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## Article

## The application of financing and dividend decision techniques in practice among Ghanaian chief financial officers (CFOs)

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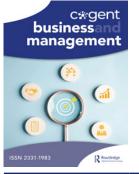
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## ACCOUNTING, CORPORATE GOVERNANCE & BUSINESS ETHICS | RESEARCH ARTICLE

## The application of financing and dividend decision techniques in practice among Ghanaian chief financial officers (CFOs)

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business & management

Anthony Owusu-Ansah<sup>1\*</sup>, Nene Lartey Addico<sup>2</sup> and Dr Godfred Amewu<sup>3</sup>

Abstract: We use a survey approach to investigate how managers in a frontier market apply financing and dividend decision techniques in practice. 15 firm characteristics were grouped into paired subgroups for a two-sample t-test analysis that aenerated statistical differences, economic significance levels and ranking for each technique investigated. The Ghanaian listed firm's sample choice was due to the country's persistent volatile macroeconomic environment. In managing the capital structure, managers consider most relevant issuing of stock to give investors a better impression of their firms' prospects (signalling). In choosing between short and long-term debt techniques, the most applied technique is matching the firm's debt maturity with the assets' useful life span. Managers are most concerned about the volatility of their earnings and cash flows on the appropriate amount of debt to use. A probe into debt policy indicates that the most valuable technique is issuing debt when the firm's internal funds are inadequate. Under dividend policy, the most treasured technique is ensuring cash availability which deviated from existing literature. These results show that managers in frontier markets are cash-focused, which may lead to short-termism, which may be non-value-adding but important for survival in their persistent liquidity crunch markets.

Subjects: Economics; Finance; Business, Management and Accounting; Industry & Industrial Studies

Keywords: CFOs; survey; capital structure; dividend policy; financing decision; debt policy

JEL CLASSIFICATION: G30; G31; G35; G39

## 1. Introduction

Short-termism may be vital for the survival of firms in a frontier market where cash or liquidity crunch is likely to be persistent. In a frontier market with a persistent liquidity crunch environment, prioritising the firm's short-term returns in terms of cash earnings and reserves to meet short-term obligations could be more vital for survival than in developed and emerging market firms. We expect this notion to lead to a difference in frontier market managers' use of financing and dividend policy techniques. A short-termism philosophy encourages managers and the financial markets to have short time horizons that prioritise short-time shareholder return over the long-term growth of the firm's value (Janicka et al., 2020). Generally, firms need cash to meet their obligations, not profitability, as accounting net income may not be in line with the timing of cash flows: many profitable firms have gone extinct due to poor cash flow management (Stice et al.,





2017). Therefore, the idea that frontier market managers may be short-term cash-focused due to the likelihood of a persistent liquidity crunch in their market is reasonable.

In addition, Damodaran (2014) notes that the obligation to make cash payments (like interest and principal payments) could influence managers to prefer and implement projects that generate short-term payoffs (short-termism) over longer-term investments that create more value for the firm. This implies that a firm's ability to meet its cash obligations and access to cash in a particular market influences managers' decision-making process. Uludag and Ezzat (2016) note that developed, emerging, and frontier market classification summarises the level of business risk and hurdles in a specific market jurisdiction. This means market classifications may force managers to evolve to survive within their market risks and hurdles and are likely to use different financing and dividend techniques based on difficulty accessing cash. Frontier markets skew toward the investment horizon where markets are no longer suitable for investment—they are plagued by persistent business risks and hurdles that shape investors and managers as they navigate their markets (Uludag & Ezzat, 2016). We expect frontier market managers to prefer financing and dividend techniques that hold onto cash needed to survive periods of liquidity crunch.

The idea of managers holding onto internal cash to ensure business continuity is in line with the pecking order theory. Myers and Majluf's (1984) pecking order theory of corporate capital structure posit that managers would prefer retained earns (internal cash), debt and equity sources of funds in descending order. Insightfully, the pecking order theory is based on the assumption of information asymmetry, which infers that managers are insiders and are associated with no cost on information to make funding decisions. However, debt and equity investors are outsiders who require information to make funding decisions. Equity holders are more exposed due to their residual claim to the firm asset and require a higher information premium than debt holders. In a harsh frontier market business environment, the idea of managers being cash-focused is reasonable as the premium required by debtholders would be high and even higher for equity holders cetaris parabus.

Also, ideally, as market risk and hurdles increase from developed to frontier markets, we expect information asymmetry to also increase from developed to frontier markets. This suggests that signalling maybe important to frontier market managers in accessing funds from debt and equity investors/sources. Ross (1977) and other researchers developed the capital structure signalling theory based on the problems of the asymmetrical information between managers and investors. To reduce the information gap, managers with private information may transfer it to investors via signalling through their financial policy (Markopou & Papadopoulos, 2009). Therefore, frontier market managers in their high-risk business environment may want to signal strength by holding onto cash or taking a debt position to send positive signals to the market to support their business' strategic positioning and growth.

A liquidity crunch is when cash resources are in short supply and demand is high. Firms and individuals during a liquidity crunch are exposed to high-interest rates on loans that are more difficult to obtain (UNESCWA, 2020). Maquieira et al. (2012) note that emerging markets are not efficient markets: they are usually characterised by a comparative lack of market development (in terms of equity, debt, commodity, etc.), relatively low market liquidity, higher information asymmetries, higher transaction costs, and more concentrated ownership. They further note that managers in Latin America's emerging markets seem to weigh more on liquidity and capital rationing. Ceteris paribus, the business risk and hurdles experienced by managers would increase from an emerging to a frontier market. We believe frontier market managers are expected to experience higher levels of liquidity crunch than developed and emerging markets and would have the propensity to hold onto cash. This would uniquely alter their financing and dividend policy, as cash is king and may be challenging to get in their liquidity crunch environment.

Figure 1. Percentage of firms thinking of issue stocks.



This study considers Ghana an interesting case study because of its volatile macroeconomic environment, which is similar to most frontier markets. Ghana is part of Sub-saharan Africa (SSA) which is host to many indebted frontier markets. As of 2022, the IMF Sub-Saharan Africa (SSA) Regional Economic Outlook reports that SSA regional public debt is creeping toward Pre-Heavily Indebted Poor Countries Initiative (thus early 2000s levels). In congruence, 19 of the region's 35 low-income countries are in debt distress or at high risk of distress. Detrimentally, most SSA countries have their old debt portfolios of low-cost, long-term multilateral debt substituted with higher-cost private funds from the international bond market. This has resulted in rising debtservice costs and higher rollover risks (IMF, 2022). This implies an increasingly volatile macroeconomic business environment within which SSA managers must adapt or die out. MSCI Global Indexes indicates Ghana as a standalone frontier market and further states that the MSCI Standalone Market Indexes are not included in the MSCI Frontier Markets Index (MSCI, 2017). This may be because standalone market input data may be outliers. World Bank (2022) documents in Ghana's country overview that in July 2022, the Government of Ghana started engaging the IMF for a possible bailout program. Ghana's Long-Term Local- and Foreign-Currency Issuer Default Ratings (IDRs) have been downgraded to junk by the top three credit rating agencies; for example, Fitch's downgraded Ghana's credit rating from "CCC" to "CC" (Fitch, 2022). The implication here is that managers in Ghana or other similar frontier markets are likely to evolve and adapt their financing and dividend decisions to survive in their relatively challenging business environment.

The quality of managerial financing and dividend decisions is heavily dependent on their capacity, understanding, appreciation, and application of financing and dividend techniques in practice. With this perspective, it is essential to describe, explain and compare the current application of financing and dividend policy techniques in practice among Ghana's frontier market managers or Chief Finance Officers (CFOs) against similar results from emerging and developed markets. This would help provide a baseline for managers to compare their use of these techniques to best practices to help identify and implement improvement opportunities. This study uses capital structure as a proxy for describing the use of financing decision techniques among Ghana's frontier market CFOs. The study groups' financing techniques used to manage and alter capital structure into techniques for (1) issuing equity, (2) issuing short-and-long-term debt, (3) choosing the amount of debt to use, and (4)adopting a debt policy, similar to Graham and Harvey (2001), Bancel and Mittoo (2004), Brounen et al. (2006), Vasiliou and Daskalakis (2009), Maquieira et al. (2012), Strýčková (2017), and De Andrés et al. (2018).

In the dividend payout techniques section, the survey work of H. Baker et al. (1985) provides the basis for the investigation because Ghana's financial market is in its infancy and not complex compared to some of the leading global markets. The dividend section is also in line with similar studies done across the globe by authorities such as Baker and Powell (2000), Baker et al. (2012), Baker et al. (2015) and Baker and Jabbouri (2016), Baker, Kilincarslan et al. (2018), Baker, Kapoor et al. (2018), and Baker et al. (2019). This study is relevant because most Ghanaian or frontier market firms are likely to make financing and dividend decisions that alter their discount rate and cash reserves. The proper handling of discount rates and cash reserves by frontier market managers would positively impact their firm value as they are the critical determinants under the free cash flow valuation model (Bodie et al., 2018).

In Ghana, most research into the capital structure and dividend policy used secondary data without engaging managers to document their actual use of capital structure and dividend

Figure 2. Percentage of firms paying dividends.

Yes 87.10% No 12.90%

techniques in practice (a description position). Some notable secondary data capital structure works include Abor (2008), Oppong-Boakye et al. (2013), Tornyeva (2013), and Nyeadi et al. (2017). Similarly, in the area of dividend policy, some notable secondary data-based works are Amidu and Abor (2006), Badu (2013), and Ofori-Sasu et al. (2019). This research focused on gathering primary data by directly engaging managers to complete a survey at their own time. The survey comprises 15 firm characteristics, 45 financing decision techniques, and 12 dividend policy techniques. The 15 firm characteristics are grouped into subgroup pairs leading to 30 subgroups for a two-sample t-test analysis. Each technique is linked with any statistical difference between paired subgroups, economic significance or high usage of a technique and a rank to provide clarity in interpreting results. This cross-section approach is rare in literature on Ghana, SSA and other frontier markets and also provides incremental insight into the knowledge developed with secondary data quantitative studies on capital structure and dividend policy in Ghana and similar frontier markets.

