakistan because mutual funds are gaining popularity as principal investment choices together with regulatory and governance framework changes. The literature shows an important research deficiency regarding how ownership structures work together to determine dividend payouts.

The research expands existing knowledge through empirical analysis of how insider and institutional ownership together affect dividend policies in Pakistan's mutual fund sector. This research stands apart from earlier studies by examining both ownership dimensions together within the specific framework of mutual funds operating in an emerging market. To achieve a comprehensive analysis the research integrates control variables including fund age size expense ratios fund flows and manager qualifications. This research will provide academic and policy insights while helping investors and mutual fund managers and regulators establish better governance standards to build investor trust in Pakistan’s mutual funds.

Literature Review

Research has shown significant interest in how insider and institutional ownership affects dividend policy in emerging markets such as Pakistan. This literature review examines how different ownership structures affect dividend policy through their interactions while concentrating on corporate dynamics in Pakistan’s conventional mutual funds.

Insider Ownership and Dividend Policy

The equity stakes that directors and executives and other company insiders hold in their organization constitute insider ownership which serves a central purpose in examining both corporate governance structures and dividend decisions. Jensen and Meckling's work from (1979) established agency theory to show that owner-manager shares reduce agency problems since ownership brings directors' and executive interests closer to those of the shareholders. When insider ownership creates alignment between their interests and those of shareholders it acts to deter opportunistic behaviors from insiders while leading to improved dividend policy outcomes. The research by Jensen et al. (1992) shows that agency theory predicts that insiders will prefer lower dividend distributions to maintain control through retained earnings.

The effects of insider ownership on dividend distribution become stronger in emerging markets where legal protections remain insufficient. According to Mirza's 2014 analysis insiders prefer keeping resources in companies with growth potential which results in lower dividend distribution. In Pakistan according to Ehsan et al. (2013) insider ownership proves to decrease dividend payouts because growth-focused firms choose to reinvest earnings instead. Boshnak, (2023) reported that firms' experiencing high growth and possessing substantial insider ownership choose to reinvest their earnings instead of delivering quick returns to their shareholders.

Research across different nations shows that when insiders own stock they tend to make companies lower dividend payments. Based on his research in Pakistani funds Razzaq & Mehmood (2023) learned that Islamic mutual fund insiders choose to paying dividends instead of reinvesting the money. Kim and Koh (2020) found in their study that South Korean mutual funds use conservative dividend strategies to keep control despite insider ownership building trust between managers and shareholders.

Research shows that insider owners pay more dividends to stockholders under specific conditions. According to Siahaan et al. (2020) insider shareholders distribute dividends to show their company has stable finances and they are committed to increasing shareholder wealth when growth prospects are minimal. Research from Ngo et al. (2020) shows that when insiders own company shares, they both reduce agency costs and back shareholder-focused dividend payments in stable markets. According to Bian et al. (2023) executives of established markets maintain regular dividend payments to safeguard both their professional standing and their own wealth.

How insiders own shares affects a company's dividend choices relies on unique business traits such as performance results and executive pay plans. According to research by Ma and Tang (2019) insiders prefer dividends as immediate earnings when their performance judgments overlook future business results. When insiders own large portions of their company they distribute dividends to gain investor trust and strengthen their market reputation according to Anh and Tuan (2019) study.

Research demonstrates Pakistan's insider ownership practices are hard to manage due to constantly changing government rules and strong business opportunities. Ahmed et al. (2020) found that Pakistani mutual funds invest in growth projects and reduce payouts because major insiders steer the funds toward expansion. Naveed (2021) study found that dividends help bridge the gap between managers and shareholders by reducing conflicts when both sides see the same business results.

When companies have high insider ownership they base their dividend decisions primarily on how much they can grow. Businesses with big expansion plans invest their profits into development instead of paying dividends to shareholders. According to Ehsan et al. (2014), firms with insider ownership use it to keep resources within the company to support expansion rather than to distribute dividends. Corporations which experience fewer growth opportunities tend to distribute dividends because their requirement for retained earnings diminishes which makes dividend payments appealing (Dewi, 2008).

