

Dividend Policy of the ISE Industrial Corporations: The Evidence Revisited (1986-2007)

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Abstract

The study aims to find out whether the disappearing dividends, the decline in the number of dividend payers, the size effect and the increasing dividend/earnings concentration found in several developed and emerging markets exist among the industrials traded in the ISE. The study also analyzes the effects of the reinstatement of mandatory dividend policy in 2003. Using univariate statistical tests, we detect a size effect as well as a high level but stable dividend/earnings concentration. We find a significant decrease in the number of dividend payers, but we also detect an increasing level of real/nominal dividends driven by the high dividend/earnings concentration and the increasing level of earnings. The reinstatement of the mandatory dividend policy regulation in 2003 has not been successful in changing the payout policy of industrials.

Keywords: *Dividends, Payout Policy, Disappearing Dividends, Dividend Types, Mandatory Dividend Policy, Concentration, Size Effect*

JEL Classification: *G35, G32*

Özet - İMKB Sanayi Şirketlerinin Temettü Politikası (1986-2007)

Temettü politikası ile ilgili birçok çalışmada, gelişmiş ve gelişen piyasalarda temettü yok oluşu, temettü ödeyen halka açık şirket sayısında azalış, şirket büyüklüğü etkisi ve gittikçe artan kazanç ve temettü yoğunlaşması tespit edilmiştir. Bu çalışmada, söz konusu tespitlerin İMKB'nda işlem gören sanayi şirketleri için de geçerli olup olmadığı araştırılmıştır. Tek değişkenli istatistik testleri kullanılarak, şirket büyüklüğü etkisi ve yüksek fakat istikrarlı bir temettü ve kazanç yoğunluğu bulunmuştur. Ayrıca, temettü ödeyen şirketler sayısında önemli bir azalış olduğu gözlenmiştir. Ancak, bu azalışa rağmen, yüksek kazanç ve temettü yoğunluğu sonucunda, yükselen kazançlarla birlikte 2003 mali yılından itibaren nominal ve reel toplam temettü seviyesinde önemli bir yükseliş saptanmıştır. 2003 mali yılı itibarı ile tekrar yürürlüğe konulan zorunlu temettü dağıtım politikası şirketlerin temettü politikalarında herhangi bir değişiklik yaratmamıştır.

Anahtar Kelimeler: *Temettü, Temettü Politikası, Temettü Yok Oluşu, Temettü Çeşitleri, Yoğunluk, Şirket Büyüklüğü Etkisi*

JEL Sınıflaması: *G35, G32*

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1. Introduction

Fama and French have led to a series of studies with their article published in 2001 "Disappearing Dividends: Changing Firm Characteristics or Lower Propensity to Pay?" showing a significant decrease in the number and percent of manufacturing and commercial corporations (thereafter, industrials) that pay dividends in the U.S. over the period between 1978 and 1998. Fama and French focus on determining the characteristics of dividend payers and the changes in these characteristics affecting the decision to pay dividends, namely profitability, investment opportunities and size. They put forward that there had been an increase in the number of publicly traded firms having the characteristics of non-payers (i.e., low earnings, strong investments and small size) and there had been a reduced propensity to pay dividends by firms having the characteristics of a typical dividend payer.

In response to Fama and French's article on disappearing dividends, DeAngelo et al. (2004) revisit the evidence and point out that the dividends are not disappearing in the U.S. but both nominal and real amount of dividends increase over time accompanied by a large decrease in the number of firms that pay small dividends and an increasing level dividend/earnings concentration among the biggest payers. In European Union Countries (Von Eije and Megginson, 2008) and in Canada, U.K., Germany, France, and Japan (Denis and Osobov, 2008; Ferris et al., 2006a, 2006b and 2008), similar findings such as the high concentration of dividend payments by a few industrials with high earnings, the declining propensity to pay, the close connection between the dividend payment decision and the profitability, size, investment opportunities, and earned/contributed capital mix are found.

Few studies have been done investigating the disappearing dividends and dividend/earnings concentration phenomenon in emerging markets. In this study, we aim to find out whether the increasing dividend/earnings concentration, the decline in the number of dividend payers, and the size effect found in developed markets also exist among the industrials trading in the Istanbul Stock Exchange (ISE). The dividend policy regulatory environment in Turkey enriches the study due to the fact that during 1986-2007 dividend distribution years, industrials traded in the ISE have been legally subject to mandatory and flexible dividend payout policies. Typically, mandatory dividend policies are not used in developed markets. Focusing on the regulatory environment between 1982 and 2003, a few studies (Adaoglu, 1999 and 2000; Yilmaz, 2003; Yilmaz and Gulay, 2006) have been carried out investigating the dividend payout policy of corporations trading in ISE. This study revisits the empirical observations of these studies and extends them covering the latest regulatory setting that legally obliges the corporations trading in the ISE to pay a certain level of their distributable profit as cash dividends and/or stock dividends starting with 2003 fiscal year. We also try to see whether there has been a change in the choice of payout tools such as the use of stock dividends.

Since the abolishment of mandatory dividend policy regulation in 1994 fiscal year, we observe a substantial decrease in the number of dividend payers among ISE industrials followed by an insufficient increase in the number of dividend payers as a result of the reinstatement of mandatory dividend policy in 2003. The reinstatement of the mandatory dividend policy has not been successful due to the fact there is no strong change in the number of cash dividend payers which has only caught the level of payers in 1999 during the flexible dividend policy period. Using dividend payout policy ratios at the market and corporate level, we observe a significantly increasing level of real dividend payments starting with 2003 fiscal year. This is mainly due to the fact that there is a high level of dividend/earnings concentration among the ISE industrials driving the level of dividends upwards by dividend paying industrials having more earnings during the uninterrupted economic growth period between 2003 and 2006 fiscal years. Finally, stock dividends have not emerged as a substitute payout tool in place of cash dividends, but dividend omissions have become the only tool of payout policy in case of having losses in the income statement.

In the following section, we have a brief literature review followed by the investigation of regulatory environment for the dividend policy in Section 3. We present the data and methodology in Section 4 and the empirical results can be found in Section 5. Finally, we present the conclusions complemented by further research implications.

2. Literature Review

Fama and French (2001) pioneered the debate regarding the disappearing dividends with their finding that there is a substantial decrease in the number of cash dividend payers from the high level of 66.5% in 1978 to a level of 20.8% in 1999. The underlying reason is the increasing number and entry of publicly traded industrials having the characteristics of non-dividend payers – small size, low earnings and good investment opportunities. In addition to the change in firm characteristics, they also find a lower propensity to pay dividends among the U.S. industrials. DeAngelo et al. (2004) join the debate with their finding that dividends are not disappearing. They find an upward trend in the level of real and nominal dividends paid, and the increasing dividend and earnings concentration has contributed to this increase with few firms having high earnings.

