Study on Dividend Policy and its Determinants
Evidence from Chinese Companies

Antonio Goncalves de Andrade* Yang Qing, Akhtiar Ali
School of Management, Wuhan University of Technology, 122 Luoshi Road, Wuhan, Hubei, 430070, China

Abstract
The present work conducts a study on dividend policy behavior from Chinese companies that are listed in National Association of Securities Dealers Automated Quotations (NASDAQ) stock exchange. In this study we use ordinary least squares linear regression using panel data with random and fixed effects, using data of 75 Chinese companies from 2010 to 2014 constructing a panel with 300 observations. Dividend payout is used as a dependent variable while variables such leverage, profitability, liquidity, firm size, float, business risk, age, and asset structure is used as an independent variable. The result suggested that random effect model were more appropriated. The results show an existence of positive relationship between dividend policy and age and negative relationship between dividend policy and profitability. It suggests that Chinese firms that are larger tend to pay more dividends and firms that have higher profitability tend to pay lower dividends. Our findings provide support for agency cost theory.

Keywords: Dividend payout, panel data, Chinese companies and behavior.

1. Introduction
In corporate finance, managers are generally confronted with two operational decisions, investment and financing decisions. As we now the investment decision deal with what real assets the firm needs to operate and the financing decision deals with how these assets should be financed. When the firms begin to generate profit, managers is confronted with another decision how to distribute the profit. Should the firm distribute all the earned profits in form of dividends to the shareholders or investing it on the business?

We know that managers should focus how to maximize the wealth of firm and the wealth of the shareholders, this means that the managers should applied a good dividend policy to the firm. In this context, the motivation of investment decision is the accretion of wealth. This increasing of wealth is achieved in two ways: through a regular income received in forms of dividends and through capital gains obtained on disposal of the shares in the capital market.

The decisions regarding structure of capital, dividend policy and investment decisions are constant concerns for companies, since such decisions influence their values by being able to contribute to the maximization of income received by their partners or investors.

The main goal for private and public companies is to maximize their profit at the end of each financial year. The profit can follow various destinations. We talk about dividend payout policy that each company can adopt to ensure its credibility, competitiveness, continuity and satisfaction their shareholders.

The dividend payout policy has aroused the interest of investors and economists in the last five decades and was the subject of intense theoretical modeling and empirical tests in the literature of corporate finance. These intense theoretical modeling tries to explain what factors affect the distribution of dividend. However a very few studies has been conduct to those Chinese listed firms in NASDAQ stock exchange and this paper tries to provide evidence of dividend policy from those firms.

The present work is structured as following: section 2 we review some important literature in dividend policy determinants, section 3 we specify our methodology that we use to accomplish our objectives, section 4 we present the results and discussion according to the others studies care out and finally section 5 we present our conclusion, recommendations and future works.

2. Literature Review
Dividend policy has been one of the most discussed topics in corporate finance. Many researchers have conduct study about dividend policy in attempt to provide empirical evidences to support different theory of dividends becoming so far in a vast empirical literature in dividend policy. This is the result of theory of dividend irrelevance defended by Modigliani & Miller (1961) M&M hereafter, where under perfect market dividend policy is irrelevant.

M&M is based upon idealistic assumptions of a perfect capital market and rational investors. These assumptions can be summarized as follows: (1) no differences between taxes on dividends and capital gains; (2) no transaction and flotation costs incurred when securities are traded; (3) all market participants have free and equal access to the same information (symmetrical and costless information); (4) no conflicts of interests between managers and security holders (i.e. no agency problem); and (5) all participants in the market are price takers.
Lintner (1956) was the first one to investigate the partial adjustment model of dividends. His behavioral model suggests that a function of the target dividends payout less the last period's dividends payout multiplied by the speed of an adjustment factor can explain the change in dividends. Fama and Fabiak (1968) and Fama (1974) tested other models for explaining dividends behavior and their findings also supported the view of Lintner which is shareholders prefer the stable dividends paid rather than a significant change in dividends.

