DIVIDENDOVÉ POLITIKY AKCIOVÝCH SPOLEČNOSTÍ UPLATŇOVANÉ NA KAPITÁLOVÝCH TRZÍCH[#]

DIVIDEND POLICIES OF THE STOCK COMPANIES REALIZED IN THE CAPITAL MARKETS

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Abstract

The paper focuses on different types of dividend policies realized by stock companies in the capital markets. First of all, different types of dividend policies and dividend models are characterized. The relation between dividend policies and earnings togehter with relation between dividend policies and returns are presented. These relations are founded by empirical researches cited in the paper. Factors leaded stock companies to dividend payment are mentioned, too.

Key words: dividend policy, dividend, stock company.

JEL Classification: N20

Abstrakt

Příspěvek se zaměřuje na různé typy dividendových politik akciových společností, které jsou uplatňovány na kapitálových trzích. Nejdříve jsou obecně charakterizovány různé typy dividendových politik a modelů. Dále je prezentován vztah mezi dividendovými politikami a výnosy. Tyto vztahy jsou zjišťovány pomocí empirických studií, které jsou v příspěvku citovány. Zmíněny jsou i faktory, které vedou akciové společnosti k výplatě dividend.

Klíčová slova: dividendová politika, dividenda, akciová společnost.

Introduction

Different stock companies realize different dividend policies. There are some advantages and disadvantages of paying dividends. Dividends may attract investors who prefer some return in the form of dividends. Dividends may reduce agency costs that arise from conflicts between management and shareholders. Dividends can provide support to stock price and underscore good results. Stock prices usually increase with the announcements of a increasing or new dividends. On the contrary, dividends are taxed as ordinary income. They can reduce internal sources of financing and they may force the company to rely on costly external equity financing.

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Literary overview

Many researchers analyse different dividend policies. Some researchers analyse it rather theoretically, other ones use real data realizing empirical researches. Authors from both groups are mentioned in the paper. Rather theoretical access to this problematics was chosed by Elton, Gruber, Brown and Goetzmann (2007), which describe different growth models and Lumby and Jones (1999), which, among others, compare the dividend discount model and the model CAPM. Also Forbes (2009) together with Garret and Priestley (2000) theoretically focuse on dividend policy. The rules of the dividend policy and the specific dividend model are presented. Rest authors belong to the second group. Concretely, Liu, Szewczyk and Zantout (2008) using real data to explain the dependence between cash dividend omission or reduction and abnormal returns. The declination of the propensity of firms to pay dividends in some periods is explained by Hoberg and Prabhala (2009). It is clear, that many other researchers focuse on dividend policies. The great part of all stock companies in the capital markets pay some dividends.

Methodology

The objective of the paper is to analyse the dividend policies, which are realized in the capital markets. Descriptive and analytical methods are used in this paper. Descriptive method is used to explain the important terms, types of the dividend policies, observations. The data founded by realizing of cited empirical researches are statistically evaluated. To evaluate the data, the analytical method is used.

Results and Discussion

Many types of the dividend policies and models are realized in practice. Elton, Gruber, Brown and Goetzmann (2007) focuse on different types of the dividend policies and on the valuation process, in general. Discounted cash flow model is presented. They examine three models and sets of growth assumptions:

- constant growth model - constant growth over an infinite amount of time,
- two-period growth model - growth for a finite number of years at a constant rate, then growth at the same rate as a typical firm in the economy from that point on,
- three-period growth model - growth for a finite number of years at a constant rate, followed by a period during which growth declines to a steady-state level over a second period of years. Growth is then assumed to continue at the steady-state level into the indefinite future.

General finite horizon models are also described. It is possible to use cross-sectional regression analysis to define the weights the market places on a set of hypothesized determinants of common stock prices.

Dividend policies and dividend models are the subjects of research of Lumby and Jones (1999). They describe the dividend growth model which assumes a constant, level flow of expected dividends through time. The flow can also grow linearly or nonlinearly. The growth rate can be changed in time. Two main approaches to estimating the constant expected dividend growth rate are presented. The first approach asuumes that the average past rate of growth of dividends will continue unchanged in the future. The second approach examines the basis of dividend growth and attempts to derive a future growth rate rather than just to

extrapolate a past growth rate. There are some differences between the dividend discount model and the CAPM:

- the dividend discount model is not saying what actually determines cost of equity capital, but the CAPM is saying it,
- the dividend discount model is a multi time period model, but the CAPM is only a single time period model,
- the dividend discount model is a positive model, but the CAPM is a normative model.

These differences cause different estimates of the cost of equity capital, provided by the dividend discount model and the CAPM in practice.

