# Impact of Globalization on Dividend Policy and Payout Rate: Evidences from selected countries

Sazali Abidin, Dr., Department of Finance, Waikato Management School, University of Waikato, Private Bag 3105, Hamilton 3240, New Zealand
Tel: +(647) 838-4513, E-mail: sazali@waikato.ac.nz

Nirosha Wellalage, Dr., Department of Finance, Waikato Management School, University of Waikato, Private Bag 3105, Hamilton 3240, New Zealand
Tel: +(647) 838-4196, E-mail: nirosha@waikato.ac.nz

Lin Wu, Department of Finance, Waikato Management School, University of Waikato, Private Bag 3105, Hamilton 3240, New Zealand
Tel: +(647) 838-4448, E-mail: lw196 @students.waikato.ac.nz

## Abstract

The impact of globalization on dividend policy has been one of the most arguable topics in financial literature. This paper investigates different selected countries through 2001 to 2010 and find out the disappearing dividends phenomenon supported by Fama-French (2001) does not appear except during 2007-2009 financial crisis period. Moreover, the project suggests that developed countries are paying more dividends than developing countries, and common law countries tend to have more dividend payers than civil law countries due to a better legal protection for investors' rights. Further, by using regression analysis for selected countries in year 2013, this project find a significant positive relationship between dividend payers with size and profitability, and a negative correlation with stock return volatility for most of the countries. However, the findings do not support the hypothesis that import competition has an impact on dividend policy.

JEL Classification - G15 - International Financial Markets

Keywords: dividend, payout, volatility, globalization, vector auto-regression, Global Financial Crisis

## 1.0 Introduction

With the increasing economic integration among countries worldwide, there is virtually no country that can escape from the impact of globalization. The pressure from globalization leads to more intense competition. If previously, company may only have to compete with similar companies in specific industry and specific market, this is no longer a privilege. Individual company presently not only has to compete with similar companies in specific industry and specific market, but it also has to compete with similar companies from other markets and/or other countries. Therefore, as globalization has been a trend for developed economic all over the world since at early stages and with the increasing of business communication, different finance environment in different countries could have different results in related to the same financial topic.

Another increasing effect of globalization it more important for individual company to control its cost of capital as intense competition makes products and/or services from other companies more attractive and cheaper. One of the measures that have a significant impact on cost of capital of a company is its dividend policy. Fortunately, dividend policy is an internal decision of Board of Directors of a company and it is a decision that is not determined by factors externally to the company. A very profitable company may have shareholders friendly policy by paying high dividends to the shareholders but this will result to lower retention rate which eventually result to higher cost of capital for capital expenditure.

In addition, the decisions of paying out dividends or not includes a certain amount of determinants. For instance, firm's characteristics, such as earnings, firm size, and profitability may have the direct internal linkage with the dividend payout rate. However, evidences are showing companies in different countries are paying fewer dividends gradually, which known as disappearing dividends phenomenon. This phenomenon was first reported by Fama and French (2001) who analyzed all the public firms listed on NASDAQ, NYSE, and AMEX to find out that the proportion of dividend payout rate has declined from 66.5% to 20.8% during for the time period of 1978 to 1999. Therefore, this study investigates whether there is a decreasing trend in dividends payment happening in companies in Australia, Brazil, Canada, Chile, India, Italy, Mexico, New Zealand, Singapore, and Turkey. This report is going to collect the full financial data in related to dividends payments of public firms in all 10 countries to conclude the results.

After that, expoloring the essential factors which are lead to this decreasing dividends payments turn out to be an important following issue to consider. There are several potential elements are selected to explore the changing dividend policy. For instance, share repurchase is regarded as one of the reason for firms to change their dividend payout. Evidences are suggesting more firms are using share repurchase rather than paying dividends as alternative methods to distribute cash to shareholders. Grullon, Paye, Underwood and Weston (2011), pointed out that the annual growth rate of dividend payout is less than the percentage of share repurchases, which indicated the decreasing dividend payout could due to the substitution of share repurchases.

Moreover, the income level of economic development for different countries contributes to another element in influencing the dividend policy. Glen et al. (1995) found that dividend policies in developing markets differed from those in developed markets. They reported that dividend payout ratios in developing countries were only about two thirds of that of developed countries. In addition, La Porta, Lopez-de-Silanes, Shleifer, and Vishny, (2000) pointed out it is evident that companies in the developing countries pay very low dividend if not none at all. Therefore, economic development becomes the first determinate when choosing the research countries. According to the World Bank, the main classifications of developed countries group and developing country group is by income level with its economic development. More specifically, there are two main variants: one which includes low and middle income economies only is labeled developing and the high income economies are defined as developed. Therefore, Australia, Canada, Italy, New Zealand, and Singapore are considered as developed countries, while Brazil, Chile, India, Mexico and Turkey are developing countries.

Another factor that could possibly explain the decreasing dividends payment is the different legal systems. La Porta et al (2000) investigated the 33 countries to conclude the relationship between dividend payout with legal protections. They pointed out that firms in common law countries have more effective protections than those firms in civil law countries, thus helped the minority shareholders have the possibility to gain more dividends. Therefore, by categorizing the 10 countries based on their legal systems, Australia, Canada, India, New Zealand, and Singapore are countries adopted common law, and Brazil, Chile, Italy, Mexico, and Turkey are civil law countries. The report would expect to investigate the difference of dividend policy and payout rate from different countries aspects.

On the other hand, globalization factor is the mainly variable to evaluate in this research project. Though the impact of globalization could has a huge difference in every aspect, the growing global communication trend lead to a furious foreign competitions among companies all over the world. This follows the import competition which leads to an impact on the stability and sustainability of a firm's future earnings, and influence the dividend policy and payout rate. Moreover, globalization could be strength for some companies to get extra profits, but also can be a weakness if companies are lack of international management skills. In this case, companies in different countries may response differently towards the influence of globalization. As a result, new countries including China, France, Japan, Korea, Malaysia, and United Kingdom are added to replace Italy, New Zealand, Chile, Brazil, and Turkey in order to ensure the significance of regression analysis by using large countries. After that, this report is going to analyze the main research question, which is the impact of globalization on dividend policy and payout rate in different selected countries into more details with various stages of economic development and different legal system.

Selecting different countries and divided them into several categories help to find out different expected results and thus improves the research credibility, and different countries' background will contribute to dissimilar dividend policy accordingly. However, the research gap of this project is that most of the theories are based on either dividend

policy or globalization factor, it is difficult to find related articles in explaining the relationship between dividend payout with the globalization. Moreover, as globalization is one of the most important factors to evaluate, it is limited to consider import competition as the only variable.

This study is primarily motivated by the significant impact of globalization on ability and preferences of public-listed companies to pay dividends. It is important to note that payment of dividend is the choice and prerogative of the Board of Directors of public-listed companies. The Board may decide not to pay dividends despite having the financial ability to do so. The globalization impact has significantly force the Board to make strategic decision on dividend payment. Previous literature also highlighted the differences of dividend policy adopted by companies in different countries with different legal system. This is an interesting observation and provides a strong motivation to study the factor determinants of dividend policy adopted by countries with different legal system.

All in all, the motivation of doing this empirical research paper is first to find out whether global companies are paying less dividends as a whole, and to investigate if there is any differences between developed countries and developing countries in paying dividends. Besides, the paper is also going to examine whether legal system could explain the gap between different countries behave different dividends payments. Most importantly, the internal relationship between globalization with dividend policy and payout rate for companies in different countries as the major research question will be tested in the paper. The problem statement of the study is the worrying trend of companies not paying dividend despite having the financial ability to do so, which may not align to the preferences of majority and/or minority shareholders, as well as institutional and/or retail investors. Upon investigation on past literature, I have found that there has not been any specific study being done on the impact of globalization on dividend policy and payout rate on the selected countries after the global financial crisis 2007-2008.

Therefore, the research questions for the study are:

1. What is the trend of dividend payment on the selected countries as a result of globalization?
2. Are there any differences in impact of globalization on dividend policy between developed and developing countries?
3. Are there any differences in impact of globalization on dividend policy between countries adopting civil law and common law?

The rest of the report is organized as follows. The next section followed is the literature review related to all the aspects of this research topic, as well as introduces the hypotheses questions. Data collection are presented in section 3. Section 4 the methodology and variables explanations. Findings and discussions will be provided in section 5, and section 6 contains the conclusion.

## 2.0 Literature Review

### 2.1 Disappearing dividend phenomenon

There are extensive literatures are focus on discussing the dividend policy and pay out rate, starting with Miller and Modigliani (1961) who published the dividend irrelevance theory, pointed out that shareholders' wealth did not have the direct relationship with the changing of dividend policy. After that, Fama and French (2001) analyzed all the public firms listed on NASDAQ, NYSE, and AMEX to find out that the proportion of dividend payout rate has declined from 66.5% to 20.8% during for the time period of 1978 to 1999. To explain this phenomenon, Fama and French suggested that firms with small size newly listed that have much investment opportunities are potentially pay less dividends. However, the proportion to pay dividends still decreasing even after controlling the firm characteristics makes the disappearing dividends become a puzzle in financial area.

On the other hand, DeAngelo et al. (2004) reported that during 1978 to 2000, the dividend payout rate was actually increasing at roughly about 23%. They contributed that the disappearing dividends phenomenon did not exist, but the aggregate value of dividends were increasing as a fact. To explain this, DeAngelo et al stated that the supply of dividends are more concentrated in largest dividend payers, thus potentially decreased the number of dividend-paying companies. Therefore, it is a truth that fewer companies are paying out dividends, but more dividends are paid by those companies with large increasing consolidated earnings.

### 2.2 Catering theory

Subsequently, several explanations followed up to explain the reason why firms are less willing to pay dividends. Baker and Wurger (2004a, b) provided the catering theory, which could be a potential behavioral explanation to suggest that companies paying dividends according to investors' demand. More specifically, companies may change the dividend policy by increasing the stock price if the investors' demand is high or provide stock discount if investors' demand is low, in this case cater to investors' preference. After that, several empirical findings are reported to support the catering theory. Ferris et al. (2006) found the proportion of dividend payers has been decreased from 75.9% in 1988 to 54.5% in 2001 in UK market, which indicated that catering theory is one of the most powerful explanations to disappearing dividends phenomenon even after controlling firm characteristics.

### 2.3 Liquidity explanation to dividend policy

On the other hand, other theories followed to explain the changing of dividend policy and dividend payout rate. Banerjee, Gatchev and Spindt (2007) provided new evidences in showing the relationship between dividend policy and stock market liquidity. By analyzing the firms listing in AMEX and NYSE from 1963 to 2003, collected the data related to liquidity factors, they concluded that the relationship between stock liquidity with dividend payout rate was negative. That is to say, firms with higher stock liquidity tend to pay less dividends compared with low stock liquidity firms. To explain this, it is a fact that investors prefer to invest those companies with higher liquidity with large net profit earnings. Therefore, in order to improve the firm valuation to attract more investors,

companies with low liquidity tend to pay out more dividends. In this case, stock liquidity is one of the factors could explain the changing of dividend policy.

### 2.4 Risk explanation to dividend policy

However, a disagreement has reported by Hoberg and Probhala (2009), proposing that risk based explanation could answer the disappearing dividend rather than catering based explanation. Their evidence finding was rely on the study of systematic risk and idiosyncratic risk from US companies, investigating that the proxy of catering incentives is only the measure difference of dividend payers and non-payers.

### 2.5 Stock repurchases explanation to dividend policy

In addition, Grullon, Paye, Underwood and Weston (2011) argued that stock repurchase could be another reason to explain the lower dividend payout propensity. In detail, they showed that the annual growth rate of dividend payout was less than the percentage of share repurchases, which indicated the decreasing dividend payout could due to the substitution of share repurchases.

### 2.6 Global companies in related to dividend policy

In spite of the overall tendency of dividend policy tends to reduce the payout rate, there are more literatures that are specifically focus on the global companies in different countries in related to dividend policy. Especially, most of the literatures are from European countries perspective. La Porta et al (2000) investigated the 33 countries to conclude the relationship between dividend payout with legal protections. They pointed out that firms in common law countries have more effective protections than those firms in civil law countries, thus benefited the minority shareholders to gain more dividends.

On the other hand, Eije and Megginson (2008) stated that dividends concentration and earnings has been increased, with an 81% dividends payout rate which known as the largest payers among the 15 European countries. More specifically, Denis and Osobov (2005) provided evidences showing the six most developed countries including Japan, Canada, UK, US, Germany and France, have a decline tendency in propensity to pay dividends. They reported that it is dependent of dividend payments in related to the countries legal system, and firms with large profits are more likely to pay out dividends. Moreover, Bancel et al. (2005) supported that ownership structure and the legal institutional structures have a significant influence in dividend payout policy from the evidence of 16 European countries.

### 2.7 Globalization impact on different country regions

After summarizing the main literatures that focused on the development of the dividend policy from both a historical view and international perspective, the following literatures are mainly concentrated on explaining the globalization impact on different country regions. To begin with, McLuhan and Fiore (1968) firstly introduced “global village” concept by express the globalization is a growth of international trade of goods and services. More specifically, the growing economic integration is linked with the growth of foreign direct investment as well as the political and social exchange systems. In the early time, most of the countries are adopted aggressive export-oriented policies. Ariff

and Khalid (2005) pointed out that these export-oriented policies with poorly implemented structure force the domestic countries lost large investment opportunities. However, because of the unique geographic differences, the globalization impact could result to different aspects or standards towards different countries.