The notion that Ghana's frontier market managers would prefer short-term cash-focused financing and dividend techniques is intriguing, and testing it would provide new perspectives on shorttermism. Additionally, survey-oriented literature is in its infancy for frontier markets like Ghana; studies like this research expands the knowledge in this area. Also, similar study results may not be directly applicable due to different cultures, governance systems, information availability, currency stability, capital market development, liquidity, transaction costs, and market structures. Therefore, this work adds to the literature by providing a descriptive perspective on financing and dividend decision techniques in a frontier market context with a persistent liquidity crunch using listed firms in Ghana as a sample.

This paper investigates capital structure alteration and management by (1) issuing equity or common stock, (2) issuing short-and-long-term debt funding, (3) selecting the amount of debt to use, and (4) choosing a firm's debt policy. Lastly, (5) the work investigates the dividend policy techniques most relevant to managers in a frontier market. Based on the developed, emerging, and frontier market classification with their associated level of risk and hurdles: we expect that the financing and dividend techniques preference of Ghana's frontier market should tilt towards emerging market results in the literature and focus on short-term cash focus to ensure business continuity during periods of liquidity crunch.

This study's resulting descriptive position or baseline is vital as it provides an empirical record that brings to the fore the perspective of frontier market managers on financing and dividend techniques. The results generally provide evidence that in altering a firm's capital structure, Ghana's frontier market managers do not consider issuing more equity for cash; they prefer retained earnings and debt. However, they would rather issue equity to signal strength to the market, creating goodwill that may help increase access to cash when needed. On the three (3) probes into issuing debt to alter capital, Ghana's frontier market managers are generally in line with developed and emerging market managers. This may be due to the disciplinary effect of using debt and the threat of bankruptcy. Notably, the dividend result shows that Ghana's frontier market managers are short-term cash focused before paying dividends. This result deviates from both developed and emerging market results. This study shows that short-term cash focus and signal-ling strength may be more vital for survival in a frontier market than in developed and emerging markets. This study's insight (short-term cash focus and signalling strength) may support the

Table 1. Review and market classification of capi	n of capital structure survey literature			
No.	Authors	Country	Market	Market Classifications
			Developed Emerging	Emerging Frontier
1	Norton (1990)	United States	×	
	Norton, 1991a)a	United States	×	
3	Norton, 1991a)b	United States	×	
4	Harris and Raviv (1991)	United States	×	
5	Fan and So (2000)	Hong Kong, China		×
6	Graham and Harvey (2001)	United States	×	
7	2	Europe	×	
8	Brounen et al. (2006)	Europe	×	
6	Beattie et al. (2006)	United Kingdom	×	
10	Correia and Cramer (2008)	South Africa		×
11	Vasiliou and Daskalakis (2009)	Greece	×	
12	Karadeniz et al. (2011)	Türkiye		×
13	Nor et al. (2012)	Malaysia		×
14	Maquieira et al. (2012)	7 Latin American Countries (Argentina, Chile, Colombia, Ecuador, Peru, Uruguay and Venezuela		×
15	Wachilonga (2013)	Kenya		×
				(Continued)

Table 1. (Continued)					
No.	Authors	Country	Market	Market Classifications	ons
			Developed	Developed Emerging Frontier	Frontier
16	Noulas and Genimakis (2014)	Greece	×		
17	De Wet and Gossel (2016)	South Africa		×	
18	Strýčková (2017)	Czech Republic		×	
19	De Andrés et al. (2018)	Spain	×		
20	Brown et al. (2019)	Australia, United States, United Kingdom	×		
Summary			12	7	1
			60%	35%	5%
Source: Author's compilation			-	-	

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No.	Authors	Country	Ма	rket Classificatio	ons
			Developed	Emerging	Frontier
1	H. Baker et al. (1985)	United States	Х		
2	Partington (1989)	Australia	Х		
3	Baker and Powell (1999a)	United States	Х		
4	Baker and Powell (1999a)	United States	Х		
5	Baker and Powell (2000)	United States	Х		
6	Baker et al. (2001)	United States	Х		
7	Baker et al. (2002)	United States	Х		
8	Al-Deehani (2003)	Kuwait		Х	
9	Anand (2004)	India		Х	
10	Dhanani (2005)	Britain	Х		
11	Baker et al. (2006)	Norway	Х		
12	Baker et al. (2007)	Canada	Х		
13	Firer et al. (2008)	South Africa		Х	
14	Brav et al. (2008)	United States	Х		
15	Pourheydari (2009)	Iran		Х	
16	Chazi et al. (2011)	United Arab Emirates		Х	
17	Baker et al. (2012)	Indonesia		Х	
18	Naser et al. (2013)	United Arab Emirates		Х	
19	Brunzell et al. (2014)	Denmark, Finland, Iceland, Norway and Sweden	Х		
20	Baker et al. (2015)	India		Х	
21	Baker and Jabbouri (2016)	Moroccan		Х	
22	Baker, Kilincarslan et al. (2018)	Turkiye		Х	
23	Baker et al. (2019)	Sri Lankan		Х	

(Continued)

No.	Authors	Country	Market Classifications		
			Developed	Emerging	Frontier
24	Baker, Kapoor et al. (2018)	India		Х	
25	Baker et al. (2020)	Sri Lankan		Х	
Summary	l.	_1	12	13	0
			48%	52%	0%

Source: Author's compilation

survival of firms on the continent, which would help in the progressive transformation of Africa into a global powerhouse in line with the African Union Agenda 2063 (African Union, 2021).

The remaining article is structured as follows; Section Two covers the literature review. Section Three presents the methodology, the survey design, and the sampling process. Section Four documents and discusses the empirical results, and Section Five provides conclusions to the study.

### 2. Literature review

### 2.1. Review of capital structure survey-based studies per market classifications

#### 2.1.1. Literature review matrix on capital structure surveys per market classifications

Many survey studies have sought to engage managers directly to collect primary data on their approach to making financing decisions. This study believes that the increased risk and hurdles experienced by investors and managers as they move from developed, emerging, and frontier markets would alter the preference for financing techniques per market classification. We perform a literature review matrix on capital structure survey literature in Table 1 covering 1990 to 2019 and find very low and scantly frontier market capital structure survey literature. Our review in Table 1 shows a total of 20 studies with the following distribution: 12 studies in developed markets (60%), seven (7) studies in Emerging markets (35%) and one (1) study in Frontier markets (5%). We recognize that our review may not be exhaustive; however, we want to bring to the fore that the use of financing decision techniques in frontier markets has largely not been investigated. This study seeks to engage Ghana's frontier market managers to document and empirically analyse their use of financing decision techniques in practice to add to the frontier market literature.

## 2.1.2. Altering capital structure via financing from common stocks issuing techniques in practice per market classification

On issuing common stocks to alter the capital structure in the developed market, Graham and Harvey (2001) find that US CFOs consider important and very important in issuing common stock to  $1^{st}$  manage earnings-per-share dilution (69%),  $2^{nd}$  profiting from the market by timing stock issuing based the market undervaluation or overvaluation (67%) and  $8^{th}$  concerns about whether the firms recent profits are sufficient to fund the firm's activities (30%). Likewise, Bancel and Mittoo (2004), using European survey data from 16 countries, find similar CFOs' disinterest in issuing equity to generate cash for the firm's operation, as European CFOs consider important and very important  $1^{st}$  earnings per share dilution (66%),  $2^{nd}$  issuing of stocks to maintain a target debt-to-equity ratio (59%) and  $6^{th}$  concerns about whether the firms recent profits are sufficient to fund the firm's activities (32%). Noulas and Genimakis (2014) find that among Greece's CFOs that the financing sources by order of preference are  $1^{st}$  retained earnings(1.69),  $2^{nd}$  straight debt (2.55) and  $3^{rd}$  external common equity from existing shareholders(3.62), where one (1) indicates the

highest and six (6) the lowest preference. De Andrés et al. (2018), working with CFOs in Spain, find the average importance of funding sources on a scale of 0–4 to be 1<sup>st</sup> retained earning(2.53), 2<sup>nd</sup> bank debt (2.47), with the 5<sup>th</sup> being issuing shares for cash (1.21). From the above, developed markets CFOs seem to be interested in signals to the market, profiting from the market timing and pecking order theory when it comes to issuing common stock, which alters their capital structure.

Maquieira et al. (2012), working with Latin America emerging market data, find that CFOs consider important and very important issuing stocks which alters their capital structure 1<sup>st</sup> when it is the least risky source of funds (56%), 2<sup>nd</sup> when issuing stocks gives investors a better impression of the firm's prospects than issuing debt (41%) and 6<sup>th</sup> issue stocks when profits is insufficient to fund the firm's activities (22%). Nor et al. (2012), interacting with CFOs of non-financial listed firms in Malaysia find that the most important factors affecting equity financing are 1<sup>st</sup> Earnings per share dilution (97%), 2<sup>nd</sup> whether recent profits are sufficient to fund activities (95%) and 3<sup>rd</sup> profiting from equity undervaluation and overvaluation (92%). In South Africa, using data from listed firms on Johannesburg Stock Exchange, De Wet and Gossel (2016) find that the most important factor affecting firm's equity issue decisions are 1<sup>st</sup> earnings per share dilution (66%), 2<sup>nd</sup> when recent profits may not be sufficient to fund the firm's activities (62%) and 3<sup>rd</sup> working to maintaining a target debt to equity ratio (62%). These results show that emerging market CFOs are also leaning toward signalling to the market, profiting from the market and the pecking order, similar to the developed market CFOs.

