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Dividend smoothing when firms distribute most of their earnings as dividends

K. H. Al-Yahyaee^{a,*}, T. M. Pham^b and T. S. Walter^c

^aDepartment of Economics and Finance, College of Commerce and Economics, Sultan Qaboos University, Muscat, Sultanate of Oman ^bSchool of Banking and Finance, Australian School of Business, University of New South Wales, Sydney, Australia ^cSchool of Finance and Economics, University of Technology Sydney, Sydney, Australia

Due to its distinctive institutional background, Oman offers a valuable opportunity to investigate the stability of the dividend policy. In Oman, (1) there are no taxes on dividends, (2) firms are highly levered mainly through bank loans, (3) there is a high concentration of stock ownership and (4) there is variability in cash dividend payments. These factors suggest a diminished role of dividend smoothing in Oman. Our results show that Omani financial firms have erratic dividend policies. These results are inconsistent with the predictions suggested by the relatively weak corporate governance, government ownership and dividend signalling.

Keywords: dividend smoothing; taxes; bank debt; government ownership

JEL Classification: G35

I. Introduction

It is well documented that firms in the US smooth their dividends. In a well-cited study, Lintner (1956) shows that US companies have stable dividend policies. He finds that managers are reluctant to raise (cut) dividends immediately following an increase (decrease) in earnings. Hence, changes in dividends appear to lag changes in earnings by a number of periods. Subsequent research by Fama and Babiak (1968), Brav *et al.* (2005) and Aivazian *et al.* (2006) confirm Lintner's original findings. Using data from the UK, Michaely and Roberts (2007) report that dividend smoothing is more pronounced in public firms relative to private firms where potential agency issues and information asymmetries are more pronounced. More recently, Leary and Michaely (2009) find that dividend smoothing has been increasing over the past 50 years, suggesting that managers are more concerned about dividend smoothing today.

The majority of these studies are conducted using US data.¹ One natural question is whether these dividend effects are peculiar to the US or if they are also prominent in countries where the tax regime and/ or institutional and economic characteristics are

*Corresponding author. E-mail: yahyai@squ.edu.om

¹Al-Yahyaee *et al.* (2010) examined the stability of dividend policy using a large sample of Omani nonfinancial firms. They find that Omani nonfinancial firms adopt a policy of smoothing dividends.

significantly different. The purpose of this article is to examine whether Omani financial firms smooth their dividends by applying the Lintner's partial adjustment model. We also examine whether Omani financial firms have a long-term target payout ratio.

The financial sector plays a crucial role in economic development in Oman. The contribution of the financial sector to the Gross Domestic Product occupies second place after oil and gas. The importance of the financial sector can also be seen from its representation in the stock market which represents 51% of market capitalization in 2008. The financial sector has the highest liquidity with the highest number of shares traded in the Muscat Securities Market (MSM). The sector accounts for 59% of shares traded and 45% of total profits of MSM-listed firms in 2008.

Several important economic and institutional features make Oman a unique and interesting environment in which to examine the stability of dividend policy. There are reasons that may suggest Omani financial firms may adopt a smoothing dividend policy and there are other reasons that may suggest otherwise. First, Omani firms pay a large proportion of their earnings through dividends. This is very different from the western countries which are known to distribute moderate dividends. Omani investor's attitude towards dividends may contribute to the higher payout ratio. Most investors in Oman consider dividends as the principal component of stock returns (Al-Yahyaee, 2006).

Second, there are no taxes on dividends in Oman. This is very different from Western countries which have been traditionally taxing dividends at a higher rate than capital gains. The absence of taxes in Oman may have an impact on dividend stability. Rozycki (1997) shows that personal income taxes provide managers with a motivation to smooth the dividend payments. He provides evidence that dividend smoothing has increased the wealth for a tax paying investor by reducing the present value of the investor's future expected income tax liabilities. Consequently, the absence of personal income taxes is expected to reduce the importance of dividend stability in Oman.

Third, Omani companies rely heavily on bank financing (Al-Yahyaee, 2006). Aivazian et al. (2003a) suggest that bank debt reduce the moral hazard problem and the agency problem.² Aivazian et al. (2003b, 2006) argue that dividend stability should be less important in bank centric countries like Oman because bank debt reduces the value of agency reduction roles typically fulfilled by dividend payments. Dewenter and Warther (1998) also suggest that dividend stability may not be important for companies that rely on bank debt due to bank monitoring. Hence, the reliance of Omani firms on bank debt financing implies that dividend stability may not be important for Omani firms.