In fifteen nations of the European Union, Von Eije and Megginson (2007) detect a similar decrease in the percentage number of European firms paying dividends from 92% to 62% between 1989 and 2003. However, the total real dividends and dividend payments as a fraction of corporate profits increase significantly together with a sharp increase in dividend and earnings concentration. They also detect similar firm characteristics as in the U.S. resulting in the declining propensity to pay. Ferris et al. (2006a) repeat the study for the U.K. firms and find the same significant decline in the percentage of dividend payers from 75.9% to 54.5% between 1988

and 2002. Ferris et al. (2006b) extend their study to Japan followed by another study (Ferris et al., 2008) covering an international data set of 30 countries. They find high dividend and earnings concentration, but also detect a substantial variation in the propensity to pay dividends. Denis and Osobov (2008) study U.S., Canada, U.K., Germany, France, and Japan, and in each country, they find that aggregate dividends have not decreased and are concentrated among the largest and most profitable firms, and among firms having retained earnings making up a significant fraction of total equity.

Reddy and Rath (2005) investigate the issue of disappearing dividends for the Indian emerging market and find similar findings in the dividend behavior of Indian industrials. They detect a decline in the percentage of dividend payers between 1991 and 2001, and a reduced propensity to pay dividends. They also find that the dividend paying industrials are larger and more profitable than non-paying industrials, but could not detect a significant effect of investment opportunities. Ronapat (2003) investigates the disappearing dividends phenomenon between 1990 and 2002 for the Thai listed firms and finds similar results. Two studies by Aivazian et al. (2003a and 2003b) with a broad data set of emerging markets including Turkey find that dividends are explained by profitability, debt, and the market-to-book ratio (investment opportunities proxy), and emerging market industrials typically follow unstable dividend policies reducing the role of dividend policy as a signaling device.

3. The Regulatory Framework

The regulatory discussion focuses on the fact that during 1982-2007, public corporations were subject to three different set of regulatory policies which were put into effect by the Capital Markets Board (CMB), the supervisory body in Turkey. With the enactment of Capital Markets Board Law in 1982, public corporations had to distribute at least half of their distributable profit as cash dividends. At that time, since there was no organized exchange, shareholders faced an illiquid capital market for their stocks and the only source of income was the dividend income (Adaoglu, 2000). This mandatory cash dividend regulatory policy had been in effect till the end of 1994 (1993 fiscal year) and meanwhile, the Istanbul Stock Exchange (ISE) was opened in 1986 as the official organized stock market.

Starting with fiscal year 1994, the Capital Markets Board implemented a significant change in the regulatory environment¹ abolishing the mandatory cash dividend distribution requirement only for the public corporations which were traded in the ISE. Since the shareholders of these traded corporations had the ability to incorporate their analysis of the dividend policy in the stock price by their buy and sell strategies, the CMB granted full flexibility in determining the dividend policy which was subject to voting in the annual ge-

(1) Decree issued by CMB Serial: IV, No.9 published in the Official Gazette dated 27/12/1994 and No: 22154.

neral meeting. In addition to the abolishment of mandatory dividend policy, stock dividends were introduced for the first time as another payout policy tool. Consequently, public corporations which were traded in the ISE could distribute cash dividends only, stock dividends only, both stock and cash dividends together and no dividends at all.

Adaoglu (1999, 2000), Yilmaz (2003), Yilmaz and Gulay (2006) show that following the changes in the regulatory environment, there is a substantial decrease in the average cash dividend payout ratios and a substantial increase in the number of non-payers. In 2001, Turkey had gone through a major economic crisis resulting in substantial losses for shareholders, especially small Turkish investors who heavily invested in the Turkish stocks prior to the economic crisis. Facing a major economic crisis, Turkey signed a standby agreement with IMF and started to implement major structural reforms. The stock market bounced back and attracted a substantial amount of foreign investment. However, the dismay of small Turkish investors had continued and in order to attract the Turkish investors back to the stock market, the Capital Markets Board reinstated the mandatory dividend policy² starting with fiscal year 2003 in line with the power granted to CMB in determining the mandatory dividend level by the change in Article 15 of Capital Markets Board Law dated 15/12/1999 and No: 4487 (published in Official Gazette dated 18/12/1999 No: 23910).

With the reinstatement of mandatory dividend policy, public corporations which were traded in the ISE had to pay at least 20% of their distributable income in cash dividends or in stock dividends or a combination of both, but the total distribution of cash dividends and/or stock dividends could not be less than 20% of the distributable profit for fiscal year 2003. In contrast to the mandatory cash dividend policy requirement between 1982 and 1994, public corporations do not have to pay in cash but have the option of distributing stock dividends with the requirement that the amount of stock dividends is added to the paid-in capital. Starting with fiscal year 2003, on a yearly basis, the CMB informed the public corporations of its decision regarding the minimum percentage of the distributable income that had to be paid to shareholders. For 2004 fiscal year, the minimum percentage was increased from 20% to 30% which stayed at this level for fiscal year 2005 as well. For fiscal year 2006, the level was decreased to 20% and stayed at this level for 2007.³

(2) Capital Markets Board decision number 16535 published in the Capital Markets Board Weekly Announcement Bulletin No. 2003/63 dated 30/12/2003.

(3) For fiscal year 2004, Capital Markets Board decision number 51/1747 dated 30/12/2004 published in the Capital Markets Board Weekly Announcement Bulletin No. 2004/54.

For fiscal year 2005, Capital Markets Board decision number 4/67 dated 27/01/2006 published in the Capital Markets Board Weekly Announcement Bulletin No. 2006/3.

For fiscal year 2006, Capital Markets Board decision number 2/53 dated 18/01/2007 published in the Capital Markets Board Weekly Announcement Bulletin No. 2007/3.

For fiscal year 2007, Capital Markets Board decision number 4/138 dated 8/01/2008 published in the Capital Markets Board Weekly Announcement Bulletin No. 2008/6.

Till the end of 2001, public corporations could only distribute dividends annually and they were required to complete the dividend payments within five months following the end of fiscal year. At the end of 2001 (CMB decree dated 13/11/2001, Serial: IV, No. 27), public corporations are allowed to distribute interim dividends, as called advance dividend payments in Turkey, on a quarterly basis during the fiscal year. However, due to tight restrictions, unclear taxation policy and heavy bureaucracy in the distribution of interim dividends, and the tendency of keeping the earnings for internal financing, interim dividend payments have not been popular among the public corporations.

4. Data and Methodology

The data is obtained from the ISE official website links for the "ISE Companies Capital Increases and Dividend Payments 1986-2007/06" and "Dividend Payments and Footnotes 2007".⁴ Financial institutions and utilities⁵ are excluded from the population since corporations in these two industries have different investment and dividend payout policies relative to industrial and commercial corporations. These two electronic sources and the Rasyonet Hisse XL 2.3.2 software program provide the data for earnings, cash and stock dividend amounts, and market capitalization. Parametric and non-parametric univariate statistical tests, namely t-test, Mann-Whitney test, ANOVA F-test and Kruskal-Wallis H-test are used to test for differences in means/medians between two samples and among subgroups. Where needed, Pearson correlation test is also used in the study.

