

# The Effect of Tax Regulation on Firm Value: A Case for Allowance for Corporate Equity (ACE) Regulation\*

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## Abstract

The Capital Markets Board of Turkey announced a new tax regulation that provides a deduction for equity financing thereby providing a tax shield for new equity issues at the end of 2014. We investigate whether and how investors priced the introduction of this new tax regulation that incentivizes equity financing. The 11-day cumulative abnormal returns around the announcement average 3.2 percent for the 75 non-financial firms that are covered in the tax bill and 2.7 percent for the 25 financial firms that are exempted from the regulation. Furthermore, we find that not all firms are equally affected by the tax bill. Cumulative abnormal returns around the announcement of the tax bill for highly levered firms (measured using equity-to-debt ratio) who may find it easier to switch from debt to equity financing prove significantly higher. Furthermore, cumulative abnormal returns of firms with large income streams (measured using EBIT-to-asset ratio) that may be shielded from tax with the new regulation also prove significantly higher. Results indicate that investors ex-ante priced the anticipated additional equity issues that firms would undertake due to this regulation.

*Keywords:* Allowance for corporate equity; event study; tax regulation.

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## 1. Introduction

Debt financing provides a tax shield since interest expense is tax deductible. The seminal work of Modigliani and Miller (1963) started a large literature on how the tax benefits of debt affect the capital structure<sup>1</sup>. In the Modigliani and Miller paper and in most countries around the world, equity financing does not provide the tax shield that debt financing does. Institute of Fiscal Studies Capital Taxes Group (1991) and Deveraux and Freeman (1991) proposed a new tax regulation (Allowance for Corporate Equity –ACE–) that provides a deduction for equity when a company calculates its taxable profits<sup>2</sup>. Croatia in 1994 is the first country to enact ACE and provide a tax shield for equity financing (Keen and King, 2002). So far, Brazil in

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<sup>1</sup> Refer to Graham (2003) for an excellent review on the literature studying how taxes affect capital structure.

<sup>2</sup> Refer to IFS Capital Taxes Group (1991) for commentary report and Isaac (1997) for evaluation of the viability of ACE.

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1996, Italy in 1997, Austria in 2000, Belgium in 2006, and Turkey in 2015 implemented the tax regulation that provides a deduction for equity financing.

This study investigates whether and how the introduction of tax regulation that provides a deduction for equity financing affects shareholder value in Turkish firms listed on Borsa Istanbul. On 29 December 2014, Vahdettin Ertas, the chairman of Capital Markets Board of Turkey, announced new tax regulation (ACE) that allowed firms to deduct 50 percent of new stock issues multiplied by the average loan interest rate (as determined by The Central Bank of the Republic of Turkey)<sup>3</sup>. This tax bill entered into force on 1 July 2015. The regulation aims to encourage firms to issue equity instead of debt. It applies to all firms incorporated in Turkey except for financial institutions (such as banks and insurance companies) and government-owned enterprises.

We investigate the market reaction to the announcement of the tax bill using the 100 listed firms that make up the BIST-100 index (the benchmark index of Borsa Istanbul). The 11-day cumulative abnormal returns around the announcement date average 3.2 percent for the 75 non-financial firms. The tax regulation excludes financial firms and the 11-day cumulative abnormal returns around the announcement date average 2.7 percent for these 25 financial firms. The market reaction to the announcement proves economically and statistically significant for the 75 firms that are covered in the tax bill.

