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RESEARCH ARTICLE

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Impact of macroeconomic variables on dividend payout in Pakistan's textile firms

Umair Abbas[1*], Muhammad Imran[1], Qasim Raza[1], Abubakar Mumtaz[1], and Muhammad Adeel Abbas[2]

[1]UE Business School, Division of Management and Administrative Sciences, University of Education Lahore, Pakistan.

[2]Higher School of Economics, National Research University, Russia.

Correspondence:
ua2198682@gmail.com

Abstract
This study investigates the impact of key macroeconomic variables Trade openness, Population and Trade deficit on dividend payout decisions within Pakistan's textile. Drawing the data from 68 listed textile firms over the period 2018-2022, the research employs a logit regression model to explore how these variables corporate dividend behavior in emerging economy characterized by political and economic instability. The findings reveals that trade openness has significant negative impact on dividend payouts, suggesting that increased global exposure prompts firms to retain earnings to buffer against external shocks. Population shows an insignificant relationship with dividends reflecting the export-oriented nature of the sector. Conversely, trade deficits are found to have a significant positive relationship with dividend payouts, possibly due to currency depreciation benefits and supportive government policies during deficit periods. The study contributes to understanding the complex interplay between macroeconomics dynamics and corporate financial decisions in developing markets.

KEYWORDS
Macroeconomic, dividend payout, textile firms.

1 | INTRODUCTION

1.1. Introduction and Literature

Dividend is one of the most important decisions of a company. The belief that dividend policy is an important area in corporate finance and its implication to the stakeholder is not new. The question arises when and how firms pay dividend. "The harder we look at the dividend picture the more it seems like a puzzle, with pieces that just do not fit together" (Black, 1976). It is examined that the companies who are generating well income have many ways to invest that income in better use of the company. The residual theory of dividend described that there is common tendency to reinvest the profit of the companies into the business due to clientele effect because there has been great pressure on companies to pay dividend. Especially in the developing countries like Pakistan have the tendency to reinvest the profit in the company for their growth due to economic uncertainty in Pakistan. In corporate finance dividend is very controversial area. It is interesting to know that how technical the dividend policy is viewed in growing economy like Pakistan. Because of the weak corporate governance, the structure of Pakistani firms is only characterized by one main shareholder.

There are three different beliefs in the consideration of dividend. One group believes that the value of the firms will increase if they pay dividend which is known as conservative group. The second group is known as radical group which believes that the value of the firm will decrease with an increase in the payment of dividend. The group is of theorists who believed that dividend payment does not any effect which are known as Miller and Modigliani (MM) Myer and Mojluf 1984. In a hypothetical paper MM showed the irrelevance of the dividend decision in the world without taxes, transaction cost or other market fault. (Miller & Modigliani, 1961).

The object of our study is to find the reasons that why textile sector in Pakistan has less dividend payouts. We have chosen three high impact macroeconomic variables ([1]Trade openness, [2]Trade deficit, [3]Population) that affects the dividend payouts in Pakistan's textile sector. Due to economic and political instability in Pakistan the textile sector is in crisis. We have found that the firms retain the earnings for reinvesting because there are high uncertain policies in Pakistan. The prices of electricity are rising continuously. Interest rate in Pakistan is very high. The unstable exchange rate. However, if we critically analyze the textile sector of Pakistan, we will find some other reasons that should be addressed. There are low free float shares in Pakistan's textile sector. Many textile firms are family owned or closely held, with a significant portion of shares controlled by founders and institutional investors. This leaves a smaller percentage of shares available for trading in the market, reducing overall liquidity. This can be a main reason of less dividend payouts because they got the profit directly without the urge of dividend payout and to avoid double taxation. So, the general public who purchased the shares have less dividend payouts.

Dividend payout decisions are influenced by various macroeconomic factors. This study examines the impact of three such factors trade deficit, trade openness and population on corporate dividend payouts. Understanding these relationships is crucial for policy makers and investors especially in emerging markets where macroeconomic variables can affect significantly the corporate dividend payouts.

1.2. Theoretical Perspective on Dividend Policy

1.2.1. Signaling theory

Dividends are used as signals of firm stability and future performance, especially under information asymmetry (Bhattacharaya, 1917). In volatile macroeconomic environments, consistent dividend payouts may serve as reassurance to investors.

1.2.2. Agency Theory & Free Cash Flow Hypothesis

Jensen (1986) argues that dividends help mitigate agency costs by reducing excess free cash flow available to managers. External shocks such as trade fluctuations or deficit can influence how much cash is retained versus distributed.