Research findings remain inconsistent yet most evidence supports the view that insider ownership decreases dividend distributions especially within developing nations such as Pakistan. Insiders face conflicting pressures between using earnings for growth purposes and retaining control of company resources (Khan et al., 2022). Dividend signaling takes priority when insider ownership matches shareholder interests thus creating notable exceptions.

H1: Insider ownership negatively influences dividend payouts in conventional mutual funds of Pakistan.

Institutional Ownership and Dividend Payouts

Large investment entities which include mutual funds, pension funds and insurance companies under institutional ownership represent an important determinant for dividend distribution decisions. Institutional investors select firms which distribute regular dividends because they seek stable and predictable investment returns to mitigate financial risk (Shen, 2013; Wiberg, 2009). Investors who need stable returns require corporate transparency which leads them to

push companies towards steady dividend policies because dividends demonstrate both financial health and good management practices.

Research conducted in Pakistan shows multiple analyses exploring how institutional ownership affects dividend distributions. Studies by Hussain and Khan (2014) together with Afza and Mirza (2011) show that institutional investors particularly insurance companies actively push for companies to increase their dividend payments. Institutional investors demonstrate a predilection for businesses which maintain vigorous dividend programs since stable annual distributions signal both strong company finances and solid management practices. Different institutional investor types show varying levels of impact on company dividend policies. Insurance companies frequently promote increased dividend payments but mutual funds among institutional investors demonstrate weaker influence on such dividend policies (Hussain & Khan, 2014).

The corporate influence of institutional ownership becomes particularly strong in businesses with concentrated institutional ownership levels. In which investors possess substantial shareholdings large institutional actors can control important corporate decisions such as dividend distributions. Ultimately institutional investors serve as major governance actors in these firms because they protect shareholder interests while making sure dividend policy reflects these priorities (Mehrani et al., 2011). The consistency of dividend policies receives additional reinforcement through stable institutional ownership. Organizations with enduring institutional ownership demonstrate consistent dividend patterns because these shareholders demand predictable long-term returns and reject business approaches that favor reinvestment rather than shareholder payouts (Jafarinejad et al., 2015).

The presence of institutional ownership leads to better governance practices especially within emerging markets including Pakistan. Through their demand for transparent operations and improved accounting standards institutional investors diminish information asymmetry and strengthen dividend decision reliability (Shaikh & Shah, 2012). Recent governance reforms make sure that dividend strategies better match the goals of institutional investors alongside minority shareholders.

Research from emerging markets demonstrates the beneficial link between institutional ownership levels and dividend distributions. Research conducted by Subramaniam et al. (2022) together with John et al. (2023) demonstrates institutional investors tend to implement disciplined dividend strategies. Institutions prioritize predictable revenue models which leads

them to maintain higher dividend payout ratios to support their long-term portfolio management approach. Tayachi et al. (2023) observed that institutional ownership drives the creation of steady dividend approaches in developing markets such as Pakistan which build investor trust and retention.

Institutional investors affect more than dividend policies when they participate in corporate governance. The arrival of these entities helps to elevate a company's governance standards. Institutional investors guide companies to improve financial reporting and control systems while supporting better board management for dependable dividend outcomes. According to Dimmock et al. (2023) institutional investors in emerging markets push managers to create dividend strategies that generate reliable returns to satisfy their need for steady income.

H2: Institutional ownership positively influences dividend payouts in the conventional mutual funds of Pakistan.

Control Variables, Ownership Structure, and Dividend Payout Policy

To understand how insider ownership and institutional ownership affect dividend distributions we need control variables that impact how companies make dividend choices. Our study evaluates mutual funds by measuring their age size expense ratios cash movement and manager skills and background. To keep dividend strategies separate from ownership forms we need to understand how these elements affect dividend distribution decisions.

Fund Age: Research shows that how long a mutual fund has been operating heavily impacts its approach to dividends. Mutual funds that operate for many years and develop strong investment success with a substantial number of investors usually pay consistent dividends. A fund maintains its stable position because of its proven track record and excellent handling of investor relationships (Kaur, 2018; Reddy et al., 2017). Older funds can synchronize dividend strategies with shareholder wealth maximization because they possess essential resources and established credibility which enable them to maintain consistent distributions.

