Stock price synchronicity and dividend policy: Evidence from an emerging market

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Abstract

Is stock price synchronicity significant determinant of firm's dividend policy? This paper seeks to answer this question within the context of an emerging market. Using a dataset from India, covering the period between 2000 and 2012, we document a parabolic relationship between stock price synchronicity and dividend payout ratio. Our results indicate that the relationship between synchronicity and dividend payout ratio is positive until a turning point is reached. After that point, synchronicity has a negative impact on dividend payout ratio. We argue that firms with low synchronicity have higher information asymmetries. As a result, they have incentive to develop reputation as better governed firms by paying high dividends. However, as synchronicity increases further, information asymmetries go down and incentive to use dividend payouts as a mechanism to reduce information asymmetries goes down. Therefore, positive relationship between synchronicity and dividend payout ratios breaks down at high levels of synchronicity. We also show that our results are robust across different proxies for dividend policy.

JEL classification: G34
Keywords: Stock Price Synchronicity; Dividend Policy; Information Environment; Corporate Governance; Emerging Markets

1. Introduction

Prior literature characterizes emerging markets by weak corporate governance mechanisms. Farooq and El Kacemi (2011), for instance, show that vast majority of firms are owned and controlled by insiders in emerging markets. While, Balasubramanian et al. (2010) document ineffectiveness of traditional governance mechanisms by showing that the largest shareholder is often the board chairman in emerging markets. This strand of literature considers weak enforcement of investor protection laws, presence of family control, and ineffectiveness of regulatory authorities as the main reasons behind weak governance environment in these markets (Khwaja and Mian, 2006; Claessens and Fan, 2003). An important implication of weak governance mechanisms is that the culture of information disclosure could not evolve in these markets. Leuz et al. (2003) document that managers and insiders do not disclose true information about their firms in emerging markets. This paper is an attempt to document the effect of information asymmetries on dividend policies of firms in India – an important emerging market – during the period between 2000 and 2012. The novelty of this paper is that we aim to document the relationship between stock price synchronicity – a measure reflecting the information environment of a firm – and dividend policy. To the best of our knowledge, this relationship has not been discussed in detail in earlier studies. The only exception is Kang and Kim (2013) who document a negative relationship between stock price synchronicity and dividend payouts in Korea.

Stock price synchronicity measure the extent to which stock prices co-move with the market. Prior literature shows that firms with better information environment exhibit higher synchronicity than firms with poor information environment. Barberis et al. (2005), for instance, document that inclusion in the S&P 500 index – an event that improves information environment of a firm – increases stock price synchronicity. In another related study, Chan and Hameed (2006) associate analyst following – proxy for information environment of a firm – with high stock price synchronicity. Farooq and Ahmed (2015) also compliment the above findings by documenting high stock price synchronicity for firms with superior governance and information mechanisms. Dasgupta et al. (2010) argue that better governance and information environment leads to higher stock price synchronicity due to its impact on the forecasting abilities of investors. They note that improvement in governance environment results in improving the

accuracy of forecasts that investors make regarding future firm-specific events. Given that stock prices respond only to unanticipated events, accurate forecasts increase the likelihood that prevailing stock prices have already factored in the occurrence of future events. Therefore, when events actually happen, prices do not react significantly to such news. In other words, more informative current stock prices (that result from better governance environment) should be associated with less firm-specific variation in stock prices in future, thereby resulting in high synchronicity with the market.