1.2.3. Pecking Order Theory

Miller and Modigliani (1961) argue that dividend policy is irrelevant in a perfect market, bit in real world emerging economies with market imperfections, macroeconomic shocks can significantly alter payout policies.

1.3. Trade openness and dividend payouts

Trade openness is a way to describe how much a country is connected to the world thorough buying and selling of goods. It is usually measured by adding up all imports (things a country buys from abroad) and exports (things it sells abroad) and comparing that numbers to the country's GDP, which is the total value of everything the country produces in a year. Mujahid and Alam (2014) studied Pakistan and discovered that when a country becomes more open to trade, its economy become more unpredictable. For example, the amount of goods and services the country produces might rise of fall sharply, people's spending habits (consumption) may change suddenly, and businesses might quickly change how much they invest in a new project or equipment. These ups and down can influence how companies decide to handle their money, including whether or not they pay dividends to shareholders. When companies expect more instability, they may hold back some profits to protect themselves during hard times.

Dividends are payments that companies give to the people who own their stock as a reward for investing. Le et al. (2019) found that when economies are more open to trade, companies gain better access to larger global markets and face tougher competition. This encourages them to improve their financial systems, follow stricter rules to protect investors and find easier ways to borrow money or raise funds (Rana et al., 2021). Because of this, companies in open economies tend to pay out higher dividends because investors in such markets expect clear, consistent and reliable returns on their investments. Trade openness can also improve how well companies perform overall, leaving them with extra cash on hand. According to Jensen's (1986) free cash flow theory, when companies have more free cash available, they are more likely to give a portion of it back to shareholders as dividends. In addition, greater exposure to global markets can push companies to become more efficient, adopt modern technologies, and strength relationships with foreign investors, which further supports steady dividends payments.

Pakistan's textile industry is a good example of how this works in real life. Many textile companies in Pakistan depend heavily on exports to places like the United States, Europe, and the Middle East. Trade openness allows these firms to import essential materials like cotton, synthetic fibers, dyes, and modern machinery more easily and often at better prices. It can also attract foreign direct investments (FDIs) and increase competition, which can make companies stronger and more efficient (Zhang et al., 2022). However, government policies in Pakistan about imports and exports can be uncertain. Sometimes the government raises taxes or tariffs on imports to protect foreign currency reserves. When taxes and tariffs become too high, it makes raw materials very expensive and can prevent textile firms from buying the machinery and technology they need to increase production (Xuezhou et al., 2022; Qalati et al., 2019). These challenges can hurt the performance of textile firms and, as a result, lead to lower dividend payouts for their shareholders. Over time, this unpredictability in trade policies may discourage new investments in the sector, limit growth opportunities, and reduce the overall confidence of both local and foreign investors.

1.4. Population and Dividend Payout

Population growth is simply the increase in the number of people living in a country. This growth can influence a company's decisions about dividends, which are the payments companies give to their shareholders (the people who own their stock) as a way of sharing profits. Population growth can affect dividends in both direct and indirect ways.

Directly, when a country's population grows, there are more people who need clothes, food, housing, and other goods. A bigger population means more potential customers, so businesses can sell more products and make more money. If companies are earning higher profits, they might feel confident enough to share some of those profits with shareholders by paying larger dividends.

However, there is another side to this. In developing countries that are still building up their economies fast population growth often creates challenges. As more people move to cities (this is called urbanization), governments and businesses have to spend more money on things like housing, schools, hospitals, and other public services. Companies may also need to invest heavily in expanding their factories, buying new equipment, or hiring more workers to meet the needs of a growing population. Because so much money is tied up in these areas, businesses might have less cash available to pay out as dividends.

Even though not many researchers have studied this topic in depth, some studies hint at a connection. Demirguc-Kunt and Maksimovic (1998) and La Porta et al. (2000) indirectly suggest that population size can influence how markets develop and how investors behave. In simpler terms, when a country has a larger population, its financial markets might grow bigger and more sophisticated, and investors might develop certain expectations about returns on their investments. These factors can, in turn, affect how companies decide on their dividend policies.

In Pakistan, which has a very large population, the textile industry is a good example of how population growth can play a role. A bigger population creates strong local demand for textiles clothing, fabrics, and other related products helping boost the revenue of textile firms. But at the same time, the textile sector in Pakistan does not rely only on local customers. Its dividend payouts the money it gives back to shareholders are mostly shaped by exports, global demand, and international trade policies. So even though having more people in Pakistan helps increase local sales and can slightly support profits, the real drivers of dividend payments in the textile industry are how well their products sell in foreign markets and the rules or taxes related to international trade.