Fund Size: Economies of scale enable larger funds to achieve superior cash flow management together with consistent dividend distributions. These funds demonstrate stability through diversified portfolios which withstand market changes and support consistent dividend payments (Babbar & Sehgal, 2018).

Expense Ratios: A fund’s expense ratios show both its operational efficiency and its cost structure. Investment funds that maintain higher expense ratios must use substantial earnings to pay operational costs which leaves less money available for dividend payouts (Babbar &

Sehgal, 2018). An investment fund that maintains lower expense ratios enables greater income distribution to its investors.

Fund Flows: The movement of money into and out of a fund helps us understand control mechanisms so fund flows become crucial. When money enters a fund managers get more cash to pay dividends yet ongoing withdrawals force them to set aside money for redemptions reducing available funds for dividends (Gao et al., 2020).

Fund Manager Qualifications and Experience: The level of education and years of work experience a fund manager has determines the dividend policies they put into place. Senior managers excel at predicting market movements and building effective dividend methods that benefit shareholders for many years. The research by Omri et al. (2019) proves fund managers who earn CFA credentials or graduate degrees create better dividend plans that show consistency. By using expert insights fund managers create dividend plans that fulfill the needs of both large investors and company insiders through strategic planning of present and future financial returns.

Summary

In Pakistan mutual funds the connection between internal and institutional shareholders affects how dividends are managed. Owners who have equity inside the company prefer to retain profits for management control and business development instead of paying those funds to shareholders as dividends. Organizations that partner with institutional investors give more dividends because these investors require solid corporate governance to keep the market stable. The connection between institutional ownership and dividend policy requires examination of institutional share concentration and how long they hold their investments. Business performance and growth potential change the way ownership patterns affect corporate operations. Research into ownership patterns and dividend strategies requires detailed study because these factors depend on multiple types of ownership and broad governance rules.

Theoretical Framework

Three theories form the foundation of this research to demonstrate the connection between ownership structures and dividend choices.

Agency Theory: According to Agency Theory managers who act as agents for shareholders will put their personal interests ahead of shareholder needs which leads to lower dividend payments because they prefer to keep profits inside the company or pay down debts (Jensen et

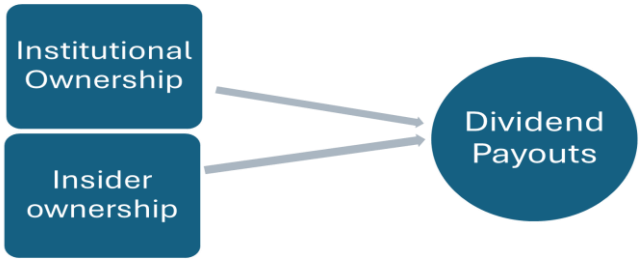
al., 1992). Insider ownership lowers agency expenses but these owners choose to reduce dividends when their company shows strong future growth potential (Ehsan et al., 2013).

Stewardship Theory: Stewardship Theory rejects Agency Theory's views by showing managers work in shareholder interests so larger dividends happen when insiders own more shares because it indicates strong company performance and growth (Khan et al., 2011). Our theory shows that when insiders own shares they naturally align their business objectives with shareholder interests making it more likely for the company to pay out dividends.

Signaling Theory: Under Signaling Theory companies use their dividend payments to show investors their present financial health and possible future growth opportunities. Institutional investors who monitor businesses and own large shares encourage companies to raise dividend payments because these investors see dividends as proof of financial strength and a solution to information mismatches between companies and their investors (Shah et al., 2022).

Our combined theoretical framework helps us study the influence of both owner groups on company dividend policies. The research shows that insiders reduce dividend payments to preserve their authority and investment freedom while institutional investors increase dividends through improved management and predictable earnings.

Conceptual Framework



Research Methodology

This section describes how the study tests the relationship between insider ownership and institutional ownership with dividend policies at Pakistan's conventional mutual funds. The research uses statistical analysis of panel data to test how certain study variables interact with each other. The study employs descriptive and inferential methods as well as econometric models to evaluate the effects of insider and institutional ownership on dividend disbursements while accounting for profitability levels together with firm size and growth opportunities.