Investors evaluate how equity tax shields may affect the financing decision of firms and price the anticipated changes in firm value with their trading activity. Our results indicate that investors price the introduction of ACE as positive news for the firms covered in the tax bill. Furthermore, we find that not all firms are equally affected by the tax bill. First, we hypothesize that firms who are more heavily debt financed will find it easier to switch from debt financing to equity financing when equity has tax advantages. When we sort the 75 non-financial firms into three bins according to the book value of equity to debt ratio, the 11-day cumulative abnormal returns around the announcement date proves largest (4.8 percent and statistically significant) in the most levered (lowest Equity to Debt bin) 25 firms and smallest (1.6 percent and statistically insignificant) in the least levered (highest Equity to Debt bin) 25 firms. Second, the tax bill can only be beneficial if the firm has positive income stream. Thus, we

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<sup>3</sup> Interested readers may refer to <http://www.resmigazete.gov.tr/eskiler/2015/04/20150407-19.htm> for the full bill.

hypothesize that firms who report no or very little income will not benefit from the tax bill and the market reaction will be correspondingly lower when compared to firms with significant income available to shield from tax. We sort the 75 non-financial firms into three bins according to the Earnings before Interest and Taxes (EBIT) normalized by assets. 11-day cumulative abnormal returns around the announcement date proves largest at 4.9 percent for the firms with the most income to shield from tax (highest EBIT to Asset bin) and lowest at 2.2 percent for the firms with the least income to shield (lowest EBIT to Asset bin).

This study contributes to the existing literature on how tax regulation in general<sup>4</sup> and ACE in particular affects corporate decision-making. To our knowledge, this is the first empirical study that investigates whether and how investors price the introduction of ACE. The literature on the introduction of an allowance for corporate equity deduction focuses on how regulation affects the government and tax revenue (Keen and King, 2002; Oropallo and Parisi, 2005), and changes the financing decision of the firm (Staderini, 2001; Klemm, 2006; Princen, 2012). We focus on investor reaction to the ex-ante anticipated effect of the tax regulation rather than the ex-post changes in tax revenue and capital structure. The very short-term abnormal returns observed around the introduction of the tax bill are a clean measure of how investors price the effect of the ACE on firm value.

The remainder of the article first describes the sampling framework, second explains the event study method, third discusses the empirical results and finally concludes.

## **2. Sampling framework and research method**

We need to identify the precise announcement date of the tax bill to measure market reactions accurately. We conduct keyword searches in Bloomberg and the archives of three major Turkish newspapers to check if there is any news about the tax

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<sup>4</sup> Modigliani and Miller (1963) show that the value of a leveraged firm is equal to value of an unleveraged firm plus a tax shield in the presence of corporate taxes. In theory, this implies that a firm can maximize its value if it finances itself solely with debt. However, leveraged firms may have higher probability to face costs of financial distress (Robichek and Myers, 1966; Kraus and Litzenberger, 1973; Scott, 1976; Brennan and Schwartz, 1978; Kane, Marcus and McDonald, 1984), agency costs of debt (Jensen and Meckling, 1976; Myers, 1977; Jensen, 1986), and signaling costs (Ross, 1977; Stiglitz and Weiss, 1981; Myers and Majluf, 1984; Myers, 1984). Thus, in the presence of complex tax structures, firms may not always desire as much debt as possible (Farrar and Selwyn, 1967; Myers, 1967; Miller, 1977; DeAngelo and Masulis, 1980) since they become more and more vulnerable to unsteady economic conditions as the amount of debt increases.

bill prior to its formal announcement. The announcement date, 29 December 2014, is the first date that newspapers report on ACE. Table 1 shows the key announcement dates for the regulation. The parliamentary counsel accepted the omnibus bill on 27 March 2015 and the tax bill entered into force on 1 July 2015. The tax bill covers all non-financial firms and our sample covers the 75 non-financial firms in the BIST-100 Index<sup>5</sup> (the main index for Borsa Istanbul).

**TABLE 1 – Key Event Dates**

Table describes key dates for ACE.