Two measures of dividend payout ratio is used, namely the traditional dividend payout ratio at the "corporate level" and the aggregate dividend payout ratio at the "market level". The traditional dividend payout ratio is the ratio of total gross dividends to total published profits of the corporation. A better measure of the denominator in the cash dividend payout ratio is the "distributable profit" relative to the published profits/losses. Corporations pay out cash dividends out of the distributable profit which is calculated by subtracting all taxes, previous years' losses (including the inflation adjustment losses) and the first legal reserve from the profit before tax. However, the "distributable profit" figures are not electronically available leading to the use of published profits as the best proxy. However, the effects of these factors on the distributable profit, especially the previous years' losses and inflation adjustment losses, are

(4) The ISE official website links for "ISE Companies Capital Increases and Dividend Payments 1986-2007/06" and "Dividend Payments and Footnotes" are http://www.imkb.gov.tr/sirket/sermaye_temettu.htm and <http://www.imkb.gov.tr/veri/temettu2007.zip> respectively. It should be noted that the dividend payments of 1986-2007 period pertain to the fiscal years of ISE corporations from 1985 to 2006.

(5) As classified by the ISE, financial institutions are banks and special finance corporations, insurance companies, financial leasing and factoring companies, holding and investment companies, brokerage houses, real estate investment trusts, and investment trusts and utility companies are electricity, gas and steam.

analyzed by following the amount of losses of the corporations over the analysis period. The effects of economic crisis years and the effects of the changes in the financial reporting standards are also analyzed in the study. Additionally, gross dividends are used for all fiscal years since it shows the total amount of dividend payments to both shareholders and the tax authorities, and it enables us to use a uniform dividend definition throughout the analysis period of 1986-2007.

Corporations can pay out cash dividends even though they have losses, especially by using the retained earnings. The negative net income figure creates a problem as the traditional dividend payout ratio which has a lower limit of zero (no dividends) turns out to be negative at the corporate level. In order to avoid this problem and to observe the general trend in the market, the aggregate dividend payout ratio is used defined as the sum of the total gross dividends across all cash dividend paying corporations divided by the sum of all published profits/losses (net earnings) across all these corporations (Da Silva et al., 2004). In addition to the aggregate payout ratio, another market level payout ratio, namely the profits payout ratio, is calculated by dividing the total amount of cash dividends by the total amount of profits of all industrial corporations. This measure is used to analyze the dividend behavior especially during the mandatory cash dividend payout years in which corporations having profit had to pay out a certain amount of cash dividends.

Adaoglu (1999), Yilmaz (2003), and Yilmaz and Guzhan (2006) use another measure of dividend payout ratio called net dividend payout ratio calculated by subtracting the amount of rights issues from cash dividends and dividing the result by the amount of profits. We do not use this measure in this study since there are other corporate motivations behind the use of rights issues such as obtaining funds for investment opportunities and/or increasing the amount of eroding paid-in capital in an inflationary environment.

5. Empirical Evidence

5.1. Aggregate earnings/dividend levels and payouts

We begin our analysis by studying the earnings and dividend behavior of the ISE industrial corporations by examining the aggregate levels which are deflated to May 1986 price levels using the May to May⁶ yearly changes in the CPI index. Figure 1 tracks the deflated aggregate cash dividends, aggregate stock dividends, aggregate positive earnings (profits), net earnings (profits-losses) of cash dividend payers, and aggregate losses over the 1985-2006 fiscal years (1986-2007 distribution years). There is a cyclical variation in the cash dividend levels closely following the

⁽⁶⁾ May is taken as the base month since legally, corporations are required to complete the payment of cash dividends by the end of this month and typically, ISE corporations complete the dividend payments by the end of this month.

cycles in the aggregate positive earnings as well as the cycles in the net earnings of cash dividend payers. Typically, in developed capital markets, corporations smooth out the dividends resulting in a smooth trend in the dividend level even though earnings have cyclicity.

In Figure 1, we do not observe any significant change in the amount of aggregate cash dividends between 1985-2002 fiscal years even though the number of industrial corporations traded in the ISE increased from 32 to 215. For the period 2003-2006 with no significant change in the number of traded industrial corporations (see Table 1 for the changes in the number of corporations traded), we observe a significant increase in aggregate cash dividend levels followed by significant increases in both aggregate positive earnings and net earnings of cash dividend payers. It should be noted that during the 2002-2006 period, major reforms under the supervision of IMF had been implemented with an uninterrupted growth in the economy and a significant increase in foreign direct/indirect investments. The close levels of aggregate positive earnings and net earnings of cash dividend payers indicate that cash dividend payers make up a high percentage of industrial earnings in all years.

Additionally, we observe that the economic crisis in 1994 does not alter the trends due to the fact that ISE corporations earned profits not from their operating activities but from their cash investments in t-bills paying a significantly high real rate of return. However, the effect of 2001 economic crisis is clearly observed in Figure 1 with significant decreases in aggregate cash dividends and earnings accompanied by a substantial increase in aggregate losses. Even though both aggregate positive earnings (profits) and net earnings of cash dividend payers increase in 2002 fiscal year, there is no noticeable change in the level of cash dividends in this year mainly due to the accumulated losses of 2001 economic crisis in the financial statements lowering the amount of distributable profit. In 2003 fiscal year, we also observe a significant increase in aggregate losses accompanied by a significant increase in aggregate positive earnings and a slight increase in aggregate cash dividends. This can be explained by the fact that starting with 2003 fiscal year, ISE corporations adopted the inflation adjusted financial reporting standards resulting in downward earnings adjustments and at the same time, they were subject to 20% mandatory dividend payout ratio.⁷ Looking at the aggregate stock dividends starting in 1994 fiscal year, we see no significant change in the aggregate stock dividend levels between 1994 and 2006 even though the number of traded industrial corporations increases from 140 to 224 during that period.

(7) Topaç (2004) states that for 101 corporations using both unadjusted and inflation adjusted financial reporting standards in 2003 fiscal year, only 57 of 101 corporations report profits in both unadjusted and adjusted income statements. He also finds that total profits in unadjusted income statements add up to 181 trillion TL where as this figure turns out to be 118 trillion loss in inflation adjusted income statements.

Figure 1: Aggregate Cash Dividends, Aggregate Stock Dividends, Aggregate Positive Earnings (Profits), Aggregate Losses and Net Earnings of Cash Dividend Payers 1985-2006 Fiscal Years (1986-2007 Distribution Years)