For Asia perspective, Mundell (2003) indicated Japanese yen would dominate the global currency market since the early influence by globalization among the Asia countries. However, Gaston, Khalid and Ebrary (2010) found that China become the major players in the global economy by surpass the trade shares with six major East Asian countries in 2006. Meissner and Oomes (2008) suggested that the phenomenon of China factor could contribute to the choice of a particular anchor currency depends on the amount of trade with countries that use that anchor. Things are completely in the opposite way as for European countries when faced to globalization. According to Ojha (2002), after surveyed in France, Britain, Italy and Spain, most of the countries in European Union consider there are negative influences on their countries' development, and Germany becomes the largest supporter by showing 36% of the agreements.

**2.8 Comparison between developed countries and developing countries**

It is considered that the distinguishing of developing or developed countries is mainly on the basis of economics, per capital income, education rate, living standards etc. A developed country has a highly developed economy and advanced technological infrastructure related to other developing nations. There might have amount of differences between the two groups. However, the purpose of this report is mainly focus on finding the relationship of the dividend policy and payout rate between the two groups. Literatures are stating that in developed countries, it is so important for investors and managers to decide whether to pay the dividends or keep the profit as retained earnings. In detail, Glen, Karmokolias, Miller, and Shah, (1995) reported the fraction of earnings paid as dividends to investors in developing countries was about two thirds the level paid in developing countries in 1994. However, before 1984, developing countries performed a higher dividend yield than developed country markets. After that, the improvement of management and investment knowledge determines that developed countries excessed the developing markets. While for developing countries, it seems pay more attention on dividend payout rations than the level of dividends paid. This may bring a more volatile dividend payment in developing markets than developed markets. Iwata and Wu (2009) supported this statement by showing an increasing volatility of developing markets because of the vulnerable economic shocks. On the contrary, Chiou (2008) suggested that countries in East Asia and Latin America, and other developed countries are able to diversify and reduce the volatility through risk-sharing, therefore benefits the most from the financial liberalization.

**2.9 Comparison between civil law countries and common law countries**

According to Watson (1974), common law of English origin and the civil law of Roman origin considered as two broad traditional laws that consist of commercial laws. More specifically, the civil law has been adopted by continental Europe and by countries that are under its historical impact while common law has been implemented largely by commonwealth countries. Bildik and Fatemi (2012) tested 17,000 companies from 33

different countries, and found the proportion of dividend payers varies substantially across countries. More importantly, the decline in the mean dividend payout ratios as well as the proportion of payer is much more pronounced in civil law countries. In addition, La Porta, Lopez-De-Silanes, and Vishny (1998) examined 49 countries on the legal protection of investors and creditors, found out better investors' legal rights protection has been provided among common law countries compared with civil law countries.

Moreover, further studies stated by La Porta, Lopez-De-Silanes, and Vishny (2000) enhanced the result by showing a high dividends payment is produced by common law countries. This finding confirms the hypothesis which suggested that effective laws help managers to make right investment decisions and reduced the legal powers of minority shareholders, thus lead to a high dividend policy. On the other hand, Faccio, Lang, and Young (2001) indicated that the basis agency problem may raise the conflicts between majority and minority shareholders rather than between managers and shareholders. It is because the dividend policy in civil law countries is mainly protecting minority shareholders' rights, and the degree of shareholder concentration is usually higher than in common law countries (Faccio and Lang, 2002), therefore dividend payouts may increase if insider ownership grows to compensate the minority expropriation.

**2.10 The relationship between import competitions with dividend policy**

With the development of globalization economic communication, more and more emerging market countries have entered the global market. Import competition becomes one of the most remarkable elements in determining the impact followed by globalization. However, the limitation is difficult to find literatures in relate the import competition with dividend policy. According to Min (1999), whether an increase in foreign competition, in an imperfectly competitive market structure, really provided an additional avenue of enforcement of more competitive market behavior and increased the efficiency of resource allocation. Thus provided an important policy implication for competition policy. After analyzed the data from Korea manufacturing industry, Min indicated the increase of foreign competition was essential to reduce the domestic firms' monopoly power and thus to increase the efficiency of resource relocation as well as developed the domestic market structure.

On the other hand, Pickford (1992) stated that domestic importers can make their relatively small purchases without influencing the price on world markets in response to foreign supplies. To explain this, Pickford indicated that in the situation of efficiency gains from scale economics have to be weighed against the higher prices arising from lack of competition. However, such competition is likely to play an important role in New Zealand competition policy, partly because of the rises in domestic industry concentration caused by the merger policy and partly because of the vigorous policy of important liberalization implemented in recent years.

To conclude this, different countries have different situations in facing the import competition. However, the common result for each countries who effect by globalization process is quite similar. Accordingly, Helpman and Krugman (1985) suggested that based

on the international trade theory, the market power of the domestic market has been reduced cause the increasing imported products from foreign competitions push down the domestic price and thus minimize the profitability of domestic firms. It is truth that domestic companies need to reduce their competitive risk caused by import competition in order to maintain their market power.

Subsequently, this report is going to divide the research questions into three main hypothesis questions as followings:
*Hypothesis 1: Firms in developing countries are paying less dividends than firms in developed countries.*
*Hypothesis 2: Countries that adopt civil law have firms that pay less dividends than firms in countries that adopt common law.*
*Hypothesis 3: Countries that have high import competition have firms that pay less dividends than firms in countries that have low import competition*

## 3.0 Data and Methodology

### 3.1 Data

The option of collect the sample data for this report are mainly located Thomson one data base. The reason to choose Thomson one is not only because the database is free to download the financial data, but also contains most of required variables for this report. In addition, using Thomson one, it is able to collect the data based on required periods and required categories within different countries automatically. Therefore, the main data sample of this report contains 16 countries for different sections, the first section including Australia, Brazil, Canada, Chile, India, Italy, Mexico, New Zealand, Singapore and Turkey. The reason to choose those 10 countries is because the analysis needs to have five developed countries and five developing countries, and also five civil law countries and five common law countries. The second section adds new countries, which are China, France, Japan, Korea, Malaysia, and UK. The reason to replace the small countries to large countries is because for countries in the first section like Brazil, Chile, Italy, Mexico, New Zealand and Turkey contains less than 100 companies' data, the regression result is insignificant. After the replacement, it is able to improve the significance for the regression results and thus makes the report easier to understand.

In detail, the time period of this report contains financial data from 2001 to 2010 in the first section in order to find out the trend of dividend payment for both global perspective and country-by-country perspective. It is because the number of firms is increasing, which means in year 2013, it contains most sufficient financial data. Therefore the second section use 2013 as the research period specifically, aims to test the research question in a more efficient way. Moreover, all companies in different countries need to have total assets, stock price, shares outstanding, income before extraordinary items, interest expense, dividends per share, stockholder's equity, liabilities, common equity and preferred stock par value. After deleting the missing data, the data sample for the first section are shown as table 1 in more details.

**Table1: Data sample for number of firms**

| Year | Global | Australia | Brazil | Canada | Chile | India | Italy | Mexico | New Zealand | Singapore | Turkey |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **2001** | 2756 | 742 | 191 | 543 | 138 | 377 | 161 | 90 | 59 | 298 | 157 |
| **2002** | 3022 | 786 | 197 | 660 | 151 | 405 | 166 | 91 | 64 | 321 | 181 |
| **2003** | 3325 | 841 | 208 | 741 | 157 | 490 | 172 | 94 | 67 | 364 | 191 |
| **2004** | 3737 | 934 | 214 | 824 | 158 | 635 | 183 | 97 | 77 | 414 | 201 |
| **2005** | 4493 | 1034 | 217 | 1234 | 166 | 762 | 200 | 104 | 85 | 449 | 242 |
| **2006** | 5956 | 1147 | 230 | 1348 | 171 | 1910 | 215 | 105 | 95 | 485 | 250 |
| **2007** | 6763 | 1437 | 286 | 1498 | 172 | 2136 | 232 | 105 | 111 | 524 | 262 |
| **2008** | 7092 | 1526 | 298 | 1566 | 170 | 2252 | 236 | 106 | 114 | 560 | 264 |
| **2009** | 7303 | 1554 | 303 | 1603 | 177 | 2341 | 241 | 109 | 118 | 588 | 269 |
| **2010** | 7470 | 1620 | 315 | 1621 | 177 | 2380 | 248 | 112 | 121 | 602 | 274 |

On the other hand, the World Bank database is used in this report in order to distinguish the country groups by different income level and economic development. More specifically, there are two main variants: one which includes low income, which is defined as those with a GNI per capital, calculated using the World Bank Atlas method, of $1,045 or less in 2013; and middle income economies, are those with a GNI per capita of more than $1,045 but less than $12,746; is labeled developing countries. The high income economies are those with a GNI per capita of $12,746 or more are defined as developed countries. Therefore, based on Table 2, Australia, Singapore, Canada, New Zealand and Italy are those with high income level countries belongs to developed group; Chile, Brazil, Turkey, Mexico and India are countries with middle income level which regarded as developing group.

**Table 2: Gross national income per capita ranking table**

| Economy | Atlas methodology (US dollars) | Ranking |
|---|---|---|
| **Australia** | 65,520 | 14 |
| **Singapore** | 54,040 | 25 |
| **Canada** | 52,200 | 31 |
| **New Zealand** | 35,520 | 48 |
| **Italy** | 34,400 | 50 |
| **Chile** | 12,230 | 73 |
| **Brazil** | 11,690 | 86 |
| **Turkey** | 10,950 | 91 |
| **Mexico** | 9,940 | 95 |
| **India** | 1,570 | 174 |

Besides, the gross domestic product (GDP) data for calculating the import competition is collected from the International Financial Statistics (IFS), a publication of the International Monetary Fund (IMF). Table 3 shows the detail GDP data for each country in year 2013, and by ranking from the highest to lowest GDP, China becomes the fastest developing country with highest GDP, but Singapore has the lowest GDP in 2013 in comparing with other countries.

**Table 3: Gross domestic product for all countries in 2013**

| Country | Subject Descriptor | Units | Scale | 2013 |
|---|---|---|---|---|
| China | Gross domestic product, current prices | U.S. dollars | Billions | 8939.327 |
| Japan | Gross domestic product, current prices | U.S. dollars | Billions | 5007.203 |
| France | Gross domestic product, current prices | U.S. dollars | Billions | 2738.676 |
| United Kingdom | Gross domestic product, current prices | U.S. dollars | Billions | 2489.674 |
| Canada | Gross domestic product, current prices | U.S. dollars | Billions | 1825.062 |
| India | Gross domestic product, current prices | U.S. dollars | Billions | 1758.216 |
| Australia | Gross domestic product, current prices | U.S. dollars | Billions | 1487.971 |
| Korea | Gross domestic product, current prices | U.S. dollars | Billions | 1197.506 |
| Thailand | Gross domestic product, current prices | U.S. dollars | Billions | 400.916 |
| Malaysia | Gross domestic product, current prices | U.S. dollars | Billions | 312.413 |
| Singapore | Gross domestic product, current prices | U.S. dollars | Billions | 287.374 |

### 3.2 Methodology

The basic model is as following:

(1) $DP_{ir} = \alpha + \beta_1 Profitability_{it} + \beta_2 Size_{it} + \beta_3 AGR_{it} + \beta_4 M/B_{it} + \varepsilon_{it}$

(2) $DP_{ir} = \alpha + \beta_1 IP_{it} + \beta_2 Profitability_{it} + \beta_3 Size_{it} + \beta_4 AGR_{it} + \beta_5 M/B_{it} + \varepsilon_{it}$

(3) $DP_{ir} = \alpha + \beta_1 IP_{it} + \beta_2 Profitability_{it} + \beta_3 Size_{it} + \beta_4 AGR_{it} + \beta_5 M/B_{it} + \beta_6 RE/TA_{it} + \beta_7 RETVOL_{it} + \varepsilon_{it}$

Where:

$DP_{it}$ is dividend payer

$IP_{it}$ is the degree of import penetration

$Profitability_{it}$ is return on assets

$Size_{it}$ is log of total assets

$AGR_{it}$ is the asset growing rate

$M/B_{it}$ is the market price to book value ratio

$RE/TA_{it}$ is retained earnings divided by total assets

$RETVOL_{it}$ is the stock price volatility

Variables explanations:

*Dependent variable*

$DP_{it}$ is dividend payer that represents the total dividends per share declared during the calendar year. It includes extra dividends declared during the year. Dividends per share is based on the "gross" dividend of a security, before normal withholding tax is deducted at a country's basic rate, but excluding the special tax credit available in some countries. This tax credit is due to the imputation system of corporate income tax under which shareholders are entitled to credit a certain proportion of the corporate income tax on distributed profits against the income tax imposed on the dividends received.

*Independent variable*

- $IP_{it}$ is the degree of import penetration, which defined as the proportion of domestic demand satisfied by imports. More specifically, import penetration of company i at year t is defined as:

$IP_{it} = Imports_{it} / (GDP_{it} – Exports_{it} + Imports_{it})$.

Where:

$Imports_{it}$ is the international operating income, which represents operating income generated from operations in foreign countries before adjustments and eliminations.

$Exports_{it}$ is international sales, which represent sales generated from operations in foreign countries.