On fronter market, Wachilonga (2013) working with small and medium enterprises (SME's) in the hotel and lodging industry in Eldoret municipality in Kenya find that the preference for financial source for financing future investments are 1<sup>st</sup> internal resources (94%), 2<sup>nd</sup> debt (89%) and 3<sup>rd</sup> common stock (44%) which follows the peck order theory. We seek to extend the work of Wachilonga (2013) in the frontier market literature by focusing on listed firms in Ghana. We expected to find frontier market CFOs aggressively following the pecking order theory and using signalling when issuing common stocks. When it comes to profiteering from over and undervaluation of stocking, we believe it will be irrelevant to most frontier market CFOs as most frontier financial markets are small, not dynamic (low maturity or not vibrant)), like the major global stock and debt markets.

## 2.1.3. Altering capital structure via financing from debt issuing techniques in practice per market classification

The use of debt generates interest and principal payments that serve as a disciplinary mechanism for managers. Managers in developed, emerging, and frontier markets are likely to factor in the general level of business risk and hurdles inherent within their market when making various debt decisions. This is expected to alter their debt use techniques differently. In the developed market, Graham and Harvey (2001) find that US CFOs consider it important and very important 1<sup>st</sup> issuing of debt when interest rates are particularly low (46%), 2<sup>nd</sup> issuing of debt when their recent profit or internal funds are not sufficient to fund their activities (46%) and 3<sup>rd</sup> issuing debt when the firm's equity is undervalued by the market (31%). Bancel and Mittoo (2004) find that European CFOs consider it important and very important to use debt to 1<sup>st</sup> try to minimise the firm's weighted average cost of capital (70%), 2<sup>nd</sup> issue debt when interests are low (45%) and 3<sup>rd</sup> issuing debt when the firm's equity is undervalued by the market (44%). De Andrés et al. (2018) find that Spanish CFOs consider the average importance factors when choosing debt level to be 1<sup>st</sup> when there are no other sources (rating of 2.39), 2<sup>nd</sup> when they have better collaterals (rating of 1.28) and  $3^{rd}$  when they have a good relationship with the bank (1.20). Generally, the reasons for debt use by developed market managers are for needs, not wants, which indicates the disciplinary effect of debt on them.

In the emerging market environment, Maquieira et al. (2012) find that the most applied debt policy techniques are 1<sup>st</sup> restricting the firm's borrowing so that profits are not committed to interest payments (39%), 2<sup>nd</sup> when debt instruments are the least subject to information

Criteria	Selected firm	Gr	ouping
	characteristics	Sub Group 1	Sub Group 2
Criteria 1	Size by sales	Medium	Large
Criteria 2	P/E	Non-Growth (≤15.97)	Growth(>15.97)
Criteria 3	Leverage	Low (≤13.19%)	High (>13.19%)
Criteria 4	Dividend	No	Yes
Criteria 5	Industry	Manu	Others
Criteria 6	Mgt Ownership	Low(≤5%)	High(>5%)
Criteria 7	Institutional investors	Low(≤5%)	High(>5%)
Criteria 8	CEO age	Younger (≤40)	Older (>40)
Criteria 9	CEO tenure	Short (≤4 years)	Long (>4 years)
Criteria 10	CEO MBA	MBA	Non-MBA
Criteria 11	CEO Nationality	Non-Ghanaian	Ghanaian
Criteria 12	Target debt ratio	No	Yes
Criteria 13	Foreign sales	No	Yes
Criteria 14	Business structure	Single operation	Group
Criteria 15	Operating years	≤10 years	>10 years

asymmetries (thus retained earnings, debt, and equity in descending order of preference—34%) and 3<sup>rd</sup> limit debt, so the firm's customers/suppliers are not worried about our firm going out of business (20%). De Wet and Gossel (2016), interacting with South African listed firms find that in the use of debt financing, managers consider important and very important 1<sup>st</sup> the impact on the volatility of the firm's earnings and cash flow (80%), 2<sup>nd</sup> the level of forecasted cashflows from the investment projects that the debt will be used to fund (77%), and 3<sup>rd</sup> financial flexibility (restrict borrowing so we have enough internal funds available—77%). Strýčková (2017), engaging Czech Republic CFOs, find that they consider important or very important issuing debt 1<sup>st</sup> when the firm's recent profits (internal funds) are not sufficient to fund their activities (59%), 2<sup>nd</sup> when interest rates are particularly low (14%) and 3<sup>rd</sup> delay issuing debt because of transactions costs and fees (11%). The debt techniques valuable to emerging market CFOs seem to be aggressively oriented towards minimising the impact of debt on the firm's projects, cash, signalling, shareholders and customers. In addition, the idea of issuing debt during low-interest rate periods is no more—a differentiating technique between developed and emerging firms, possibly due to differences in market structures.

In frontier markets where the business risk and hurdles are at their most, we expect to find a cautious use of debt financing and an extreme preference for the pecking order theory (retains earns before debt, equity financing should be of low value). Also, the impact of debt on the firms signalling to the market would be of great concern to frontier market CFOs as a negative signal can lower access to key stakeholders such as equity and debt investors, customer, financiers, suppliers etc. Lastly, due to the general disciplinary effect of debt, CFOs of developed, emerging, and frontier markets are likely to skew toward similar techniques on most issues to be investigated.

No.	Application of common stock issuing techniques with respect to capital structure	% Important or very important	Total Mean	Frequency	Ranking in terms of use in practice
1	Issuing stock gives investors a better impression of our firm's prospects than using debt	16.13%	0.97	1	1 <sup>st</sup> rank
2	If our stock price has recently risen, the price at which we can issue is "high."	16.13%	0.81	0	Low or no usage
3	Stock is our "least risky" source of funds	29.03%	1.03	0	Low or no usage
4	Providing shares to employee bonus/stock option plans	6.45%	0.45	0	Low or no usage
5	Common stock is our cheapest source of funds	22.58%	0.90	0	Low or no usage
6	Maintaining a target debt-to -equity ratio	9.68%	0.61	0	Low or no usage
7	Using a similar amount of equity as is used by other firms in our industry	6.45%	0.55	0	Low or no usage
8	Whether our recent profits have been sufficient to fund our activities	22.58%	0.87	0	Low or no usage
9	The capital gains tax rates faced by our investors (relative to tax rates on dividends)	3.23%	0.55	0	Low or no usage
10	Diluting the holdings of certain shareholders	6.45%	0.58	0	Low or no usage

(Continued)

Table 4. (Cor	tinued)				
No.	Application of common stock issuing techniques with respect to capital structure	% Important or very important	Total Mean	Frequency	Ranking in terms of use in practice
11	The amount by which our stock is undervalued or overvalued by the market	16.13%	0.77	0	Low or no usage
12	Inability to obtain funds using debt, convertibles, or other sources	3.23%	0.42	0	Low or no usage
13	Earnings per share dilution	6.45%	0.52	0	Low or no usage

Note: CFOs of listed firms in Ghana rated their application of common stock issuing techniques on a scale of 0 (Not Important), 1 (Slightly Important), 2 (Moderately Important), 3 (Important) and 4 (Very Important). The report shows the total mean, the sum of percentage (%) for responses 3 (Important) and 4 (Very Important), frequency and ranking per technique. See Table A3 for the build-up of the table above.

### 2.2. Review of dividend policy techniques survey-based studies per market classifications

### 2.2.1. Literature review matrix on dividend policy surveys per market classifications

Paying dividend usually involves cash leaving the firm, and firms need the cash to meet their obligations as they fall due. Therefore, managers in developed, emerging and frontier markets are likely to value different sets of dividend policy techniques per their market risk and hurdles. Globally, dividend survey studies have engaged and gathered primary data directly from managers to document and empirically analyse their preferred dividend policy techniques. We performed a literature review matrix on dividend survey literature in Table 2 and found very low or zero frontier market dividend survey literature spanning from 1985 to 2020. Our finding in Table 2 indicates a total of 25 studies with the following distribution 12 studies in developed markets (84%), 13 studies in emerging markets (52%) and zero (0) studies in Frontier markets (0%). Our review may not be exhaustive, but the notion being put forth is that the literature on the use of dividend decision techniques in frontier markets in practice (with primary data) is low or no existent. We seek to engage managers to document and empirically analyse their dividend decision preferences.

### 2.2.2. Dividend policy techniques survey-based studies per market classifications

A dividend payout is a permanent cash flow from the firm to equity holders. The varying levels of difficulty in accessing cash per market classifications are likely to influence CFOs' dividend policy in the various markets. In the developed market, H. Baker et al. (1985) find that US CFOs consider important and very important 1<sup>st</sup> the anticipated level of a firm's future earnings, 2<sup>nd</sup> the pattern of past dividends and 3<sup>rd</sup> availability of cash. Baker and Powell (2000) similarly find that US CFOs consider most important 1<sup>st</sup> the current and expected future earnings (2.72), 2<sup>nd</sup> the pattern or continuity of past dividends (2.33) and 3<sup>rd</sup> concerns about maintaining or increasing stock price (2.18). Baker et al. (2007) find that the level of importance attached to factors influencing dividend policy by Canadian managers of TSX-listed firms to be 1<sup>st</sup> level of expected future earning (2.60), 2<sup>nd</sup> Stability of earnings (2.54) and 3<sup>rd</sup> pattern of past dividends (2.35). Notably, since 1985 the developed markets' CFOs seem not to be concerned about the availability of cash when

Table 5. Altering capital structure via applying short-term and long-term debt techniques by CFOs in practice							
No.	Application of cost of short- and long-term debt techniques with respect to capital structure	% Important or very important	Total Mean	Frequency	Ranking in terms of use in practice		
1	Matching the maturity of our debt with the life of our assets	64.52%	2.45	17	1st rank		
2	We issue short term when short-term interest rates are low compared to long-term rates	38.71%	1.87	3	2nd rank		
3	We borrow short-term so that returns from new projects can be fully captured by shareholders rather than committing to pay long-term profits as interest to debtholders	29.03%	1.68	3	3rd rank		
4	We issue long-term debt to minimise the risk of having to refinance in "bad times."	29.03%	1.61	1	4th rank		
5	Borrowing short-term to indicate that our firm will take on low-risk projects	19.35%	1.1	1	5th rank		
6	We issue short-term when we are waiting for long-term market interest rates to decline	32.26%	1.58	0	Low or no usage		
7	We expect our credit rating to improve, so we borrow short-term until it does.	29.03%	1.32	0	Low or no usage		

Note: CFOs of listed firms in Ghana rated their application of short- and long-term debt techniques on a scale of 0 (Not Important), 1 (Slightly Important), 2 (Moderately Important), 3 (Important) and 4 (Very Important). The report shows the total mean, the sum of percentage (%) for responses 3 (Important) and 4 (Very Important), frequency and ranking per technique. See Table A3 for the build-up of the table above.

considering whether to pay dividends or not: this could be due to the comparative less risk and hurdles in the developed world.