Overall, population growth can be a double-edged sword: on one hand, it can create opportunities for higher sales and profits, but on the other hand, it can also create extra costs and investment needs that limit how much money companies can return to shareholders. In countries like Pakistan, local population growth helps the economy, but for industries like textiles, dividends still depend much more on what happens in global markets.

1.5. Trade Deficit and Dividend Payout

A trade deficit happens when a country buys (imports) more goods and services from other countries than it sells (exports). In simple words, it means more money is going out of the country to pay for imports than is coming in from exports. This can influence how much cash companies have available and can even affect how confident investors feel about the economy. When a trade deficit lasts for a long time, it can make a country look economically weak or unstable, which may cause companies to be extra careful with their finances.

Souza Junior et al. (2004) pointed out that persistent trade deficits can make firms adopt safer, more conservative strategies. Instead of paying out large dividends which are the profits companies share with their shareholders firms might hold on to their earnings as a way to protect themselves against economic uncertainty (Hussain et al., 2020). This is like a family saving money during tough times instead of spending it.

The pecking order theory by Myer and Majluf (1984) supports this idea. The theory says that when it's hard or expensive for companies to borrow money from outside sources, they prefer to use their own earnings first. So, instead of giving out dividends, companies keep their profits to pay for their own needs. This way, they don't have to depend on costly loans or outside investors.

Empirical evidence meaning what researchers have observed in real-world data also backs up this negative relationship between trade deficits and dividend payouts. Abor and Bokpin (2010) found that when a country experiences economic instability, such as balance of payments deficits (another way of describing when imports are much higher than exports), companies tend to save their earnings. They do this as a safety net, keeping cash on hand in case things get worse.

The literature overall shows that different economic factors can influence dividend policy in different ways. For example, trade openness (how much a country is involved in global trade) tends to have a positive effect on dividend payouts, while trade deficits generally have a negative effect. Meanwhile, population growth's impact on dividends depends on the specific situation in a country.

In Pakistan, the textile industry gives us a clear example. Pakistan's textile sector is its biggest export earner, but in recent years it has faced many challenges because of a persistent trade deficit. While textile exports bring in foreign money, imports like raw materials, machinery, and chemicals have grown even faster, widening the trade gap. On top of this, changing government policies, like fluctuating tax incentives or sudden increases in input costs (the prices of things needed to produce textiles), have made it harder for companies to stay profitable. As profits shrank, many textile firms in Pakistan reported lower earnings and, as a result, reduced their dividend payouts to shareholders. This situation shows how problems at the national economic level, like a trade deficit, can directly hurt investor returns in industries that depend heavily on exports. It also reminds us how closely linked a country's economic health is to the financial decisions of its companies.

2 MATERIAL AND METHOD

2.1 Data and Sources

Research methods are applied in accordance with secondary data to investigate the relationship between variables in the research model. We have collected the data of 68 listed textile firms of Pakistan from FSA issued by state bank of Pakistan period (2018-2022). We have also collected the data from individual firm's websites.

2.2. Variable measurement

2.2.1. Dependent variable

We have one dependent variable which is dividend payout. Dividend payout is the part of the profit which is distributed in shareholders. Figure 1 shows the conceptual framework of studied variables with dependent and independent variables.

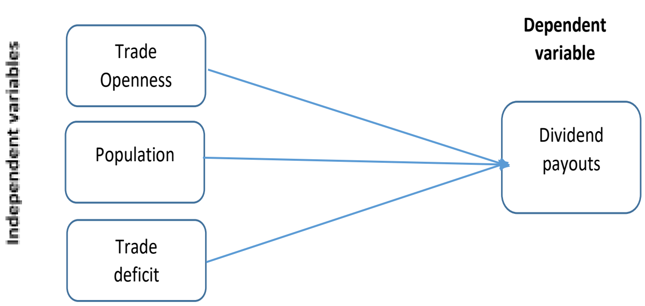

Fig. 1: Research model

2.2.2. Independent variables

We have three independent variables. Our first variable is **Trade openness** refers to the extent to which a country allows free trade with other nations. It is typically measured by the ratio of a country's total trade (export+import) to its Gross Domestic Product (GDP).
Formula:
Trade Openness= Export+import/GDP x 100

A higher percentage indicates a more open economy that is more engaged in international trade.

The second independent variable is Population. In the context of Pakistan textile sector, population growth reflects a rising domestic demand for textile products. A larger population also expands the labor force, supporting production capacity.

The third independent variable is Trade Deficit that can impact dividend payouts by affecting foreign exchange availability and import costs for raw materials. Thus, trade deficit serves as a critical macroeconomic factor influencing dividend policy decisions.