Rozell’s (1982) find that there are many factors that can affect the dividends policy such as agency problems, size, investment opportunities and risk. Miller and Rock’s model (1985) was based on the asymmetric information and pointed out the dividends announcement provides the missing information about the sources or uses of funds. In addition, it allows the market to estimate the firm’s current earnings. Henry, Suny and Terry (1988), concludes that Investors for the most part do not anticipate large changes in dividend rate. To the limited extent that they do engage in anticipatory price adjustment, it occurs in "good news" groups and also that in samples where the dividend and earnings announcement are in close temporal proximity the market seems to overreact to the news and adjusts prices accordingly after the later announcement. This conclusion holds also for samples with both announcements on the same day.

Pruitt and Gitman (1991) had done a survey 1,000 largest US firms in term of investment, financing, and dividends decisions in their firms. The result showed that the important determinants of dividends policy are the current and past profit level, the volatility of earnings and the expected future earnings in term of the growth in earnings. Eriots (2005) used data from Greek Market found a significant estimation with explanatory power of 95, 4% (when cross section weights and characteristic groups are taken into account). His model’s evidence suggests that the dividend at time t can be expressed as the long-run target dividend payout represented by both the changes in dividend and in distributed earnings and an adjustment to distributed earnings and last year’s dividend of the firm at time t.

Since a greater insider ownership results in a lower dividend, Kania and Bacon (2005) their findings suggest that possibly management in the firms examined has an incentive to reduce dividends in order to increase the expected value of their stock options received as executive compensation.

Al-Malkawi (2007) found that ownership dispersion as measured by the natural log of the number of stockholders (STOCK) seems to not be related to dividend policy in Jordan. The firm’s age, size, and profitability positively and significantly affect its dividend policy and The analysis also found that a firm’s financial leverage is significantly and negatively related to its dividend policy.

Kanwal and Sujata (2008) concluded that existing variables as per available literature do not explain the dividend payment pattern of IT sector. Only liquidity and beta (year to year variability in earnings) is found to be a noteworthy determinant. Azhagaiah and Sabari Priya (2008) found that the wealth of the shareholders is greatly influenced mainly by five variables viz., Growth in Sales, Improvement of Profit Margin, Capital Investment Decisions (both working capital and fixed capital), Capital Structure Decisions, Cost of Capital (Dividend on Equity, Interest on Debt) etc. As far as the dividend paying companies are concerned, there is a significant impact of dividend policy on shareholders’ wealth in Organic Chemical Companies.

Jiangou and Nont (2009) using sample from of firms listed on New Zealand Stock Exchange, found results mostly consistent with the agency cost theory. Ownership structure seems to be the most important determinant of dividend policy for NZSE firms. NZSE firms tend to have a high dividend payout ratio when they have high ownership dispersion. They tend to have a lower dividend payout ratio when they have high degree of insider ownership.

Tsujii (2010) on his paper entitled what are the determinants of dividend policy? The case of the Japanese electrical appliances industry, founds that in that industry, corporate managers do not cater to investors’ demands in both their dividend initiation and continuation decisions. Instead, in the Japanese electrical appliances industry, the determinants of firm’s dividend policies are value-weighted dividend yields, value-weighted nonpayer’s size, and value-weighted after-tax earnings-to-total-asset ratios. Moreover, cross-sectionally, found relations between corporate earnings and firm dividend payments in general. However, on an aggregate time-series basis, dividend payments tend to decrease company earnings in the Japanese electrical appliances industry, and this means rejection of the traditional signaling hypothesis.

Anupan Mehta (2012) found that size, risk and profitability explain 42% of the total variations in the dividend payout policy. The study clearly shows that size and risk are the two most important considerations in deciding on dividend policy by United Arab Emirates companies.

Faroop Saoud and Agnaou (2012) in their study the results for stable growth period suggest negative relationship between stock price volatility and dividend payout ratios, and positive relationship between market-adjusted returns and dividend payout ratios.