Given that stock price synchronicity is an increasing function of governance and information environment of a firm, we argue that firms with higher synchronicity should have lower information asymmetries and vice versa. If this is true, stock price synchronicity should have significant implications for dividend policy of a firm. Our arguments are based on prior literature that suggests higher dividends for firms with higher information asymmetries (Miller and Rock, 1985; John and Williams, 1985; Jensen, 1986; La Porta et al., 2000). This strand of literature notes that dividends can be used to reduce some of the information asymmetries surrounding firms. Grossman and Hart (1980) argue that high dividend payouts alleviate agency conflicts through the reduction of free cash flows available to managers. They posit that paying high dividends reflects managements' good faith and signals low agency problems. In another related study, Jensen (1986) concludes that high dividend payout ratios lessen agency costs by reducing free cash flows that can be expensed on unprofitable projects. La Porta et al. (2000) formalize the arguments in a theory known as the substitute model. The substitute model argues that dividends can substitute for the monitoring roles of stakeholders. It argues that firms operating in relatively poor information environment make dividend payments to establish a reputation for acting in the interests of minority shareholders. High dividend payments signal to market that there is less cash at the expense of management to expropriate. Consistent with above arguments, we document a positive relationship between stock price synchronicity and dividend payout ratios for firms with high information asymmetries – firms with low synchronicity. However, we also report that relationship between stock price synchronicity and dividend payout ratio is parabolic. Our results show that the relationship between synchronicity and dividend payout ratio is positive until a turning point is reached. After that point, synchronicity has a negative impact on dividend payout ratio. We argue that firms with low synchronicity have higher information asymmetries. As a result, they have incentive to develop

reputation as better governed firms by disgorging more cash. It, therefore, results in a positive relationship between synchronicity and dividend payout ratios for firms with low synchronicity – firms with high information asymmetries. However, as synchronicity increase, information asymmetries decline and incentive to use dividend payouts as a mechanism to reduce information asymmetries also decrease. Therefore, positive relationship between synchronicity and dividend payout ratios breaks down at high levels of synchronicity. We also show that our results are robust across different proxies for dividend policy.

Contrary to arguments presented above, an equally compelling argument can be presented to argue that the parabolic relationship between stock price synchronicity and dividend policy is due to the fact that high (low) synchronicity is associated with poor (better) information environment (Morck et al., 2000; Gul et al., 2010). Morck et al. (2000) document high synchronicity for firms operating in poor information environments. They argue that investors are discouraged to trade on private information in these environments. As a result, stock prices are driven by market-wide events and rumors. More importance of market-wide events results in lower importance for firm-specific information. It, therefore, causes all stocks to react to the same set of information, thereby causing high synchronicity. Gul et al. (2010) also come to the same conclusion when they document higher synchronicity for firms with poor audit quality. Low quality auditors provide less reliable firm-specific information and therefore decrease the incorporation of firm-specific information in prices. If these arguments are true, positive relationship between low synchronicity and dividend payouts is driven by the fact that firms with low synchronicity have better information environment. Better information environment constrain insiders/controlling shareholders from expropriating corporate resources, thereby reducing the means and incentives available for insiders/controlling shareholders to expropriate.[1] We argue that that when insider/controlling shareholders cannot expropriate, they tend to share corporate profit with shareholders, thereby leading to higher dividend payouts. Our arguments are consistent with prior literature that documents high payout ratios for firms with low information asymmetries. Li and Zhao (2008), for example, find that the lower agency problems

[1] Some of the legal means available with minority shareholder to discipline insiders/controlling shareholders and receive dividends are voting for directors, participating in shareholders' meetings, subscribing to new issues of securities on the same terms as the insiders, suing directors or the majority shareholders for suspected expropriation, and calling extraordinary shareholders' meetings. Enforcement of these legal powers ensures that there are no incentives for insiders/controlling shareholders to expropriate. Expropriation may lead to legal penalties for insiders/controlling shareholders.

– lower analyst earnings forecast errors and lower dispersion in their forecasts – positively affect dividends. They document that firms with lower agency problems are more likely to pay, initiate, or increase dividends.

In order to test whether the above alternate arguments are valid, we document the relationship between synchronicity and stock price performance. If the alternate arguments are correct and high synchronicity indeed reflects poor information environment, we should observe negative impact of high synchronicity on stock price performance. However, if our original arguments are valid and high synchronicity indeed reflects better information environment, we should observe positive impact of high synchronicity on stock price performance. Consistent with our original argument regarding stock price synchronicity, we document a positive impact of high synchronicity on stock prices and negative impact of low synchronicity on stock prices. We argue that firms with high synchronicity have better information environment and therefore low agency problems. Lower agency conflicts translate into better stock price performance (Mitton, 2002).