Moving on to emerging markets, Baker et al. (2012) find that Indonesian CFOs consider most important  $1^{st}$  stability of earnings (2.67),  $2^{nd}$  the level of current earnings (2.62) and  $3^{rd}$  level of expected future earnings (2.58). Baker et al. (2015) find that Indian CFOs consider important or very important  $1^{st}$  stability of earnings (2.64),  $2^{nd}$  the level of current earnings (2.62) and  $3^{rd}$  pattern of past dividends (2.49). Baker and Jabbouri (2016) find that Moroccan CFOs consider important or very important  $1^{st}$  the level of current earnings (2.66),  $2^{nd}$  the stability of earnings (2.54) and  $3^{rd}$  needs of current shareholders, such as the desire for current income (2.41). Baker et al. (2019), working with Sri Lankan firms, show the level of importance of dividend policy determinants to be  $1^{st}$  Past dividends (4.22),  $2^{nd}$  Profitability (4.12) and  $3^{rd}$  investment opportunities (4.04).

From the above, developed market CFOs focus on the future and pattern of dividends, while emerging market CFOs focus on current earning stability and levels. This is likely to be because emerging market CFOs may be responding to the increased level of business risk and hurdles inherent to their market (managing the signalling sent to the market by earning). Similar research on frontier market dividend policy survey literature seems to be unavailable but intuitively, considering the expected increase in business risk and hurdles in the frontier markets compared to developed and emerging markets. We expect CFOs to focus extremely on cash availability and maintenance (short-term cash-focused) due to the expected liquidity crunch in their market.

### 3. Methodology

#### 3.1. Survey

In finance, survey studies are few, but their descriptive position helps share more light on the results of secondary data quantitative studies in the same subject area. Inherently, all surveys suffer from potential problems such as respondents providing their beliefs instead of their actions, questions being misunderstood, and the sample not being representative of the population (Maquieira et al., 2012). These inherent limitations are addressed by ensuring an easily comprehensible questionnaire, and (3) targeting a broad audience to increase the chance of obtaining a representative sample. Also, the study relies on a tried and tested format of similar surveys run globally: the Cronbach Alpha for the reliability and consistency of the survey instrument is 0.950. The work focuses on targeting Chief Financial Officers (CFOs) of listed firms in Ghana due to their role in the firm. Ghana Stock Exchange (GSE) provides a set of listed firms, which are accessible, have a strict separation between owners and managers, are heavily regulated by the Security and Exchange Commission (SEC), and have much public information to support this research.

The questionnaire design used in this study is based on Graham and Harvey (2001) and H. Baker et al. (1985). The combined survey instruments were revised considering the infant and unsophisticated state of the GSE. The process involved removing techniques such as foreign debt, rating agencies, convertible debts, and many more that were not applicable to the current Ghanaian financial market setting. Notably, Graham and Harvey's (2001) survey did not consider dividend policy questions, so we expanded their work by including some dividend policy questions that apply to the Ghanaian context from H. Baker et al. (1985), which has also been largely used globally.

The research questionnaire consists of three (3) sections. The first (1<sup>st</sup>) section focuses on gathering data on the firm characteristics of responding firms to understand how CFOs of particular firm characteristics are making their decisions. The second (2<sup>nd</sup>) section explores how CFOs apply financing decision techniques that alter their firm's capital structure under four (4) subsections. These subsections are: (1) issuing equity or common stock, (2) issuing short- and long-term debt, (3) selecting the appropriate amount of debt to use, and (4) adopting a firm's debt policy. Finally, the third (3<sup>rd</sup>) section investigates the consideration that influences the dividend policy of CFOs in practice. In all, the survey investigated 57 techniques that apply to the Ghanaian setting, out of which 45 were under financing decision and 12 related to dividend policy.

This study's sample was all listed firms on the GSE at the end of February 2019. The GSE Market Information Session Daily Report indicate forty-one (41) listed entities made-up of 33 Main Market Equities, one (1) Depository Share, one (1) Preference Share, one (1) Exchange Tradeable Fund (ETF), and five (5) Alternative Market (GAX) equities. The research targeted all the entities as they cover varying sectors of the economy. However, To avoid repetition, the depository and preference share in the sample were removed because their listing firms were already in the target sample, while ETF was not accessible and this resulted to a total target sample of 38 firms. The questionnaires were distributed to all 38 listed firms and CFOs were allowed to fill out the questionnaires on their own time. The post-administering activity mainly involved a series of follow-up visits, calls, and emails in getting the responses.

No.	Application of appropriate amount of debt techniques with respect to capital structure	% Important or very important	Total Mean	Frequency	Ranking in terms of use in practice
1	The volatility of our earnings and cash flows	58.06%	2.19	11	1st rank
2	Financial flexibility (we restrict debt so we have enough internal funds available to pursue new projects when they come along)	51.61%	2.29	9	2nd rank
3	The tax advantage of interest deductibility	51.61%	2.19	9	3rd rank
4	The transactions costs and fees for issuing debt	54.84%	2.10	8	4th rank
5	We limit debt so our customers/suppliers are not worried about our firm going out of business	45.16%	2.06	7	5th rank
6	The potential costs of bankruptcy, near- bankruptcy, or financial distress	38.71%	1.87	3	6th rank
7	Our credit rating (as assigned by rating agencies)	38.71%	1.81	2	7th rank
8	If we issue debt our competitors know that we are very unlikely to reduce our output	12.90%	1.06	2	8th rank
9	The debt levels of other firms in our industry	25.81%	1.39	1	9th rank
10	We try to have enough debt that we are not an attractive takeover target	3.23%	0.71	1	Low or no usage
11	The personal tax cost our investors face when they receive interest income	9.68%	1.03	0	Low or no usage
12	High debt ratio helps us bargain for concessions from our employees	3.23%	0.48	0	Low or no usage
13	To ensure that upper management works hard and efficiently, we issue sufficient debt to make sure that a large portion of our cash flow is committed to interest payments	3.23%	0.52	0	Low or no usage

(Continued)

No.	Application of appropriate amount of debt techniques with respect to capital structure	% Important or very important	Total Mean	Frequency	Ranking in terms of use in practice
14	we restrict our borrowing so that profits from new/future projects can be captured fully by shareholders and do not have to be paid out as interest to debtholders	19.35%	1.42	0	Low or no usage

Note: CFOs of listed firms in Ghana rated their application of an appropriate amount of debt techniques on a scale of 0 (Not Important), 1 (Slightly Important), 2 (Moderately Important), 3 (Important) and 4 (Very Important). The report shows the total mean, the sum of percentage (%) for responses 3 (Important) and 4 (Very Important), frequency and ranking per technique. See Appendix C for the build-up of the table above.

A total of 31 out of 38 firms responded, resulting in a response rate of 82%. Similar African studies include Firer et al. (2008) sent out 312 emails survey to directors of the JSE-listed companies by the cut-off date 80 responses(26%) were received, of which 24 were unusable, resulting in 46 responses and response rate of 15%. De Wet and Gossel (2016) sent out 95 email surveys to CFOs of JSE-listed companies and received 33 complete responses, translating to a response rate of 11.8%. Globally notable related studies include Graham and Harvey (2001) sampled 4,440 firms, out of which a total of 392 CFOs responded to the survey resulting in a response rate of 9%. Bancel and Mittoo (2004) targeted 720 firms with their survey and got 87 responses, representing a 12% response rate of about 14%. Strýčková (2017) targeted 2000 randomly selected companies and received 220 responses with 197 properly completed questionnaires leading to a response rate of 9.9%. This study's high response rate may be due to the comparatively small sample size and the delivery of hard copies to the firms with a series of kind reminder calls and emails.

The data from the completed questionnaires are collected and entered into SPSS software. All the firms' characteristics align with Graham and Harvey (2001) except for CEO nationality, business structure, and operating years, which extend the literature. The additional variables were to determine whether expatriate CEOs, group business structures (conglomerates) and old businesses performed differently, similar to Addico et al. (2022). All data entered into an SPSS software are primary data from the survey except for price earns ratio (PE ratio), leverage, and CEO nationality. The PE ratio data is available in the GSE Market Information Session Daily Report. The leverage and CEO nationality data are obtained from a review of the firm's 2017 audited financial statements (secondary data) provided to the GSE. The 2017 audited financial statement was used because the required information is available for all responding firms. Ethical considerations such as informed consent, confidentiality and anonymity of the respondents are all all ensured.