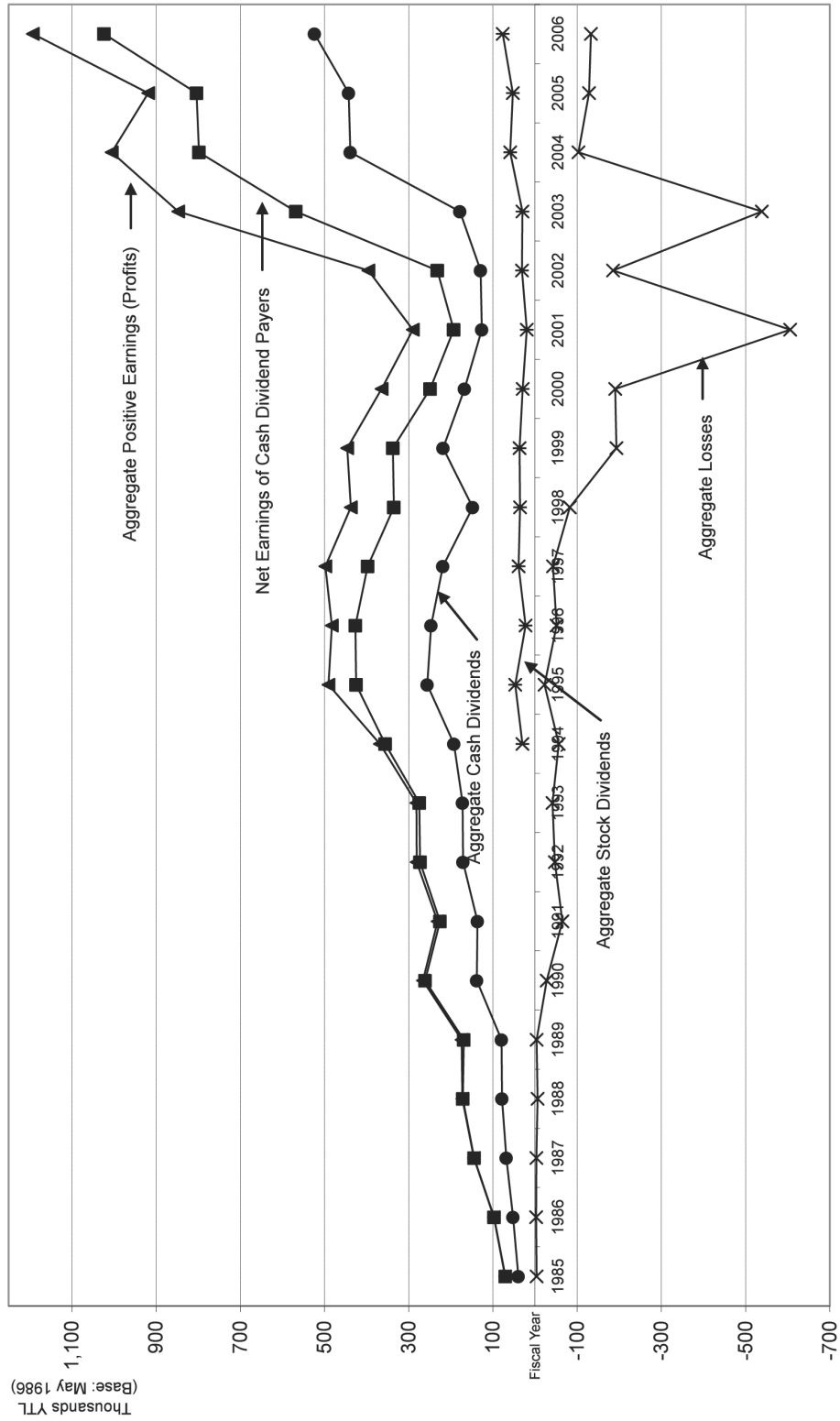


Table 1 (Panel A) shows the profits payout ratio at the market level together with the mandatory dividend payout ratio for each fiscal year. Panel B shows the profits payout ratio for selected periods which are determined taking into account the regulatory changes, the economic crisis in 2001 and the changes in financial reporting standards. The 1986-1989 period (1985-88 fiscal years) is the early growth period of the stock exchange with the opening of the market to foreign investors in late 1989. The 1990-1994 period (1989-1993 fiscal years) is characterized as the fast growth period in terms of trading volume, market volume and the number of traded corporations. The 1995-2003 period (1994-2002 fiscal years) is characterized by the abolition of mandatory cash dividend payment of 50% and the implementation of full flexibility in determining the payout policy and the use of stock dividends as another tool of payout policy. The 2001 economic crisis is another important economic and financial event during this period. During the 2004-2007 period (2003-2006 fiscal years), the mandatory dividend payment policy is reinstated accompanied by the implementation of economic reforms, uninterrupted economic growth, and declining inflation to single digit level.

For 1985-1989 and 1990-1993 fiscal year periods, both Panel A and B show that profits payout ratio is mostly above the 50% mandatory cash dividend payout ratio with a noticeable increase in the latter fiscal period. With the change in regulations in 1995 giving full flexibility in determining the payout policy for corporations trading in the ISE, we observe a decline in the profits payout ratio from 60% level to around 40% level. After being granted full autonomy in setting the payout policy, ISE industrials preferred to retain earnings for internal financing (Adaoglu, 1999). Especially, in 2002 fiscal year prior to the reinstatement of the mandatory dividend payout ratio policy, the profits payout ratio reaches its lowest level of 33% mainly due to the build-up of losses in 2001 income statements as a result of the economic crisis and the resulting downside effect on the amount of distributable profit. Taking out 2001 and 2002 fiscal years from the data set as shown in Panel B does not change the preceding analysis with a slight increase from 41% to 45%.

After the reinstatement of mandatory dividend payout policy of 20% in 2003 fiscal year, the profits payout level is just above the threshold level mainly due to the significant losses generated by the adaptation of inflation adjusted financial reporting standards. In Panel B, with 2003 or without 2003, we do not find a significant shift in the profits payout ratio after the regulatory change. In Panel A of Table 1, the average dividend yield of the ISE is presented showing unsatisfactory levels for shareholders, especially negative real dividend yields taking into account the high inflation rates during the analysis period. Most noticeably, the dividend yield reached its lowest level of 0.94% in 2002 fiscal year just before the reinstatement of mandatory dividend policy.

Table 1 : Profits Payout Ratios 1985-2006 Fiscal Years (1986-2007 Distribution Years)**Panel A : Average Dividend Yield, Mandatory and Profits Payout Ratios**

Fiscal Year	Dist. Year	N	ISE Average Dividend Yield*	Mandatory Dividend Payout Ratio	Profits Payout Ratio
1985	1986	32	9.15%	50%	55%
1986	1987	46	2.82%	50%	53%
1987	1988	54	10.48%	50%	47%
1988	1989	56	3.44%	50%	46%
1989	1990	75	2.62%	50%	46%
1990	1991	92	3.95%	50%	52%
1991	1992	101	6.43%	50%	59%
1992	1993	112	1.65%	50%	61%
1993	1994	125	2.78%	50%	61%
1994	1995	140	3.56%	0%	52%
1995	1996	159	2.87%	0%	52%
1996	1997	175	1.56%	0%	51%
1997	1998	189	3.37%	0%	44%
1998	1999	193	0.72%	0%	34%
1999	2000	213	1.29%	0%	49%
2000	2001	210	0.95%	0%	46%
2001	2002	212	1.20%	0%	44%
2002	2003	215	0.94%	0%	33%
2003	2004	216	1.37%	20%	21%
2004	2005	219	1.71%	30%	44%
2005	2006	222	2.10%	30%	48%
2006	2007	224	1.90%	20%	44%

*: Data obtained from the ISE official publication Annual Factbook 2007

<http://www.ise.org/quarterlybulletin/data/annualfactxls.zip>.