The remainder of the paper is structured as follows: Section 2 summarizes the data and Section 3 presents assessment of our hypothesis. Section 4 and Section 5 provide robustness checks and discussion of results, respectively. The paper ends with Section 6 where we present conclusions.

2. Data

This paper documents the effect of stock price synchronicity on dividend policy in India during the period between 2000 and 2012. Following sub-sections will explain the data used in analysis in more detail.

2.1 Dividend policy

We define dividend policy (DIV) of a firm by dividend payout ratio. Data for dividend payout ratio is obtained from the Worldscope. Descriptive statistics for dividend policy is reported in Table 1. The results of Table 1, Panel A, show very low dividend payout ratios for all sectors. We show that dividend payout ratio in none of sectors is more than 14% and almost half

of firms in every sector paid no dividends. The only exception is Industrial sector where median payout ratio is 6.84%. Similar results are reported in Table 1, Panel B, across all years. Low dividends may be driven by the fact that Indian economy experienced sustained growth during our sample period. Most of the earnings, therefore, may have been used to finance this growth. However, relatively weak corporate governance mechanisms in India – similar to other emerging markets – may have also contributed towards lower payout ratios among Indian firms.

Table 1: Descriptive statistics for dividend policy

Panel A: Dividend policy in each industrial sector

Industries	Mean	Median	Standard Deviation	No. of Firms
Oil and Gas	0.0000	0.0000	0.0000	32
Basic Materials	10.1249	0.0000	16.7158	1178
Industrials	13.2662	6.8400	17.8522	1043
Consumer Goods	12.5069	0.0000	20.5069	1313
Healthcare	11.7495	0.0000	17.9343	292
Consumer Services	8.7550	0.0000	16.2957	276
Telecommunication	0.0000	0.0000	0.0000	10
Utilities	3.6992	0.0000	5.7987	25
Technology	5.8570	0.0000	14.3468	388

Panel B: Dividend policy in each year

Years	Mean	Median	Standard Deviation	No. of Firms
2000	21.3438	0.0000	27.7966	9
2001	16.7205	0.0000	19.9832	17
2002	15.8385	0.0000	24.3926	21
2003	8.2242	0.0000	17.7173	33
2004	7.4320	0.0000	11.6885	48
2005	10.1611	0.0000	17.8803	71
2006	11.9261	0.0000	18.5986	489
2007	12.3803	0.0000	18.3295	578
2008	11.6412	0.0000	18.2672	617
2009	10.4495	0.0000	10.4495	653
2010	10.9583	0.0000	10.9583	691
2011	10.8553	0.0000	10.8553	668
2012	9.5395	0.0000	16.8718	653

2.2 Stock price synchronicity

Consistent with prior literature, we define stock price synchronicity (SYNCH) by the coefficient of determination (R^2) from the estimation of following regression equation. Following equation uses return of stock 'i' during week 't' ($R_{i,t}$) as a dependent variable and return of market index 'm' for the same week ($R_{m,t}$) as an independent variable. Consistent with prior literature, we estimate following regression for those firms for which we have at least 40

weekly observations of returns in a year. Relevant data for estimating following regression equation is obtained from the Datastream.

$$R_{i,t} = \alpha + \beta(R_{m,t}) + \varepsilon_{i,t} \quad (1)$$

Table 2 documents descriptive statistics for stock price synchronicity. Our results show low stock price synchronicity for Indian firms. For instance, Table 2, Panel A, shows that average synchronicity in none of sectors is more than 11%. Similar results are reported in Table 2, Panel B, across all years. Low synchronicity for Indian firms is consistent with prior literature that associates low synchronicity with opaque information environments. Piotroski and Roulstone (2004), for instance, document low synchronicity for firms with low analyst coverage – a proxy for weak information environment. In another related study, Farooq and Ahmed (2014) also document low synchronicity for firms with poor governance mechanisms.