Al- Shubiri (2012) on his paper entitled determinants of changes dividend behavior policy: evidence from the Amman Stock Exchange, founds evidence of a significant negative relationship between the leverage ratio and the dividend payments decision and is in line with the agency theory, strong significant positive
relationship between profitability and dividend payments, significant negative relationship between business risk
and dividend payments decision, strong significant positive relationship between the potential growth rate and
dividend payments. He concludes that the results the Jordanian firms follow the same determinants of dividend
policy as suggested by the developed markets.

Gul et al (2012) in their paper that examined the influence of dividend policy on shareholder’s wealth
of 75 companies listed in “Karachi Stock Exchange”, for duration of six years from 2005 to 2010 using multiple
regression and stepwise regression, they found that the difference in average market value relative to book value
of equity is highly significant between dividend paying companies and non-paying companies. Retained earnings
have insignificant influence on market value of equity. There is significant influence of dividend policy on
wealth of shareholder’s, as far as the dividend paying companies are concerned. Lagged Price earnings ratio did
not appear to have any significant influence on dependent variable, whereas lagged market value of equity has a
significant impact on market price per share.

No census has been achieved after several decades of investigation and scholars often disagree even
about the same empirical evidence. Although numerous studies have examined various issues of dividend policy,
they have produced mixed and inconclusive results. This paper mainly tries to provide evidence related to
agency cost theory of dividends by examine a new sample of Chinese companies using OLS regression with
random and fixed effects.

3. Methodology

3.1 Data
To accomplish this study, we use data from Chinese companies that are listed in NASDAQ stock exchange and
respective website of the companies that was included in this research for the period 2010 till 2013. All the firms
used in this study are non-financial companies and they are from different industries. We did not use financial
companies to analyze regarding their specificity of accounting that may cause some implications while analyzing
them together with non-financial companies. Thus from the listed Chinese companies in NASDAQ, we collected
all 75 non financial companies information in 4 years constructing then a panel data with 300 observations. Most
of data was accessed on NASDAQ Stock Exchange with exception some information such age of firms that we
had to access at companies website to complete them.

3.2. Dependent Variables
Many study has been conduct in attempt to provide explanation about what variables may cause the effect o
dividend payout, the variable that we design in our study to be our dependent variable. In this study our
dependent variable is cash dividends paid by the companies from the period set in our study.

3.3. Explanatory Variables
In this research we include some variables that we presume to be very important explanatory variables such as:
profitability, liquidity, age, leverage, size, float, business risk and Asset structure.
3.1.1 Profitability
Dividend payout has strong relationship with profitability. There a positive relationship between dividend payout
and profitability which means that firms that has higher profitability tend to pay more dividends, hence positive
relationship is expected in our study. Many studies have found also this kind relationship between these
variables. In other words, profitable firms pay dividends to convey their good financial performance (Ho, 2003;
Aivazian et al., 2003). We measure the profitability as ratio between net profit and owner’s equity. Some
previous study like Fama and French (2001) have found that profitability, investment opportunities and size are
the main variables that affect dividend payout.
3.1.2 Liquidity
Liquidity ratio, expresses a company's ability to repay short-term creditors out of its total cash. It means the
ability of firms to cover their current liabilities with current assets the greater is the liquidity more is the cash in
the firm so firms with more liquidity are more likely to pay dividends. In this research our ratio to measure
liquidity is current ratio that’s equal to currents assets divided by current liabilities. A poor liquidity position
means less generous dividends due to shortage of cash. (Kanwal and Kapoor 2008; Ahmed and Javid 2009).
3.1.3 Age
There is not many research that link companies age with dividend payout policy the evidence shows others
linkage such as age with profitability, relationship of Age, leverage and growth of companies. Some others
studies support that exist relationship with dividend payout. Al-Malkawi (2007) reported that the relationship of
company’s age is significantly positive with dividend payout. So we expect a positive relationship between age
and dividend payout.
3.1.4 Leverage
Firm’s leverage is very important for firm’s dividend payout policy. “Firms with relatively less debt and more
tangible assets have greater financial slack and more able to pay and maintain their dividends” (Aivazian et al., 2003: 380). Rozeff (1982) argued that those firms with high financial leverage tend to have low payout ratios in order to reduce the transaction costs associated with the external financing. Despite these ideas some study support different opinions such as Kania and Bacon (2005) have found a significant positive relationship. We expect a positive relationship between leverage and dividend payout.