- $Profitability_{it}$ is represented by return on assets, which calculated as:

Annual Time Series: (Net Income before Preferred Dividends + ((Interest Expense on Debt-Interest Capitalized) * (1-Tax Rate))) / Last Year's Total Assets * 100

Banks: Net Income before Preferred Dividends + ((Interest Expense on Debt-Interest Capitalized) * (1-Tax Rate))) / (Last Year's Total Assets - Last Year's Customer Liabilities on Acceptances) * 100. Customer Liabilities on Acceptances only subtracted when included in Total Assets

Insurance Companies: (Net Income before Preferred Dividends + ((Interest Expense on Debt-Interest Capitalized) *(1-Tax Rate))) + Policyholders' Surplus) / Last Year's Total Assets * 100

Other Financial Companies: (Net Income before Preferred Dividends + ((Interest Expense on Debt-Interest Capitalized) * (1-Tax Rate))) / (Last Year's Total Assets - Last Year's Custody Securities) * 100

- $Size_{it}$ is log of total assets, where total assets represent the sum of total current assets, long term receivables, investment in unconsolidated subsidiaries, other investments, net property plant and equipment and other assets, which calculated as:

Total Current Assets + Net Property, Plant & Equipment + Investments & Advances to Subsidiaries + Other Non-Current Assets + Deferred Charges + Intangibles + Deposits & Other Assets

- $AGR_{it}$ is the asset growing rate, which calculated as:

Annual Item; Industrials, Insurance Companies: (Current Years total assets / last year's total assets - 1) * 100

Banks: ((Current Year's Total Assets - Current Years customer liabilities on acceptances) / (Last Year's total assets - last year's customer liabilities on acceptances) - 1) * 100

Other Financial Companies: ((Current year's total assets - current year's custody securities) / (Last Year's total assets - last year's custody securities) - 1) * 100

- $M/B_{it}$ is the market price to book value ratio, which calculated as:

Market Price-Year End / Book Value per Share

*Control variables*

- $RE/TA_{it}$ is retained earnings divided by total assets, where retained earnings represent the cumulative earnings of a company minus total dividend distributions to shareholders. The stock adjustments made to this item relate to unissued shares.
- $RETVOL_{it}$ is the stock price volatility, which measures a stock's average annual price movement to a high and low from a mean price for each year. For example, a

stock's price volatility of 20% indicates that the stock's annual high and low price has shown a historical variation of +20% to -20% from its annual average price.

## 4.0 Findings and Results

In findings and results part, the main analysis has been divided into two sections. Section one is concentrate on finding whether the dividend payment has been decreasing between year 2001 to 2010 from different aspects, including global perspective, country-by-country perspective, developed and developing countries perspective, as well as civil law and common law countries perspective. Section two uses the OLS regression for each country, as well as developed and developing countries group and common law and civil law countries group especially in 2013, in order to examine the relationship between import competitions and other firm characteristics with dividend payers significantly.

### 5.1 Section one: disappearing dividend phenomenon

#### 5.1.1 Global Perspective

**Table 4: Aggregate dividends paid**

| Aggregate dividends paid (in millions of dollars) | | | |
|---|---|---|---|
| **Year** | Global number of firms | Global total amount ($m) | Absolute Percentage Change |
| **2001** | 2756 | 39452.06 | |
| **2002** | 3022 | 40958.36 | 3.82% |
| **2003** | 3325 | 63143.45 | 54.16% |
| **2004** | 3737 | 79250.54 | 25.51% |
| **2005** | 4493 | 103663.67 | 30.80% |
| **2006** | 5956 | 125022.17 | 20.60% |
| **2007** | 6763 | 170866.69 | 36.67% |
| **2008** | 7092 | 146528.85 | -14.24% |
| **2009** | 7303 | 144395.78 | -1.46% |
| **2010** | 7470 | 168622.41 | 16.78% |

**Table 5: Global number of firms, dividend payers and dividend nonpayers**

| **Year** | **2001** | **2002** | **2003** | **2004** | **2005** | **2006** | **2007** | **2008** | **2009** | **2010** |
|---|---|---|---|---|---|---|---|---|---|---|
| All firms | 2756 | 3022 | 3325 | 3737 | 4493 | 5956 | 6763 | 7092 | 7303 | 7470 |
| Number of Payers | 913 | 994 | 1126 | 1348 | 1587 | 2264 | 2522 | 2524 | 2369 | 2638 |
| Percentage of Payers | 33.13% | 32.89% | 33.86% | 36.07% | 35.32% | 38.01% | 37.29% | 35.59% | 32.44% | 35.31% |
| Number of Nonpayers | 1843 | 2028 | 2199 | 2389 | 2906 | 3692 | 4241 | 4568 | 4934 | 4832 |
| Percentage of Nonpayers | 66.87% | 67.11% | 66.14% | 63.93% | 64.68% | 61.99% | 62.71% | 64.41% | 67.56% | 64.69% |

From a global perspective, Table 4 indicates the global number of firms, global total amount of aggregate dividends for each country including Australia, Brazil, Canada, Chile, India, Italy, Mexico, New Zealand, and Singapore from 2001 to 2010. Table 5

reports the annul number of firms, number of dividend nonpayers, number of dividend payers and percentage of dividend payers for each year. With the increasing of global number of firms, the global total amount of aggregate dividends paid is increasing accordingly. Besides, the absolute percentage change of global aggregate dividend paid has an average 28.59% growth than previous year before 2007. That is to say, a sharp decline of -14.24% in year 2008 to -1.46% in year 2009 is an abnormal situation. In addition, both the number of payers and number of nonpayers all increase significantly over this period. However, the percentage of nonpayers is 67.56% and the number of nonpayers is 4934 in 2009 that are highest figures compared with other years, which indicates there are lots of companies reduce their dividend payments or become nonpayers during the time.

The reason to explain this is due to the 2008 financial crisis, Basu and Media (2012) indicated that during the 2008 financial crisis, millions of people lost jobs and homes; economics destroyed that lot of announced reductions or temporary halts in dividend payments appear even for solid large companies. However, the reaction of market was useless and it tend to punish companies those reduce their dividends payment because it weakening the business fundamentals. On the other hand, investors expected management to preserve cash and get their dividend income from regular cash distributions during a liquidity crisis. However, the reality force them to believe that their net worth is decreasing as stock prices declined, thus the relatively safe world of dividend investing was turned the economics upside down for many. Therefore, the financial crisis could explain a part of reason why the global total amount of dividends payment decreased for a short time period.

### 5.1.2 Country-by-Country Perspective

**Table 6: Number of firms, number of payers and nonpayers for each country**

| **Year** | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | Absolute Change over 2001 to 2010 | Percentage Change over 2001 to 2010 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Australia** | | | | | | | | | | | | |
| Number of firms | 742 | 786 | 841 | 934 | 1034 | 1147 | 1437 | 1526 | 1554 | 1620 | 878 | 118.33% |
| Number of payers | 185 | 199 | 219 | 263 | 310 | 343 | 381 | 405 | 357 | 374 | 189 | 121.62% |
| Number of nonpayers | 557 | 587 | 622 | 671 | 724 | 804 | 1056 | 1121 | 1197 | 1246 | 689 | 123.70% |
| Percentage of payers | 24.93% | 25.32% | 26.04% | 28.16% | 29.98% | 29.90% | 26.51% | 26.54% | 22.97% | 23.09% | -1.84% | -74.47% |
| | | | | | | | | | | | | |
| **Brazil** | | | | | | | | | | | | |
| Number of firms | 191 | 197 | 208 | 214 | 217 | 230 | 286 | 298 | 303 | 315 | 124 | 64.92% |
| Number of payers | 46 | 42 | 47 | 40 | 34 | 36 | 13 | 4 | 5 | 7 | -39 | -84.78% |
| Number of nonpayers | 145 | 155 | 161 | 174 | 183 | 194 | 273 | 294 | 298 | 308 | 163 | 112.41% |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Percentage of payers | 24.08% | 21.32% | 22.60% | 18.69% | 15.67% | 15.65% | 4.55% | 1.34% | 1.65% | 2.22% | -21.86% | -97.73% |
| | | | | | | | | | | | | |
| **Canada** | | | | | | | | | | | | |
| Number of firms | 543 | 660 | 741 | 824 | 1234 | 1348 | 1498 | 1566 | 1603 | 1621 | 178 | 198.53% |
| Number of payers | 164 | 187 | 222 | 253 | 319 | 339 | 356 | 359 | 353 | 362 | 198 | 127.32% |
| Number of nonpayers | 379 | 473 | 519 | 571 | 915 | 1009 | 1142 | 1207 | 1250 | 1259 | 88 | 232.19% |
| Percentage of payers | 30.20% | 28.33% | 29.96% | 30.70% | 25.85% | 25.15% | 23.77% | 22.92% | 22.02% | 22.33% | -7.87% | -26.60% |
| | | | | | | | | | | | | |
| **Chile** | | | | | | | | | | | | |
| Number of firms | 138 | 151 | 157 | 158 | 166 | 171 | 172 | 170 | 177 | 177 | 39 | 28.27% |
| Number of payers | 70 | 79 | 92 | 102 | 105 | 108 | 118 | 97 | 111 | 122 | 52 | 74.29% |
| Number of nonpayers | 68 | 72 | 65 | 56 | 61 | 63 | 54 | 73 | 66 | 55 | -13 | -19.12% |
| Percentage of payers | 50.72% | 52.32% | 58.60% | 64.56% | 63.25% | 63.16% | 68.60% | 57.06% | 62.71% | 68.93% | 18.22% | 35.88% |
| | | | | | | | | | | | | |
| **India** | | | | | | | | | | | | |
| Number of firms | 377 | 405 | 490 | 635 | 762 | 1910 | 2136 | 2252 | 2341 | 2380 | 23 | 531.30% |
| Number of payers | 163 | 175 | 211 | 268 | 340 | 883 | 1052 | 1135 | 1003 | 1173 | 11 | 619.63% |
| Number of nonpayers | 214 | 230 | 279 | 367 | 422 | 1027 | 1084 | 1117 | 1338 | 1207 | 993 | 464.19% |
| Percentage of payers | 43.24% | 43.21% | 43.06% | 42.20% | 44.62% | 46.23% | 49.25% | 50.40% | 42.84% | 49.29% | 6.05% | 13.99% |
| | | | | | | | | | | | | |
| **Italy** | | | | | | | | | | | | |
| Number of firms | 161 | 166 | 172 | 183 | 200 | 215 | 232 | 236 | 241 | 248 | 87 | 54.37% |
| Number of payers | 108 | 108 | 113 | 122 | 131 | 136 | 154 | 123 | 119 | 130 | 22 | 23.74% |
| Number of nonpayers | 53 | 58 | 59 | 61 | 69 | 79 | 78 | 113 | 122 | 118 | 65 | 122.64% |
| Percentage of payers | 67.08% | 65.06% | 65.70% | 66.67% | 65.50% | 63.26% | 66.38% | 52.12% | 49.38% | 52.42% | -14.66% | -21.86% |
| | | | | | | | | | | | | |
| **Mexico** | | | | | | | | | | | | |
| Number of firms | 90 | 91 | 94 | 97 | 104 | 105 | 105 | 106 | 109 | 112 | 22 | 24.44% |
| Number of payers | 29 | 32 | 33 | 34 | 39 | 47 | 47 | 39 | 47 | 47 | 18 | 62.69% |
| Number of nonpayers | 61 | 59 | 61 | 63 | 65 | 58 | 58 | 67 | 62 | 65 | 4 | 65.57% |
| Percentage of payers | 32.22% | 35.16% | 35.11% | 35.05% | 37.50% | 44.76% | 44.76% | 36.79% | 43.12% | 41.96% | 9.74% | 32.34% |
| | | | | | | | | | | | | |
| **New Zealand** | | | | | | | | | | | | |
| Number of firms | 59 | 64 | 67 | 77 | 85 | 95 | 111 | 114 | 118 | 121 | 62 | 158.47% |
| Number of | 38 | 42 | 44 | 53 | 61 | 67 | 73 | 69 | 66 | 70 | 32 | 84.22% |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| payers | | | | | | | | | | | | |
| Number of nonpayers | 21 | 22 | 23 | 24 | 24 | 28 | 38 | 45 | 52 | 51 | 3 | 142.86% |
| Percentage of payers | 64.41% | 65.63% | 65.67% | 68.83% | 71.76% | 70.53% | 65.77% | 60.53% | 55.93% | 57.85% | -6.56% | -11.78% |
| | | | | | | | | | | | | |
| **Singapore** | | | | | | | | | | | | |
| Number of firms | 298 | 321 | 364 | 414 | 449 | 485 | 524 | 560 | 588 | 602 | 34 | 121.34% |
| Number of payers | 78 | 87 | 109 | 139 | 161 | 213 | 230 | 211 | 216 | 248 | 17 | 217.95% |
| Number of nonpayers | 220 | 234 | 255 | 275 | 288 | 272 | 294 | 349 | 372 | 354 | 134 | 70.00% |
| Percentage of payers | 26.17% | 27.10% | 29.95% | 33.57% | 35.86% | 43.92% | 43.89% | 37.68% | 36.73% | 41.20% | 15.03% | 57.39% |
| | | | | | | | | | | | | |
| **Turkey** | | | | | | | | | | | | |
| Number of firms | 157 | 181 | 191 | 201 | 242 | 250 | 262 | 264 | 269 | 274 | 117 | 74.52% |
| Number of payers | 32 | 43 | 36 | 74 | 87 | 92 | 98 | 82 | 92 | 105 | 73 | 228.13% |
| Number of nonpayers | 125 | 138 | 155 | 127 | 155 | 158 | 164 | 182 | 177 | 169 | 44 | 35.20% |
| Percentage of payers | 20.38% | 23.76% | 18.85% | 36.82% | 35.95% | 36.80% | 37.40% | 31.06% | 34.20% | 38.32% | 17.94% | 88.13% |
| | | | | | | | | | | | | |
| **Total number of firms** | 2756 | 3022 | 3325 | 3737 | 4493 | 5956 | 6763 | 7092 | 7303 | 7470 | 4714 | 171.45% |
| Total number of payers | 913 | 994 | 1126 | 1348 | 1587 | 2264 | 2522 | 2524 | 2369 | 2638 | 1725 | 188.94% |
| Total number of nonpayers | 1843 | 2028 | 2199 | 2389 | 2906 | 3692 | 4241 | 4568 | 4934 | 4832 | 2989 | 162.18% |
| Percentage of payers | 33.13% | 32.89% | 33.86% | 36.07% | 35.32% | 38.01% | 37.29% | 35.59% | 32.44% | 35.31% | 2.18% | 66.13% |

From country-by-country perspective, the study investigates the dividend payment into details for each country, shown in Table 6. To begin with, the number of firms in all countries increase positively over 2001 to 2010. For instance, Australia has the highest absolute change among all countries by showing there are 878 new companies has been established on the stock exchange market. However, Mexico has the lowest absolute change in number of firms that only 22 new companies added in the local market. Moreover, there are 124, 178, 39, 23, 87, 62, 34, and 117 of new registered companies in Brazil, Canada, Chile, India, Italy, New Zealand, Singapore and Turkey respectively.