### 3.2. Firm characteristic subgroupings

Table 3 documents 15 firm characteristics grouped into two (2) subgroups, resulting in 30 firm characteristics subgroups to support the analysis (see, Table 3). The size by sales firm characteristics subgroups adopts the Ghana Revenue Authority's (GRA) classifications for small, medium and

No.	Application of debt policy with respect to capital structure	% Important or very importan	Total Mean	Frequency	Ranking in terms of use in practice
1	We issue debt when our recent profits (internal funds) are not sufficient to fund our activities	54.84%	2.26	10	1st rank
2	We issue debt when interest rates are particularly low	38.71%	1.77	5	2nd rank
3	We use debt when our equity is undervalued by the market	32.26%	1.35	4	3rd rank
4	Using debt gives investors a better impression of our firm's prospects than issuing stock	16.13%	1.10	0	Low or no usage
5	We delay issuing debt because of transactions costs and fees	16.13%	1.03	0	Low or no usage
6	We delay retiring debt because of recapitalisation costs and fees	6.45%	0.74	0	Low or no usage
7	Changes in the price of our common stock	6.45%	0.71	0	Low or no usage
8	We issue debt when we have accumulated substantial profits	12.90%	0.61	0	Low or no usage

Note: CFOs of listed firms in Ghana rated their application of debt policy on a scale of 0 (Not Important), 1 (Slightly Important), 2 (Moderately Important), 3 (Important) and 4 (Very Important). The report shows the total mean, the sum of percentage (%) for responses 3 (Important) and 4 (Very Important), frequency and ranking per technique. See Table A3 for the build-up of the table above

large businesses. Large firms have an annual turnover of more than GHC 5,000,000 (\$ 1,009,570.73). Medium firms have an annual turnover of more than GHC 90,000 (\$18,172.27) but less than GHC 5,000,000 (GRA, 2018). For non-growth and growth firms, the average PE ratio data for all responding firms in the GSE Market Information Session Daily Report at the end of February 2019 is 15.97. Firms with a PE ratio less or equal to 15.97 (≤15.97) are considered non-growth firms, and those above (>15.97) are considered growth firms.

No	Application of dividend payout policy techniques	% Important or very important	Total Mean	Frequency	Ranking in terms of use in practice
1	Availability of cash	87.10%	3.1	28	1st rank
2	Pattern of past dividends	61.29%	2.42	14	2nd rank
3	Dividend distributions should be viewed as a residual after financing desired investments from available earnings.	45.16%	2.03	2	3rd rank
4	The firm should strive to maintain an uninterrupted record of dividend payments.	48.39%	1.81	2	4th rank
5	Concern about maintaining or increasing stock price	38.71%	1.97	1	5th rank
6	Anticipated level of firms' future earnings	41.94%	1.81	1	6th rank
7	Dividend payout affects the price of the common stock.	32.26%	1.58	1	7th rank
8	The firm should avoid making changes in its dividend rates that might have to be reversed in a year or so	35.48%	1.71	0	Low or no usage
9	Stockholders in high tax brackets are attracted to low-dividend stocks.	6.45%	0.74	0	Low or no usage
10	Investors are basically indifferent between returns from dividends versus those from capital gains	16.13%	1.29	0	Low or no usage

(Continued)

No	Application of dividend payout policy techniques	% Important or very important	Total Mean	Frequency	Ranking in terms of use in practice
11	Capital gains expected to result from earnings retention are riskier than are dividend expectations.	12.90%	0.97	0	Low or no usage
12	A firm should have a target payout ratio and periodically adjust the payout toward the target.	41.94%	1.87	0	Low or no usage

Note: CFOs of listed firms in Ghana rated their application of dividend payout policy on a scale of 0 (Not Important), 1 (Slightly Important), 2 (Moderately Important), 3 (Important) and 4 (Very Important). The report shows the total mean, the sum of percentage (%) for responses 3 (Important) and 4 (Very Important), frequency and ranking per technique. See Table A3 for the build-up of the table above

This research uses the long-term debt-to-total-assets ratio as a proxy for leverage as it provides the percentage of a firm's assets financed with long-term debt. The average long-term debt-tototal assets ratio for all responding firms is 13%. Firms with a long-term debt-to-total-assets ratio less or equal to 13% ( $\leq$ 13%) are considered low-leverage firms, and those above are regarded as high-leverage firms (>13.19). The dividends subgroups are intuitively dividend-paying and nondividend-paying firms. On the industry level, the firm characteristics subgroupings are manufacturing and other (non-manufacturing) firms. The management ownership characteristics are grouped by considering management ownership of less than five percent ( $\leq$ 5%) as low and above five percent (>5%) as high. This study finds institutional investors of less than five percent ( $\leq$ 5%) as low and above five percent (>5%) to be high. The CEO Age firm characteristics subgroups are young CEOs ( $\leq$ 40 years) and older CEOs (> 40 years), in line with the minimum Presidential age in Ghana according to the 1992 Constitution of Ghana. The CEO tenure subgroups consist of short CEO tenure (< 4 years) and long CEO tenure(> 4 years), whiles the CEO-education level subgroupings are MBA CEOs and non-MBA CEOs. CEO Nationality is divided into firms with Ghanaian and non-Ghanaian CEOs subgroups.

The study divides the target debt ratio characteristic into firms with no targeted debt ratio and firms with some form of targeted debt ratio subgroups. The features of foreign sales are divided into firms with zero percent (0%) foreign sales and firms with some foreign sales percentage (1–100%). The business structure subgroups are single standalone firms and firms that are part of a group. In line with the life cycle theory of the firm, the research investigates the number of a firm's operating years by creating the short operating years ( $\leq$  10 years) and long operating years (>10 years) subgroups.

### 3.3. Data processing

The analysis involves coupling the firm characteristics in Table 3 to each financing and dividend policy decision technique investigated. This cross-section methodology applied has been used by authorities such as Graham and Harvey (2001), Maquieira et al. (2012), Nor et al. (2012) and Addico et al. (2022). Using SPSS software, the data was processed in the following steps:

- (1) The investigation into using capital structure and dividend policy techniques applies a Richter scale (0-4) with the following meaning: Not Important = 0, Slightly Important = 1, Moderately Important = 2, Important = 3, Very Important = 4. The analysis results include:
  - (1) Total usage per technique—the percentage sum of respondents for important and very important (4 and 3); and
  - (2) Total mean per technique—the average of all respondents on a scale of 1 to 4.
- (2) Firm characteristic subgroup analysis included:
  - (1) Firm characteristic subgroup mean value per each technique—an average of all respondents on a scale of 1 to 4. Next, all firm characteristic subgroup mean values with statistical significance differences are provided by SPSS using a two-sample t-test for equal means. For clarity, all statistical differences documented are underlined.
  - (2) Firm characteristic subgroup mean values of economic significance or high usage are assumed by this research to have a rating of 2.4 or more (60% or more (2.4/4)). This is to help standardise the definition of high usage (shaded grey).
- (3) Ranking
  - (1) Frequency is determined by tallying all firm characteristic subgroup mean values of 2.4 or more (60% or more) for each technique shaded grey.
  - (2) Ranking is done by frequencies first and then by total mean. All techniques have a frequency and a ranking to ensure a clear conclusion and interpretation of the results.

Also, see, Table A1 for summary statistics, Table A2 for Firm Characteristics Correlation Matrix and Table A3: Firm characteristic and Financing/Dividends Results Buildup.

### 4. Results and discussions

#### 4.1. Altering capital structure by common stocks issuing techniques results

This section investigates capital structure manipulation by issuing common stocks to fund the firm's activities—equity financing. The first part of the question is whether the firm has seriously considered issuing common stocks to raise financing, and the results from respondents are in Figure 1. It shows that 39% of listed firms have considered issuing stocks as a means of sourcing for additional funding; while this finding is of no relevance to the remaining majority of 61% of firms, it implies that most listed firms do not find issuing more stock on the GSE viable, and their CFOs may be oriented towards the pecking order theory—they prefer internal funds, debt before equity. This result contradicts the idea that already listed firms in Ghana's frontier market and their CFOs would be interested in issuing more common stocks as a funding source.

Awiagah and Choi (2018), using GSE data spanning 28 years (1990–2017), find a rejection of the random walk hypothesis (RWH posit that stock market prices cannot be predicted) test on a daily, weekly, monthly, and quarterly basis. This possibly implies that the GSE has a weak-form inefficient market characteristic and is not sensitive to return frequency. The implications are that listed firms with undervalued stocks would prefer other financing sources like retained earnings and debt, while investors would not purchase overvalued stocks. This may be why existing listed firms are disinterested in issuing more stocks on the GSE to alter their capital structure. In line with this argument, Graham and Harvey (2001) find that firms with undervalued common stock are reluctant to issue more (rating of 2.69, the most important equity issuing factor in their Tables 4 and 8).

Subsequently, CFOs who respond yes to the above are further questioned on the factors that influence their decisions when issuing common stock in practice. The results in Table 4 show that the most relevant technique in this section is  $1^{st}$  issuing stock to give investors a better impression of the firm's prospects than using debt ( $1^{st}$  rank, 16%, 1 out of 30 firm characteristics). The extremely low frequency of only one (1) implies that there is generally a no or low usage of all

the common stock issuing techniques investigated. The remaining results are in Table 4. Notably but not economically significant, some of Ghana's frontier market CFOs consider important and very important issuing stocks: when stocks offer a minor risky source of funds (29%), when stocks are the cheapest source of funds (23%), and when recent profits are not enough for their firm's activities (23%). These stock issuing techniques used by Ghana's frontier market CFOs skew toward signalling and putting in the effort to ensure cash availability reserve management, as CFOs may be reacting to the persistent liquidity crunch expected within their market.