Research Design and Approach

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This study tests the effect of ownership structures on mutual funds dividend policies in Pakistan through a causal-comparative research method. This research examines mutual fund relationships throughout a selected time period using data from multiple panels. This study benefits from using panel data because it analyzes both individual mutual fund differences and temporal changes to create a deeper understanding of the ownership-dividend relationship (Porter & Gujarati, 2009).

Sample Selection

Between 2015 and 2022 the sample includes conventional mutual funds registered with the Pakistan Stock Exchange (PSX) or listed on the Mutual Funds Association of Pakistan (MUFAP). Data availability and major regulatory industry developments define the selected time frame. The initial selection contained 236 conventional mutual funds which through the application of selection criteria like data consistency for key variables and minimum fund age of 5 years became a final sample of 98 conventional mutual funds.

Data Collection

Secondary data is collected from annual financial reports of the mutual funds, available on the PSX, Mutual Funds Association of Pakistan (MUFAP) website and the respective mutual funds' websites. Additionally, relevant data sources such as the State Bank of Pakistan (SBP) and Mutual Funds Association of Pakistan (MUFAP) are consulted for macroeconomic variables. The variables for ownership structure, dividend policy, and control variables are extracted from these reports.

Variables and Measurement

The study investigates the following key variables:

Dependent Variable: Dividend Policy (DIV)

Dividend payout ratio (DPR) is used as the dependent variable, measured as the ratio of dividends paid to net assets value. This metric reflects the extent to which mutual funds distribute earnings to shareholders.

$$\text{DPR} = \frac{\text{Dividends Paid}}{\text{Net Assets Value}}$$

Independent Variables:

Insider Ownership (DIRO)

Insider ownership is measured as the percentage of shares held by managers, executives, and directors in the mutual fund (Kamardin, 2014). This data is typically disclosed in the ownership sections of the annual reports.

Institutional Ownership (INSO)

Institutional ownership is measured as the percentage of shares held by institutional investors, including insurance companies, pension funds, and mutual funds themselves (Lin and Fu, 2017).

Control Variables:

L_SIZE: Natural log of the total net assets of the fund (Ferreira et al., 2013).

L_AGE: Fund age measured in years (Makni et al., 2016)

Expense Ratio Total expenses/Average net assets (Makni et al., 2016)

Fund Flow: $Fund\ Flow = \frac{TNA_{it} - TNA_{it-1} * (1+R_{it})}{TNA_{it-1}}$ (Casavecchia, 2016)

Manager's Education: Dummy variable equal to 1 if managers got professional certification (CFA, FCA, ACCA) and zero otherwise (Naidenova et al., 2015)

Manager's Experience: The number of years a fund manager has served in the mutual fund industry (Naidenova et al., 2015)

Regression Models and Estimation Techniques

To analyze the relationship between the variables, the study employs panel data regression analysis using fixed-effects (FE) and random-effects (RE) models. The panel data structure allows for controlling both cross-sectional and temporal variations. The regression models can be expressed as follows:

Basic Model for Dividend Payout:

$$\mathrm{DIV}_{it} = \beta_0 + \beta_1 \mathrm{DIRO}_{it} + \beta_2 \mathrm{INSO}_{it} + \beta_3 \mathrm{L\_AGE}_{it} + \beta_4 \mathrm{L\_SIZE}_{it} + \beta_5 \mathrm{ER}_{it} + \beta_6 \mathrm{FFLOW}_{it} + \beta_7 \mathrm{FMEDU}_{it} + \beta_8 \mathrm{FMEXP}_{it} + \epsilon_{it}$$

Where:

DIV_{it} represents the dividend payout ratio for mutual fund iii at time ttt.

$DIRO_{it}$ and $INSO_{it}$ are the insider and institutional ownership, respectively.