In addition, the increasing speed of nonpayers is much higher than dividend payers in countries like Australia, Brazil, India, Italy, and Singapore. On the contrary, companies in Canada, Chile, Mexico, New Zealand, and Turkey have a higher increasing in number of payers than the number of nonpayers. Moreover, the change of the percentage of payers differs from country to country as well. For instance, there is a negative 18.46% decline in the percentage of payers in Australia, which is from 24.93% in 2001 to 23.09% in 2010. Same as Australia, countries like Brazil, Canada, Italy, and New Zealand are all

have a negative change in percentage of payers, which means those countries have a lower propensity to pay dividends gradually. By contrast, there are still some countries those who willing to pay more dividends, such as Chile, India, Mexico, Singapore and Turkey, by showing a positive 18.21%, 6.05%, 9.74%, 15.03%, 17.94% respectively. In summary, although the change in dividend payers and nonpayers report an opposite result for each country, the figure in the absolute change of total number of nonpayers is 2989, and the absolute change of total number of payers is 1725, which indicates that the speed of nonpayers increases fast than the dividend payers.

**Table 7: Country-by-country aggregate amounts of dividends paid in 2001 and 2010**

| Year | 2001 | 2010 | Absolute Percent Change |
|---|---|---|---|
| **Australia** | | | |
| Aggregate Real Dividends in Millions | 9308.34 | 47024.81 | 405.19% |
| Mean Real Dividends per Dividend-paying Firm ($m) | 50.32 | 125.73 | 149.89% |
| Median Real Dividends per Dividend-paying Firm ($m) | 4.39 | 10.62 | 142.06% |
| | | | |
| **Brazil** | | | |
| Aggregate Real Dividends in Millions | 4.08 | 0.22 | -94.55% |
| Mean Real Dividends per Dividend-paying Firm ($m) | 0.09 | 0.03 | -64.22% |
| Median Real Dividends per Dividend-paying Firm ($m) | 0.03 | 0.10 | 243.75% |
| | | | |
| **Canada** | | | |
| Aggregate Real Dividends in Millions | 8230.92 | 45412.82 | 451.73% |
| Mean Real Dividends per Dividend-paying Firm ($m) | 50.19 | 125.45 | 149.96% |
| Median Real Dividends per Dividend-paying Firm ($m) | 11.20 | 0.07 | -99.37% |
| | | | |
| **Chile** | | | |
| Aggregate Real Dividends in Millions | 1394.99 | 9270.38 | 564.55% |
| Mean Real Dividends per Dividend-paying Firm ($m) | 19.93 | 75.99 | 281.30% |
| Median Real Dividends per Dividend-paying Firm ($m) | 6.39 | 29.15 | 356.10% |
| | | | |
| **India** | | | |
| Aggregate Real Dividends in Millions | 2635.35 | 15585.27 | 491.39% |
| Mean Real Dividends per Dividend-paying Firm ($m) | 16.17 | 13.29 | -17.82% |
| Median Real Dividends per Dividend-paying Firm ($m) | 2.76 | 0.98 | -64.37% |
| | | | |
| **Italy** | | | |
| Aggregate Real Dividends in Millions | 8628.84 | 21276.14 | 146.57% |
| Mean Real Dividends per Dividend-paying Firm ($m) | 79.90 | 163.66 | 104.84% |
| Median Real Dividends per Dividend-paying Firm ($m) | 7.81 | 25.18 | 222.30% |
| | | | |
| **Mexico** | | | |
| Aggregate Real Dividends in Millions | 2128.26 | 7744.64 | 263.90% |
| Mean Real Dividends per Dividend-paying Firm ($m) | 73.39 | 164.78 | 124.53% |
| Median Real Dividends per Dividend-paying Firm ($m) | 29.82 | 41.51 | 39.22% |

| | | | |
|---|---|---|---|
| **New Zealand** | | | |
| Aggregate Real Dividends in Millions | 535.29 | 2020.57 | 277.47% |
| Mean Real Dividends per Dividend-paying Firm ($m) | 14.09 | 28.87 | 104.91% |
| Median Real Dividends per Dividend-paying Firm ($m) | 5.31 | 10.57 | 99.13% |
| | | | |
| **Singapore** | | | |
| Aggregate Real Dividends in Millions | 2533.50 | 13471.91 | 431.75% |
| Mean Real Dividends per Dividend-paying Firm ($m) | 32.48 | 54.32 | 67.24% |
| Median Real Dividends per Dividend-paying Firm ($m) | 8.93 | 9.11 | 2.07% |
| | | | |
| **Turkey** | | | |
| Aggregate Real Dividends in Millions | 4052.49 | 6815.67 | 68.18% |
| Mean Real Dividends per Dividend-paying Firm ($m) | 126.64 | 64.91 | -48.74% |
| Median Real Dividends per Dividend-paying Firm ($m) | 9.75 | 13.04 | 33.69% |

Table 7 reports the value of aggregate real dividends, mean real dividend per dividend-paying firms and median real dividends per dividend-paying firms for each country. It is clearly to find out that most of the countries have a steady increase for all the three items. Australia has the highest aggregate real dividends in both 2001 and 2010, which 9308.34 and 47024.81. Chile has the highest absolute change in aggregate real dividends from 2001 to 2010, which is 564.55%. Other countries such as Italy, Mexico, New Zealand, and Singapore all present a positive increase in aggregate real dividends, which is 146.57%, 263.90%, 277.47%, 431.75%; a positive increase in mean real dividends, which is 104.84%, 124.53%,104.91%, 67.24%; and a positive increase in median real dividends, which is 222.30%, 39.22%, 99.13%, 68.18%.

However, there are some countries have a positive aggregate real dividends, but show a negative change in mean or median real dividends per dividend paying firms. For example, Canada has a 451.73% increase in aggregate real dividends and 149.96% increase in mean real dividends, but has a negative 99.37% in median real dividends. India has a 491.39% increase in aggregate real dividends, but have a negative 17.82% and a negative 64.37% in mean and median real dividends. Turkey has a positive 68.18% in aggregate real dividends and a positive 33.69% in median real dividends but have a negative 48.74% in mean real dividends. Most importantly, only Brazil report a negative 94.55% in aggregate real dividends among all the countries with a negative 64.22% in mean real dividends and a positive 243.75% in median real dividends.

**Table 8: Concentration of aggregate real dividends in 2001 and 2010**

| | **Aggregate Real Dividends ($m)** | | **Percentage of Aggregate Real Dividends** | | **Absolute Percent Change** |
|---|---|---|---|---|---|
| **Year** | **2001** | **2010** | **2001** | **2010** | |
| **Australia** | | | | | |
| Top 50% of Dividend Payers | 9168.97 | 46296.73 | 98.50% | 98.45% | -0.05% |
| Bottom 50% of Dividend Payers | 139.37 | 728.08 | 1.50% | 1.55% | 0.05% |
| Number of payers | 185 | 374 | 185 | 374 | |
| Total | 9308.34 | 47024.81 | | | |

| | | | | | |
|---|---|---|---|---|---|
| **Brazil** | | | | | |
| Top 50% of Dividend Payers | 3.96 | 0.20 | 96.97% | 91.00% | -5.97% |
| Bottom 50% of Dividend Payers | 0.12 | 0.02 | 3.03% | 9.00% | 5.97% |
| Number of payers | 46 | 7 | 46 | 7 | |
| Total | 4.08 | 0.22 | | | |
| | | | | | |
| **Canada** | | | | | |
| Top 50% of Dividend Payers | 7898.90 | 43978.35 | 95.97% | 96.84% | 0.88% |
| Bottom 50% of Dividend Payers | 332.02 | 1434.47 | 4.03% | 3.16% | -0.88% |
| Number of payers | 164 | 362 | 164 | 362 | |
| Total | 8230.92 | 45412.82 | | | |
| | | | | | |
| **Chile** | | | | | |
| Top 50% of Dividend Payers | 1293.83 | 8786.45 | 92.75% | 94.78% | 2.03% |
| Bottom 50% of Dividend Payers | 101.17 | 483.93 | 7.25% | 5.22% | -2.03% |
| Number of payers | 70 | 122 | 70 | 122 | |
| Total | 1394.99 | 9270.38 | | | |
| | | | | | |
| **India** | | | | | |
| Top 50% of Dividend Payers | 2550.38 | 15362.54 | 96.78% | 98.57% | 1.80% |
| Bottom 50% of Dividend Payers | 84.97 | 222.72 | 3.22% | 1.43% | -1.80% |
| Number of payers | 163 | 1173 | 163 | 1173 | |
| Total | 2635.35 | 15585.27 | | | |
| | | | | | |
| **Italy** | | | | | |
| Top 50% of Dividend Payers | 8481.79 | 20805.48 | 98.30% | 97.79% | -0.51% |
| Bottom 50% of Dividend Payers | 147.05 | 470.66 | 1.70% | 2.21% | 0.51% |
| Number of payers | 108 | 130 | 108 | 130 | |
| Total | 8628.84 | 21276.14 | | | |
| | | | | | |
| **Mexico** | | | | | |
| Top 50% of Dividend Payers | 2003.85 | 7356.60 | 94.15% | 94.99% | 0.84% |
| Bottom 50% of Dividend Payers | 124.41 | 388.04 | 5.85% | 5.01% | -0.84% |
| Number of payers | 29 | 47 | 29 | 47 | |
| Total | 2128.26 | 7744.64 | | | |
| | | | | | |
| **New Zealand** | | | | | |
| Top 50% of Dividend Payers | 493.96 | 1875.55 | 92.28% | 92.82% | 0.54% |
| Bottom 50% of Dividend Payers | 41.33 | 145.02 | 7.72% | 7.18% | -0.54% |
| Number of payers | 38 | 70 | 38 | 70 | |
| Total | 535.29 | 2020.57 | | | |
| | | | | | |
| **Singapore** | | | | | |
| Top 50% of Dividend Payers | 2392.55 | 12961.68 | 94.44% | 96.21% | 1.78% |
| Bottom 50% of Dividend Payers | 140.94 | 510.23 | 5.56% | 3.79% | -1.78% |
| Number of payers | 78 | 248 | 78 | 248 | |
| Total | 2533.50 | 13471.91 | | | |
| | | | | | |
| **Turkey** | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Top 50% of Dividend Payers | 4001.32 | 6572.37 | 98.74% | 96.43% | -2.31% |
| Bottom 50% of Dividend Payers | 51.17 | 243.30 | 1.26% | 3.57% | 2.31% |
| Number of payers | 32 | 105 | 32 | 105 | |
| Total | 4052.49 | 6815.67 | | | |

Table 8 reports the percentage of aggregate dividends paid by the top 50 percent and bottom 50 percent of dividend payers for each country in year 2001 and 2010. The result is significantly indicates that the dividends payment in every country is concentrated by the top 50 percent of dividend payers. In detail, the percentage of aggregate real dividends in top 50 percent of dividend payers in Australia is 98.50% in 2001 and 98.45% in 2010. The percentage of all dividends paid by top payers in Brazil, Canada, Chile, India, Italy, Mexico, New Zealand, Singapore, and Turkey has a 96.97%, 95.97%, 92.75%, 96.78%, 98.30%, 94.15%, 92.28%, 94.44%, 98.74% in 2001; and 91.00%, 96.84%, 94.78%, 98.57%, 97.79%, 94.99%, 92.82%, 96.21%, 96.43% in 2010. Moreover, the concentration of dividends payment aggravate in countries like Canada, Chile, India, Mexico, New Zealand, and Singapore, because the absolute percentage change in top 50 percent of dividend payers is positive, which indicate the amount of dividend payments contributed by the top 50 percent dividend payers is increasing.

On the contrary, the absolute percent change of top 50 percent dividend payers is negative in Australia, Brazil, Italy, and Turkey. More specifically, the number of dividend payers is decreased from 46 in 2001 to only 7 company pay dividends in 2010 for Brazil. According to DeAngelo, DeAngelo, and Skinner (2004), the loss of many small payers is the reason to explain the reduction in the number of dividend payers, while the increase in aggregate dividends due to the top payers pays more real dividends than ever before. In addition, the finding explains the companies sustained strength in dividend payout, while the financial distress and earnings difficulties is the reason for bottom payers reduce the dividend payments.