Panel B: Profits Payout Ratio for Selected Periods and Sub-periods

Selected Periods	Mandatory Dividend Payout Ratio	Profits Payout Ratio
1985 - 1988	50%	47%
1989 - 1993	50%	60%
1994 - 2002	0%	41%
1994 - 2000 (2001 & 2002 omitted)	0%	45%
2003 > 2006	25%*	41%
2004 > 2006 (2003 omitted)	27%*	45%

*: Average of the specified period.

In Panel A of Table 2, we document the evolution of dividend payout ratio at both market (aggregate) and corporate level over the 22-year period from 1985 to 2006 fiscal years (1986-2007 distribution years) as well as over the selected periods. At the corporate level, we calculate mean/median dividend payout ratios including zero dividend payouts (Corporate Level I in the table) and including only the dividend payers (Corporate Level II in the table).⁸ In Panel B, using the dividend payouts at the corporate level among the dividend paying industrials (Corporate Level II), we statistically test for differences in means/medians between selected periods. In

(8) Adaoglu (1999 and 2000) and Yilmaz (2003) include the zero cash dividend payouts in their mean and median dividend payout ratio calculations creating a downward bias in their means/medians due to the significant number of corporations omitting dividends (see Table 2 for the percentage of traded industrials paying dividends).

order to eliminate the effect of outliers at the corporate level, we exclude corporations with negative dividend payout ratios as well as corporations with payouts three standard deviation away from the mean in each fiscal year. A more outlier resistant measure of central tendency, namely median, is also used in the analysis.

From 1985 to 1993, ISE industrials have the highest mean/median payouts with the highest percentage number of industrials paying cash dividends mainly due to the 50% mandatory cash dividend payout ratio. Comparing 1985-1988 to 1989-1993 periods, the aggregate payouts and the mean/median payouts at the corporate level increase with a statistically significant increase of 6% in the median. It is interesting to observe that up to 1993 fiscal year, the aggregate dividend payout ratio and the mean/median dividend payout ratios at the corporate level do not significantly diverge from each other due to the fact that a high percentage of traded industrials paid cash dividends during that period. A significant divergence and a decreasing percentage of dividend payers over time are detected after 1993 with the introduction of flexible payout policy.

Table 2: Dividend Payout Ratios 1985-2006 Fiscal Years (1986-2007 Distribution Yrs.) at the Aggregate (Market) and Corporate Level

Panel A: Aggregate and Corporate Level Payout Ratios

Fiscal Yr.	% of Corp. Paying Dividends	Aggregate Dividend Payout Ratio	Corporate Level I (including zero dividend payouts)		Corporate Level II (including only dividend payers)		Selected Periods	Corporate Level II (including only dividend payers)	
			Mean	Med	Mean	Med.		Mean	Med
1985	84%	56%	51%	56%	63%	59%	1985 - 1988	64%	63%
1986	80%	54%	48%	53%	63%	59%			
1987	87%	47%	54%	54%	62%	62%			
1988	84%	46%	54%	59%	64%	69%			
1989	84%	47%	58%	69%	71%	72%	1989 - 1993	67%	69%
1990	84%	53%	54%	59%	64%	67%			
1991	74%	60%	49%	59%	68%	69%			
1992	77%	63%	50%	56%	66%	70%			
1993	84%	63%	55%	59%	65%	65%	1994 - 2002	64%	55%
1994	80%	54%	51%	55%	64%	68%			
1995	65%	60%	36%	40%	57%	53%			
1996	67%	58%	37%	42%	57%	56%			
1997	56%	55%	31%	19%	56%	50%	2002 ----- 1994 - 2000	60%	55%
1998	45%	44%	23%	0%	51%	49%			
1999	36%	65%	20%	0%	58%	56%			
2000	34%	65%	21%	0%	62%	61%			
2001	28%	67%	15%	0%	60%	71%	2000 ----- 2003 - 2006	55%	48%
2002	26%	56%	15%	0%	53%	48%			
2003	22%	31%	9%	0%	43%	37%			
2004	37%	55%	20%	0%	54%	47%			
2005	34%	55%	19%	0%	56%	51%	2004 ----- 2006	57%	49%
2006	38%	51%	20%	0%	53%	48%			

Panel B: Tests for Differences in Means/Medians at the Corporate Level II among Dividend Paying Industrials

Compared Periods	Mann-Whitney Test	t-test
(1985-1988) vs. (1989-1993)	40,917.5** (p: 0.048)	1.59 (p: 0.112)
(1989-1993) vs. (1994-2002)	255,621.0* (p: 0.000)	-0.45 (p: 0.651)
(1994-2002) vs. (2003-2006)	436,701.5* (p: 0.003)	-1.69*** (p: 0.092)
(1994-2000) vs. (2004-2006)	206,933.5** (p: 0.057)	1.03 (p: 0.303)

*, **, ***: significant at 0.01, 0.05 and 0.10 respectively.

During the flexible dividend policy period of 1994-2002, the aggregate and the mean/median payouts decrease with a significant decline in the percentage number of cash dividend payers reaching its lowest level in 2002 fiscal year just before the reinstatement of mandatory dividend payout starting with 2003 fiscal year. When we compare 1994-2002⁹ to 1989-1993 period, both the mean and median of dividend payers decrease with a statistically significant decrease of 14% in the median (see Panel B). In order to control for the negative effect of the economic crisis in 2001, mean and median are recalculated by removing the payout data of 2001 and 2002 fiscal years resulting in no change in the findings (see Table 1 (Panel A) – numbers in italics). Interestingly, in 2001 economic crisis year, both the aggregate payout and the median payout at the corporate level are at its highest level due to the high dividend payout policy of few profitable industrials distributing cash dividends (i.e., 28% - third lowest percentage of cash dividend payers between 1986-2007).

During the 2003-2006 period, we see further decreases in the mean/median payouts at both corporate and market level with a slight increase in the percentage number of cash dividend payers. Statistically, we detect a statistically significant decrease of 11% and 7% in mean and median respectively (see Panel B). At the same time, there is no significant change in the number of traded corporations. In Panel A, when we remove 2003 fiscal year with record level of aggregate losses (see Figure 1) due to the implementation of inflation adjusted reporting standards, mean and median do not differ significantly. In Panel B, we repeat the statistical tests by removing the outlier years of 2001, 2002 and 2003 in our data set and still detect a statistically significant 6% decrease in the median of between 1994-2000 and 2004-2006 periods.

⁽⁹⁾ As discussed before, the accumulated losses of the economic crisis in 2001 have a downside effect on the amount of distributable profit in 2002.

5.2. Dividend Types and Profit/Loss Responses

In Table 3, we focus on four types of payout policy tools which are cash dividends only, stock dividends only, both cash and stock dividends, and finally, dividend omissions. We try to see the trend in the choice of the payout tools and to find out the effect of stock dividends as a new payout tool starting in 1994 fiscal year. Stock dividends can be substitutes to cash dividends increasing the flexibility of managers in setting the dividend policy (Baker et al., 1995).