L_SIZE: Natural log of the total net assets of the fund

L_AGE: Fund age measured in years

Expense Ratio: ER = Total expenses/Average net assets

Fund Flow: $FFlow = \frac{TNA_{it} - TNA_{it-1} * (1+R_{it})}{TNA_{it-1}}$

Manager's Education: Dummy variable equal to 1 if managers got professional certification (CFA, FCA, ACCA) and zero otherwise.

Manager's Experience: The number of years a fund manager has served in the mutual fund industry.

ϵ_{it} is the error term.

Fixed-Effects vs. Random-Effects Model:

To determine the most appropriate model, the study will conduct a Hausman test to decide between the fixed-effects and random-effects models. Fixed-effects models control for unobserved heterogeneity that could vary across mutual funds but remain constant over time, while random-effects models assume that the unobserved individual differences are uncorrelated with the independent variables.

Panel Data Estimation:

The panel data approach enables the researcher to account for individual heterogeneity (differences across mutual funds) and time effects (changes over the years). The use of fixed-effects allows for controlling time-invariant factors that may vary across funds, such as management style and risk preferences, which might impact dividend payout decisions.

Econometric Issues and Model Diagnostics:

Multicollinearity: The correlation between the independent variables will be tested using the Variance Inflation Factor (VIF) to ensure there are no issues of multicollinearity.

Heteroskedasticity: The Modified Wald test for groupwise heteroskedasticity will be conducted to assess error variance consistency. Robust standard errors will be applied to address any detected heteroskedasticity, ensuring reliable estimations.

Autocorrelation: The study will check for autocorrelation using the Durbin-Watson test.

Cross-Sectional Dependence: The Pesaran test will be applied to detect cross-sectional dependence in the dataset. If present, adjustments such as Driscoll-Kraay standard errors will be used to ensure robust and reliable results.

Analysis Techniques:

Once the regression models are estimated, the findings will be interpreted to assess the impact of insider and institutional ownership on dividend policy. The analysis will focus on the sign and significance of the coefficients for the ownership variables (insider and institutional ownership). The study will also assess the robustness of the results by performing various diagnostic tests and sensitivity analysis.

Ethical Considerations:

This study adheres to ethical guidelines by ensuring the use of publicly available data and respecting the confidentiality of any proprietary information. The research follows the guidelines established by institutional review boards (IRBs) where applicable.

Result and discussion

Descriptive Statistics

Variable	Obs	Mean	Std. dev.	Min	Max
DIV	706	13.5261	2.558338	2.995015	19.79787
DIRO	913	0.0239049	0.0792646	0.0001	0.8569
INSO	913	0.2069991	0.1960562	0.0001	0.9739
L_SIZE	913	6.139041	0.6369634	4.401	7.913
L_AGE	913	0.9529025	0.253088	0	1.7853
ER	913	0.0231381	0.014577	0.0001	0.0947
FMEDU	913	0.7086528	0.4546322	0	1
FMEXP	913	12.11062	6.547886	1	31
FFLOW	913	0.3954882	3.010896	-0.9601	80.6642

Correlation

VARIABLE	DIV	DIRO	INSO	L_SIZE	L_AGE	ER	FMEDU	FMEXP	FFLOW
DIV	1								
DIRO	-0.061	1							
INSO	-0.006	-0.102*	1						
L_SIZE	0.564***	-0.01	-0.023	1					

L_AGE	0.217***	0.033	0.148***	0.257***	1				
ER	-0.117**	0.025	0.114**	-0.21***	0.229***	1			
FMEDU	-0.075*	-0.011	0.025	-0.104*	0.033	0.035	1		
FMEXP	0.264***	-0.063	-0.124**	0.213***	0.172***	-0.2***	-0.21***	1	
FFLOW	0.035	-0.016	-0.052	0.109*	0.006	-0.054	0.007	-0.008	1

Significance levels: $p < 0.05$ (*), $p < 0.01$ (**), $p < 0.001$ (***).