### 5.1.3 Developed and Developing Countries Perspective

**Table 9: Comparison between developed countries and developing countries**

| | **Developed Countries Group** (Australia, Canada, Italy, New Zealand, Singapore) | | | |
|---|---|---|---|---|
| | **No. Firms** | **No. Payers** | **Aggregate Dividends** | **Aggregate dividends per payer** |
| **2001** | 1803 | 573 | 29236.88 | 16.22 |
| **2002** | 1997 | 623 | 34216.81 | 54.92 |
| **2003** | 2185 | 707 | 48676.14 | 68.85 |
| **2004** | 2432 | 830 | 65733.88 | 79.20 |
| **2005** | 3002 | 982 | 84268.27 | 85.81 |
| **2006** | 3290 | 1098 | 100938.52 | 91.93 |
| **2007** | 3802 | 1194 | 135421.33 | 113.42 |
| **2008** | 4002 | 1167 | 118805.03 | 101.80 |
| **2009** | 4104 | 1111 | 114398.24 | 102.97 |
| **2010** | 4212 | 1184 | 129206.24 | 109.13 |
| **Average** | 3083 | 1070 | 86090.13 | 82.42 |

| | Developing Countries Group (Brazil, Chile, India, Mexico, Turkey) | | | |
|---|---|---|---|---|
| | **No. Firms** | **No. Payers** | **Aggregate Dividends** | **Aggregate dividends per payer** |
| **2001** | 953 | 340 | 10215.18 | 30.04 |
| **2002** | 1025 | 371 | 6741.56 | 18.17 |
| **2003** | 1140 | 419 | 14467.31 | 34.53 |
| **2004** | 1305 | 518 | 13516.67 | 26.09 |
| **2005** | 1491 | 605 | 19395.40 | 32.06 |
| **2006** | 2666 | 1166 | 24083.65 | 20.65 |
| **2007** | 2961 | 1328 | 35445.36 | 26.69 |
| **2008** | 3090 | 1357 | 27723.82 | 20.43 |
| **2009** | 3199 | 1258 | 29997.54 | 23.85 |
| **2010** | 3258 | 1454 | 39416.17 | 27.11 |
| **Average** | **2109** | **882** | **22100.26** | **25.96** |

Table 9 states the number of firms, number of payers, aggregate dividends and aggregate dividends per payers for both developed countries group and developing countries group. The distinction of those two research group is mainly depend on their income level and economic development. Therefore, Australia, Canada, Italy, New Zealand, and Singapore belongs to developed countries group, and the developing countries group including Brazil, Chile, India, Mexico, and Turkey. Based on the result, the number of firms increased gradually for both developed countries and developing countries from year 2001 to 2010. Moreover, the number of payers is also increasing through most of years except in 2008 the number of payers decreased from 1194 to 1167, and 1111 in 2009, the developing countries group also has a decline from 1357 firms to 1258 firms in 2009. With the decreasing in number of payers, the aggregate dividends follows declined in year 2008 to 2009. This finding is consistent with previous results because the 2008 financial crisis damaged the stock market of each global country.

More importantly, the average value in number of firms, number of payers, aggregate dividends, and aggregate dividends per payer is higher in developed countries group than the developing countries group. Before year 2006, there are more dividends payers in developed countries than it in developing countries, but even have less dividends payers in 2007 to 2010, the aggregate dividends still exceeds the developing countries around four times. This finding helps accept the first hypothesis that firms in developing countries are paying less dividends than firms in developed countries. To explain this, Jack, Yannis, Robert, and Sanjay (1995) indicated that the fraction of earnings paid as dividends to investors in developing countries was roughly two thirds the level paid in developed countries. This extensive difference reflects both the importance of internally-generated financing in developing countries, as well as willingness on the part of investors in developing countries to forego current dividend cash flow in anticipation of higher future growth in earnings.

### 5.1.4. Civil Law and Common Law Countries Perspective

**Table 10: Comparison between civil law countries and common law countries**

| Civil Law Countries Group (Brazil, Chile, Italy, Mexico, Turkey) | | | | |
|---|---|---|---|---|
| | **No. Firms** | **No. Payers** | **Aggregate Dividends** | **Aggregate dividends per payer** |
| **2001** | 786 | 304 | 14135.57 | 46.50 |
| **2002** | 822 | 321 | 25716.91 | 80.11 |
| **2003** | 853 | 372 | 29068.93 | 78.14 |
| **2004** | 929 | 396 | 38946.04 | 98.35 |
| **2005** | 971 | 419 | 47357.80 | 113.03 |
| **2006** | 1057 | 430 | 67424.93 | 156.80 |
| **2007** | 1074 | 345 | 36828.97 | 106.75 |
| **2008** | 1099 | 374 | 40666.23 | 108.73 |
| **2009** | 1126 | 411 | 45107.04 | 109.75 |
| **2010** | 945 | 366 | 36146.11 | 95.50 |
| **Average** | 786 | 304 | 14135.57 | 46.50 |
| Common Law Countries Group (Australia, Canada, India, New Zealand, Singapore) | | | | |
| | **No. Firms** | **No. Payers** | **Aggregate Dividends** | **Aggregate dividends per payer** |
| **2001** | 2019 | 628 | 23243.40 | 37.01 |
| **2002** | 2236 | 690 | 26822.80 | 38.87 |
| **2003** | 2503 | 805 | 37426.54 | 46.49 |
| **2004** | 2884 | 976 | 50181.62 | 51.42 |
| **2005** | 3564 | 1191 | 64717.63 | 54.34 |
| **2006** | 4985 | 1845 | 77664.37 | 42.09 |
| **2007** | 5706 | 2092 | 103441.76 | 49.45 |
| **2008** | 6018 | 2179 | 109699.88 | 50.34 |
| **2009** | 6204 | 1995 | 103729.54 | 51.99 |
| **2010** | 6344 | 2227 | 123515.37 | 55.46 |
| **Average** | **4246** | **1463** | **72044.29** | **47.75** |

Table 10 stated the number of firms, number of payers, aggregate dividends and aggregate dividends per payers for both civil law countries group and common law countries group. In detail, civil law countries group including Brazil, Chile, Italy, Mexico, and Turkey; common law countries group including Australia, Canada, India, New Zealand, and Singapore. Similarly, the number of the firms increased through 2001 to 2010. However, the number of payers start declined in 2008 for countries adopt civil law, and the common law countries group had a decline in 2009. Nevertheless, the value of aggregate dividends reduced twice from 67424.93 in 2007 to 36828.97 in 2008 for civil law countries group, while the change of aggregate dividends is not so evident. It is notable that the average dividends payment in common law countries is 72044.29, which exceed twice times compared with 36146.11 in civil law countries.

Thus, the result supports the second hypothesis that countries adopt civil law have firms that pay less dividends than firms in countries that adopt common laws. La Porta, Lopez-

De-Silanes, & Vishny (2000) explained this result by stating that the common law countries tend to have a better legal protection for investors and creditors than civil law countries. Furthermore, the effective law protection also benefits for managers to make right investment decisions and thus reduce the minority shareholders' legal powers. Therefore, common law countries tend to have a higher dividend payout than civil law countries.

### 5.2 Section two: Regression Analysis

In this section, new countries including China, France, Japan, Korea, Malaysia and United Kingdom replace Brazil, Chile, Italy, Mexico, New Zealand, and Turkey. It is because after delete the missing data, there left under ten companies' value in previous small countries. This may cause insignificant regression results and contribute nothing in investigating the research questions. Moreover, the data collected from the new countries is limited in year 2013 specifically, because the financial data in the latest year is most sufficient and significant. By doing so, this section aims to find out the relationship between import competitions with dividend payments, thus answer the main research question of this report, which is the impact of globalization on dividend policy.

**Table 11: Descriptive Statistics**

| Country | Australia | Canada | China | France | India | Japan | Korea | Malaysia | Singapore | UK |
|---|---|---|---|---|---|---|---|---|---|---|
| **Dividend Payer** | | | | | | | | | | |
| Mean | 0.373 | 0.430 | 0.582 | 0.713 | 0.459 | 0.899 | 0.627 | 0.553 | 0.683 | 0.649 |
| Median | 0.000 | 0.000 | 1.000 | 1.000 | 0.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| Sdv | 0.484 | 0.497 | 0.498 | 0.455 | 0.499 | 0.302 | 0.487 | 0.501 | 0.471 | 0.478 |
| **Import Penetration** | | | | | | | | | | |
| Mean | 0.003 | -0.003 | 0.011 | -0.215 | -0.007 | 0.003 | -0.001 | -0.013 | -0.054 | -0.048 |
| Median | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Sdv | 0.112 | 0.175 | 0.047 | 1.603 | 0.200 | 0.159 | 0.025 | 0.080 | 0.273 | 0.776 |
| **Profitability** | | | | | | | | | | |
| Mean | -0.146 | -0.146 | 0.036 | 0.048 | 0.038 | 0.031 | 0.026 | 0.046 | 0.061 | 0.010 |
| Median | 0.000 | 0.010 | 0.031 | 0.050 | 0.046 | 0.027 | 0.036 | 0.047 | 0.069 | 0.036 |
| Sdv | 0.516 | 0.680 | 0.038 | 0.078 | 0.102 | 0.060 | 0.069 | 0.089 | 0.115 | 0.159 |
| **Size** | | | | | | | | | | |
| Mean | 2.064 | 2.612 | 3.325 | 2.962 | 1.862 | 3.164 | 2.677 | 2.278 | 2.532 | 2.608 |
| Median | 1.987 | 2.568 | 3.124 | 2.829 | 1.755 | 2.984 | 2.547 | 2.329 | 2.305 | 2.439 |
| Sdv | 1.106 | 1.238 | 1.113 | 0.992 | 0.910 | 0.891 | 0.703 | 0.750 | 1.113 | 1.137 |
| **AGR** | | | | | | | | | | |
| Mean | 0.085 | 0.220 | 0.099 | 0.014 | 0.106 | 0.065 | 0.040 | 0.131 | 0.048 | 0.073 |
| Median | 0.014 | 0.027 | 0.073 | 0.015 | 0.057 | 0.051 | 0.042 | 0.074 | 0.048 | 0.027 |
| Sdv | 1.122 | 2.156 | 0.144 | 0.139 | 0.466 | 0.122 | 0.115 | 0.422 | 0.127 | 0.439 |
| **M/B** | | | | | | | | | | |
| Mean | 3.892 | 3.505 | 2.029 | 1.962 | 0.865 | 1.456 | 1.358 | 1.382 | 1.696 | 1.746 |
| Median | 1.015 | 1.300 | 1.700 | 1.525 | 0.590 | 0.885 | 0.910 | 0.825 | 1.310 | 1.460 |
| Sdv | 36.789 | 19.017 | 1.623 | 1.712 | 4.080 | 4.156 | 1.256 | 1.779 | 1.524 | 8.565 |
| **RE/TA** | | | | | | | | | | |
| Mean | -7.604 | -9.771 | 0.162 | 0.232 | -0.291 | 0.253 | 0.204 | 0.132 | -0.105 | -0.126 |
| Median | -0.199 | -0.057 | 0.143 | 0.251 | 0.125 | 0.295 | 0.238 | 0.197 | 0.204 | 0.204 |
| Sdv | 58.770 | 71.768 | 0.165 | 0.306 | 5.916 | 0.402 | 0.345 | 0.438 | 1.171 | 1.302 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **RETVOL** | | | | | | | | | | |
| Mean | 0.410 | 0.377 | 0.365 | 0.271 | 0.448 | 0.291 | 0.364 | 0.292 | 0.312 | 0.328 |
| Median | 0.416 | 0.379 | 0.375 | 0.259 | 0.448 | 0.286 | 0.376 | 0.284 | 0.292 | 0.296 |
| Sdv | 0.149 | 0.153 | 0.075 | 0.081 | 0.087 | 0.099 | 0.084 | 0.101 | 0.125 | 0.129 |
| **Observation** | 560 | 128 | 55 | 80 | 823 | 268 | 75 | 76 | 41 | 211 |

Table 11 summaries the descriptive statistics of all explanatory variables. In detail, dividend payer is measured by the dividend per share during the calendar year, the median value is 1 if a firm in a given year pays a positive dividend, and zero otherwise. Import penetration is calculated by the imports divided by GDP minor exports plus imports, where imports is the value of foreign income and exports is the value of foreign sales in each country. In addition, profitability is the ratio of return on assets, size is log of total assets, AGR is the asset growing rate calculated by current year total assets divided by last year's total assets, and M/B is the market price to book ratio. Moreover, RE/TA is retained earnings divided by total assets and RETVOL is the stock price volatility, which is the measure of a stock's average annual price movement to a high and low from a mean price.

According to the results, the mean value of dividend payer in most of the countries exceeds 50 percent, which indicates that the majority of the country sample pays dividends. For instance, there are 89.9% of firms in Japan tend to pay dividends, which is the highest mean value of dividend payer among the ten countries. Australia, Canada, China, France, India, Korea, Malaysia, Singapore and UK contributes 37.3%, 43.0%, 58.2%,71.3%, 45.9%, 62.7%, 55.3%, 68.3%, and 64.9% correspondingly.

In addition, the mean value of import penetration is positive 0.003, 0.011, and 0.003 in Australia, China, and Japan. The high import penetration ratio suggested that a bigger size of the economy in those large markets have less need to purchase imports. While in Canada, France, India, Korea, Malaysia, Singapore and UK all have a negative mean value, which is -0.003, -0.215, -0.007, -0.001, -0.013, -0.054, and -0.048. This is because customers in those countries prefer to purchase lower-priced goods or services from abroad, and there might have a higher import duties or non-tariff barriers to protect domestic producers in those countries.

Moreover, the mean value of profitability in most of the countries are positive, which means firms in China, France, India, Japan, Korea, Malaysia, Singapore and UK have efficient management at using their assets to generate earnings. On the contrary, Australia and Canada have same negative 14.6% in profitability, which means companies in this two countries are investing a high amount of capital into its production while simultaneously receiving little income (Harrison, 2013). The mean value is near the median value of size for all countries, and China has the largest market size which is 3.325, and India has the smallest market size which is 1.862. Additionally, there is a significantly positive asset growing rate through all countries, which suggest that the total assets in current year has been increased compared with previous year. Besides, most countries have effective market to book ratio above 1, except India, the mean value is 0.865, where is below 1 that may indicate Indian companies asset value is undervalued to the market price of their stock.