On issuing equity to raise funds for the firm, we compare the top three techniques from Ghana's frontier market with results from the literature. Starting with emerging market results, Maguieira et al.'s (2012) Latin American CFOs preferred techniques are: 1<sup>st</sup> issuing stocks when it is the least risky source of funds (56%), 2<sup>nd</sup> issuing stocks to give investors a better impression of the firm's prospects than issuing debt (41%) and  $3^{rd}$  issuing stocks when it is the cheapest source of funds (33%). Nor et al.'s (2012) Malaysian CFOs preferred techniques are: 1<sup>st</sup> issuing stocks for earnings per share dilution (97%), 2<sup>nd</sup> issuing stocks when recent profits may not be sufficient to fund activities (95%) and 3<sup>rd</sup> profiting from equity undervaluation and overvaluation (92%). De Wet and Gossel's (2016) South African CFOs preferred techniques are: 1<sup>st</sup> issuing stocks for earnings per share dilution (66%), 2<sup>nd</sup> issuing stocks when recent profits may not be sufficient to fund the firm's activities (62%) and 3<sup>rd</sup> issuing stocks when working to maintain a target debt to equity ratio (62%). Notably, the only significant result similarity with this study's findings is issuing stocks to send a better impression signal to investors; ranked 1<sup>st</sup> by Ghana's frontier market CFOs but 2<sup>nd</sup> by Latin American emerging markets managers. This is plausible as emerging markets have a more vibrant financial market with relatively less business risk and hurdles than frontier markets. Thus, CFOs in emerging countries can afford to time the market (profit from the market), while frontier market CFOs may be dead focused on the pecking order theory and sending the appropriate signals to the market to maintain access to cash to ensure survival in their comparatively high business risk environment.

Another interesting argument made by Maquieira et al. (2012) that supports the generally no or low usage of all the common stock issuing techniques investigated in this study is that their result shows that over 80% of the responding firms are private firms. They document that less than 10% of the respondents have considered issuing stock meaning more firms in Latin America prefer to stay private. This finding is notable because there is a sense that firms in an emerging market may prefer to stay private, and this pattern is expected to be amplified in a frontier market like Ghana, with more firms choosing to stay private. During the data collection for this research in 2019, the GSE had existed for 28 years with only 39 listed firms, and existing listed firms may be unwilling to issue more shares. Even more insightful is the Government of Ghana's lack of interest in listing various State-Owned Enterprises that control more than 50% of the nation's assets (Ministry of Finance, 2017). This may be due to the business, legal, and governance environmental dynamics in emerging markets, which further worsen as we move towards a frontier market.

In the developed markets, Graham and Harvey's (2001) US CFOs preferred techniques are: 1<sup>st</sup> issuing stocks for earnings-per-share dilution (69%), 2<sup>nd</sup> profiting from equity undervaluation or overvaluation (67%) and 3<sup>rd</sup> issuing stocks when their stock price has recently risen, and the firm can sell it high (63%). Bancel and Mittoo's (2004) European CFOs' preferred techniques are: 1<sup>st</sup> issuing stocks for earnings per share dilution (66%), 2<sup>nd</sup> issuing stocks to maintain a target debt-to -equity ratio (59%) and 3<sup>rd</sup> issuing stocks when their stock prices have recently risen, and they can issue it high (59%). The developed market results are significantly varied from Ghana's results. This is expected as the business risk and hurdles managers face in developed markets are comparatively lower than in emerging and significantly lower than in frontier markets. The primary differentiation between the developed markets' results and both emerging market results above and this research's findings is that access to cash is not a priority to CFOs in the developed market (they focused on earnings-per-share dilution, which is signalling management). This may be because liquidity crunches may not be a major problem in a country with developed equity and

debt market. The developed markets studies above cover countries such as the USA, Austria, Belgium, Greece, Denmark, Finland, Ireland, Italy, France, Germany, Netherlands, Norway, Portugal, Spain, Switzerland, Sweden, and the UK.

#### 4.2. Altering capital structure by short and long-term debt techniques results

This section probes capital structure management and alternation by issuing short- and long-term debt to raise funding to support the firm's activities. Responding CFOs are asked what factors influence their choice between short and long-term debt in practice. The results in Table 5 show Ghana's frontier market CFOs consider important and very important issuing short and long-term debt: 1<sup>st</sup> when attempting to match the maturity of the debt with the life of the firm's assets (1<sup>st</sup> rank, 65%, 17 out of 30 firm characteristics), 2<sup>nd</sup> when short-term interest rates on the market are relatively low compared to long-term rates (2<sup>nd</sup> rank, 39%, 3 out of 30 firm characteristics) and 3<sup>rd</sup> when managing profit by borrowing short-term for future returns from new projects to be fully captured by shareholders, rather than committing to paying long-term profits as an interest to debt holders (3<sup>rd</sup> rank, 29%, 3 out of 30 firm characteristics). The remaining results are in Table 5. All the dominant short- and long-term debt techniques among Ghana's frontier market CFOs are aeared toward ensuring cash reserve maintenance in the firm for survival and ensuring the appropriate signalling to stakeholders. This supports the idea that CFOs in frontier markets, facing increased business risk and hurdles compared to both developed and emerging markets, would hold on to cash and value access to cash (in line with the pecking order and signalling theories due to the likelihood of a persistent liquidity crunch environment.

The discussion on issuing short-term and long-term debt to raise funds for the firm would involve comparing the top three techniques from Ghana's frontier market with comparable results in the literature. On emerging markets results, Maguieira et al.'s (2012) Latin American CFOs preferred techniques are: 1<sup>st</sup> matching the maturity of their debt with the average life of their assets (37%), 2<sup>nd</sup> choosing short-term debt when short-term interest rates are low in relative terms (32%) and 3<sup>rd</sup> issuing long term debt to minimise the risk of having to refinance in bad times (30%). Nor et al.'s (2012), Malaysian CFOs preferred techniques are: 1<sup>st</sup> issuing short-term debt when short-term interest rates are low compared to long-term rates (95%), 2<sup>nd</sup> matching the maturity of our debt with the life of our assets (93%) and 3<sup>rd</sup> issuing short-term when we are waiting for long-term market interest rates to decline (91%). Their result pattern suggests the influence of illiquidity associated with most emerging markets. Managers would not want to risk bankruptcy due to a lack of cash which would force the CFOs to go out to access third-party equity or debt funding. These results are similar to Ghana's frontier market results, with the expectation of Ghana's frontier market CFOs borrowing short-term for future returns from new projects to be fully captured. This is a reasonable posture in a frontier market that is more likely to experience a persistent liquidity crunch with high-interest rates: where a weak profitability signal could severely lower access to cash (debt and equity).

On issuing short-term and long-term debt to raise funds for the firm in the developed markets, Graham and Harvey's (2001) US CFOs' preferred techniques are: 1<sup>st</sup> matching the maturity of their debt with the life of their assets (63%), 2<sup>nd</sup> issuing long-term debt to minimise the risk of having to refinance in bad times (49%) and 3<sup>rd</sup> issuing short-term when short-term interest rates are low compared to long-term rates (36%). Bancel and Mittoo's (2004) European CFOs preferred technique are: 1<sup>st</sup> matching the maturity of their debt with the life of their assets (77%), 2<sup>nd</sup> issuing long-term debt to minimise the risk of having to finance in "bad times" (70%) and 3<sup>rd</sup> issuing short term when they are waiting for long term interest rate to decline (31%). De Andrés et al. (2018) Spanish CFOs' preferred techniques are: 1<sup>st</sup> matching debt maturity with assets life (rating of 2.26), 2<sup>nd</sup> when long-term debt reduces refinancing problems (rating of 2.16) and 3<sup>rd</sup> when each project has its funding policy (rating1.91).

The deviation in perspective between CFOs in Ghana and the US/Europe is issuing long-term debt to minimise the risk of refinancing in bad times. Ghana has a persistent high-interest rate;

therefore, CFOs in Ghana and most frontier markets may not find issuing long-term debt to minimise the risk of refinancing in bad times valuable. The 2020 Ghana Banking Survey documents that the average commercial bank lending rate in 2019 was 24.7%. Interest rates on short-dated Treasury bills (T-bills) remained broadly at 14.7%, while the 182-day T-bills rate increased marginally from 15.1% in September to 15.2% over the same period (PWC Ghana. (2020). Ghana Banking Survey, 2020). Comparatively, the European Central Bank (ECB) was proceeding cautiously over time, lowering the deposit facility rate (DFR) in small increments of 10 basis points until it reached -0.5% in September 2019 (Schnabel, 2020, August 26). The issue of high-interest rates persists in Ghana as the Bank of Ghana's December 2022 91-day Treasury bill interest rate (risk-free rate) is approximately 35.6% (Bank of Ghana, 2022). This implies that 35.6% risk-free rate plus a premium of 5% may result in a borrowing rate above 40%.

#### 4.3. Altering capital structure by choice of the amount of debt use techniques results

In this section, responding CFOs are asked about the factors that affect the amount of debt they apply in their respective firms. The results in Table 6 show that Ghana's frontier market CFOs consider important and very important: 1<sup>st</sup> debt amount effect on the volatility of a firm's earnings and cash flows (1<sup>st</sup> rank, 58%, 11 out of 30 firm characteristics), 2<sup>nd</sup> debt amount impact on financial flexibility (2<sup>nd</sup> rank, 52%, 9 out of 30 firm characteristics), and 3<sup>rd</sup> debt amount to when attempting to reduce taxes via the tax advantage of interest deductibility (3<sup>rd</sup> rank, 52%, 9 out of 30 firm characteristics). The remaining results are in Table 6. All the dominant techniques valuable to Ghana's frontier CFOs lean toward cash reserve maintenance as the harsh disciplinary effect of high-interest rates within their market may be restrictive. Also, sending the wrong signals via reducing earns may lower cash access from equity and debt sources. In addition, Ghana's frontier market CFOs may be using debt to reduce their taxes, which would support the maintenance of cash reserves in a liquidity crunch environment.