The correlation analysis reveals several significant relationships between the variables. DIV is positively correlated with L_SIZE ($r = 0.564$, $p < 0.001$) and negatively with ER ($r = -0.117$, $p < 0.05$). DIRO shows a significant negative correlation with INSO ($r = -0.102$, $p < 0.05$). INSO is positively correlated with both L_AGE ($r = 0.148$, $p < 0.01$) and ER ($r = 0.114$, $p < 0.01$). FMEXP is positively correlated with L_SIZE ($r = 0.213$, $p < 0.001$) but negatively with ER ($r = -0.2$, $p < 0.001$) and FMEDU ($r = -0.21$, $p < 0.001$). The correlations provide insight into how firm size, age, education, and economic factors are interrelated, offering a foundation for further regression analysis to explore these relationships in more depth.

Unit Root Test

Series	**Levin, Lin & Chu T-stat**				**Im, Pesaran and Shin W-stat**				**Result**
	Level		1st Diff		Level		1st Diff		
	T. Stat	P Value	T. Stat	P Value	T. Stat	P Value	T. Stat	P Value	
CDIV	-25.188	0.000			-9.658	0.000			**I(0)**
INSO	-18.550	0.000			-8.370	0.000			**I(0)**
DIRO	-168.59	0.000			-32.287	0.000			**I(0)**
F_Size	-134.13	0.000			-5.772	0.000			**I(0)**
FMEXP	-9.629	0.000			-1.946	0.026			**I(0)**
FFLOW	-37.463	0.000			-16.720	0.000			**I(0)**
ER	-21.693	0.000			-8.204	0.000			**I(0)**
Lage	-22.155	0.000			-108.07	0.000			**I(0)**

We tested panel dataset variables for stationarity by applying two unit root tests: Levin, Lin & Chu (LLC) alongside Im, Pesaran, and Shin (IPS). The LLC test produced highly significant negative T-statistics for all variables and p-values reached 0.000 which enabled us to reject the unit root null hypothesis. The IPS test produced negative W-statistics for every variable with p-values at 0.000 which supported rejecting the null hypothesis. The analysis confirmed all variables to be stationary at their initial level designation (I(0)) which means no data differencing or transformation is necessary. The dataset exhibits stationarity which qualifies it for advanced econometric examination because it contains no unit roots.

Heteroskedasticity Test

The Modified Wald test for groupwise heteroskedasticity assessed the fixed effects regression model for heteroskedasticity. The null hypothesis for this test assumes that error variances (σ_i^2) stay the same for every group thereby showing homoskedasticity. When the p-value reaches statistical significance it shows that the null hypothesis should be rejected because groupwise heteroskedasticity exists.

The chi-square statistic resulted in 3.9×10^{31} with a p-value of exactly 0.0000. The analysis confirmed data heteroskedasticity because the obtained p-value fell below the standard 0.05 threshold which led to the rejection of the null hypothesis. The error variances show variation between groups leading to distorted standard errors and test statistics within the regression analysis.

Subsequent analysis implemented Driscoll-Kraay Standard Errors to produce reliable statistical results. The implemented adjustment reduces the effects of heteroskedasticity on the model's findings.

Autocorrelation Test

The researchers conducted the Wooldridge test to examine first-order autocorrelation within their panel data set. According to the null hypothesis of this test the error terms of the model exhibit no first-order autocorrelation. When the p-value reaches significance it demonstrates that the null hypothesis must be rejected because autocorrelation exists.

The test outcome revealed an F-statistic value of 8.177 together with a corresponding p-value of 0.0053. The data displays first-order autocorrelation because the p-value dropped below 0.05 resulting in null hypothesis rejection. The errors demonstrate temporal correlations which produce inefficient estimations and distorted statistical results unless corrected.

The regression model received a re-estimation with robust standard errors clustered at group level to handle autocorrelation concerns. The results maintain reliability through this adjustment even when autocorrelation exists in the data.

Cross-Sectional Dependence

The analysis used Pesaran's test to determine if cross-sectional units in the panel data model show correlated residuals. The null hypothesis underlying the test establishes that cross-sectional dependence does not exist because the residuals from various cross-sectional units remain uncorrelated.

The test produced both a statistic of 16.165 and a p-value of 0.0000 indicating high statistical significance. The null hypothesis of no cross-sectional dependence becomes invalid because the p-value falls below the 0.05 significance level. The panel data reveals substantial cross-sectional dependence because error terms between different cross-sectional units demonstrate correlation.