Table 2: Descriptive statistics for stock price synchronicity

Panel A: Stock price synchronicity in each industrial sector

Industries	Mean	Median	Standard Deviation	No. of Observations
Oil and Gas	0.0493	0.0177	0.0666	60
Basic Materials	0.0944	0.0535	0.1097	2312
Industrials	0.0933	0.0528	0.1066	2186
Consumer Goods	0.0829	0.0487	0.0951	2789
Healthcare	0.0915	0.0562	0.1048	618
Consumer Services	0.0847	0.0427	0.1063	517
Telecommunication	0.1009	0.0385	0.1164	20
Utilities	0.1058	0.0522	0.1210	30
Technology	0.0818	0.0419	0.1009	1093

Panel B: Stock price synchronicity in each year

Years	Mean	Median	Standard Deviation	No. of Observations
2000	0.0953	0.0502	0.1149	297
2001	0.0935	0.0507	0.1132	208
2002	0.0670	0.0500	0.0658	300
2003	0.0443	0.0268	0.0493	415
2004	0.0707	0.0395	0.0829	563
2005	0.0791	0.0572	0.0738	767
2006	0.1389	0.1185	0.1192	919
2007	0.0522	0.0274	0.0627	991
2008	0.1667	0.1318	0.1520	1004
2009	0.0783	0.0493	0.0853	1030
2010	0.0536	0.0301	0.0627	1165
2011	0.1162	0.0718	0.1201	1156
2012	0.0509	0.0276	0.0619	1130

2.3 Control variables

This paper uses number of firm-specific characteristics as control variables. These variables are:

SIZE: It is defined as log of firm's total assets. Prior literature documents a positive relationship between firm's size and dividend payouts (Eriotis, 2005; Al-Malkawi, 2007; Imran et al., 2013). We argue that this positive relationship is driven by the fact that large firms are mature and have relatively fewer growth opportunities. As a result, they tend to disgorge most of the cash to shareholders. Furthermore, large firms also have lower information asymmetries due to increased visibility among stock market participants. Better information environment discourages managers to spend resources on unprofitable projects, thereby increasing capacity of large firms to pay high dividends.

LEVERAGE: It is defined as total debt to total asset ratio. Gugler and Yurtoglu (2003) and Kowalski et al. (2007) show that leverage has a negative impact on dividend payout ratio. They argue that debt reduces the capacity of firms to have residual income to warrant dividend payments.

EPS: It is defined as earnings per share. Prior literature argues that profitable firms are more likely to pay dividends than non-profitable firms (Eriostis and Vasiliou, 2003).

GROWTH: It is defined as the growth in total assets over the last one year. Growth opportunities play an important role in a firm's decision to pay dividends. Chen and Dhiensiri (2009) show that high growth firms pay lower dividends. In these firms, there is high demand for capital and retained earnings are the least expensive source for financing growth opportunities.

MBR: This paper defines MBR as market value to book value ratio. High market value to book value ratio is associated with increased faith of stock market participants. Therefore, it should positively affect dividend policy.

Table 3 reports the descriptive statistics (Panel A) and the correlation matrix (Panel B) for control variables used in this study. An interesting observation from Table 3, Panel A, is the low level of leverage among Indian firms. Table 3, Panel A, also reports that, on average, Indian firms report positive earnings during our sample period. It indicates good performance of Indian firms during our sample period. Furthermore, our results in Table 3, Panel B, show low correlation between control variables used in this study. Therefore, we are able to use all control variables together in any regression equation.