Dividend policies are applied in perfect capital markets or in an imperfect market. The traditional view of the dividend decision is often used in practice. The „bird in the hand" argument means that any particular point of time one dollar of dividends is somehow more valuable than one dollar of retained cash flow. The cash flow may have been retained for investment in a project yielding a substantial positive net present value. The traditional view can be also put in an alternative way. If dividends are really seen by investors as a means of sending signals then we would expect share prices to react to unexpected changes in dividend policy. The dividend decision may also be held to have an information content which it signals to the market. In this case, dividend policy is important in that management should ensure that their company´s dividend decision does not give the wrong signal to the market.

The types of the dividend policies and the valuation models are analysed by Forbes (2009), concretely the discounted cash flow model, the residual income valuation model and model using the price-earnings ratio. The fragility of these model is caused by different factors, which are also described.

75 % of the firms listed in the Stock Exchange index Standard & Poor´s pay dividends. The irrelevance of dividends to value is related to these rules of dividend policy:

- dividends are a signal of value,
- dividends are simply a residual paid after setting investment policy,
- dividends reflect the attributes of the investors they serve whether these are particular tax clients or value/growth investments strategists,
- dividend payments discipline naughty managers on the shareholders behalf , stopping them from empire building, losing money etc.

US companies with a high ratio of retained earnings to total shareholders´ equity, book value, pay dividends while those with low or negative retained earnings relative to shareholders´ equity do not. The evidence of that was presented in 2006 by DeAngelo and Stulz.

Garret and Priestley (2000) propose a dividend model assuming that managers minimize the costs of adjustment associated with being away from their target dividend payout. The target is in form of a function of lagged permanent earnings and stock prices. They focuse on the dividend behavior of the aggregate stock market. This model allows to generalize the Marsh and Merton model. New method for measuring unobserved permanent earnings. The method is based on the Kalman filter. There is an evidence of dividend smoothing and dividends conveying information regarding unexpected positive changes in current permanent earnings. Test of signaling and the speed of adjustment of dividends to target dividends are sensitive to the specification of the model. Movement toward the target lowers costs, even if adjustment costs prevent a complete movement to the target.

The relation between dividend policies and earnings is often analysed. The question, whether dividends are signals of future earnings prospects was particularly answered by Benartzi, Michaely and Thaler in 1997. They examined the earnings performance of New York and US Stock Exchange companies that changed their dividend betwen the years 1979-1991. The sample of 1025 firms and over 7000 firm-year observations were used. They reported strong correlation between contemporaneous and lagged dividend and earnings changes. They found that dividend changes cannot really predict future earnings changes, although they may be able to predict a sustained increase in the level of reported earnings.

Examining a sample of 561 cash dividends initiation events and 887 omissions of dividends from was observed that far larger price responses to omissions than initiations. Price declines in response to omissions are roughly twice the comparative prices rises associated with dividend initiations.

The relation between dividend policies and returns is also often analysed. The dependence between cash dividend omission or reduction and abnormal returns is studied by Liu, Szewczyk and Zantout (2008). They use a sample of 2,337 cash dividend omission or reduction announcements over the 1927 to 1999 period. Table 1 presents industry representation of the sample of cash dividend reductions or omissions.

Table 1 - Industry representation of the sample

Industry	SIC codes	Number of events	Percent of sample
Mining	1000 – 1499	121	5.2
Construction	1500 – 1999	34	1.5
Manufacturing	2000 – 3999	1,711	73.2
Transportation	4000 – 4999	143	6.1
Wholesale trade	5000 – 5199	51	2.2
Retail trade	5200 – 5999	179	7.7
Services	7000 - 8999	98	4.2
TOTAL		2,337	100.0%

Source: Liu, Szewczyk and Zantout (2008)

The table examined, whether the sample dividend events exhibit any industry clustering. The manufacturing sector represents about 73% of the announcements. It is reported significant negative post-announcement long-term abnormal returns, which last one year only. This abnormal performance is driven by the post-earnings-announcement drift. It is possible to measure post-announcement average abnormal monthly returns estimated using the rolling portfolio method for firms that omit or reduce their cash dividend. Table 2 presents returns using post-announcement periods:

Table 2 - Returns using post-announcement periods

Event portfolio return	**Parameter estimation method**	**Statistic**	**Period: 1 year**	**Period: 2 years**	**Period: 3 years**
Equally weighted	OLS	Estimate of α_p (%)	-0.97	-0.50	-0.30
Equally weighted	OLS	*t*-statistic	-6.1	-3.7	-2.4
Equally weighted	WLS	Estimate of α_p (%)	-0.72	-0.31	-0.17

Equally weighted	WLS	*t*-statistic	-5.8	-3.1	-1.9
Value weighed	OLS	Estimate of α_p (%)	-0.86	-0.30	-0.20
Value weighed	OLS	*t*-statistic	-4.3	-1.7	-1.3
Value weighed	WLS	Estimate of α_p (%)	-0.59	-0.18	-0.11
Value weighed	WLS	*t*-statistic	-3.9	-1.4	-1.0
Number of observations (months)	-	-	875	875	875