To highlight the appropriate amount of debt to use by firms, we compare the top three techniques in Ghana's frontier market with some notable results in the literature. Starting with the emerging market in Latin America, Maquieira et al.'s (2012) Latin American CFOs preferred techniques are: 1<sup>st</sup> amount of debt depends on internal funds insufficiency—financial flexibility (54%), 2<sup>nd</sup> amount of debt depends on the requirement needed to harness tax advantage of interest deductibility (43%), and 3<sup>rd</sup> amount of debt depends on its effects on the volatility of the firms earnings and cash flows (40%). Nor et al.'s (2012), Malaysian CFOs preferred techniques are: 1<sup>st</sup> amount of debt depends on internal funds insufficiency—financial flexibility (92%), 2<sup>nd</sup> amount of debt depends on its impact on the volatility of the firm's earnings and cash flows (92%), and 3<sup>rd</sup> amount of debt depends on the amount required when the recent firm profits (internal funds) are not sufficient to fund our activities (87%). Strýčková's (2017) indicates that Czech Republic CFOs preferred techniques are: 1<sup>st</sup> amount of debt depends on internal funds insufficiency—financial flexibility (34%), 2<sup>nd</sup> amount of debt depends on its effects on the volatility of the firm's earnings and cash flows (24%), and 3<sup>rd</sup> amount of debt depends on the transactions costs and fees for issuing debt (22%). These dominant appropriate amount of debt strategies employed by emerging market CFOs maintain cash reserves needed for survival in their relatively harsh business environment. Frontier market CFOs take the appropriate amount of debt techniques to extreme levels by focusing on the volatility of earnings and cash flows which has a signalling effect on the market. These earning signals influence access to cash resources from stakeholders such as equity and debt investors or banks needed to support business continuity.

In developed markets, Graham and Harvey's (2001) US CFOs preferred techniques are: 1<sup>st</sup> amount of debt depends on internal funds insufficiency—financial flexibility (59%), 2<sup>nd</sup> amount of debt depends on it impact on their credit rating (57%), and 3<sup>rd</sup> amount of debt depends on its effects on the volatility of their earnings and cash flows (48%). Bancel and Mittoo's (2004) European CFOs preferred techniques are: 1<sup>st</sup> amount of debt depends on internal funds insufficiency—financial flexibility (91%), 2<sup>nd</sup> amount of debt depends on the impact on the credit rating (73%), and 3<sup>rd</sup> amount of debt depends on the requirement to harness tax advantage of interest

deductibility (58%). De Andrés et al. (2018) Spanish CFOs preferred techniques are: 1<sup>st</sup> amount of debt depends on access to debt (65%), 2<sup>nd</sup> amount of debt depends on it impact on financial flexibility (57%), and 3<sup>rd</sup> amount of debt depends on the type of investment to finance (57%). The main deviation of the developed market results from both emerging and frontier market results is the irrelevancy of credit rating or agencies to CFOs in both markets. This could be due to the lower level of development associated with the equity and debt markets within those regions, resulting in CFOs focusing on banks and private investor terms and conditions.

#### 4.4. Altering capital structure by debt policy techniques result

Here, responding CFOs are asked about their firm's debt policy. The results in Table 7 show that Ghana's frontier market CFOs consider important and very important the following debt policies: 1<sup>st</sup> issuing debt when their firm's recent profits (internal funds) are not sufficient to fund their activities (1<sup>st</sup> rank, 55%, 10 out of 30 firm characteristics), 2<sup>nd</sup> issuing of debt when interest rates are relatively low (2<sup>nd</sup> rank, 39%, 5 out of 30 firm characteristics), and 3<sup>rd</sup> issuing of debt when their equity is undervalued by the market (3<sup>rd</sup> rank, 32%, 4 out of 30 firm characteristics). The remaining results are in Table 7. The finding indicates that Ghana's frontier market CFOs would only attempt to raise funds when retained earnings are low in line with peck order theory and also attempt to take advantage of the market. All these debt policies lean towards ensuring cash availability for survival in a liquidity-crunch environment. On issuing debt for signalling purposes: notably, only 16% of Ghana's frontier market CFOs consider it important and very important to issue debt, giving investors a better impression of their firm's prospects rather than issuing stock (not relevant to frontier market CFOs). In summary, CFOs in frontier markets appreciate the expected persistent increase in risk and hurdles and instinctively hold on to cash and harness the market rather than sending signals with debt positions.

To explore the debt policy of firms, we compare the top three techniques in Ghana's frontier market with similar results in the literature. Maquieira et al.'s (2012) Latin American CFOs' preferred techniques are: 1<sup>st</sup> restricting their borrowing so that profits are not committed to interest payments (39%), 2<sup>nd</sup> looking for instruments less subject to information asymmetries implying a preference for retained earnings, debt, and equity in descending order (34%), and 3<sup>rd</sup> limiting debt, so their customers' suppliers are not worried about their firm going out of business (20%). Strýčková (2017) Czech Republic CFOs' preferred techniques are: 1<sup>st</sup> issuing of debt when their recent profits (internal funds) are not sufficient to fund their activities (59%), 2<sup>nd</sup> issuing debt when interest rates are particularly low (14%), and 3<sup>rd</sup> delaying issuing debt because of transactions costs and fees (11%). These adopted techniques depend on the pecking order and signalling theories which are crucial for cash reserve maintenance and access needed to avoid bankruptcy situation in a liquidity crunch market environment.

In the developed markets, Graham and Harvey (2001) US CFOs' preferred techniques are: 1<sup>st</sup> issuing debt when their recent profit or internal funds are not sufficient to fund their activities (47%), 2<sup>nd</sup> issuing debt when interest rates are particularly low (46%) and 3<sup>rd</sup> issuing debt when their equity is undervalued by the market (31%). Bancel and Mittoo (2004) European CFOs' preferred techniques are: 1<sup>st</sup> issuing debt to minimise the weighted average cost of capital (70%), 2<sup>nd</sup> issuing debt when interests are low (45%) and 3<sup>rd</sup> issuing debt when their equity is undervalued by the market (at (2018) Spanish CFOs' preferred techniques are: 1<sup>st</sup> issuing debt when there are no other sources (rating of 2.39), 2<sup>nd</sup> issuing debt when they have better collaterals (rating of 1.28), and 3<sup>rd</sup> issuing debt when they have good relationships with banks (rating of 1.20). The results from various developed market studies above indicate the cautious use of debt by developed markets' CFOs, which the general disciplinary effect of debt could explain.

### 4.5. Application of dividend policy techniques results

This section focuses on the use of dividend policy decision techniques by CFOs of listed firms in Ghana. The first part investigates whether Ghana's frontier market CFOs pay dividends or not.

Figure 2 below shows the results, with a majority of 87% of listed firms paying dividends, while 13% do not pay dividends.

In gathering the data, responding CFOs who respond yes to the above are further questioned on the factors influencing their dividend payout decision. The results in Table 8 show that Ghana's frontier market CFOs consider important and very important the following dividend policy techniques before declaring dividends: 1<sup>st</sup> confirming cash availability (1<sup>st</sup> rank, 87%, 28 out of 28 firm characteristics), 2<sup>nd</sup> considering the pattern of past dividends (2<sup>nd</sup> rank, 61.29%, 14 out of 28 firm characteristics) and 3<sup>rd</sup> promoting the idea dividend distributions should be viewed as a residual after financing desired investments from available earnings. (3<sup>rd</sup> rank, 45%, 2 out of 28 firm characteristics). The remaining results are in Table 8. The 1<sup>st</sup> and 3<sup>rd</sup> rank results align with the view that the expected high level of liquidity crunch in a frontier market would force CFOs to focus on cash availability and reserve maintenance (short-term cash-focused). Also, the 2<sup>nd</sup> rank techniques focus on ensuring that the firm generates and maintains the proper signalling to maintain and enhance investor and other stakeholder perception and confidence needed to support access to cash from equity and debt sources.

The discussion of dividend policy would involve comparing the top three techniques in Ghana's frontier market with similar results in the literature. In the emerging market, Baker et al.'s (2012) study on the Indonesian Stock Exchange (IDX) found CFOs' preferred techniques are: 1<sup>st</sup> determining the stability of earnings (2.67), 2<sup>nd</sup> determining the level of current earnings (2.62), and 3<sup>rd</sup> determining the stability of earnings (2.58). Baker et al. (2015) NSE Indian CFOs' preferred techniques are 1<sup>st</sup> determining the stability of earnings (2.62), and 3<sup>rd</sup> considering the pattern of past dividends (2.49). Baker and Jabbouri (2016) Moroccan CFOs' preferred techniques are 1<sup>st</sup>, the level of current earnings (2.66), 2<sup>nd</sup> the stability of earnings (2.54) and 3<sup>rd</sup> the needs of current shareholders, such as the desire for current income (2.41). Baker et al. (2019) Sri Lankan CFOs' preferred techniques are 1<sup>st</sup> Past dividends (4.22), 2<sup>nd</sup> Profitability (4.12) and 3<sup>rd</sup> investment opportunities (4.04).

The notable deviation from the Indonesian, Indian, Morocco and Sri Lankan emerging market results from Ghana's frontier market results is that the availability of cash is ranked first (1<sup>st</sup>) in Ghana but is ranked 3<sup>rd</sup> in for results in Indonesia, 5<sup>th</sup> in India, 10<sup>th</sup> in Morocco and 10<sup>th</sup> in Sri Lanka. This further confirms that CFOs in the frontier markets are focusing on cash availability and reverse maintenance (short-term cash-focused) in response to the expected persistent high liquidity crunch environment. In Africa, Baker and Jabbouri's (2016) Moroccan Casablanca Stock Exchange (CSE) CFOs consider important and very important liquidity constraints such as the availability of cash (2.00) as the 10<sup>th</sup> factor to take into consideration when deciding on dividend policy. This further support the notion that frontier market CFOs may be short-term cash focused on ensuring survival in a persistent liquidity crunch environment.