2.3. Econometric Model

The model estimated in study which measures dividend payouts.

$$DP = \alpha + \beta_1 Trade\ openness + \beta_2 POP + \beta_3 TD + \varepsilon_t \dots\dots\dots\dots 1$$

In above equation α is constant β is coefficient, dividend payouts is dependent variable and trade openness, population, trade deficit are independent variables.

2.4. Empirical results:

2.4.1. Descriptive statistics

Descriptive statistics are used to describe and summarize data in a ways that are meaningful and useful. Descriptive statistics are reported in Table 1. This section provides the descriptive statistics of 68 listed textile firms from the period 2018 to 2022 in Pakistan. Dividend payout (DP) is the dependent variable and its mean value is 0.4529412 having standard deviation (SD) is 0.4985142. The first independent variable is trade openness with the mean value of 9.034622 and SD is 9.432849. The second independent variable is Population (POP) with the mean value of 219.572 and SD is 5.055028. The third independent variable is Trade deficit (TD) with the mean value of 8.22 and SD is 0.6346652.

Table 1: Descriptive Statistics

Variables	Obs	MEAN	S.D	Min	Max
Dpd	340	0.452	0.498	0	1
Trade openness	340	9.034	9.432	-2.870	25.555
POP	340	219.572	5.055	211.8	224.78
TD	340	8.22	0.634	7	8.7

2.4.2. Correlation analysis

The correlation is a measure of statistics which is used to measure the strength of association and relative movement between two variable. In the current study the correlation is presented in Table 3 with 340 number of observations. Multicollinear problem may arise if the correlation coefficient between two explanatory variables is 0.80 or larger (REHMAN et al, 2020). None of the pair wise correlation coefficient of variable exceed 0.80. Table 2. Suggesting no multicolinarity among the expalanarity variables.Table 2 shows correlation of the studied variables.

2.4.3. Multicollinearity analysis

However, to further investigate this issue of multicollinearity, we employed the variance inflation factor (VIF) and VIF helps to identify the severity of any multicollinearity issues so that the model can be adjusted. A good regression model is considered free of multicollinearity once VIF value is <10 and 1/VIF > 0.10 (Kartikasari & Merianti, 2016). The output shows that all the variables in this study are free of multicollinearity because VIF of all variables are <10 and all 1/VIF of all variables is > 0.10.

Table 2: Correlation Matrix

Variables	DP	Trade openness	POP	TD
DP	1			
Trade openness	-0.2604*	1		
POP	-0.963	0.3676*	1	
TD	0.2575*	-0.8685*	-0.2617*	1

Table 3: Multicollinearity test results

Variables	VIF	1/VIF
Trade openness	1.17	0.851
POP	4.14	0.241
TD	4.45	0.224
Mean VIF	3.25	

3 RESULTS AND DISCUSSION

The following Table 4 Is constructed to report the logit regression results based on the sample of 68 textile firms of Pakistan. The logit regression results shows that Trade openness has a negative but significant effect on dividend payouts. This means when companies become more involved in international trade, they are less likely to give out profits to their shareholders. This happens because doing business globally comes with more competition and more risks. For example, prices of raw material like cotton can change quickly, or demand for products might suddenly drops in foreign markets. Also companies may feel pressure to invest more money to modernize their operations and keep up with international competitors. So instead of paying out dividends, these companies chose to keep the money inside the business as a safety net. This finding supports earlier research by Botoc and Pirtea (2014) and Mujahid and Alam (2014), who also said that global uncertainty and intense competition often lead companies to hold onto their earnings rather than share them with investors especially in industries that rely heavily on exports, like Pakistan's textile sector.

Table 4: Logit regression results

Variables	Coefficient	Std. err.	Z	P > |Z|
Trade openness	-0.087	0.042	-2.08	0.038
POP	-0.006	0.039	-0.16	0.874
TD	0.210	0.609	1.98	0.047
Log likelihood	-154.49			
LR statistics	133.44			

When it comes to population, the study found a negative but not significant relationship with dividend payouts. What this means is that changes in the number of people living in Pakistan don't really affect whether textile companies decide to pay dividends. This results makes sense because the textile industry in Pakistan is mostly focused on selling products to other countries, not to people living within Pakistan. So even if the Population grows, it does not automatically mean these companies will make more money or feel the need to pay dividends. What matters more to them is how much demand form international buyers. This support earlier findings by La Porta et al. (2000) who explained that in export oriented industries, the size of local population does not play a big role in shaping dividend decisions, since the main source of income comes from outside the country.