Table 3: Descriptive statistics for control variables

Panel A: Summary statistics

	Mean	Median	Standard Deviation	No. of Observations
SIZE	13.5319	13.5381	1.2597	4751
LEVERAGE	28.4391	26.9200	22.0653	4622
EPS	4.4293	1.6500	13.5842	4315
GROWTH	23.2763	-4.2415	90.9630	3988
MBR	1.8529	0.8600	4.6899	4458

Panel B: Correlation matrix

	SIZE	LEVERAGE	EPS	GROWTH	MBR
SIZE	1.0000				
LEVERAGE	0.3231	1.0000			
EPS	0.1767	-0.1854	1.0000		
GROWTH	0.0254	-0.0120	0.1098	1.0000	
MBR	-0.0173	0.0664	-0.0394	0.0650	1.0000

3. Methodology

In this section, we document the effect of stock price synchronicity on dividend policy of a firm. In order to test this relationship, we estimate the following regression equations with dividend policy (DIV) as a dependent variable and stock price synchronicity (SYNCH) and square of stock price synchronicity (SYNCH*SYNCH) as independent variables. Furthermore, we also add SIZE, LEV, GROWTH, EPS, and MBR as control variables. It is important to mention here that panel regression with fixed effects is used as estimation techniques. Hausman test is used to decide between fixed effect and random effects. Our regression equation takes the following form.

$$DIV = \alpha + \beta_1(SYNCH) + \beta_2(SYNCH * SYNCH) + \varepsilon \quad (2)$$

$$DIV = \alpha + \beta_1(SYNCH) + \beta_2(SYNCH * SYNCH) + \beta_3(SIZE) + \varepsilon \quad (3)$$

And

$$DIV = \alpha + \beta_1(SYNCH) + \beta_2(SYNCH * SYNCH) + \beta_3(SIZE) + \beta_4(LEVERAGE) + \beta_5(EPS) + \beta_6(GROWTH) + \beta_7(MBR) + \varepsilon \quad (4)$$

Our results are reported in Table 4. Our results indicate parabolic relationship between stock price synchronicity and dividend payout ratio. Our results from all equations show a significantly positive coefficient of SYNCH and a significantly negative coefficient of SYNCH*SYNCH. Our results indicate that the relationship between synchronicity and dividend

payout ratio is positive until a turning point is reached. After that value, synchronicity has a negative impact on dividend payout ratio. We argue that firms with low synchronicity have higher information asymmetries. As a result, they have incentive to develop reputation as better governed firms by disgorging more cash. Our arguments are consistent with Grossman and Hart (1980) and Jensen (1986) who consider high dividend payout as a channel via which firms alleviate agency conflicts by reducing free cash flows available to managers. It, therefore, results in a significantly positive coefficient of SYNCH. However, as synchronicity increase, information asymmetries go down and incentive to use dividend payouts as a mechanism to reduce information asymmetries also goes down. It, therefore, should lead to insignificant relationship between synchronicity and dividend payout ratio. But, surprisingly, we obtain significantly negative coefficient of SYNCH*SYNCH.

Table 4: Effect of stock price synchronicity on dividend payout ratio

	Equation (2)	**Equation (3)**	**Equation (4)**
SYNCH	11.2698**	11.6376**	13.2507**
SYNCH*SYNCH	-15.2434*	-15.9419*	-17.9015*
SIZE		-0.2418	1.3615*
LEVERAGE			-0.1030***
EPS			-0.1204***
GROWTH			0.0055*
MBR			0.0347
Fixed Effects	Yes	Yes	Yes
No. of Observations	4557	4525	3270
No. of Groups	759	758	700
F-Value	2.36***	2.25***	2.81***

NOTE: Coefficients with 1% significance are followed by ***, coefficient with 5% by **, and coefficients with 10% by *.

4. Robustness checks

4.1 Relationship between stock price synchronicity and dividend policy in different sub-samples

As a robustness check, we divide our sample into the following groups: (1) Small firms and large firms and (2) Firms with high earnings and firms with low earnings. We re-estimate Equation (4) for all sub-samples. Our results are reported in Table 5. Our results indicate parabolic relationship between stock price synchronicity and dividend payout ratio for large firms and more profitable firms. We report a significantly positive coefficient of SYNCH and a

significantly negative coefficient of SYNCH*SYNCH for these sub-samples. For small firms and less profitable firms, we report insignificant coefficients of SYNCH and SYNCH*SYNCH. We argue that large firms and more profitable firms generate more trading and more interest from stock market participants. As a result, their stock prices are more informative, thereby making synchronicity a more reliable measure of information environment in these firms. The same, however, cannot be said about small firms and less profitable firms.