Table 3: Dividend Types for Selected Periods

Payout Tools	Average % of Number of Industrials Traded (Medians in parentheses)			
	1985-1988	1989-1993	1994-2002*	2003-2006*
Cash Dividend Payers Only	84% (84%)	81% (84%)	44% (41%)	31% (34%)
Stock Dividend Payers Only	-	-	7% (7%)	4% (4%)
Cash and Stock Dividend Payers	-	-	5% (3%)	1% (2%)
Omissions	16% (16%)	19% (16%)	45% (49%)	63% (60%)

*: Removing the outlier fiscal years of 2001, 2002 and 2003 does not result in significant changes quantitatively and qualitatively.

Using the same selected periods as in Table 2, the selected parameter for the choice of the payout tool is the average and the median percentage number of traded industrials using one of the four tools as depicted in Table 3 during the specified periods. In Table 3, we clearly observe that there is a significant decrease in the percentage number of cash dividend payers over time from 84% average (84% median) level during 1985-1988 to 31% average (34% median) level during 2003-2006 period. Similarly, there is a significant increase in the percentage number of dividend omissions from 16% average (16% median) to 63% average (60% median) level. Clearly, the abolishment of the mandatory cash dividend payout ratio in 1994 fiscal year resulted in a significant decrease in the number of cash dividend payers and the reinstatement of the mandatory cash dividend payout in 2003 fiscal year has not been effective and has not resulted in an increase in the number of cash dividend payers, but has resulted in a lower percentage number of dividend payers (i.e., 44% average between 1994-2002 vs. 31% average between 2003-2006).

Stock dividends have not turned out to be a significant substitute payout tool with an average level of 7% for stock dividends only and 5% level for the combination of cash and stock dividends during the 1994-2002 period. The use of stock dividends has decreased even more during the 2003-2006 period. In other words, the dividend policy flexibility granted for the ISE industrials in 1994 fiscal year did not result in the substitution of cash dividends by stock dividends but rather resulted in an increase in the number of dividend omissions.

In Table 4, we extend the analysis by investigating the choice of payout tool in response to whether the corporation has profit or loss declared in its income state-

ment. Panel A and B show the choice of payout tool for the selected periods in cases of profits and losses. The results in Panel A and B support the preceding findings and in Panel A, we detect a decrease in the percentage number of cash dividends over time even though corporations declare profits. Similarly, the reinstatement of the mandatory dividend policy in 2003 fiscal year has not been effective in increasing the number of cash dividend payers for profit declaring corporations. In Panel B, the evidence is striking with the payout policy tool choice of dividend omission in case of losses. Clearly, for all selected periods, whenever an industrial declares a loss, the payout policy is to omit the dividend payment. In line with the findings of Adaoglu (2000), this dividend behavior has not changed and it is a clear indicator for the industrials that they do not use dividend smoothing policies. For both profits and losses, stock dividends do not emerge as a cash dividend substitution tool with very few industrials using stock dividends.

Table 4 : Payout Policy Responses of ISE Industrials to Profits/Losses

Panel A : Payout Policy Response to Profits

Fiscal Years	Average % of Number of Industrials Traded (Medians in parentheses)			
	1985-1988	1989-1993	1994-2002*	2003-2006*
Cash Dividend Payers Only	92% (92%)	90% (90%)	54% (51%)	46% (50%)
Stock Dividend Payers Only	-	-	8% (8%)	6% (6%)
Cash and Stock Dividend Payers	-	-	6% (5%)	2% (2%)
Omissions	8% (8%)	10% (10%)	28% (32%)	46% (42%)

*: Removing the outlier fiscal years of 2001, 2002 and 2003 does not result in significant changes quantitatively and qualitatively.

Panel B: Payout Policy Response to Losses

Fiscal Years	Average % of Number of Industrials Traded (Medians in parentheses)			
	1985-1988	1989-1993	1994-2002*	2003-2006*
Cash Dividend Payers Only	0% (0%)	7% (0%)	2% (0%)	1% (0%)
Stock Dividend Payers Only	-	-	1% (0%)	0% (0%)
Cash and Stock Dividend Payers	-	-	5% (3%)	1% (2%)
Omissions	100% (100%)	93% (100%)	97% (100%)	99% (100%)

*: Removing the outlier fiscal years of 2001, 2002 and 2003 does not result in significant changes quantitatively and qualitatively.

5.3. Empirical Observations for 2002 and 2006 Fiscal Years (2003 and 2007 Distribution Years)

In this section, we explore the dividend and earnings concentration, and we test whether there is a relationship between the size (market capitalization) of the ISE industrial and the dividend payout ratio. For instance, DeAngelo et al. (2004) and Ferris et al. (2006a and 2006b) detect a high level of dividends and earnings concentration for U.S., U.K. and Japan, and they also find that the level of concentration gets higher over time for U.S. and U.K., but not for Japan. Da Silva et al. (2004) find a positive monotonic relationship between the corporation size and the divi-

dend payout ratio for the U.K. corporations, but not for the German corporations. Reddy and Rath (2005) also find a positive relationship and state that the dividend paying corporations are larger and more profitable in India. Similarly, Fama and French (2001) find that the three characteristics of dividend payers are the profitability, investment opportunities and the size for the U.S. industrials. Larger and profitable corporations are more likely to pay dividends in the U.S.. Using an international data set from 30 countries, Ferris et al. (2008) find that larger firms have a higher propensity to pay cash dividends.

Similar to the methodology adopted in DeAngelo et al. (2004) and Ferris et al. (2006b), we focus on a particular period by selecting a beginning fiscal year, 2002, and an ending fiscal year, 2006. There are a couple of motivations in selecting these two particular fiscal years. Firstly, as it can be observed in Figure 1, 2002 fiscal year is a turn around year in terms of the amount of aggregate cash dividends and aggregate profits of the ISE industrials. Between 1985 and 2002 fiscal years, there has not been a significant change in the level of aggregate cash dividends even though the number of traded industrials increased significantly. Moreover, in 2002 fiscal year, the industrials do not have an unusual amount of aggregate losses, but it is the fiscal year in which the percentage number of cash dividend paying industrials (26% - see Table 2) is at its lowest level over the 22 years analysis period (1985-2006). Secondly, it is the last fiscal year in which the ISE industrials are not subject to mandatory cash dividend payout and this will enable us to evaluate the impact of the reinstatement of mandatory cash dividend payout starting in fiscal year 2003. To the best of our knowledge, no study exists investigating the dividend behavior of ISE industrials after the reinstatement of the mandatory dividend policy in 2003 fiscal year. Thirdly, after 2002 fiscal year period, ISE industrials have adopted the inflation adjusted financial reporting as well as the international accounting standards between 2003 and 2006 fiscal years. Fourthly, the number of traded industrials is relatively stable compared to the pre 2003 high growth period.