Nevertheless, the mean values of RE/TA of some countries are positive. For instance, China is 0.162, France is 0.232, Japan is 0.253, Korea is 0.204 and Malaysia is 0.132. However, in Australia, Canada, India, Singapore, and UK, the mean value of RE/TA is -7.604 -9.771, - 0.291, -0.105, -0.126 respectively. Last but not least, RETVOL indicates the stock price volatility in each country. India has the highest stock price volatility which is 44.8%, that states the stock's annual high and low price has shown a historical variation of +44.8% to -44.8% from its annual average price. On the other hand, France has a lowest 27.1% in the mean value of stock price volatility. More specifically, the stock price volatility in Australia is 41.0%, in Canada is 37.7%, in China is 36.5%, in Japan is 29.1%, in Korea is 36.4%, in Malaysia is 29.2%, in Singapore is 31.2%, and in UK is 32.8%.

**Table 12: Correlation**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Australia** | | | | | | | |
| | Dividend Payer | IP | Profitability | SIZE | AGR | M/B | RE/TA |
| **IP** | -0.060 | | | | | | |
| **Profitability** | 0.387 | 0.023 | | | | | |
| **SIZE** | 0.509 | -0.034 | 0.435 | | | | |
| **AGR** | 0.075 | 0.004 | 0.060 | 0.027 | | | |
| **M/B** | -0.097 | 0.004 | -0.038 | -0.066 | -0.009 | | |
| **RE/TA** | 0.007 | 0.004 | 0.406 | 0.288 | 0.032 | -0.004 | |
| **RETVOL** | -0.679 | 0.023 | -0.371 | -0.597 | -0.097 | 0.063 | -0.541 |
| **Canada** | | | | | | | |
| | Dividend Payer | IP | Profitability | SIZE | AGR | M/B | RE/TA |
| **IP** | -0.070 | | | | | | |
| **Profitability** | 0.227 | 0.000 | | | | | |
| **SIZE** | 0.529 | -0.833 | 0.406 | | | | |
| **AGR** | 0.310 | 0.005 | 0.006 | 0.073 | | | |
| **M/B** | 0.285 | 0.001 | 0.570 | 0.090 | -0.029 | | |
| **RE/TA** | 0.963 | -0.002 | 0.434 | 0.358 | -0.045 | 0.074 | |
| **RETVOL** | -0.689 | 0.345 | -0.303 | -0.635 | -1.000 | -0.008 | -0.399 |
| **China** | | | | | | | |
| | Dividend Payer | IP | Profitability | SIZE | AGR | M/B | RE/TA |
| **IP** | 0.209 | | | | | | |
| **Profitability** | 0.496 | -0.304 | | | | | |
| **SIZE** | 0.439 | 0.643 | -0.040 | | | | |
| **AGR** | 0.371 | -0.059 | 0.290 | 0.924 | | | |
| **M/B** | -0.330 | -0.423 | 0.099 | -0.487 | -0.353 | | |
| **RE/TA** | 0.230 | -0.658 | 0.350 | -0.035 | 0.297 | -0.430 | |
| **RETVOL** | -0.353 | -0.487 | -0.373 | -0.530 | -0.084 | 0.375 | 0.031 |
| **France** | | | | | | | |
| | Dividend Payer | IP | Profitability | SIZE | AGR | M/B | RE/TA |
| **IP** | -0.086 | | | | | | |
| **Profitability** | 0.358 | -0.029 | | | | | |
| **SIZE** | 0.533 | -0.209 | 0.603 | | | | |
| **AGR** | 0.223 | 0.027 | 0.285 | 0.438 | | | |
| **M/B** | -0.076 | -0.076 | -0.035 | -0.043 | 0.056 | | |
| **RE/TA** | 0.488 | -0.044 | 0.364 | 0.643 | 0.373 | -0.035 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **RETVOL** | -0.490 | 0.585 | -0.300 | -0.423 | -0.386 | -0.060 | -0.396 |
| | | | **India** | | | | |
| | Dividend Payer | IP | Profitability | SIZE | AGR | M/B | RE/TA |
| **IP** | -0.037 | | | | | | |
| **Profitability** | 0.390 | -0.065 | | | | | |
| **SIZE** | 0.337 | -0.090 | 0.365 | | | | |
| **AGR** | 0.057 | 0.000 | 0.203 | 0.043 | | | |
| **M/B** | 0.086 | -0.007 | 0.063 | 0.066 | 0.009 | | |
| **RE/TA** | 0.088 | -0.005 | 0.330 | 0.558 | 0.036 | 0.025 | |
| **RETVOL** | -0.465 | 0.079 | -0.253 | -0.300 | -0.056 | -0.076 | -0.084 |
| | | | **Japan** | | | | |
| | Dividend Payer | IP | Profitability | SIZE | AGR | M/B | RE/TA |
| **IP** | 0.030 | | | | | | |
| **Profitability** | 0.055 | -0.035 | | | | | |
| **SIZE** | 0.245 | 0.094 | -0.901 | | | | |
| **AGR** | 0.649 | 0.009 | 0.392 | 0.782 | | | |
| **M/B** | -0.221 | 0.003 | -0.080 | -0.227 | -0.091 | | |
| **RE/TA** | 0.476 | -0.026 | 0.899 | -0.029 | 0.737 | -0.650 | |
| **RETVOL** | -0.455 | 0.068 | 0.035 | -0.258 | -0.053 | 0.869 | -0.335 |
| | | | **Korea** | | | | |
| | Dividend Payer | IP | Profitability | SIZE | AGR | M/B | RE/TA |
| **IP** | 0.395 | | | | | | |
| **Profitability** | 0.379 | 0.002 | | | | | |
| **SIZE** | 0.246 | -0.091 | 0.377 | | | | |
| **AGR** | 0.247 | 0.264 | 0.349 | 0.220 | | | |
| **M/B** | -0.257 | -0.233 | -0.670 | -0.997 | -0.006 | | |
| **RE/TA** | 0.587 | -0.059 | 0.550 | 0.264 | 0.684 | -0.344 | |
| **RETVOL** | -0.584 | 0.999 | -0.234 | -0.392 | -0.991 | 0.350 | -0.566 |
| | | | **Malaysia** | | | | |
| | Dividend Payer | IP | Profitability | SIZE | AGR | M/B | RE/TA |
| **IP** | 0.443 | | | | | | |
| **Profitability** | 0.373 | -0.008 | | | | | |
| **SIZE** | 0.434 | -0.204 | 0.570 | | | | |
| **AGR** | 0.006 | -0.044 | 0.465 | 0.262 | | | |
| **M/B** | 0.278 | -0.391 | 0.377 | -0.003 | -0.007 | | |
| **RE/TA** | 0.399 | -0.055 | 0.671 | 0.376 | 0.444 | -0.053 | |
| **RETVOL** | -0.624 | -0.089 | -0.334 | -0.429 | -0.202 | -0.088 | -0.455 |
| | | | **Singapore** | | | | |
| | Dividend Payer | IP | Profitability | SIZE | AGR | M/B | RE/TA |
| **IP** | -0.091 | | | | | | |
| **Profitability** | 0.388 | 0.027 | | | | | |
| **SIZE** | 0.505 | -0.637 | 0.224 | | | | |
| **AGR** | 0.274 | -0.027 | 0.268 | 0.465 | | | |
| **M/B** | 0.054 | 0.059 | 0.351 | -0.049 | 0.077 | | |
| **RE/TA** | 0.464 | -0.030 | -0.003 | 0.338 | -0.060 | -0.066 | |
| **RETVOL** | -0.767 | 0.971 | -0.310 | -0.556 | -0.049 | 0.045 | -0.503 |
| | | | **United Kingdom** | | | | |
| | Dividend Payer | IP | Profitability | SIZE | AGR | M/B | RE/TA |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **IP** | -0.046 | | | | | | |
| **Profitability** | 0.509 | -0.026 | | | | | |
| **SIZE** | 0.598 | -0.084 | 0.322 | | | | |
| **AGR** | -0.052 | 0.032 | 0.869 | -0.057 | | | |
| **M/B** | -0.039 | -0.063 | -0.077 | -0.047 | 0.054 | | |
| **RE/TA** | 0.448 | -0.022 | 0.658 | 0.366 | 0.066 | -0.779 | |
| **RETVOL** | -0.677 | 0.098 | -0.479 | -0.535 | 0.358 | 0.040 | -0.422 |

Table 12 represents the correlation between each variable included in this research project. The result is significantly different compared with each country. In detail, the correlation between import penetration and dividend payers is negative in Australia, Canada, France, India, Singapore and UK, and positive in rest of the countries. This opposite result may due to different background, economic development, or legal systems in each country. Moreover, most of the countries have a positive relationship between dividend payers with profitability, size, AGR, and RE/TA. This indicates there are more dividend payers in profitable, large size, high asset growing rate and sufficient retained earnings companies in most of the countries. Again, the correlation between dividend payers with market to book ratio differs from county to country.

In Australia, China, France, Japan, Korea, and UK, the increasing market to book ratio result to a decreasing dividend payers. By contrast, the dividend payments increase with market to book ratio increase in Canada, India, Malaysia, and Singapore. Lastly, the correlation between dividend payers with RETVOL is negative for all countries, which indicate with an increase in stock price volatility companies in all countries tend to pay less dividends. More importantly, most of the correlation value between each variable is relatively low, which guarantees the degree of the multi-collinearity is moderate.

**Table 13: Regression Analysis**

(Note: [1] column is the OLS regression without Import Penetration, [2] column is with Import Penetration, and [3] column is the robustness check by adding RE/TA and RETVOL)

| **Australia** | | | | | | |
|---|---|---|---|---|---|---|
| | [1] Without IP | | [2] With IP | | [3] Robustness | |
| | coefficient | p-value | coefficient | p-value | coefficient | p-value |
| Import Penetration | | | 0.002 | 0.991 | 0.022 | 0.871 |
| Profitability | 0.116 | 0.002 | 0.116 | 0.002 | 0.061 | 0.078 |
| Size | 0.195 | 0.000 | 0.195 | 0.000 | 0.063 | 0.000 |
| AGR | 0.010 | 0.534 | 0.010 | 0.534 | 0.001 | 0.929 |
| M/B | 0.000 | 0.540 | 0.000 | 0.540 | 0.000 | 0.760 |
| RE/TA | | | | | 0.000 | 0.098 |
| RETVOL | | | | | -1.872 | 0.000 |
| R Square | 0.265 | | 0.265 | | 0.480 | |
| Obs | 560 | | 560 | | 560 | |
| **Canada** | | | | | | |
| | [1] Without IP | | [2] With IP | | [3] Robustness | |
| | coefficient | p-value | coefficient | p-value | coefficient | p-value |

| | | | | | | |
|---|---|---|---|---|---|---|
| Import Penetration | | | 0.073 | 0.739 | 0.120 | 0.519 |
| Profitability | 0.002 | 0.980 | 0.000 | 0.998 | -0.020 | 0.717 |
| Size | 0.209 | 0.000 | 0.211 | 0.000 | 0.071 | 0.055 |
| AGR | 0.018 | 0.314 | 0.018 | 0.320 | -0.004 | 0.778 |
| M/B | 0.003 | 0.119 | 0.003 | 0.120 | 0.003 | 0.059 |
| RE/TA | | | | | 0.000 | 0.748 |
| RETVOL | | | | | -1.944 | 0.000 |
| R Square | 0.300 | | 0.300 | | 0.506 | |
| Obs | 128 | | 128 | | 128 | |

**China**

| | [1] Without IP | | [2] With IP | | [3] Robustness | |
|---|---|---|---|---|---|---|
| | coefficient | p-value | coefficient | p-value | coefficient | p-value |
| Import Penetration | | | 0.473 | 0.746 | 0.178 | 0.907 |
| Profitability | 6.399 | 0.000 | 6.475 | 0.000 | 6.506 | 0.000 |
| Size | 0.159 | 0.003 | 0.144 | 0.044 | 0.115 | 0.137 |
| AGR | 0.467 | 0.234 | 0.465 | 0.240 | 0.500 | 0.214 |
| M/B | -0.050 | 0.187 | -0.054 | 0.179 | -0.067 | 0.158 |
| RE/TA | | | | | -0.187 | 0.641 |
| RETVOL | | | | | -0.723 | 0.397 |
| R Square | 0.500 | | 0.501 | | 0.511 | |
| Obs | 55 | | 55 | | 55 | |

**France**

| | [1] Without IP | | [2] With IP | | [3] Robustness | |
|---|---|---|---|---|---|---|
| | coefficient | p-value | coefficient | p-value | coefficient | p-value |
| Import Penetration | | | 0.006 | 0.833 | 0.014 | 0.573 |
| Profitability | 1.492 | 0.010 | 1.493 | 0.010 | 1.045 | 0.056 |
| Size | 0.219 | 0.000 | 0.221 | 0.000 | 0.173 | 0.000 |
| AGR | 0.277 | 0.385 | 0.273 | 0.396 | -0.198 | 0.524 |
| M/B | -0.014 | 0.576 | -0.014 | 0.584 | -0.014 | 0.545 |
| RE/TA | | | | | 0.432 | 0.004 |
| RETVOL | | | | | -1.273 | 0.034 |
| R Square | 0.369 | | 0.369 | | 0.504 | |
| Obs | 80 | | 80 | | 80 | |