However, there are reasons that may suggest that banks in Oman may be relatively ineffective in monitoring. Saidi and Kumar (2008) suggest that corporate governance in Oman is relatively weak. They demonstrate that banks in Arab Gulf Cooperation Council (GCC) countries including Oman play limited role in scrutinizing corporate governance practices of borrowers.³ Saidi and Kumar (2008) indicate that there is a relatively weaker institutional characteristic in the GCC countries including Oman in terms of disclosure and transparency requirements, creditor rights, enforcement of contracts, regulations, oversight and minority shareholder rights. Mohamed et al. (2009) find that many Omani firms do not comply with the Code of Corporate Governance.⁴ They observe that the implementation, monitoring and enforcement aspects of the corporate governance regulatory regime are still at a nascent stage.⁵ La Porta et al. (1998) claim that the lack of transparency, inadequate legal infrastructure and weak investment protection in emerging markets all enhance the role of dividends as a reputation mechanism. In this case, and even with the close banking relations and closely held nature of firms, dividend payment is extremely important to attract capital (Aivazian et al., 2003b). The relatively weak institutional variables and the relative noncompliance with corporate governance codes may reduce the effectiveness of banks in monitoring firms. This may suggest that the impact of bank-centricity on dividend stability may be relatively ineffective in Oman. The relatively weak governance practices in

² See Aivazian et al. (2003a) for a discussion on the role of bank debt in reducing the agency cost. Fleming et al. (2005) also provide a discussion of the benefits of debt financing in alleviating the agency problem.

³Gulf Cooperation Council (GCC) countries include United Arab Emirates, Kuwait, Oman, Saudi Arabia, Qatar and Bahrain.

⁴ The Capital Market Authority (CMA) in June 2002, published its Corporate Governance Code (Circular No. 11/2002), which was later amended and replaced by Circular No. 1/2003 of April 2003. The Code requires all listed companies to publish a section on corporate governance in their annual financial statements. This Code is not as elaborate as corporate governance regimes in western countries (Mohamed *et al.*, 2009). ⁵ See Mohamed *et al.* (2009) for a detailed description of Corporate Governance in Oman.

Oman may induce firms to pay out more dividends to offset the weak monitoring through corporate governance mechanism. John and Knyazeva (2008) claim that firms will use payout policy to mitigate the agency conflict due to poor governance. They argue that poor corporate governance exacerbates the agency costs of free cash flow. Hence, a higher level of dividends is necessary to impose a constraint on the manager. Consistent with their proposition, John and Knyazeva (2008) find that firms with weak corporate governance are more likely to pay higher dividends. Similarly, Knyazeva (2008) shows that weakly governed managers engage in more dividend smoothing and pay high dividends.

Fourth, Omani firms are owned by a small number of investors who have controlling interests. Al-Yahyaee et al. (2011) show that the average ownership of MSM-listed firms by shareholders who own at least 10% of the issued capital is 52%. A significant part of this ownership belongs to the government. In fact, Al-Yahyaee (2006) shows that government ownership is a significant factor that affects dividend policy in Oman. Government-controlled firms are expected to suffer most from agency problem as they are ultimately owned by the citizens (Gugler, 2003). As most citizens are only indirect shareholders of government-controlled firms, they have few incentives to monitor the management. Consequently, the managers of government-controlled firms will prefer a stable dividend policy with high dividends to keep their principals happy. Gugler (2003) examines the potential impact of a range of different types of shareholders on dividends for a sample of Austrian firms and report evidence that government-controlled firms have the highest dividend payout and practice dividend smoothing. Hence, the higher dividend payout and the stability of dividends in Oman may be the consequence of corporate control. The high government ownership in Oman implies that the potential agency problem is likely to be high due to the few incentives of the shareholders (government) to monitor the management. Consequently, dividends in Oman may serve as a corporate governance device bonding managers to generate sufficient cash flow to honour the precommitted level of dividends. Therefore, firms in Oman are more likely to pay high dividends and follow stable dividend policies.