3.1.5 Size
We expect that dividend payout may be affect by firm’s size. Large firms are more likely to be mature and more capable of experiencing economy of scale and easier to get access to capital market, and more able to pay dividends. So large firms are more likely to pay dividends than smaller firms. Fama and French (1999) argue that among dividend payers, larger and more profitable firms have higher payout ratios, and firms with more investments have lower payouts. Thus we expect a positive relationship between size and dividend payout.

3.1.6 Float
There is a high expectation that float can affect dividend policy. A high float implies that the firm’s stock is more uncertain more unpredictable relative to the market and hence implies high transaction costs of external finance (Rozeff, 1982). Firms with high equity beta will lower the dividend payout to lower the cost of external funding. We expect a negative relationship between float and dividend payout.

3.1.7 Business risk
The lower is the business risk for a firm the higher will be his dividends. “Dividend payout should be inversely related with business risk” (Aivazian et al., 2003: 380). “A firm with stable earnings can predict its future earnings with a greater accuracy. Thus, such a firm can commit to paying larger proportion of its earnings as dividends with less risk of cutting its dividends in the future” Mollah (2002). We expect negative relationship between dividend payout and business risk.

3.1.8 Asset structure
We expect a relationship between asset structure and dividend payout. “More tangible asset firms can benefit from greater tax without relying on debt, so they can be more likely to use dividend policy to influence information asymmetry and agency costs” (Koch and Shenoy, 1999:26). We expect a negative relationship between asset structure and dividend payout.

3.3. Hypothesis
The Hypothesis and the specification of variables used in this study are summarized on the table 1 below.

<table>
<thead>
<tr>
<th>Variable name</th>
<th>Variable definition</th>
<th>Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEV</td>
<td>Total liabilities/Total assets</td>
<td>Positive</td>
</tr>
<tr>
<td>AGE</td>
<td>Firm Age since listed</td>
<td>Positive</td>
</tr>
<tr>
<td>PROF</td>
<td>Net Profit/Owner equity</td>
<td>Positive</td>
</tr>
<tr>
<td>LIQTY</td>
<td>Current Asset/Current Liabilities</td>
<td>Positive</td>
</tr>
<tr>
<td>SIZE</td>
<td>Natural log of total assets</td>
<td>Positive</td>
</tr>
<tr>
<td>FLOAT</td>
<td>Average daily share prices of year t</td>
<td>Negative</td>
</tr>
<tr>
<td>BRISK</td>
<td>Standard deviation of ROA</td>
<td>Negative</td>
</tr>
<tr>
<td>ASTRUCT</td>
<td>Fixed assets/Total assets</td>
<td>Negative</td>
</tr>
</tbody>
</table>

3.4. Methods
In this research we used Pearson correlation, OLS regression model. The models used panel data with random effects and fixed effects to test which model better explain the relationship between dependent variable and explanatory variables. In order to find the appropriated model that better explain the relationship between dependent and independent variables correlated random effects–Hausman test, and redundant fixed effects test was carried out.

4. Results and Discussion
On table 2 we can see the common statistics of the variables used in this study. Cash dividend used as a proxy to measure the dividend policy, has a mean of 0.035, with maximum at 3.8 and minimum at 0. The probability associated with Jarque-Bera is 0.000, which is more than 5% meaning that the variable has normal distribution.