The residual correlation matrix shows an average absolute off-diagonal element value of 0.402 which supports the conclusion of cross-sectional dependence.

Adjust for cross-sectional error correlations through Panel-Corrected Standard Errors (PCSE) and Driscoll-Kraay Standard Errors during regression analysis because these methods correct the error terms heteroskedasticity and let cross-sectional unit errors correlate with each other.

Variance Inflation Factor (VIF)

Variable	VIF	1/VIF
L_AGE	1.25	0.800901
L_SIZE	1.2	0.836166
FMEXP	1.19	0.837285
ER	1.17	0.857171
FMEDU	1.09	0.921456
INSO	1.07	0.93241
DIRO	1.02	0.978007
FFLOW	1.02	0.984238
Mean VIF	1.13	

The Variance Inflation Factor (VIF) was computed for each explanatory variable to investigate multicollinearity problems within the regression model. The VIF measures the degree to which the variance of an estimated regression coefficient expands because of collinear relationships between variables. When the VIF exceeds 10 researchers should be alerted to significant multicollinearity because it shows that variables strongly correlate with each other.

The average variance inflation factor of 1.13 shows that multicollinearity does not cause substantial coefficient variance inflation. The model demonstrates no significant multicollinearity issues because all VIF values remain below the standard threshold of 10 leading to reliable estimates.

Hausman Test

The Hausman test compared fixed effects and random effects models to select the proper panel regression model for analysis. This test examines if regression estimates of the RE model remain consistent in comparison to the FE model especially when regressors show correlation with unidentified entity-specific effects. Under the null hypothesis the RE model proves suitable while the alternative hypothesis favors the FE model.

From the Hausman test we obtained a chi-square statistic value of 16.72 with a p-value result of 0.0332. We discarded the null hypothesis because the p-value fell below 0.05 which demonstrates systematic differences between the FE and RE model coefficients. The analysis concluded that researchers should adopt the fixed effects model as it proved appropriate. Unobserved characteristics that remain constant over time between entities show relationships with independent variables which strengthens the fixed effects model as a tool for data analysis.

Regression Results

DIV	Coefficient	Drisc/Kraay Std. Err.	P
DIRO	2.638944	0.8976409	0.004
INSO	-1.966358	0.6282985	0.002
L_SIZE	2.174877	0.127239	0.000
L_AGE	3.355395	0.4404916	0.000
ER	-3.708894	7.514592	0.623
FMEDU	-0.1970253	0.1082221	0.072
FMEXP	-0.0436075	0.0103459	0.000
FFLOW	-0.0104097	0.0088596	0.243
C	-2.11252	0.9139003	0.023

The fixed-effects regression analysis uncovers important connections between insider ownership and institutional ownership with conventional mutual fund dividend payouts in Pakistan while controlling for multiple additional factors. The research outcomes refute the original predictions but reveal detailed insights into the dividend strategies that firms use in this setting. Instead of showing a negative effect on dividend payouts as proposed in hypothesis H1 about insider ownership the results demonstrate a positive correlation. Research data demonstrates a 2.638944 coefficient for insider ownership (DIRO) along with a highly significant p-value of 0.004 which proves that when insiders have a larger ownership stake funds distribute more dividends. Insiders within Pakistani mutual funds show preference toward dividend distribution instead of earning retention. The study's findings match Aleknevičienė and Vilimaitė (2023) research which documented a comparable positive

relationship in emerging markets yet opposes (Gugler, 2003) assertion that insiders usually choose to reinvest earnings instead of distributing dividends.

The statistical outcomes oppose hypothesis H2 that suggested institutional ownership would have a positive effect on dividend payments. The parameter estimate of institutional ownership (INSO) shows a value of -1.966358 backed by a statistically important p-value of 0.002 revealing the portion of companies with greater institutional ownership determines lower dividend distributions. Contrary to Short et al. (2002), who stated institutional investors usually seek higher dividends to control agency costs, this study presents different results. The study agrees with Grinstein and Michaely (2005) who reported that developed market dividend payouts show no significant link to institutional ownership. The contrasting results reveal how institutional investors affect dividend policies differently in various global markets.