Fifth, Omani firms appear to use dividends to signal their future prospectus (Al-Yahyaee *et al.*, 2011). The dividend signaling theory is based on the belief that investors prefer stable dividend over the years and firms are reluctant to cut dividends. John and Williams (1985) show that, in equilibrium, the optimal dividend policy is to pay smoothed dividends

relative to stock prices. Their model implies that when dividends are used as a signalling mechanism firms are expected to smooth their dividends. In a similar vein, Guttman et al. (2008) show that dividend smoothing can arise from a coarse signalling equilibrium in a setting where managers have private information about firm value. Al-Yahyaee et al. (2011) find that Omani firms use dividends to signal their future prospects. Dividends are smoothed with respect to earnings to be a credible signal (Jeong, 2008). This may suggest that Omani firms use dividends as a signal to convey their private information to outsiders. Hence, Omani firms are more likely to smooth their dividends to strengthen the credibility of dividends as a signal of firm's future prospects.

Finally, a feature of Omani MSM-listed firms is their variability in cash dividend payments. The majority of Omani firms change their dividends almost every year. This practice contrasts with patterns observed in the US and other developed countries, where most stocks experience relatively few changes in their dividends. In fact, Aharony and Swary (1980) find that about 87% of sampled firms had no change in quarterly dividend payments in the US during the period January 1963 to December 1976. In the data sampled by Bajaj and Vijh (1995), more than 80% of announcements made between July 1962 and June 1987 involve no change in dividends. More recently, Hallock and Mashavekhi (2006) find that 80% of firms do not change their dividends in the US during the period 1970 to 2000. The variability of dividends may suggest a diminished role of dividend stability in Oman.

Whether or not dividends are stable in Oman is an empirical question. While studies in developed markets show that firms smooth dividends, the picture is less clear in Oman. On the one hand, the relatively weak corporate governance, government ownership and dividend signalling all suggest that firms may have stable dividend policies. On the other hand, high bank leverage, the absence of taxes and the variability in cash dividend payments may suggest that firms may have unstable dividend policies. Whether the net effect of these factors on dividend stability is positive or negative is an empirical issue.

Our research provides a number of interesting results on stability of dividend policy. First, we find that Omani financial firms have unstable dividend policies. This instability of dividends support the predictions suggested by the high bank leverage, absence of taxes and the variability of dividend payments in Oman. Second, our evidence shows that Omani financial firms are not reluctant to cut dividends. Third, we find that financial firms do have a target dividend payout ratio that they move quickly towards. These results contradict those reported by Al-Yahyaee *et al.* (2010) who find that Omani nonfinancial firms have stable dividend policies. They also show that Omani nonfinancial firms have a target payout ratio of around 0.70 which is much higher than the 0.57 reported in this article for financial firms.

In general, our results stand in sharp contrast to the evidence reported using US data where firms adopt a policy of smoothing dividends and are reluctant to cut them. These results suggest that the institutional and economic environment play an important role in determining the smoothing behaviour of firms. Our findings show that there are differences in dividend policies between the Omani companies and those in developed markets. Consequently, potential investors in the Omani market should be aware about these differences in making their investment decisions. This study also highlights the need for further research in order to examine whether these results have any effect on dividend initiations and omissions in Oman.

The remainder of this article proceeds as follows. Section II describes the Lintner model. Section III describes the institutional aspects of the Omani stock market. Section IV describes the data and presents summary statistics for the payment of dividends, and reports some descriptive statistics for the sample. In Section V we examine the stability of dividends using the Lintner model. Section VI concludes this article.

II. The Lintner Model

In a frequently cited study, Lintner (1956) develops a quantitative model to test for the stability of dividend policy where he hypothesizes the following relationship between dividends and earnings:

$$D_t^* = rE_t \tag{1}$$

where D_t^* is the target level of dividends for any year t, r the target payout ratio and E_t the firm's net earnings in year t. In addition, Lintner (1956) also predicts that a firm will only partially adjust to the target dividend level in any given year, so the change in dividend payments from year t-1 to year t is given by

$$D_t - D_{t-1} = \alpha + c(D_t^* - D_{t-1}) + u_t$$
(2)

where α is the intercept term, c the speed of adjustment coefficient, u the error term, D_t^* the target dividend payment in period t, D_t the actual

dividend payment in period t and D_{t-1} the actual dividend payments in period t-1.