Table 5: Effect of stock price synchronicity on dividend payout ratio in different sub-samples

	Size		**Profitability**	
	Small	**Large**	**Low**	**High**
SYNCH	-0.3592	25.8136***	-2.5346	20.8506***
SYNCH*SYNCH	1.2695	-36.4123***	4.6379	-35.4089***
SIZE	2.8109**	0.2161	0.4077	3.0503**
LEVERAGE	-0.0880*	-0.1332**	-0.0818*	-0.1349**
EPS	-0.2215***	-0.1155***	0.0616	-0.4087***
GROWTH	0.0050	0.0067*	0.0122*	0.0013
MBR	0.0322	-0.0215	0.0992*	-0.1188
Fixed Effects	Yes	Yes	Yes	Yes
No. of Observations	1423	1847	1443	1827
No. of Groups	395	437	469	495
F-Value	1.81**	2.65***	1.41	4.00***

NOTE: Coefficients with 1% significance are followed by ***, coefficient with 5% by **, and coefficients with 10% by *.

4.2 Relationship between stock price synchronicity and alternate measures of dividend policy

In this section, we re-estimate Equation (2), Equation (3), and Equation (4) by using alternate measures of dividend policy as a dependent variable. For the purpose of this analysis, our alternate measures of dividend policy are decision to pay dividend and decision to increase dividend. Decision to pay dividend is a dummy variable that takes the value of 1 if firm pays dividend and 0 otherwise. Decision to increase dividend is a categorical variable that takes the value of 1 if firm increases dividend, 0 if it does not increase dividend, and -1 if it decreases dividend. Panel logistic regression with fixed effects is estimated when we use decision to pay dividend as a dependent variable and ordered probit regression is estimated when we use decision to increase dividend as a dependent variable. Our results are reported in Table 6. Consistent with our previous findings, we report parabolic relationship between stock price

synchronicity and both measures of dividend policy. We report a significantly positive coefficient of SYNCH and a significantly negative coefficient of SYNCH*SYNCH for all estimations.

Table 6: Effect of stock price synchronicity on decision to pay dividend

Panel A: Decision to pay dividend as a dependent variable

	Equation (2)	**Equation (3)**	**Equation (4)**
SYNCH	8.5246***	8.3410***	5.8847***
SYNCH*SYNCH	-8.1739***	-8.2522***	-5.3216
SIZE		0.8181***	0.1161
LEVERAGE			-0.0282***
EPS			0.1506***
GROWTH			0.0042***
MBR			0.0262
Fixed Effects	Yes	Yes	Yes
No. of Observations	1639	1632	1049
No. of Groups	242	242	190
Chi-Square	127.36***	147.95***	244.65***

Panel B: Decision to increase dividend as a dependent variable

	Equation (2)	**Equation (3)**	**Equation (4)**
SYNCH	0.9198**	1.0430**	1.2577**
SYNCH*SYNCH	-2.9931***	-3.1436***	-3.4487***
SIZE		-0.0172	0.0081
LEVERAGE			-0.0033***
EPS			-0.0023
GROWTH			0.0001
MBR			0.0056**
Fixed Effects	Yes	Yes	Yes
No. of Observations	3697	3671	3078
No. of Groups			
Wald Chi-Square	14.75***	16.12***	37.18***

NOTE: Coefficients with 1% significance are followed by ***, coefficient with 5% by **, and coefficients with 10% by *.