The others variables age, leverage liquidity, profitability, size, business risk float and asset structure have the same probability associated. About 75 non-financial companies were used from 2010 to 2013, constructing a panel data with 300 observations as we can see on the above table. From the sample we used in this study only 25% of the companies use to pay dividends while the other 75% do not pay dividends from the period in analysis.

The following table 2 summarizes common statistics of all variables used in this study. Dividend payout as dependent variables and the independent variables such as: age leverage, liquidity, profitability, size,
Table 2 – Statistical summary of variables

<table>
<thead>
<tr>
<th>Stat.</th>
<th>DIV.</th>
<th>AGE</th>
<th>LEV</th>
<th>LIQTY</th>
<th>PROF</th>
<th>SIZE</th>
<th>BRISK</th>
<th>FLOAT</th>
<th>ASTR</th>
<th>UCT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>0.035</td>
<td>3.727</td>
<td>0.419</td>
<td>3.152</td>
<td>2.999</td>
<td>12.360</td>
<td>-0.002</td>
<td>12.383</td>
<td>0.211</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>0.000</td>
<td>4.000</td>
<td>0.360</td>
<td>2.320</td>
<td>0.125</td>
<td>12.247</td>
<td>0.000</td>
<td>4.762</td>
<td>0.166</td>
<td></td>
</tr>
<tr>
<td>Max.</td>
<td>3.800</td>
<td>9.000</td>
<td>3.722</td>
<td>31.360</td>
<td>1494.00</td>
<td>16.277</td>
<td>1.303</td>
<td>132.447</td>
<td>0.845</td>
<td></td>
</tr>
<tr>
<td>Min.</td>
<td>0.000</td>
<td>0.000</td>
<td>0.031</td>
<td>0.000</td>
<td>-2051.0</td>
<td>-1.101</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>0.269</td>
<td>2.330</td>
<td>0.357</td>
<td>3.140</td>
<td>156.899</td>
<td>1.243</td>
<td>0.149</td>
<td>19.981</td>
<td>0.186</td>
<td></td>
</tr>
<tr>
<td>Skewness</td>
<td>10.998</td>
<td>0.153</td>
<td>5.299</td>
<td>4.154</td>
<td>-4.093</td>
<td>-0.197</td>
<td>1.175</td>
<td>3.369</td>
<td>1.186</td>
<td></td>
</tr>
<tr>
<td>Kurtosis</td>
<td>140.24</td>
<td>2.038</td>
<td>44.791</td>
<td>30.050</td>
<td>128.371</td>
<td>5.392</td>
<td>37.155</td>
<td>16.515</td>
<td>3.929</td>
<td></td>
</tr>
<tr>
<td>J-Bera Prob.</td>
<td>24149</td>
<td>12</td>
<td>23234</td>
<td>10008</td>
<td>197310</td>
<td>73</td>
<td>14651</td>
<td>2850</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Obs.</td>
<td>300</td>
<td>300</td>
<td>300</td>
<td>300</td>
<td>300</td>
<td>300</td>
<td>300</td>
<td>300</td>
<td>300</td>
<td>300</td>
</tr>
</tbody>
</table>

Table 3 presents the results of correlation among independent variables. From the results we can see that the highest correlation is between variable SIZE and AGE, 0.485 that is less than 60%. The correlation between FLOAT and SIZE is 0.43, which is also less than 60%. The others correlation among variables seems to be very low. Therefore these correlation do not arise any problems to our analysis. The following table 3 presents in detailed the result of correlation among independent variables.