Out of the 6 variables in the model, four variables are statistically significant. The coefficient of 2.174877 for fund size (L_SIZE) and its p-value at 0.000 demonstrate that larger funds usually provide higher dividend payments. The findings illustrate the principle that larger funds maintain superior resources and stability that result in more consistent dividend distribution as established (Smith & Watts, 1992). Data shows that older funds pay higher dividends because L_AGE presents a significant positive relationship through its coefficient of 3.355395 and p-value of 0.000. The lifecycle theory of dividends claims that mature firms display a higher likelihood of profit distribution which receives support from (DeAngelo et al., 2006).

Data shows fund manager experience (FMEXP) produces a coefficient of -0.0436075 along with a p-value of 0.000 indicating experienced fund managers distribute smaller dividends. The findings suggest a trend toward reinvesting earnings to foster long-term growth that (Baker & Wurgler, 2004) proposed. Analysis reveals that better-educated fund managers demonstrate a marginally significant negative correlation to dividend payouts because they may prefer reinvesting earnings as indicated by the coefficient -0.1970253 and p-value of 0.072. In contrast, the expense ratio (ER) and fund flow (FFLOW) do not show significant relationships with dividend payouts, with p-values of 0.623 and 0.243, respectively. The constant term, at -2.11252 with a p-value of 0.023, indicates that the baseline level of dividend payouts is significantly different from zero when all other variables are held constant.

Overall, the findings of this study both support and contradict prior research. The positive relationship between insider ownership and dividend payouts aligns with studies by Khan et al. (2011) in emerging markets but challenges the agency theory argument that insiders prefer

retaining earnings (Jensen & Meckling, 1979). Similarly, the negative relationship between institutional ownership and dividend payouts contrasts with the monitoring hypothesis proposed by (Short et al., 2002) but aligns with the findings of (Grinstein & Michaely, 2005). These results underscore the complexity of dividend policy determinants and highlight the unique dynamics at play in emerging markets like Pakistan.

In summary, this study provides valuable insights into the factors influencing dividend payouts in conventional mutual funds in Pakistan. The findings emphasize the significant roles of insider and institutional ownership, as well as fund size, age, and manager characteristics. These results contribute to the broader debate on dividend policy and offer practical implications for fund managers and policymakers in emerging markets, shedding light on the intricate balance between distributing profits and reinvesting for growth.

Conclusion

The paper uncovers essential connections between ownership structure and dividend policy specifically among traditional mutual funds operating in Pakistan. Analysis shows that insider ownership leads to greater dividend distributions because insiders prefer to distribute company earnings through dividends to demonstrate financial stability and meet shareholder expectations. The data shows that institutional investors tend to avoid dividend distributions because they prefer to reinvest in business expansion which suits their extended-term investment goals. Both firm size and age show a direct positive relationship to increased dividend payments which demonstrates that larger and older firms possess greater stability and organizational maturity. Managerial factors reveal complex effects where managers with greater experience tend to prefer lower dividend distributions because they focus more on building long-term value creation.

The strength of these findings exists alongside several study limitations which require attention. The current research which examines conventional mutual funds in Pakistan cannot extend its results to different financial sectors or countries and mutual fund categories like Islamic funds. The study bases its conclusions on ten years of data which although substantial fails to fully represent long-term trends and economic shock consequences. The scope of analysis depth is restricted by available data limitations.

This research delivers important practical and theoretical advancements. This research improves understanding of ownership structures and dividend policies in emerging markets through its analysis of the complex relationship between insider and institutional ownership.

The research provides essential guidance which helps fund managers and institutional investors synchronize corporate governance with investment strategies to achieve optimal dividend decisions. These research outcomes provide policymakers with a basis to advance transparency alongside efficient dividend distribution techniques across the financial industry.

Research advancements can overcome current limitations by examining extensive datasets while including varied ownership arrangements and extending case studies to international markets and multiple industries. The study of ownership dynamics will help clarify their impact on dividend practices which will lead to better insights into corporate governance frameworks and financial strategies in both developed and emerging markets.

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