Interestingly, the study found that the trade deficit has a positive and significant impact on dividend payouts. A trade deficit means Pakistan is importing more than it is exporting. At first, this might sound like a bad thing but for exporters like textile companies, it can actually work in their favor. When there is a trade deficit, the value of local currency (Pakistan Rupee) often falls. This makes the goods that Pakistani companies sell abroad cheaper and more attractive to foreign buyers, which can boost their income when those sales are converted back into local currency. Also, during times of trade deficit, the government might step into help exporters by offering them like tax breaks, subsidies or special loan programs. This gives companies more cash to work with, making it easier for them to pay dividends. Another reason companies might still pay dividends during tough economies times is to send a positive signal to investors, showing that they are financially stable and confident about the feature. Similar explanations have been offered in past research by Souza Junior et al. (2004) and Abor and Bokin (2010), who pointed out that companies often use dividend payouts as a way to show financial health and maintain investor trust during uncertain periods.

In short, the result of this study show that dividend decisions in Pakistan's textile industry are strongly influenced by global economic conditions. Trade openness while important for growth also brings risks that make companies more cautious about sharing profits. The size of the population does not play a big role, likely because most of the textile products are sold abroad. On the other hand, Trade deficits often seen as a negative sign can sometimes benefit export-focused companies, giving them both higher revenues and more government support, which encourages them to keep paying dividends. These findings not only match previous research but also help explain how companies respond to changes in the broader economy.

3.1. Conclusion

In this study, we looked at how three big economic factors Trade openness, Population, and the trade deficit affect how companies in Pakistan's textile industry decides to give out dividends. We studied the data of 68 companies listed on stock exchange from the period of 2018-2022.

First Trade openness we have found a negative effect on dividend payments. That means when companies are more connected to the world market and do more international business, they tend to give less money to their shareholders because being involved in global trade can be risky. There can be sudden changes in world economy like prices shocks or changes in demand and companies wants to keep more money saved up to deal with those surprises (Ramzan et al., 2023). So instead of paying that money out as dividend, they hold on to it.

Next, we looked at the Population of the country thinking may be a bigger population might lead to more customers and higher profits (Azeem, Hussain and Hussain, 2012). But it turns out that the population did not have much effect on dividend payments. This might be because the textile industry in Pakistan mostly sells its products to other countries (export oriented), so how many people lives in Pakistan does not really changes their profits or their decisions about dividends that much.

Lastly, we studied the trade deficit. Surprisingly, when there was a trade deficit, companies in the textile sector actually paid more in dividends. This might sound strange, but there are a few reasons this could happen (Xuezhou et al., 2022). For example, when the country’s trade deficit goes up, the value of the local currency might go down, making Pakistan’s goods cheaper and attractive to buyers in other countries. That could boost profits to help the companies, and companies might want to show confidence to the investors by giving out more dividends, even when things are uncertain.

So, this study shows that companies in Pakistan’s textile sector change how much they pay in dividends based on what’s going on in the bigger economy. If they are trading more globally, they get more careful and safe money. If the population changes it does not really affect them and when there is a trade deficit, they might actually give our more to investors. These findings helps us understand that company decisions about paying profits to shareholders are not just based on how much money they make, but also on what’s happening in the economy around them both in Pakistan and around the world.

3.2. Policy implications

The results highlight important lessons for policy makers:

3.2.1. Stabilizing trade policies

Frequent shifts in tariffs, taxes, and export incentives create uncertainty for textile firms, discouraging dividend payouts. More predictable trade policies could foster confidences and improve shareholder returns.

3.2.2. Support during trade deficit period

Since trade deficit appear to encourage dividend payments, policymakers should design targeted support (e.g. subsidies, financing facilities) that strengthens exporter’s liquidity without promoting unsustainable payout practices.

3.2.3. Strengthening corporate governance

Weak shareholder rights and family ownership structure often reduce dividend distribution. Policies to improve transparency investor protection and free float shares would enhance dividend practices in the sector.

3.3. Managerial Implications

For managers of textile firms, the study suggests.

3.3.1. Balancing reinvestment and payouts

While retaining earnings is necessary under uncertainty, maintaining stable dividend policies can help attract long term investors and signal financial strength.

3.3.2. Strategic use of global exposure

Since trade openness creates volatility, firms should adopt hedging strategies, diversify exports markets, and manages foreign exchange risks to sustain dividend capacity.

3.3.3. Investor communication

Clear communication with shareholders about dividend policies, particularly during periods of trade imbalance, can strength investor trust and reduce uncertainty.

3.4. Future Research Directions

This study focused exclusively on macroeconomic variables. Future research could extend the model by integrating firm level determinants (profitability, leverage, ownership structure, liquidity) alongside macroeconomic indicators. Additionally, comparative studies could provide broader insight into how external shocks influence dividend policies in emerging markets.

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