Substituting rE_t for the target dividend payment (D_t^*) in Equation 2, we arrive at the following model,

$$D_t - D_{t-1} = \alpha + \beta_1 E_t + \beta_2 D_{t-1} + u_t$$
(3)

where $\beta_1 = cr$ and $\beta_2 = -c$.

The constant term (α) is expected to have a positive sign 'to reflect the greater reluctance to reduce than to raise dividends' Lintner (1956, p. 107). The speed of adjustment coefficient (c) reflects that stability of dividends and measures the speed of adjustment toward the target payout ratio (r) in response to earnings changes. The value c reflects the dividend smoothing behaviour of firms to changes in the level of earnings. A higher value of c indicates less dividend smoothing and vice versa. Thus, a conservative firm will have a lower adjustment rate, while a less conservative firm will have a higher adjustment rate. As shown by Lintner, Equation 3 can be rewritten as

$$D_t = \alpha + crE_t + (1 - c)D_{(t-1)} + u_t \tag{4}$$

This model implies that firms set their dividends in accordance with current level of earnings, and that changes in dividends do not correspond exactly with the changes in earnings.

To test whether dividend policy in Oman is stable, we follow Fama and Babiak (1968) and use earnings per share (EPS) and dividends per share (DPS) rather than total earnings as follows:

$$DPS_t = \alpha + \beta_1 DPS_{t-1} + \beta_2 EPS_t + u_t \tag{5}$$

where DPS_t is the dividend per share for period t, EPS_t the earning per share for period t and u the error term. Fama and Babiak argue that per share data are more appropriate for this test than the aggregate data used by Lintner. Indeed, almost all studies conducted since Lintner's study employ per share data rather than aggregate data. This model has been used by many scholars to examine the stability of dividends such as Brittain (1964, 1966), Fama and Babiak (1968), Fama (1974), Dewenter and Warther (1998), Adaoglu (2000), Aivazian *et al.* (2003a), Omet (2004), Naceur *et al.* (2006), Michaely and Roberts (2007), Leary and Michaely (2009), among others.

III. Oman Stock Market: Institutional Aspects

Trading rules and practices

Oman is a small free market economy with a stable social, political and economic system, low taxation

rates, steady economic growth, low inflation, a manageable level of external debt, fairly liberal investment laws, a sustainable level of budget deficit and no controls over capital movements. In Oman, firms are subject to market economy discipline that is comparable to Western firms.⁶

Trading in the MSM was computerized in 1997. MSM is a pure auction market where trades are facilitated through brokerage firms. It is very different from the NYSE in that there are no specialists or market makers. Trading in the market is conducted by stockbrokers, who cannot trade on their own account, which means that they have no role in setting cum- and ex-day prices. Orders are initiated from brokerage firms via computer terminals in their offices or on the exchange floor. Brokerage firms match buy and sell orders. Investors intending to buy or sell stocks execute their transactions through these brokerage firms that charge them a commission or transaction fees. The minimum fee that can be charged by a brokerage firm is 0.4% and the maximum is 0.75% (0.015% of the fee is revenue for the MSM).

As Oman is a petroleum-producing country, taxes play a minor role in generating income for the economy (Al-Yahyaee *et al.*, 2008). As a result, shareholders are not subject to any taxes on dividends. Likewise, there are no taxes on capital gains. The only taxes are the 12% flat tax rate on corporate income. This makes the tax system in Oman one of the simplest in the world.

Dividends

Firms listed at the MSM distribute dividends in two forms namely, cash dividends and stock dividends. Paying dividends in one form or another is not compulsory. If the board of directors proposes to distribute dividends, the details must be published in the daily newspapers. The proposed dividend is subject to the final approval of shareholders at the Annual General Meeting (AGM). Generally, most dividend propositions are accepted at the AGM as the board of directors usually represents the majority of the share capital. The date when the AGM is held is the record date. Investors whose names are recorded as stockholders on this date are entitled to receive the declared dividend. The following date is the ex-dividend date. Firms usually pay dividends once a year. Some firms complement their cash dividends with stock dividends.

IV. Data

The data for this study are obtained from 'Share-Holding Guide of MSM Listed Companies' published by the MSM. As the data were available in hard copy only, the first task was to input the data into a computer database. The data set comprise all publicly traded financial firms listed at the MSM.