5.3.1. Dividend and earnings concentration

In Table 5, we rank the cash dividend paying industrials in groups of five based on the amount of dividends paid in 2002 (61 dividend paying industrials) and 2006 (83 dividend paying industrials) fiscal years, and calculate the percentage of each group's amount of distributed dividends relative to the fiscal year's total. We also calculate the cumulative percentage and the real amount of dividends for each group. Similar to the level of dividend concentration level for the Japanese industrials but lower than for U.S. and U.K. industrials, we detect a high level of dividend concentration of around 45% for the Top 5 and around 60% for the Top 10. The Top 5 almost accounts for the half of the total dividends distributed in each fiscal year. However, unlike the increasing level of concentration for U.S. and U.K. industrials

over time, we detect a small increase in the level of dividend concentration between 2002 and 2006, only around 5% increase for the Top 5 and 2% increase for the Top 10. Additionally, unlike the evidence for U.S. and U.K. in which the bottom groups pay less real dividends over time, for every group of five ISE industrials, we detect a significant increase in the amount of real dividends with the Top 5 paying twice of the total amount for 2002 fiscal year as a whole.

Table 5: Concentration of Total YTL Dividends paid by ISE industrials in 2002 and 2006 fiscal years

Dividend Ranking	Percent of Total Dividends		Cumulative % of Total Dividends		Real Dividends (YTL millions, May 2003 Base)	
	2002	2006	2002	2006	2002	2006
Top 5	45.10%	49.50%	45.10%	49.50%	339.74	1,413.04
06-10	15.70%	12.94%	60.80%	62.45%	118.31	369.42
11-15	11.67%	9.03%	72.47%	71.47%	87.94	257.71
16-20	7.59%	6.86%	80.06%	78.33%	57.17	195.76
21-25	5.63%	5.23%	85.69%	83.56%	42.39	149.22
26-30	4.50%	3.92%	90.19%	87.48%	33.91	112.03
31-35	3.40%	3.07%	93.59%	90.55%	25.64	87.50
36-40	2.37%	2.65%	95.96%	93.20%	17.84	75.73
41-45	1.54%	2.07%	97.50%	95.27%	11.60	59.00
46-50	1.30%	1.69%	98.80%	96.96%	9.80	48.10
51-55	0.85%	1.15%	99.65%	98.11%	6.41	32.84
56-60 (61)	0.35%	0.67%	100.00%	98.78%	2.62	19.11
61-65		0.46%		99.24%		13.24
66-70		0.34%		99.58%		9.80
71-75		0.23%		99.82%		6.63
76-80		0.15%		99.97%		4.36
81-83		0.03%		100.00%		0.92
Total	100%	100%			753.37 YTL	2,854.41 YTL
N	61	83				

Table 6: Concentration of Total YTL Earnings (Profits) paid by ISE industrials in 2002 and 2006 fiscal years

Dividend Ranking	Percent of Total Earnings of Dividend Paying Industrials		Cumulative % of Total Earnings of Dividend Paying Industrials		Real Earnings (YTL millions, May 2003 Base)	
	2002	2006	2002	2006	2002	2006
Top 5	37.82%	39.57%	37.82%	39.57%	511.04	2,251.30
06-10	10.97%	9.65%	48.78%	49.22%	148.18	548.99
11-15	9.82%	13.19%	58.60%	62.41%	132.65	750.26
16-20	14.04%	5.97%	72.64%	68.38%	189.66	339.87
21-25	5.92%	9.98%	78.56%	78.37%	80.04	567.82
26-30	6.89%	5.38%	85.44%	83.74%	93.05	305.96
31-35	3.70%	3.60%	89.15%	87.35%	50.05	205.01
36-40	3.84%	3.19%	92.99%	90.53%	51.88	181.32
41-45	2.29%	2.94%	95.28%	93.48%	30.94	167.52
46-50	2.38%	2.34%	97.66%	95.82%	32.18	132.91
51-55	1.80%	1.51%	99.46%	97.32%	24.27	85.76
56-60 (61)	0.54%	0.78%	100.00%	98.10%	7.36	44.26
61-65		0.64%		98.74%		36.32
66-70		0.40%		99.14%		23.03
71-75		0.40%		99.54%		22.47
76-80		0.38%		99.92%		21.75
81-83		0.08%		100.00%		4.47
Total	100%	100%			1,351.30 YTL	5,689.03 YTL
N	61	83				

Taking into account the findings of Lintner (1956) for the U.S. corporations and Adaoglu (2000) for the ISE corporations that the earnings of the corporation is the main determinant of dividend supply, the high level of dividend concentration detected in Table 5 can be driven by the high level of earnings concentration among the dividend paying corporations. In Table 6, we analyze the level of earnings concentration for each group of five industrials in the dividend ranking of Table 5. In Table 6, similar to the findings of dividend concentration, we detect a high level of earnings concentration among the Top 5 and 10 dividend payers accounting for around 40% and 50% of total earnings in each fiscal year. Additionally, we detect a slight increase in the level of earnings concentration between the two fiscal years (i.e., 37.82% vs. 39.57% for Top 5). However, the earnings concentration evidence in the U.S. and U.K. is stronger showing a significant increase over time with low ranking dividend payers having decreases in the total amount of real earnings. In the ISE setting, all dividend ranking groups experience significant increases in real earnings between 2002 and 2006 fiscal years with all industrials earning 1,351.30 million YTL in 2002 and 5,689.03 million YTL in 2006 corresponding to around 400% increase in real amounts. The evidence supports the empirical findings of Lintner and Adaoglu that earnings is the main determinant in the dividend supply with the fact that earning increases are accompanied with higher dividends, and similarly, any changes in the earnings concentration is directly reflected in the dividend concentration taking into account that there is no change in the typical payout ratio among the dividend paying industrials (i.e., no change in the mean 53% and the median 48% at the corporate level, see Table 2).¹⁰

5.3.2 Size effect

Theoretically, industrials with a high market capitalization are expected to have stable earnings, proven track of profitability and easier access to capital markets relative to smaller and riskier industrials (Da Silva et al., 2004). Consequently, large industrials are expected to have a higher dividend payout ratio mainly due to the expectation that they have more free cash flows relative to small industrials. We test the size effect by partitioning the populations for 2002 and 2006 fiscal years into five quintiles based on the average market capitalization in each respective fiscal year. Then, we test for the difference in mean/median between each quintile's dividend payout ratio and the population (All). We also test for the difference in mean/median between the first (highest market capitalization) and the fifth (lowest market capitalization) quintiles. We investigate the percentage of cash dividend paying corporations in each quintile and the correlation between the corporation size and the payout ratio. For the correlation test, we use the natural log of the avera-

⁽¹⁰⁾ For instance, the small increase in the earnings concentration of Top 5 (37.82% vs. 39.57% for Top 5) is accompanied by a small increase in the dividend concentration of Top 5 (45.10% vs. 49.50% for Top 5).

ge market capitalization in order to normalize the data since the Pearson correlation test is sensitive to outliers. We use the coefficient of variation as a tool for measuring the relative dispersion in each quintile. Finally, we use the non-parametric Kruskal-Wallis H-test and the parametric one-way ANOVA F-test to test for the difference in mean/median among all quintiles.