**India**

| | [1] Without IP | | [2] With IP | | [3] Robustness | |
|---|---|---|---|---|---|---|
| | coefficient | p-value | coefficient | p-value | coefficient | p-value |
| Import Penetration | | | 0.001 | 0.986 | 0.040 | 0.581 |
| Profitability | 1.727 | 0.000 | 1.727 | 0.000 | 1.384 | 0.000 |
| Size | 0.157 | 0.000 | 0.157 | 0.000 | 0.110 | 0.000 |
| AGR | -0.030 | 0.370 | -0.030 | 0.371 | -0.030 | 0.334 |
| M/B | 0.006 | 0.139 | 0.006 | 0.139 | 0.004 | 0.291 |
| RE/TA | | | | | -0.001 | 0.782 |
| RETVOL | | | | | -1.916 | 0.000 |
| R Square | 0.237 | | 0.237 | | 0.333 | |
| Obs | 823 | | 823 | | 823 | |

| **Japan** | | | | | | |
|---|---|---|---|---|---|---|
| | [1] Without IP | | [2] With IP | | [3] Robustness | |
| | coefficient | p-value | coefficient | p-value | coefficient | p-value |
| Import Penetration | | | 0.032 | 0.774 | 0.095 | 0.332 |
| Profitability | 0.462 | 0.163 | 0.463 | 0.163 | 0.311 | 0.285 |
| Size | 0.063 | 0.003 | 0.062 | 0.004 | 0.042 | 0.029 |
| AGR | 0.223 | 0.166 | 0.222 | 0.167 | 0.128 | 0.362 |
| M/B | -0.012 | 0.008 | -0.012 | 0.008 | -0.005 | 0.160 |
| RE/TA | | | | | 0.211 | 0.000 |
| RETVOL | | | | | -0.974 | 0.000 |
| R Square | 0.100 | | 0.100 | | 0.323 | |
| Obs | 268 | | 268 | | 268 | |
| **Korea** | | | | | | |
| | [1] Without IP | | [2] With IP | | [3] Robustness | |
| | coefficient | p-value | coefficient | p-value | coefficient | p-value |
| Import Penetration | | | 1.922 | 0.398 | 5.331 | 0.007 |
| Profitability | 2.047 | 0.014 | 2.126 | 0.011 | 0.786 | 0.311 |
| Size | 0.098 | 0.207 | 0.111 | 0.161 | 0.002 | 0.972 |
| AGR | 0.484 | 0.326 | 0.360 | 0.483 | 0.017 | 0.967 |
| M/B | -0.069 | 0.107 | -0.058 | 0.194 | 0.038 | 0.335 |
| RE/TA | | | | | 0.434 | 0.015 |
| RETVOL | | | | | -2.724 | 0.000 |
| R Square | 0.218 | | 0.226 | | 0.513 | |
| Obs | 75 | | 75 | | 75 | |
| **Malaysia** | | | | | | |
| | [1] Without IP | | [2] With IP | | [3] Robustness | |
| | coefficient | p-value | coefficient | p-value | coefficient | p-value |
| Import Penetration | | | 1.529 | 0.016 | 1.013 | 0.079 |
| Profitability | 1.847 | 0.004 | 1.720 | 0.005 | 1.117 | 0.168 |
| Size | 0.282 | 0.000 | 0.318 | 0.000 | 0.195 | 0.006 |
| AGR | -0.182 | 0.142 | -0.182 | 0.129 | -0.218 | 0.043 |
| M/B | 0.001 | 0.972 | 0.013 | 0.662 | 0.010 | 0.733 |
| RE/TA | | | | | -0.017 | 0.916 |
| RETVOL | | | | | -2.265 | 0.000 |
| R Square | 0.305 | | 0.360 | | 0.508 | |
| Obs | 76 | | 76 | | 76 | |
| **Singapore** | | | | | | |
| | [1] Without IP | | [2] With IP | | [3] Robustness | |
| | coefficient | p-value | coefficient | p-value | coefficient | p-value |
| Import Penetration | | | 0.447 | 0.132 | 0.228 | 0.319 |
| Profitability | 1.283 | 0.038 | 1.059 | 0.087 | 0.420 | 0.396 |
| Size | 0.191 | 0.002 | 0.261 | 0.001 | 0.078 | 0.231 |
| AGR | 0.469 | 0.362 | 0.530 | 0.296 | 0.776 | 0.050 |
| M/B | -0.014 | 0.755 | -0.010 | 0.810 | 0.011 | 0.738 |
| RE/TA | | | | | 0.053 | 0.268 |
| RETVOL | | | | | -2.201 | 0.000 |

| | | | | | | |
|---|---|---|---|---|---|---|
| R Square | 0.385 | | 0.424 | | 0.688 | |
| Obs | 41 | | 41 | | 41 | |
| **United Kingdom** | | | | | | |
| | [1] Without IP | | [2] With IP | | [3] Robustness | |
| | coefficient | p-value | coefficient | p-value | coefficient | p-value |
| Import Penetration | | | -0.001 | 0.979 | -0.008 | 0.778 |
| Profitability | 1.191 | 0.000 | 1.191 | 0.000 | 0.572 | 0.005 |
| Size | 0.165 | 0.000 | 0.165 | 0.000 | 0.081 | 0.001 |
| AGR | -0.085 | 0.154 | -0.085 | 0.155 | -0.010 | 0.858 |
| M/B | 0.001 | 0.800 | 0.001 | 0.803 | 0.001 | 0.780 |
| RE/TA | | | | | 0.024 | 0.328 |
| RETVOL | | | | | -1.684 | 0.000 |
| R Square | 0.409 | | 0.409 | | 0.534 | |
| Obs | 211 | | 211 | | 211 | |

Table 13 reports the estimation regression results for the main Fama-French model specification both with and without import penetration for each country. Columns [1] report the coefficient estimates without import penetration for original Fama and French (2001) model, which analyze the impact of firm size profitability, and investment opportunities (measured by AGR and M/B ratio) on dividend payers. Most of the countries have a significant p-value in profitability and firm size, and the coefficient between the two variables with dividend payers is also positive. Therefore, this result is consistent with the originally reported in Fama and French (2001), which indicates those more profitable and large companies are more likely to pay dividends.

However, the coefficients of AGR and M/B in column [1] have insignificant p-value for most of the countries. Hence, the different regression results vary from each country. For instance, the relationship between dividend payers with AGR and M/B is both positive in Australia, but the coefficient of AGR is negative in India and United Kingdom, and there is also a negative coefficient of M/B in China, France, Japan, Korea, and Singapore. In this case, it is considered that the investment opportunities as measured by asset growing rate and market to book ratio cannot well explained their impact on dividend policy adopted by different countries in this standard. Moreover, the insignificant variables clarify the relatively low R square in column [1] compared with the R square in column [2] and column [3].

Column [2] stated the regression results by adding import penetration as the main independent variable in this research study. It is important to report that there is a negative relationship between import competitions with dividend payments in the previous literatures. According to Hepman and Krugman, (1985); Tybout (2003), with the increasing import competition, the increasing numbers of foreign competitors have entered in the domestic market, thus the trade barriers and transportation costs has been decreased. This increased import competition and the attendant loss in pricing ability result in lower market power and a change in industry structure. Therefore, this competitive risk caused by import competition may minimize the profitability of domestic firms, and thus force them to pay less dividends to maintain their market power.

In this case, the coefficient of import penetration of United Kingdom shows a -0.001 in column [2], which is the only negative coefficient value among the 10 countries with an insignificant p-value.

On the other hand, the import penetration is positively correlated with dividend payers in Malaysia with a significant 0.016 p-value. This result helps to reject the third hypothesis, which stating the countries that have high import competition have firms that pay less dividends than firms in countries that have low import competition. It is indicated that the increased pace of globalization has increased the exposure for domestic companies to import competition, especially for countries like China and India with labor-intensive and low wage pressure, more companies tend to exit the market and relocate their business structure. (Bernard, Jensen and Schott, 2006) In summary, the R square in column [2] stay the same for most of the countries and have a slightly increase in China, Korea, Malaysia, and Singapore by adding the import penetration in the regression analysis. Although most of the countries show a positive coefficient of import penetration, but the result is not significant. Thus, the findings conclude that import penetration cannot explain the decreasing dividends payment for the selected countries.

For the robustness test, column [3] adds RE/TA and RETVOL as control variables in the regression analysis, which is the ratio of retained earnings to total assets (DeAngelo, DeAngelo and Stulz, 2006) and stock return volatility (Hoberg and Prabhala, 2009). Consistent with the previous findings, companies in Australia, France, Japan, and Korea tend to pay more dividends with higher cumulative retained earnings and lower stock return volatility, and the results are significant compared with other countries. It is because the decision to issue dividends is determined by the board of directors, with high retained earnings, the companies are more likely to payout dividends. According to Harkavy (1953), retained earnings is more import than dividends for growth companies because managers may increase dividend payments in order to increase firms' stock prices and encouragement current investors to keep their investments or attracting more investors.

On the other hand, the negative relationship between dividend payers with stock volatility is the same with previous studies. In detail, Nazir et al., (2010) used 73 firms listed in Karachi Stock Exchange (KSE) as sample and studied the relationship between share price volatility and dividend policy for the period of 2003 to 2008. They reported that share price volatility has significant negative association with dividend yield and dividend payout. There are several theories that could explain this inverse relationship between dividend payout with stock price volatility. According to Hashemijoo, Ardekani and Younes (2012), based on duration effect, the share prices tend to be less responsive to the discount rate fluctuation in companies with high dividend yield. Based on rate of return effect, companies may reduce their dividend payments if there are more valuable assets in place because the earnings from potential growth opportunities may harder predict than earnings from assets in place.

All in all, the retained earnings and stock volatility as two control variables have a significant influence on firms decide to pay dividends. Although the result between

import penetrations with dividend payers still insignificant, the overall R square increased in column [3] effectively, this improved the explanation power potentially.

**Table 14: Comparison between developed countries and developing countries**

| **Developed Countries Group** | | | | | | |
|---|---|---|---|---|---|---|
| | [1] Without IP | | [2] With IP | | [3] Robustness | |
| | coefficient | p-value | coefficient | p-value | coefficient | p-value |
| Import Penetration | | | 0.001 | 0.965 | 0.007 | 0.703 |
| Profitability | 0.169 | 0.000 | 0.169 | 0.000 | 0.081 | 0.003 |
| Size | 0.211 | 0.000 | 0.211 | 0.000 | 0.087 | 0.000 |
| AGR | 0.009 | 0.423 | 0.009 | 0.424 | -0.003 | 0.732 |
| M/B | 0.000 | 0.623 | 0.000 | 0.623 | 0.000 | 0.630 |
| RE/TA | | | | | -0.001 | 0.028 |
| RETVOL | | | | | -1.958 | 0.000 |
| R Square | 0.307 | | 0.307 | | 0.504 | |
| Obs | 1363 | | 1363 | | 1363 | |
| **Developing Countries Group** | | | | | | |
| | [1] Without IP | | [2] With IP | | [3] Robustness | |
| | coefficient | p-value | coefficient | p-value | coefficient | p-value |
| Import Penetration | | | 0.016 | 0.835 | 0.035 | 0.622 |
| Profitability | 1.787 | 0.000 | 1.787 | 0.000 | 1.501 | 0.000 |
| Size | 0.156 | 0.000 | 0.156 | 0.000 | 0.103 | 0.000 |
| AGR | -0.032 | 0.316 | -0.032 | 0.316 | -0.035 | 0.245 |
| M/B | 0.004 | 0.232 | 0.004 | 0.232 | 0.002 | 0.495 |
| RE/TA | | | | | -0.001 | 0.817 |
| RETVOL | | | | | -1.560 | 0.000 |
| R Square | 0.244 | | 0.244 | | 0.321 | |
| Obs | 954 | | 954 | | 954 | |

Table 14 examines the regression results by dividend the 10 countries into developed countries group and developing countries group depend on their economic development and income levels. Therefore, Australia, Canada, France, Japan, Korea, Singapore and United Kingdom are considered as developed countries, while China, India and Malaysia belong to the developed countries. It is clearly to notice that the R square in developed countries group is much higher than it in developing countries, it may due to a larger sample in developed countries which is 1363 and 954 in developing countries. Similarly, for both developed countries and developing countries, the correlation between dividend payers with profitability and size is significantly positive, which indicate profitable and larger firms are more willing to pay dividends.

More specifically, the coefficient of profitability in developed countries group is 0.169 in column [1] and column [2], and 0.081 in column [3], which is much lower than it in developing countries group, which is 1.787 in column [1] and column [2], and 1.501 in column [3]. This result imply that with an increasing in the profitability, firms in developing countries tend to have more dividend payers compared with firms in developed countries. The reason to explain this may due to there are more large companies in developed countries, and the profits are much more than it in developing

countries, and those big companies may not need to pay high dividends to attract new investors as they do not have much more investment opportunities than companies in developing countries.

Furthermore, dividend payers is negatively correlated with asset growing rate, and positively correlated with market to book ratio in both developed countries and developing countries, but the p-value is not significant. More importantly, a significant negative 0.001 correlation between dividend payers with retained earnings in developed countries in column [3] is opposite with previous regression analysis. According to Schmidt, (2014), for developed countries like Canada and United States, the apparent unfairness is partially mitigated by government regulations that shareholders may have to pay income taxes on dividends received as an unfair form of double taxation. After all, the company itself is a tax-paying entity that has already paid income tax on its earnings before channeling the remaining (after tax) income into dividends or retained earnings. In this case, the double taxation at dividends or retained earnings could explained why firms in developed countries may not increase the dividend payments even they have sufficient retained earnings. Unfortunately, the relationship between import penetrations with dividend payers is still not significant for developed countries group and developing countries group.