Table 3 – Results of correlation among variables

<table>
<thead>
<tr>
<th>AGE</th>
<th>LEV</th>
<th>LIQTY</th>
<th>PROF</th>
<th>SIZE</th>
<th>BRISK</th>
<th>FLOAT</th>
<th>ASTRUCT</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEV</td>
<td>-0.070</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LIQTY</td>
<td>-0.027</td>
<td>-0.342</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PROF</td>
<td>-0.050</td>
<td>0.002</td>
<td>-0.002</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIZE</td>
<td>0.485</td>
<td>0.050</td>
<td>-0.094</td>
<td>-0.025</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BRISK</td>
<td>-0.103</td>
<td>-0.048</td>
<td>0.241</td>
<td>0.020</td>
<td>0.027</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>FLOAT</td>
<td>0.119</td>
<td>-0.078</td>
<td>-0.002</td>
<td>-0.005</td>
<td>0.434</td>
<td>0.140</td>
<td>1</td>
</tr>
<tr>
<td>ASTRUCT</td>
<td>-0.048</td>
<td>-0.043</td>
<td>-0.238</td>
<td>-0.005</td>
<td>0.001</td>
<td>-0.041</td>
<td>-0.048</td>
</tr>
</tbody>
</table>

The table 4 shows OLS regression with random and fixed effects. From the results we can see that random effects presents 0.0508 of R-squared and adjusted R-squared is 0.0213. The independent variables can only explain 5% of changes on cash dividends in this model. The S.E. of regression 0.2646 while its Durbin Watson statistics is 1.95 very close to 2, which means that there is no problem of autocorrelation, F-statistics is 1.7262 and the probability associated with is 0.08, which means the model is very significant at 10% level. There are two significant independent variables from this model: profitability and size. The findings suggest that these two variables are very significant to explain dividend policy from Chinese companies that are listed in NASDAQ stock exchange. The second model with fixed effects, the R-squared is 0.3063 and the adjusted R-squared is 0.0398. S.E. of regression is 0.2635 and Durbin Watson statistics is 2.7927. F-statistic is 1.1495 and the probability associated is 0.2128, which is more than 5% and 10%, thus the data does not fit well in this model. Furthermore only one independent variable seems to be significant but the model is not significant. More tests had to be done to see which model better explain the relationship between the dependent variable (dividend payout) with independent variables. Hausman test was applied to figure out which model best fits or is more appropriated to explain the relationship and random effect is the most desirable in this situation.

The variable profitability is very significant in both random and fixed effects model. The coefficient is -0.0003 and the probability associated with t-statistics is 0.004, which is less than 5% meaning that is significant at 5% level. The signal of coefficient is negative suggesting an existence of negative relationship with dividend policy. However theoretically profitability has a positive relationship with dividend policy. Our results do not meet the theory. It suggests that Chinese firms that have higher profitability tend to pay lower dividends.

The variable size is also very significant in random effects model. The coefficient is 0.0397 and the probability associated with t-statistics is 0.0294, which is less than 5% meaning that is significant at 5% level. The finding suggests an existence of positive relationship with dividend policy. The results support those Chinese firms that are larger tend to pay more dividends. Our finding is consistent with Fama and French (1999).
Table 4-OLS panel Regression Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Random effects</th>
<th>Fixed effects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient</td>
<td>Std. Error</td>
</tr>
<tr>
<td>C</td>
<td>-0.3174</td>
<td>0.1845</td>
</tr>
<tr>
<td>AGE</td>
<td>-0.0077</td>
<td>0.0078</td>
</tr>
<tr>
<td>LEV</td>
<td>-0.0413</td>
<td>0.0471</td>
</tr>
<tr>
<td>LIQTY</td>
<td>-0.0036</td>
<td>0.0056</td>
</tr>
<tr>
<td>PROF</td>
<td>-0.0003</td>
<td>0.0001</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.0351</td>
<td>0.0160</td>
</tr>
<tr>
<td>BRISK</td>
<td>-0.0397</td>
<td>0.1074</td>
</tr>
<tr>
<td>FLOAT</td>
<td>-0.0003</td>
<td>0.0009</td>
</tr>
<tr>
<td>ASTRUCT</td>
<td>-0.0857</td>
<td>0.0866</td>
</tr>
</tbody>
</table>

R-squared | 0.0508 | R-squared | 0.3063 |
Adjusted R-squared | 0.0213 | Adjusted R-squared | 0.0398 |
S.E. of regression | 0.2649 | S.E. of regression | 0.2635 |
Durbin-Watson stat | 1.9567 | Durbin-Watson stat | 2.7927 |
F-statistic | 1.7262 | F-statistic | 1.1495 |
Prob (F-statistic) | 0.0426 | Prob (F-statistic) | 0.2128 |

*** significance at 1%level. Prob(F-statistic) is significant at 10% meaning that the model is significant.

The other independent variables used in this study (age, leverage, liquidity, business risk float and asset structure) are not significant since their p-value is higher than 5% and 10% level.