In the developed markets, H. Baker et al. (1985) US CFOs preferred techniques are: 1<sup>st</sup> anticipated level of a firm's future earnings (overall mean of 3.18), 2<sup>nd</sup> the pattern of past dividends (overall mean of 2.84) and 3<sup>rd</sup> the availability of cash(overall mean of 2.49). Baker and Powell (2000) US CFOs' preferred techniques are: 1<sup>st</sup> the current and expected future earnings (2.72), 2<sup>nd</sup> the pattern or continuity of past dividends (2.33) and 3<sup>rd</sup> concerns about maintaining or increasing stock price (2.18). Baker et al. (2007) Canadian TSX-listed firms' CFO's preferred techniques are 1<sup>st</sup> level of expected future earnings (2.60), 2<sup>nd</sup> Stability of earnings (2.54) and 3<sup>rd</sup> pattern of past dividends (2.35). The most important dividend policy factor from H. Baker et al. (1985) and Baker and Powell's (2000) and Baker et al. (2007) results is the anticipated level of a firm's future earnings, which can be categorised as signalling concern. A change in dividend has huge signalling information for investors that managers are cautious of sudden changes in dividends. Meanwhile, for this research, Ghana's frontier market CFOs consider the availability of cash as the supreme factor by far. The deviation is likely to result from the varying cash or liquidity access levels between developed and frontier markets. For example, in Ghana, the Bank of Ghana's

December 2022 91-day Treasury bill interest rate (risk-free rate) is approximately 35.6% (Bank of Ghana, 2022), implying debt investors would seek interest rates possibly above 40% and cost of equity would even be higher. CFOs are likely to evolve to be short-term cash focus using the pecking order theory and management of signalling information as their guide.

### 5. Conclusion

This research investigates how CFOs in a frontier market make their financing and dividend policy decisions in practice with a survey approach using listed firms in Ghana as a sample. The notion is that the financing mix affects the discount rate, cash reserves due to interest, and principal payment. In addition, dividend payout leads to a cash outflow, diminishing cash reserves. This research assumes that the comparatively higher business risk and hurdles expected in frontier markets, particularly persistent liquidity crunch, would force CFOs to be short-term cash focused compared to CFOs in developed and emerging markets. The study developed descriptive documentation of Ghana's financing and dividend policy techniques in practice. Thus, serves as a baseline to support the identification of gaps that would help improve managerial decisions in similar frontier markets.

Specifically, the study objectives were to investigate how managers alter their capital structure by (1) issuing equity or common stock, (2) issuing short- and long-term debt funding, (3) selecting the amount of debt to use, and (4) adopting a firm's debt policy. Lastly, the work investigates (5) how managers make dividend policy decisions in the frontier market setting. The study used survey data from thirty-one (31) out of a targeted sample of thirty-eight (38) firms on the GSE, resulting in a response rate of 81.60%. The data is processed using SPSS software to generate the total mean, category percentages, and firm characteristic mean values with statistical significance (two-sample t-test for equal means). Each technique is associated with a frequency and rank, ensuring clarity in interpretations.

On managing capital structure by issuing stock to raise funds for the firm, Ghana's CFOs show that 39% of listed firms have considered issuing stock, whiles 61% of firms are not interested in issuing more stocks on the GSE. The implication is that CFOs do not find issuing more stock on the GSE viable and may have adopted the pecking order theory. Furthermore, this means CFOs prefer internal funds, and debt, before equity. This finding aligns with Awiagah and Choi (2018), who suggest that the GSE has a weak-form inefficient characteristic and is not sensitive to return frequency. The consequences are that CFOs with undervalued stocks would prefer other financing sources like retained earnings and debt, while investors shun overvalued stocks. In addition, all stock issuing techniques used in managing and altering capital structure show low or no usage (which is less than 60% of respondents), except issuing stock to give investors a better impression of the firm's prospects than using debt (1<sup>st</sup> rank, 1 out of 30 firm characteristics). This implies that CFOs of listed firms on the secondary market are notably more likely to exploit internal resources and debt options. This result is plausible as frontier markets are likely to have underdeveloped equity and debt markets.

In altering the capital structure by issuing short and long-term debt, CFOs show that matching the maturity of their debt with the life of their assets is the first (1<sup>st</sup>) ranked technique with a frequency of 17 out of 30 firm characteristics. The second (2<sup>nd</sup>) ranked goes to issuing short-term debt when short-term interest rates are low compared to long-term rates with a frequency of 3 out of 30 firm characteristics. The third (3<sup>rd</sup>) ranked technique involves borrowing for the short-term so that returns from new projects can be fully captured by shareholders, rather than committing to paying long-term profits as an interest to debt holders with a frequency of 3 out of 30 firm characteristics. The perspectives of emerging and Ghana's frontier market CFOs are similar, with the expectation of Ghana's frontier market CFOs borrowing short-term for future returns from new projects to be fully captured, possibly to signal strength to stakeholders. Also, this posture is reasonable as frontier markets are likely to experience a persistent liquidity crunch with high-interest rates. However, the deviation in perspective between CFOs in Ghana and the US/Europe

(the developed markets) is issuing long-term debt to minimise refinancing risk in bad times. This could be explained by the persistent high interest experienced by CFOs in Ghana and most frontier markets. Interestingly, the Bank of Ghana's December 2022 91-day Treasury bill interest rate (risk-free rate) is approximately 35.6% (Bank of Ghana, 2022), implying a higher cost of debt and an even higher cost of equity. Therefore, refinancing in bad times is not an issue because bad times (high-interest rates) may be persistent in frontier markets—no need to use it as a technique.

In deciding on the appropriate amount of debt to use, Ghana's frontier market CFOs consider important and very important: the impact on the volatility of their firms' earnings and cash flows (rank 1<sup>st</sup>) with a frequency of 17 out of 30 firm characteristics, the impact on their financial flexibility (rank 2<sup>nd</sup>) with a frequency of 9 out of 30 firm characteristics, and the impact of the transaction costs and fees for issuing debt (rank 3<sup>rd</sup>) with a frequency of 9 out of 30 firm characteristics. The result shows an alignment as the dominant techniques for both emerging and Ghana's frontier market CFOs lean toward cash reserve maintenance—the pecking order theory. The CFOs are aware of the harsh discipline effect of high-interest rates within their market and its impact on financial flexibility. However, CFOs in developed markets are concerned about the impact of the amount of debt they use on their credit rating, which is a deviation that may be due to the structure of their well-developed equity and debt market. Emerging and frontier market CFOs are not very concerned about credit rating in their market setting.

On debt policy Ghana's frontier market CFOs consider important and very important: issuing debt when the firm's recent profits (internal funds) are not sufficient to fund the firm's activities (rank 1<sup>st</sup>) with a frequency of 10 out of 30 firm characteristics, issuing debt when interest rates are relatively low (rank 2<sup>nd</sup>) with a frequency of 5 out of 30 firm characteristics and issuing debt when the market undervalues the firm's equity (rank 3<sup>rd</sup>) with a frequency of 4 out of 30 firm characteristics. Globally the results show a cautious use of debt by CFOs in all markets due to the disciplinary effect of debt. However, CFOs of emerging and frontier markets seem to be oriented toward a debt policy that minimises the impact of debt on cash reserves—only issuing debt with internal funds is insufficient. On the contrary, CFOs of developed markets issue debt when interest rates are low to harness the market.

Before a dividend payout decision, Ghana's frontier market CFOs consider it important and very important: confirming cash availability (rank 1<sup>st</sup>) with a frequency of 28 out of 28 firm characteristics, determining the pattern of past dividends (rank 2<sup>nd</sup>) with a frequency of 14 out of 28 firm characteristics, and promoting the idea that dividend distributions should be viewed as a residual after financing desired investments from available earnings (rank 3<sup>rd</sup>) with a frequency of 2 out of 28 firm characteristics. This result shows that Ghana's frontier market CFOs consider the availability of cash as the supreme dividend policy consideration (short-term cash focused), deviating from the results from both developed and emerging markets. Their reasoning is likely due to the expected high liquidity challenges within Ghana's frontier market and aligns with the pecking order and signalling theories.

This study's result supports the notion that CFOs in frontier markets are likely to be short-term cash focused, which ensures cash availability and reserves needed to ensure survival in a comparatively high liquidity crunch market environment. The work contributes to the literature on frontier markets and Ghana by describing how CFOs apply various financing and dividend policy techniques in practice. For practising managers and entrepreneurs in frontier markets, being short-term cash focuses may support your firm with the cash needed to survive periods of liquidity crunch. In addition, a good cash position may also send value-adding signals to the market, which could increase access to debt and equity investors. For frontier market policymakers working to reduce the risk and hurdles inherent in their market would move their country to emerging-market status. This would reduce the need for short-term cash focus perspectives while supporting long-term value-adding projects that create incremental value for the firm, government, and world. This study would also support further studies aimed at identifying how frontier market CFOs approach

financing and dividend decisions. For Africa, with many high-risk markets, the study could help CFOs across the continent improve upon their managerial decisions to support firm value maximisation, economic growth, and the collective development of the continent into a global powerhouse as envisioned by the African Union Agenda 2063 (African Union, 2021). We recommend rerunning this study across West Africa or Africa like Maquieira et al.s (2012) work in Latin America. We believe this would provide more depth and breadth to this knowledge for both frontier and African markets.

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#### Data availability statement

The datasets generated and analysed during the current study are not publicly available due to firm-specific nature of the data but are available from the corresponding author on reasonable request.

#### Supplementary material

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