<b>Date</b>	<b>Description</b>
29-Dec-14	Capital markets board of Turkey announced the equity tax bill
27-Mar-15	Parliamentary counsel accepted the omnibus bill
1-Jul-15	Regulation entered into force

The tax bill demonstrates how the tax deduction for new equity issues will work with the following example<sup>6</sup>. Assume Company XYZ issues additional equity of 1 TL as of January 1, 2016. Average loan interest rate (as determined by The Central Bank of the Republic of Turkey) is 13.57% as of December 31, 2016. Then, the equity tax deduction is as follows:

$$\begin{aligned} & \text{Increase in equity} \times \text{Loan interest rate} \times \text{Time} \times \text{Deduction rate} \\ & = 1 \text{ TL} \times 13.57\% \times (12 / 12) \times 50\% = 0.06785 \text{ TL} \end{aligned}$$

The tax shield using the 20 percent corporate tax rate for a 1 TL increase in equity corresponds to 0.01357 TL in the year of the issue. Firms increasing cash capital benefit from the tax shield of 0.01357 TL not only in the year of issue but also in every year following the issue. Hence, the net present value of future tax shields arising from the 1 TL increase in equity (using the Central Bank's loan interest rate of 13.57% and the perpetuity formula  $0.01357/0.1357$ ) will be 0.10 TL.

We adopt the event study method developed in Brown and Warner (1985) to measure market reaction to the tax bill. Figure 1 illustrates the timeline for the event

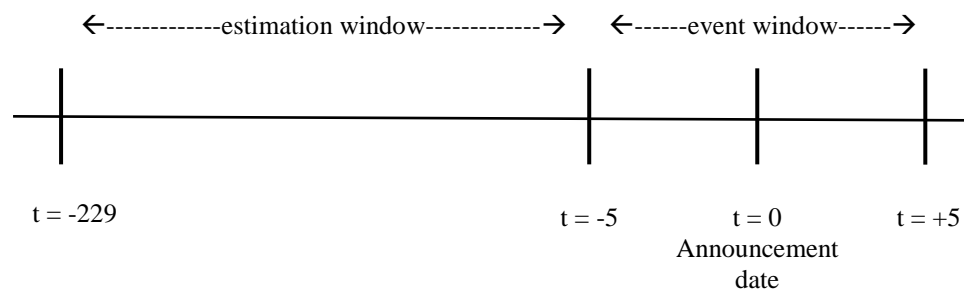
<sup>5</sup> Interested readers may refer to <http://www.borsaistanbul.com/docs/default-source/endeksler/bist-stock-indices-ground-rules.pdf?sfvrsn=14>.

<sup>6</sup> Interested readers may refer to <http://www.verginet.net/dtt/11/Vergi-Sirkuleri-2015-44.aspx>.

study. We pick the first day that investors learn about the tax bill to measure market reaction. The event is the announcement of the tax bill and the event date (Day [0]) is 29 December 2014. We measure investor reaction to the ex-ante anticipated effect of the tax regulation in the *event window*. The event window starts 5 trading days before and ends 5 trading days after the announcement date.

### FIGURE 1 – Event Timeline

Figure depicts the event timeline used to calculate abnormal returns around the announcement of tax bill on 29 December 2014.



We calculate daily returns for each stock starting 229 days before the announcement and ending 5 days after using adjusted share prices from DataStream. Daily abnormal returns difference the realized returns from the mean returns of each stock calculated in the *estimation window*. The estimation window covers the 224 trading days before the event window (Day [-229,-6]). Abnormal returns in the event window is:

$$A_{i,t} = R_{i,t} - \bar{R}_i \quad (1)$$

where  $R_{i,t}$  is return of stock  $i$  on day  $t$ ,  $\bar{R}_i$  is returns of stock  $i$  averaged in the estimation window from 229 days before to 5 days before the announcement, and  $A_{i,t}$  measures the abnormal return of stock  $i$  on day  $t$ .