After estimating the two models, a group of test was applied in order to choose with model best fit the relationship between dividend policy and independent variables used in this research. Correlated random effects–Hausman test, and redundant fixed effects tests were the two post estimation tests we carried out to help decide which model is more appropriated.

Table 5 –Post estimation tests for random and fixed effects

<table>
<thead>
<tr>
<th>Correlated Random Effects - Hausman Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Summary</td>
</tr>
<tr>
<td>Cross-section random</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Redundant Fixed Effects Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effects Test</td>
</tr>
<tr>
<td>Cross-section F</td>
</tr>
<tr>
<td>Cross-section Chi-square</td>
</tr>
</tbody>
</table>

From the results reported on table 5, correlated random effects-Hausman test suggests that a random effect model is more appropriated to be used since the probability associated is more than 5% lead us to accept random effects model. Hausman test basically tests whether the unique errors are correlated with the regressors and the results prove that they are not.

The redundant fixed effects test suggests that no time fixed- effects are needed in this case since the probability is 0.0578 > 0.05, so we failed to reject the null that the coefficients for all years are jointly equal to zero. From the light of results presented in the table 5 we choose the random effect model, which assume that the entity’s error term is not correlated with the predictors, which allows for time-invariant variables to play a role as explanatory variables.

5. Conclusion

This paper examines the relationship between dividend policy with age, leverage, liquidity, profitability, float, asset structure, size and business risk using a sample of Chinese companies listed in NASDAQ Stock Exchange by using correlation and OLS regression with panel random and fixed effects. Some tests were also applied to find the appropriated model and the tests suggested that random effect model were the most appropriated one. The finding suggests an existence of positive relationship between age and dividend policy. It supports that those Chinese firms that are larger tend to pay more dividends and also found an existence of negative relationship between profitability and dividend policy. However, theoretically profitability has a positive relationship with dividend policy. Our results do not meet the theory. It suggests that Chinese firms that have higher profitability tend to pay lower dividends. The study failed to provide further evidences about other variables used in this study.

Most of studies carried out on Chinese companies are applied to national stock exchange such us: shanghai stock exchange, Shenzhen Stock exchange and Hong Kong stock exchange. Our study is one of the few studies conduct on Chinese companies listed in NASDAQ Stock exchange and tries to provide support on agency cost theory.

113
The managers of these firms listed in NASDAQ stock exchange may assume that dividend policies are influenced by imperfect information in real estate market, resulting monitoring problems and agency costs. The shareholders has different desires some would prefer dividends and others prefer capital gains so the managers should know what investors they want in their companies therefore knowing what policy to apply in order to attract them to the firms.

Every research has its limitations and this research isn’t excluded. This research only analyzes Chinese non-financial firms and the sample size isn’t big so the conclusions taken in this sample may not be as accurate as those with big sample size. The study only provides the agency cost support theory. There are others indicators that could be used to study and to understand dividend payout policy from Chinese Companies listed on NASDAQ stock exchange. Another research can also be carried on by collecting information about Dividend policy: the views of Chinese financial managers of Chinese companies listed on NASDAQ Stock exchange in order to compare the similarities with others research made in this field.

Acknowledgements
Antonio Goncalves de Andrade would like to express his gratitude to China Scholarship Council for giving him the opportunity to study in China by supporting all his expenses such as: tuition, accommodation, medical care, learning materials and living allowance.

References