These data are time-series cross-sectional variables which are collected over the entire life of the MSM from 1989 to 2004. We check the accuracy of the data by comparing the figures from the MSM Guide with the data from the firm's financial statements available on the internet, where possible.

The empirical literature on stability dividend policy has largely ignored firms that do not pay dividends. If value-maximizing firms choose not to pay dividends, a sample that contains only dividend paying firms will be subject to a selection bias. An econometric analysis of such a sample will yield biased and inconsistent estimates. To address this selection bias, we use both dividend-paying and nondividend paying firms. In this vein, Kim and Maddala (1992) demonstrate that it is important to allow for zero observations on dividends in the estimation of models of dividend behaviour. Likewise, Deshmukh (2003, p. 353) states 'If firms find it optimal to not pay dividends, then their exclusion from any empirical analysis may create a selection bias in the sample, resulting in biased and inconsistent estimates of the underlying parameters'.⁷

Estimation model

We examine the stability of dividend behaviour in Oman using the Lintner model. Since there are some firms in Oman that do not pay dividends, this creates a censoring problem which needs to be addressed in estimating the Lintner model. In this case, previous research suggested the use of the Tobit model (Anderson, 1986; Kim and Maddala, 1992; Huang, 2001a, b). We use a Tobit model to test the stability of dividends in Oman.⁸

⁶See Al-Yahyaee (2006) for details on this issue.

⁷ For further information on this issue, see Anderson (1986) and Kim and Maddala (1992).

⁸As a robustness check, we also use a random effects Tobit regression. The Tobit and random effects Tobit results are very similar to those reported using Tobit regressions.

Payment of dividends

Omani firms tend to attract investors by distributing large dividends (Al-Yahyaee, 2006). Most of the profitable Omani firms distribute dividends as a means of rewarding investors for holding their securities. Stock repurchase is a rare phenomena in Oman, however some firms supplement their cash dividends distributions with stock dividends.

In Oman, most profitable companies distribute a high proportion of their profits through cash dividends. This led the Capital Market Authority (CMA) to issue a circular (number 12) that requires firms to have a clear policy of dividends and to disclose it in their financial reports. With this regard, the circular states that

"...studies have shown that the majority of Omani public joint stock companies currently operate with a dividend cover of 100% of its available profits assigned to dividends... We are all required to set out a clear cut dividend policy with a view to the long term expansion of the company by striking the right mix to meet both good housekeeping practice (retention of some earnings appropriate to the economic conditions) and the understandable desire of shareholders for immediate returns. CMA calls upon public joint stock companies to adopt prudent policies in cash dividends and to disclose the same in the annual report of the board of directors attached to the financial statements'.

As with other Arab countries, Omani investors seem to prefer to receive periodic income in the form of dividends (Bolbol and Omran, 2004). For the entire sample, Panel A of Table 1 shows that the average payout ratio is around 41%. When the zero dividend observations are removed, the average payout ratio increases to 78% (Panel B). This is much higher than the payout ratio reported by Fazzari *et al.* (1988), Kaplan and Zingales (1997) and Aivazian *et al.* (2006) samples of US firms. It is also higher than 23.3% reported by Chen and Dhiensiri (2009) for New Zealand.

V. Empirical Results

The results presented in Table 2 show that both the coefficients on lagged *DPS* and *EPS* are statistically significant with a positive sign. But the generally

 Table 1. Dividend payout ratio for Omani financial firms

 over the period 1989 to 2004

Year	Mean (%)	SD (%)
Panel A: All firms		
1989	47	30
1990	94	279
1991	49	47
1992	32	39
1993	46	35
1994	45	34
1995	49	49
1996	37	35
1997	19	30
1998	20	31
1999	25	59
2000	24	49
2001	15	30
2002	33	52
2003	60	142
2004	58	139
Overall period	41	67
Observations	437	
Panel B: Dividend pa	ving firms	
1990	149	343
1991	80	32
1992	72	18
1993	65	20
1994	62	22
1995	70	44
1996	58	26
1997	43	32
1998	55	25
1999	96	81
2000	70	62
2001	49	37
2002	55	58
2003	123	187
2004	138	189
Overall period	78	75
Observations	261	

Notes: The table presents the mean and the SD for financial firms listed at the MSM for each year from 1989 to 2004. In Panel A, we present the results for all firms including both dividend paying and nonpaying firms. In Panel B, we report the results for dividend paying firms.

higher coefficient and the associated *t*-statistic of the *EPS* imply the greater importance of current earnings in deciding the dividend payment. These results are consistent with Lintner and suggest that the lagged *DPS* and *EPS* are important factors that affect the decision to pay dividends. The coefficient on the constant is also statistically significant with a negative sign.⁹ This indicates that Omani firms are not reluctant to cut dividends, inconsistent with Lintner (1956).