Source: Liu, Szewczyk and Zantout (2008)

Table 3 similarly presents post-announcement years:

Table 3 - Returns using post-announcement years

Event portfolio return	**Parameter estimation method**	**Statistic**	**The 1st year**	**The 2nd year**	**The 3rd year**
Equally weighted	OLS	Estimate of α_p (%)	-0.97	0.10	0.23
Equally weighted	OLS	*t*-statistic	-6.1	0.7	1.5
Equally weighted	WLS	Estimate of α_p (%)	-0.72	0.11	0.14
Equally weighted	WLS	*t*-statistic	-5.8	1.0	1.3
Value weighed	OLS	Estimate of α_p (%)	-0.86	0.29	0.05
Value weighed	OLS	*t*-statistic	-4.3	1.7	0.3
Value weighed	WLS	Estimate of α_p (%)	-0.59	0.24	0.02
Value weighed	WLS	*t*-statistic	-3.9	1.7	0.2
Number of observations (months)	-	-	875	863	851

Source: Liu, Szewczyk and Zantout (2008)

Statistically significant negative post-announcement abnormal stock returns to the dividend-omitting or dividend-reducing firms were founded. These returns are confined to the first post-announcement year only. There is no compelling evidence of a post-dividend-omission or post-dividend-reduction price drift. Table 4 presents mean values of matching criteria for the dividend-event firms and the matched firms.

Table 4 - Mean values of matching kriteria

Matching criteria	Group of firms	Size (mil. USD)	Prior stock performance (%)	Ratio of book-to-market value	Percent change in earnings
Firm size	Event	258.94	-24.22	1.22	-2.26
Firm size	Matched	259.53	16.56	0.88	0.20
Size and industry affiliation	Event	263.62	-24.47	1.22	-2.50
Size and industry affiliation	Matched	230.35	10.59	0.99	-0.29
Size and prior stock price performance	Event	259.60	-24.48	1.22	-2.10
Size and prior stock price performance	Matched	241.60	-24.13	0.88	-0.45
Industry and prior stock performance	Event	261.09	-24.89	1.21	-2.24
Industry and prior stock performance	Matched	444.99	-23.28	1.00	-0.08
Size and ratio of book-to-market value	Event	284.79	-24.80	1.24	-2.37
Size and ratio of book-to-market value	Matched	225.69	11.59	1.25	0.53
Percent change in earnings	Event	256.47	-24.54	1.22	-2.40
Percent change in earnings	Matched	395.90	-1.44	1.08	-2.09
Size and percent change in earnings	Event	269.52	-24.20	1.24	-2.25
Size and percent change in earnings	Matched	231.80	3.95	0.88	-1.71

Source: Liu, Szewczyk and Zantout (2008)

The table examined the success of the procedures used to match the event firms with non-event firms according to seven sets of matching criteria. The matched firms and the event firms have very comparable mean values for only some criteria. The average size of the matched firms is almost more almost 2x as large as the average size of the event firms in the case of matching by industry and prior stock price performance. It is clear that the examination of the long-term abnormal returns using all seven matching kriteria as a robustness test is needed.

The propensity of firms to pay dividends declines significantly between 1978 and 1999. It was published by Fama and French in 2001. Hoberg and Prabhala (2009) examine this "disappearing dividends" puzzle through the lens of risk. They find support for the view that disappearing dividends reflects firms' catering to transient fads for dividends. Risk is a significant determinant of the propensity of firms to pay dividends. It explains roughly 40% of „disappearing dividends“. The results are robust to an extensive battery of robustness tests that vary samples, time periods, proxies for fads, the types of empirical tests, and the nature of payout decisions made by firms.

Conclusion

Companies realize different dividend policies. It depends on resolutions which are accepted by voting at general meeting of stock company. Dividend policies can be described by using of the dividend models with no growth, linear or nonlinear growth of dividends. These models differ from CAPM. Empirical researches, which found that dividend changes cannot really predict future earnings changes and did not found evidence of a post-dividend-omission or post-dividend-reduction price drift are cited. The propensity of companies to pay dividends is changing in time. Many researchers try to find the reasons why companies pay dividends. Some these factors are mentioned in the introduction of the paper. Dhanani published in 2005 several observations about UK companies, which he found. Dividends are rarely raised to discipline managers and stop them empire building except in finance companies. Dividends are usually seen as a signal of value by managers who raise dividends to signal a sustained improvement in company performance. There is no relation between dividends, investment policy and capital structure. Despite exactly described theoretical dividend models, dividend policies, which stock companies realize in practice are more complicated.

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