We then estimate the statistical significance of the abnormal returns in the event window. The null hypothesis is that the average abnormal return on Day [0] is equal to zero. The test statistic for event day is:

$$\bar{A}_t / \hat{S}(\bar{A}_t) \quad (2)$$

where

$$\bar{A}_t = \frac{1}{75} \sum_{i=1}^{75} A_{i,t}, \quad i = 75 \text{ non-financial firms covered in tax bill} \quad (3)$$

$$\hat{S}(\bar{A}_t) = \sqrt{\sum_{t=-6}^{t=-229} (\bar{A}_t - \bar{\bar{A}})^2 / 223} \quad (4)$$

$$\bar{\bar{A}} = \frac{1}{224} \sum_{t=-229}^{t=-6} \bar{A}_t \quad (5)$$

We also calculate cumulative abnormal returns (CARs) in the 11-day window around the announcement day [-5, +5]. The 11-day CARs sum the daily abnormal returns in the 11 days in the estimation window. The null hypothesis is that the cumulative average abnormal return around the announcement day [-5, +5] is equal to zero. The t-statistic used to test the 11-day CARs is:

$$\sum_{t=-5}^{+5} \bar{A}_t / \left( \sum_{t=-5}^{+5} \hat{S}^2(\bar{A}_t) / 10 \right)^{1/2} \quad (6)$$

Panel A of Table 2 reports the mean, standard deviation, the maximum and the minimum of the 75 non-financial and 25 financial firms in BIST-100 index in the estimation window. Stock returns average 15 basis points with a standard deviation of 215 basis points in the estimation window. The stock returns average -82 basis points on the announcement of the tax bill and average 43 basis points in the 11 days surrounding the tax bill.

## TABLE 2 – Descriptive Statistics

Panel A of Table 2 reports the mean, standard deviation, maximum and minimum daily returns (in %) for stocks that compose the BIST-100 index in the estimation window, event day and 11-day event window. Parameter estimates report returns of 224 days prior to the announcement date (29 December 2014) in the estimation window, returns on the announcement date on the event day and returns from 5 days before to 5 days after the announcement date in the 11-day event window. Panel B reports the mean, standard deviation, maximum and minimum equity-to-debt ratios (in %) of equity to debt bins. Equity-to-debt ratio is book value of owners' equity (in cash) divided by the total debt as of the second quarter of 2014. The stocks are sorted from the highest to the lowest ratio and divided into three bins of 25 firms. Bins one and three represent the firms with the highest and lowest equity-to-debt ratios, respectively. Panel C reports the mean, standard deviation, maximum and minimum EBIT-to-asset ratios (in %) of EBIT to asset bins. Equity-to-debt ratio is EBIT (earnings before interest and taxes) divided by the total assets as of the end of 2013. The stocks are sorted from the highest to the lowest ratio and divided into three bins of 25 firms. Bins one and three represent the firms with the highest and lowest EBIT-to-asset ratios, respectively.

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### Panel A. Descriptive statistics of daily returns (in %) for firms in BIST-100 index in the estimation window, event day and 11-day event window

	Estimation Window	Event Day	11-day Event Window
Mean	0.15	-0.82	0.43
Standard Deviation	2.15	1.46	1.80
Maximum	40.66	8.04	15.59
Minimum	-19.91	-3.49	6.91

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### Panel B. Descriptive statistics of equity-to-debt ratios (in %) for firms in BIST-100 index

	Equity to Debt bins		
	1 – Least Levered	2	3 – Most Levered
Mean	75.31	18.88	5.36
Standard Deviation	49.37	6.56	2.24
Maximum	204.63	29.19	8.85
Minimum	29.54	8.92	1.55

**Panel C. Descriptive statistics for EBIT-to-asset ratios (in %) for firms in BIST-100 index**

	EBIT to Asset bins		
	1 – Largest EBIT ratio	2	3 – Smallest EBIT ratio
Mean	16.01	7.26	-3.42
Standard Deviation	6.62	1.63	14.09
Maximum	37.35	9.73	4.26
Minimum	9.77	4.52	-65.28