⁹ The negative constant reported in this article is consistent with the results documented by Kim and Maddala (1992) and Huang (2001a, b) who utilize Tobit regression to estimate the Lintner model.

Variable	Coefficient	t-statistic
С	-0.1457***	-7.3644
DPS_{-1}	0.0588***	2.7855
EPS	0.5335***	46.8658
Observations		377
Log-likelihood		-142.8506
Wald test $[\chi^2(2)]$		509.3700
<i>p</i> -value		0.0000

Table 2. Lintner model estimates

Notes: We estimate Tobit regression for financial firms listed at the MSM over the period 1989 to 2004. The dependent variable is the dividend per share. The explanatory variables are the lagged DPS and the current EPS. The table shows the variable, their coefficients and their corresponding *t*-statistics.

The number in parentheses in the Wald test represents the degrees of freedom.

*** represent significance at the 1% level.

The objective of using the Lintner model in this article is to examine whether Omani firms follow stable dividend policies. Consequently, we are interested in the speed of adjustment. The speed of adjustment reflects how quickly the firms adjust dividends towards the target ratio; the higher the speed of adjustment, the less the smoothness and the less stability in dividends. In our case, the speed of adjustment is 0.9412 which indicates that Omani firms have not smooth their dividends. Rather, they change their dividends frequently. These results are in line with that reported by Esteban and Pérez (2001) where they find that the speed of adjustment for European financial firms over the period 1992 to 1998 is 0.76. They are also consistent with those reported by Naceur et al. (2006) for Tunisian firms which ranged between 0.68 and 1.56. However, our speed of adjustment is higher than the 0.49 reported by Bodla et al. (2007) for Indian financial firms.

Another variable of interest is whether Omani financial firms have a target payout ratio or not. Lintner (1956) hypothesizes that firms set a long-term target payout ratio and move gradually towards the target. We calculate the target payout ratio and find that Omani financial firms have a target payout ratio of 0.5668.¹⁰ This finding indicates that financial firms do have a target dividend payout ratio that they move quickly towards. Our target payout ratio is higher than the 0.27 reported by Naceur *et al.* (2006) for Tunisian financial firms and the 0.135 reported by Bodla *et al.* (2007) for Indian firms, but smaller than

the 0.85 reported by Esteban and Pérez (2001) for European firms.

VI. Conclusion

The extensive literature on dividend policy of US firms shows that firms adopt a policy of smoothing dividends. Further, managers tend to set a long-term target payout ratios and are reluctant to cut dividends. We investigate whether these stylized facts also hold for Omani financial firms which operate in a substantially different institutional and corporate governance regime which is characterized by the absence of taxes on dividends, high dividend payments, concentrated ownership, relatively weak corporate governance and high bank debt financing. We use a panel data on a sample of Omani firms and take account of the zero observations using Tobit models.

Regarding the speed of adjustment of dividends towards the long-term target payout ratio, our results show that Omani financial firms adjust their dividend policies very quickly and they are willing to cut their dividends. These results suggest that Omani financial firms have unstable dividend policies. The results lend support to the propositions put forward by the high bank leverage, absence of taxes and the variability of dividend payments in Oman. Our results also show that Omani firms have target payout ratios and they move quickly towards.

Our findings show that there are differences in dividend policies between the Omani companies and those in developed markets. Consequently, potential investors in the Omani market should be aware about these differences in making their investment decisions. This study also highlights the need for further research in order to examine whether these results have any effect on dividend initiations and omissions in Oman.

Acknowledgements

The authors are grateful to participants at the 16th Annual Australasian Banking and Finance Conference for valuable comments and suggestions. The authors also thank the participants at the European Economics and Finance Society Conference in Prague for their comments and insights.

¹⁰ We calculate the target payout ratio as (the coefficient on earnings per share (EPS) divided by the speed of adjustment).

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