**Table 15: Comparison between common law countries and civil law countries**

| **Common Law Countries Group** | | | | | | |
|---|---|---|---|---|---|---|
| | [1] Without IP | | [2] With IP | | [3] Robustness | |
| | coefficient | p-value | coefficient | p-value | coefficient | p-value |
| Import Penetration | | | -0.004 | 0.909 | -0.002 | 0.937 |
| Profitability | 0.228 | 0.000 | 0.228 | 0.000 | 0.169 | 0.000 |
| Size | 0.184 | 0.000 | 0.183 | 0.000 | 0.080 | 0.000 |
| AGR | 0.012 | 0.286 | 0.012 | 0.286 | 0.000 | 0.997 |
| M/B | 0.000 | 0.397 | 0.000 | 0.397 | 0.000 | 0.570 |
| RE/TA | | | | | -0.001 | 0.011 |
| RETVOL | | | | | -1.776 | 0.000 |
| R Square | 0.217 | | 0.217 | | 0.369 | |
| Obs | 1839 | | 1839 | | 1839 | |
| **Civil Law Countries Group** | | | | | | |
| | [1] Without IP | | [2] With IP | | [3] Robustness | |
| | coefficient | p-value | coefficient | p-value | coefficient | p-value |
| Import Penetration | | | 0.000 | 0.998 | 0.014 | 0.536 |
| Profitability | 1.358 | 0.000 | 1.358 | 0.000 | 0.858 | 0.001 |
| Size | 0.132 | 0.000 | 0.132 | 0.000 | 0.091 | 0.000 |
| AGR | 0.293 | 0.039 | 0.293 | 0.040 | 0.207 | 0.101 |
| M/B | -0.012 | 0.023 | -0.012 | 0.023 | -0.004 | 0.375 |
| RE/TA | | | | | 0.274 | 0.000 |
| RETVOL | | | | | -1.308 | 0.000 |
| R Square | 0.184 | | 0.184 | | 0.367 | |
| Obs | 478 | | 478 | | 478 | |

Table 15 reports the regression results by dividend the 10 countries into common law countries group and civil law countries group depend on their legal systems. Therefore, Australia, Canada, India, Malaysia, Singapore and United Kingdom are countries that adopted common law, while China, France, Japan, and Korea are countries that adopted civil law.

The relationship between import penetrations and dividend payers in common law countries is negative, and it is positive in civil law countries, but the p-value is not significant. Thus, it again proved that the import penetration cannot affect firms in making decisions of paying dividends or not. In addition, there still a significant positive correlation between dividend payers with profitability and size for both common law countries group and civil law countries group. However, the coefficient of AGR and M/B in common law countries is not significant, but the AGR is significantly positive correlated to dividend payers, and M/B is significantly negatively correlated to dividend payers in civil law countries.

Moreover, with an increasing in retained earnings, firms in common law countries tend to have less dividend payers, but the number of dividend payers may increase in civil law countries. On the other hand, the dividend payers tend to all decreased with the increasing stock volatility regardless of different legal systems. Those differences between civil law countries with common law countries is because firms in common law has been provided a better legal protection, thus help managers to make the right financial decisions and increase the dividend payments, while a weak investor protection in civil law countries may lead to a higher volatility of stock returns, that force firms to pay less dividends under a higher credit risk pressure. (Campbell, 2003)

## 5.0. Conclusions

This empirical research investigates the impact of globalization on dividend policy and payout rate to find out the trend of dividend payments from several perspectives. The main findings are divided into two sections. Section one focused on the decreasing dividend phenomenon by testing the 10 selected countries, including Australia, Brazil, Canada, Chile, India, Italy, Mexico, New Zealand, Singapore, and Turkey though 2001 to 2010. From a global perspective, the research found that with the increasing of global number of firms, the global total amount of aggregate dividends paid is increasing accordingly. However, during 2007 to 2009, the worldwide financial crises happened, there are lots of companies reduce their dividend payments or become nonpayers during the time. From country-by-country perspective, Australia, Brazil, Canada, Italy, and New Zealand have a lower propensity to pay dividends gradually, but Chile, India, Mexico, Singapore and Turkey are countries that willing to pay more dividends. More importantly, the figure in the absolute change of total number indicated that the speed of nonpayers increases fast than the dividend payers.

In addition, most of the countries have a steady increase for aggregate real dividends, mean and median real dividends per dividend paying firm, and the dividends payment in

each country is concentrated by the top 50 percent of dividend payers. From developed and developing countries perspective, the average value in number of firms, number of payers, aggregate dividends, and aggregate dividends per payer is higher in developed countries group than the developing countries group. This finding supports the first hypothesis that firms in developing countries are paying less dividends than firms in developed countries, which is in line with Jack, Yannis, Robert, and Sanjay (1995), who reported the fraction of earnings paid as dividends to investors in developing countries was roughly two thirds the level paid in developed countries. From civil law and common law countries perspective, the result supports the second hypothesis that countries adopt civil law have firms that pay less dividends than firms in countries that adopt common laws. La Porta, Lopez-De-Silanes, & Vishny (2000) explained this result by stating that the common law countries tend to have a better legal protection for investors and creditors than civil law countries.

Section two contains the regression analysis for firms in Australia, Canada, China, France, India, Japan, Korea, Malaysia, Singapore and United Kingdom in year 2013, in order to find out the relationship between dividend payers with firm characteristics and import penetration. First of all, there is a significant positive relationship between dividend payers with size and profitability for most of the countries, thus this finding is consistent with the original reported by Fama and French (2001), which indicated profitable and large companies are more likely to pay dividends. More specifically, the strength of the correlation between dividend payers with profitability is stronger in developing countries than developed countries, and stronger in civil law countries than common law countries. Secondly, the investment opportunities as measured by asset growing rate and market to book ratio, have insignificant coefficient for most of the countries. Thirdly, by adding retained earnings divided by total assets and stock return volatility as two control variables, it increase the level of significance and improve the explain power. In detail, the correlation between retained earnings with dividend payers varies with different countries. The positive relationship is supported by Harkavy (1953), growth firms pay more attention on paying retained earnings as dividends to encourage more investors. The negative relationship is explained by Schmidt (2014), because developed countries may decrease their dividend payments even having sufficient retained earnings to avoid double taxation problems.

On the other hand, there is a negative correlation between dividend payers with stock return volatility for all countries regardless of different economic development and legal systems, which in line with previous literatures stated by Nazir (2010) and Hashemijoo, Ardekani and Younes (2012), the share prices tend to be less responsive to the discount rate fluctuation in companies with high dividend yield. Last but not least, the import penetration is not significant with dividend payers, thus helps reject the third hypothesis indicating countries that have high import completion have firms that pay less dividends than firms that have low import competition. This is not same as reported by Hepman and Krugman (1985) and Tybout (2003) that the increasing import competition will reduce the dividend payments for firms to lose domestic market powers.

## References


Ariff, M., & Khalid, A. (2005). Liberalization and Growth in Asia: 21 Century Challenges, Chelenham, UK and Northampton, MA, USA: Edward Elgar.

Baker, M., & Wurgler, J. (2004a). Appearing and disappearing dividends: the link to catering incentives. Journal of Financial Economics 73, 271-288.

Baker, M., & Wurgler, J. (2004b). A catering theory of dividends. Journal of Financa 59, 1125-1164.

Bancel, F., Bhattacharyya, N., Mittoo, U. R. (2005). Cross-Country Determinants of Payout Policy: A Survey of European Firms. Working Paper, SSRN Working Paper Series.

Banerjee, S., Gatchev, V. A., & Spindt, P. A. (2007). Stock market liquidity and firm Dividend Policy, Journal of Financial and Quantitative Analysis, 42(2): 369-398.

Basu, C., and Media D. (2012). Decreases of the Dividend Payout Ratio. Zacks Finance. Retrieved from http://finance.zacks.com/decreases-dividend-payout-ratio-1070.html

Bernard, A. B., Jensen, J. B., & Schott, P. K. (2006). Survival of the best fit: Exposure to low-wage countries and the (uneven) growth of US manufacturing plants. Journal of International Economics , 68 (1): 219-237.

Bildik, R., & Fatemi, A. (2012). Yes, dividends are disappearing: Worldwide evidence. Journal of Banking & Finance, 36(3), 662-667.

Campbell, J. Y. (2003). Consumption-Based Asset PRICING. Handbook of Economics of Finance, Vol 1B Amsterdam: North-Holland. pp. 803-888.

Chiou, W. J. P. (2008). Who benefits more from international diversification? Journal of International Financial Markets. Institutions and Money 18(5), 466-482.

DeAngelo, G., DeAngelo, L., & Stulz, R. M. (2006). Dividend Policy and the Earned/countributed Capital mix: a test of the life-cycle theory. Journal of Financial Economics, 81: 227-254.

DeAngelo, G., DeAngelo, L., Skinner, D. J. (2004). Are dividends disappearing? Dividend concentration and the consolidation of earnings. Journal of Financial Economics 72, 426-456.

DeAngelo, G., DeAngelo, L., Skinner, D. J. (2008). Corporate Payout Policy. Foundations and Trends in Finance, 3(2-3): 95-287

Denis, D.J., Osobov, I., (2005). Disappearing Dividends, Catering Incentives and Agency Costs: International Evidence. Working Paper, Purdue University.

Eije, H., Megginson, W. (2008). Dividends and share repurchases in the European Union. Journal of Financial Economics 89, 347-374.

Faccio, M., & Lang, L. (2002). The ultimate ownership of Western European corporations. Journal of Financial Economics, 65: 365–95.

Faccio, M., Lang, L., & Young, L. (2001). Dividends and expropriation. American Economic Review, 91(1): 54–71.

Fama, E.F., & French, K.R., (2001). Disappearing dividends: changing firm characteristics or lower propensity to pay? Journal of Financial Economics 60, 3-43.

Ferris, S., Sen, N., & Yui, H., (2006). God save the queen and her dividends: corporate payouts in the UK. Journal of Business 70, 1149-1173.

Gaston, N., Khalid, A. M., & ebrary, I. (2010). Globalization and economic integration: Winners and losers in the asia-pacific. Cheltenham, U.K: Edward Elgar Pub. Ltd.

Glen, J. D., Karmokolias, Y. Miller, R. R., & Shah, S. (1995). Divedend Policy and Behavior in Emerging Markets. To Pay or Not to Pay. The World Bank and International Finance Corporation. Washing. D. C. 20433, U.S.A

Grullon, G., Paye, B. S., Underwood, S, & Weston, J., P. (2011). Has the propensity to pay out declined? Journal of Financial and Quantitative Analysis, 46(1): 1-24.

Harkavy, O. (1953). The relation between retained earnings and common stock prices for large listed corporations, Journal of Finance, Vol. 8, Issue, 3, pp. 283-297.

Harrison, S. (2013). Can You Have a Negative Return on Assets? Retrieved from http://www.ehow.com/info_12102782_can-negative-return-assets.html

Hashemijoo, M., Ardekani, A. M., & Younesi, N. (2012). The impact of dividend policy on share price volatility in the malaysian stock market. Journal of Business Studies Quarterly, 4(1), 111.

Helpman, E., & Krugman, P. (1985). Market structure and foreign trade. Cambridge, MA: MIT Press.

Hoberg, G., & Prabhala, N. (2008). Disappearing dividends: the importance of idiosyncratic risk and the irrelevance of catering. Review of Financial Studies, 22(1): 79-116.

Iwata, S., & Wu, S. (2009). Stock market liberalization and international risk sharing. Journal of International Financial Markets. Institutions and Money 19(3), 461-476.

Jack, D. G., Yannis, K., Robert, R. M., & Sanjay, S. (1995). Dividend Policy and Behavior in Emerging Markets. International Finance Corporation. The World Bank, Washington. D. C.

La Porta R., F. Lopez-De-Silanes, A. Shleifer & R.W. Vishny. (1998). Law and Finance. Journal of Political Economy, 106, 1113-1155.

La Porta, R., Lopez- de- Silanes, F., Shleifer, A., & Vishny, R. W. (2000). Agency problems and dividend policies around the world. The Journal of Finance, 55(1), 1- 33.

McLuhan, Marshall, & Fiore, Quentin. (1968). War and peace in the global village. New York: Bantam Books.

Meissner, C. and N. Oomes (2008). "Why do countries peg the way they peg? The determinants of anchor currency choice", IMF working Paper WP/08/132, International Montetary Fund, Washington, DC.

Miller, M. H., & Modigliani, F. (1961). Dividend policy, growth, and the valuation of shares. The Journal of Business, 34(4), 411-433.

Min, B. S. (1999). Competition effects of import discipline in korea. Journal of the Asia Pacific Economy, 4(2), 298-316.

Mundell, R. (2003). "Prospects for an Asian currency area", Journal of Asian Econoomics, 14(1), 1-10.

Nazir, M. S., Nawaz, M. M., & Anwar, W., Ahmed, F. (2010). Determinants of Stock Price Volatility in Karachi Stock Exchange: the Mediating Role of Corporate Dividend Policy. International Research Journal of Finance and Economics. 1450-2887

Ojha. A.K. (2002). Globalization & Liberalization – prospects of new world order, Third concept- An International Journal of Ideas,

Pickford, M. (1992). Competition policy and import competition: A new zealand perspective. The Antitrust Bulletin, 37(4), 1089-1116.

Schmidt, M. (2014). Dividend, Ex-Dividend, Dividend Yield and Related Terms Explained. Business Encyclopedia. ISBN 978-1-929500-10-9. Retrieved from https://www.business-case-analysis.com/dividend.html

Tybout, J. R. (2003). Plant- and firm-level evidence on "new" trade theories. In E.K. Choi & J. Harrigan (Eds) Handbook of international trade , Chapter 13 Oxford: Basil-Blackwell.

Watson, A. (1974). Legal Transplants: An Approach to Comparaive Law. Charlottesville: University of Virginia Press.