5. Discussion of results

An important underlying argument regarding the relationship between stock price synchronicity and payout ratio is that high synchronicity reflects lower information asymmetries. However, an equally compelling argument can be put forward to suggest the opposite – high

synchronicity reflects higher information asymmetries. Jin and Myers (2006), for instance, document that stock price synchronicity is a decreasing function of information environment of a firm. They argue that, in opaque information environments, lesser amount of firm-specific information is revealed to outside investors. Therefore, firm-specific information explains a smaller proportion of overall return variation. In another related study, Morck et al. (2000) document high synchronicity in emerging markets. They argue that weak property rights in emerging markets discourage informed arbitrage activity based on private information. As a result, stock prices are driven by market-wide events and rumors. More importance of market-wide events results in lower importance for firm-specific information. It, therefore, causes all stocks to react to the same set of information, thereby causing high synchronicity.[2] If these arguments are valid in Indian context, we should expect stock market participants to penalize firms with higher synchronicity because these firms synonymies higher information asymmetries. Therefore, there should exist a negative relationship between high synchronicity and stock returns. However, if this is not true and our arguments regarding low information asymmetries for firms with high synchronicity are valid, we should observe a positive relationship between high synchronicity and stock returns. Our arguments are consistent with prior literature that suggests that firms with lower information asymmetries outperform firms with higher information asymmetries. Mitton (2002), for example, reports positive relationship between firms exhibiting better governance mechanisms and stock returns. In order to test this conjecture, we estimate the following panel regression equations with stock returns (RET) as a dependent variable and SYNCH and SYNCH*SYNCH as independent variables. Furthermore, we also add SIZE, LEV, GROWTH, EPS, and MBR as control variables. Our regression equation takes the following form.

$$\mathrm{RET} = \alpha + \beta_1(\mathrm{SYNCH}) + \beta_2(\mathrm{SYNCH} * \mathrm{SYNCH}) + \varepsilon \quad (5)$$

$$\mathrm{RET} = \alpha + \beta_1(\mathrm{SYNCH}) + \beta_2(\mathrm{SYNCH} * \mathrm{SYNCH}) + \beta_3(\mathrm{SIZE}) + \varepsilon \quad (6)$$

And

[2] Morck et al. (2000) show that in emerging markets, such as China, Malaysia, and Poland, over 80% of stocks often move in the same direction in any given week. They also show that during their sample period, 100% of Polish stocks moved in the same direction during four of the twenty six weeks.

$$RET = \alpha + \beta_1(SYNCH) + \beta_2(SYNCH * SYNCH) + \beta_3(SIZE) + \beta_4(LEVERAGE) + \beta_5(EPS) + \beta_6(GROWTH) + \beta_7(MBR) + \varepsilon \quad (7)$$

Our results are reported in Table 7. Consistent with our expectations, our results show parabolic relationship between stock price synchronicity and stock returns. We report significantly negative coefficient of SYNCH and significantly positive coefficient of SYNCH*SYNCH for all equations. We argue that firms with high synchronicity have better information environment. Therefore, we have positive coefficient for SYNCH*SYNCH.

Table 7: Effect of stock price synchronicity on stock returns

	Equation (5)	Equation (6)	Equation (7)
SYNCH	-2.1387***	-1.8818***	-1.9514***
SYNCH*SYNCH	2.4482***	2.1942***	2.4610***
SIZE		-0.1705***	-0.1623**
LEVERAGE			0.0004
EPS			0.0027*
GROWTH			0.0011***
MBR			-0.0056
Fixed Effects	Yes	Yes	Yes
No. of Observations	9583	4733	3342
No. of Groups	1335	778	701
F-Value	475.35***	290.50***	172.41***

NOTE: Coefficients with 1% significance are followed by ***, coefficient with 5% by **, and coefficients with 10% by *.

6. Conclusion

This paper uses stock price synchronicity data from India to explain the cross-sectional variation in dividend payout ratios during the period between 2000 and 2012. Our results show a parabolic relationship between stock price synchronicity and dividend payout ratio. We show that the relationship between synchronicity and dividend payout ratio is positive until a turning point is reached. After that value, synchronicity has a negative impact on dividend payout ratio. We argue that firms with low synchronicity have higher information asymmetries. As a result, they have incentive to develop reputation as better governed firms by disgorging more cash. However, as synchronicity increase, information asymmetries go down and incentive to use dividend payouts as a mechanism to reduce information asymmetries also goes down. It,

therefore, leads to breakdown of the positive relationship between stock price synchronicity and dividend payout ratio.

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