In Table 7, Panel A and Panel B present the results for the size effect in 2002 and 2006 fiscal years, and we detect statistically significant size effects in both years. Especially, in year 2006, the effect is more prevalent with a monotonic decrease in the mean dividend payout ratio and the percentage number of corporations paying dividends, and a monotonic increase in the coefficient of variations. For both years, by analyzing the Mann-Whitney test and t-test results, we find statistically significant differences in mean/median between each quintile and the population (All) except for Size 3 which represents the average. Kruskal-Wallis H-test and one way ANOVA F-test are all significant detecting differences among the quintiles. Although not reported in Table 7¹¹, the differences between the first and fifth quintile's mean/median are statistically significant for both fiscal years. The statistically significant Pearson correlation between the natural log of the average market capitalization and the dividend payout ratio is 0.325 (p:0.00) and 0.437 (p:0.00) in 2002 and 2006 respectively. It is also interesting to find out that the industrials in the fifth quintile (Size 5) have a median payout of 0% with an extremely low percentage of these industrials paying dividends (2% in 2002 and 5% in 2006).

Table 7 : Dividend Payout Ratios Partitioned by Average Market Capitalization in 2002 and 2006 Fiscal Years
Panel A : 2002 Fiscal Year

Quintiles (N:41 in each Size)	Market Cap. Range (YTL in millions)	% of Corp. Paying Dividends	Coef. Of Variation	Mean Dividend Payout Ratio	Median Dividend Payout Ratio	Mann- Whitney Test (All vs. Size Quintile)	t-test (All vs. Size Quintile)
Size 1	108 -4,668	49%	120.84	28%	0%	5,915.5** (p: 0.01)	2.12** (p:0.04)
Size 2	42 - 107	51%	118.58	29%	13%	6,014.5* (p: 0.01)	2.30** (p:0.03)
Size 3	21 - 40	27%	190.55	13%	0%	4,926.5 (p: 0.68)	-0.59 (p: 0.56)
Size 4	10 - 20	17%	259.64	8%	0%	4,528.5*** (p: 0.10)	-1.94*** (p: 0.06)
Size 5	1 - 9	2%	640.31	1%	0%	3,932.5* (p: 0.00)	-6.54* (p:0.00)
All	1 - 4,668	29%	177.88	16%	0%	K-W H-test: 34.48* (p: 0.00) ANOVA F: 8.83* (p: 0.00)	

*, **, ***: significant at 0.01, 0.05 and 0.10 respectively.

(11) Size 1 vs. Size 5: 2002 fiscal year, Mann-Whitney test: 2,093.0* (p:0.00) and t-test: 4.98 (p:0.00)
Size 1 vs. Size 5: 2006 fiscal year, Mann-Whitney test: 2,598.0* (p:0.00) and t-test: 7.32 (p:0.00)

Table 7 : Continued
Panel B : 2006 Fiscal Year

Quintiles (N:44 in each Size)	Market Cap. Range (YTL in millions)	% of Corp. Paying Dividends	Coef. Of Variation	Mean Dividend Payout Ratio	Median Dividend Payout Ratio	Mann- Whitney Test (All vs. Size Quintile)	t-test (All vs. Size Quintile)
Size 1	449 - 15,712	73%	85.98	37%	33%	7,412.0* (p: 0.00)	3.19* (p: 0.00)
Size 2	154 - 433	59%	104.57	34%	22%	6,916.0* (p: 0.01)	2.39** (p: 0.02)
Size 3	63 - 146	32%	175.04	19%	0%	5,552.0 (p: 0.52)	-0.31 (p: 0.75)
Size 4	30 - 62	23%	212.29	10%	0%	4,989.0** (p: 0.04)	-2.62* (p: 0.01)
Size 5	2 - 29	5%	484.55	1%	0%	4,017.5* (p: 0.00)	-8.39* (p: 0.00)
All	2 - 15,712	38%	151.45	21%	0%	K-W H-test: 53.81* (p: 0.00) ANOVA F: 13.21* (p: 0.00)	

*, **, ***: significant at 0.01, 0.05 and 0.10 respectively.

6. Conclusions and Further Research Implications

This study contributes to the growing international evidence regarding the recent empirical dividend policy observations which are mainly the declining number of dividend payers accompanied by an increasing level of dividends and earnings concentration over time. There are conflicting empirical evidence whether the dividends are disappearing or reappearing (Fama and French, 2001; DeAngelo et al., 2004; Julio and Ikenberry, 2004). Moreover, there are variations in the level of dividend/earnings concentration and national differences still exist in the globalized capital markets (Ferris et al., 2006b). For the Istanbul Stock Exchange industrials, we detect similar findings along with its own national characteristics. We detect a significant decline in the number of cash dividend payers between 1985-2006 fiscal years (1987-2007 distribution years), but especially during the 1994-2006 fiscal years. However, similar to the findings of DeAngelo et al. (2004) for the U.S. market, the nominal and real level of dividends and earnings have increased for the ISE industrials during the 2003-2006 fiscal years (2004-2007 distribution years).

The increase in the level of dividends is mainly driven by the high level of dividend concentration and earnings concentration. Taking into account the finding that cash dividend payers make up a high percentage of industrial earnings and there is a high level of dividend/earnings concentration, the growth trend in the level of earnings between 2003 and 2006 fiscal years has resulted in a significant increase in the amount of dividends. In other words, during the growth period, highly concentrated dividend payers which earned more income distributed more dividends.

However, unlike the evidence in the U.S. and U.K., we do not detect a significant change in the level of dividend and earnings concentration over time and we do find increases in the level of dividends and earnings among all ranks of dividend payers.

The size effect is detected for the ISE industrials with a monotonic increase in the average payout ratio and the percentage number of industrials paying dividends as the market capitalizations of the industrials get bigger. Interestingly, the median dividend payout ratio for the third, fourth and fifth quintile (i.e., smaller market capitalization) is 0% accompanied by a significant decrease in the percentage number of payers. The industrials having small market capitalization either do not have free cash flows (profits) or retain all their earnings for internally financing their investments. This is an empirical research question that has to be investigated by using multivariate statistical tests.

The reinstatement of mandatory dividend policy regulation in 2003 has not been successful in terms of forcing the industrials to pay more dividends. We do not detect any significant change in the profits payout ratio and moreover, we detect further decreases in the dividend payout ratio at both market and corporate level, and unsatisfactory increase in the percentage number of dividend payers only catching up with the level in 1999. Topaç (2004) tries to find answers for the ineffectiveness of the mandatory dividend policy regulation and puts forward that the recent changes in the accounting standards have resulted in substantial amount of losses being recorded in the financial statements and these losses adversely affect the level of distributable profit due to the fact that industrials are not allowed to distribute dividends before covering the previous years' losses from their net income and retained earnings. Topaç also recommends that corporations should only be allowed to issue rights offerings at the nominal price under very special circumstances and the stringent restrictions on rights offerings will stop the corporate malpractice of collecting back the distributed dividends through highly discounted rights offerings.

Finally, the introduction of stock dividends as a payout tool has not proven itself as a substitute payout policy for cash dividends and dividend omissions have proved itself as the only payout policy in case of losses supporting the notion of instable dividend policy for the ISE industrials. Following the growing literature in corporate governance, another research topic in our agenda is the effect of ownership structure on the observed dividend policy behavior of industrials. Additionally, the dividend policy of the financial corporations needs to be investigated for the Turkish market.

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