Levered firms that generate large streams of income would benefit from the tax shield afforded by new equity issues relative to less levered with small income streams. We sort the 75 non-financial firms into three bins according to their leverage and the magnitude of their income. We calculate the book value of cash equity to debt ratio before the announcement of the bill in the second quarter of 2014. We calculate the EBIT to total asset ratio before the announcement of the bill as of the end of 2013. Panel B and C of Table 2 report the mean, standard deviation, the maximum and the minimum of the equity-to-debt ratios and EBIT-to-asset ratios in the three bins, respectively. The equity-to-debt ratio averages 5 percent in the most levered bin and 75 percent in the least levered bin. The EBIT-to-asset ratio averages 16 percent in the largest income bin and minus 3 percent in the smallest income bin. We hypothesize that the levered firms with the highest income will benefit from the tax bill more.

### 3. Empirical Results and Discussion

The ACE regulation excludes financial firms. Therefore, we contrast the cumulative abnormal returns around the ACE announcements in non-financial firms that are affected by ACE against the cumulative abnormal returns in financial firms that are not affected by ACE. There are 25 financial institutions and 75 non-financial firms in the BIST-100 index. Table 3 reports abnormal returns on and the 11-day CARs around the day the tax bill is announced.

Cumulative abnormal returns for non-financial firms in the 11-day window around the announcement date average 3.2 percent and are statistically significant. The 11-day CARs for financial firms are 2.7 percent and significant. Investors evaluate the tax subsidy proposed in ACE as positive news and price its effect in the non-financial firms. As expected, the market reaction in the financial institutions that do not benefit from the tax subsidy proves less. Our findings of significant abnormal returns in the longer 11-day event window and insignificant returns in the short event window are in line with the previous literature that shows investor reaction to corporate announcements may take longer in emerging country markets (Feldman and Kumar, 1995; Yılmaz and Tanyeri, 2016).

**TABLE 3 – Market reaction to announcement of equity tax regulation**

Table 3 reports abnormal returns (in %) from mean adjusted return model on and 11-day cumulative abnormal returns (CARs) around the announcement date, 29 December 2014. Abnormal returns and CARs reported in the first and third rows are in percentages. t-statistics are reported in second and fourth rows. The fifth row shows the number of observations. \*\* and \* denote significance at 1% and 5%, respectively.

<u>CAR</u>	<b>Non-financial</b>	<b>Financial</b>
<b>Day [0]</b>	-0.97 -1,040	-0.99 -0,845
<b>[-5,+5]</b>	3.20 3,400**	2.70 2,285*
<b># of obs</b>	75	25

The ACE bill states that firms who increase capital (in cash) after 1 July 2015 (the date that regulation is enforced) can benefit from the tax incentive<sup>7</sup>. We hypothesize that firms with high leverage ratios have more room to increase equity capital. Cumulative abnormal returns around ACE announcement should then be higher in firms with lower equity-to-debt ratios. We calculate the equity-to-debt ratio by dividing book value of owner's equity (in cash) to total debt as of the second quarter of 2014. We then sort the 75 non-financial firms in the sample into three bins of 25 firms according to their equity-to-debt ratio. Bins one and three cover the least and most levered firms. Panel A of Table 4 reports abnormal returns on and the 11-day CARs around the announcement date in the three bins sorted according to leverage.

<sup>7</sup> Interested readers may refer to <http://www.resmigazete.gov.tr/eskiler/2015/04/20150407-19.htm> for the full bill.



**TABLE 4 – Differences in market reaction to the tax bill**

Panel A of Table 4 reports abnormal returns (in %) from mean adjusted return model on and 11-day CARs around the announcement date of equity to debt bins. Equity-to-debt ratio is book value of owners' equity (in cash) divided by the total debt as of the second quarter of 2014. The stocks are sorted from the highest to the lowest ratio and divided into three bins. Bins one and three represent the firms with the highest and lowest equity-to-debt ratios, respectively. Panel B reports abnormal returns (in %) from mean adjusted return model on and 11-day CARs around the announcement date of EBIT to asset bins. EBIT-to-asset ratio is EBIT (earnings before interest and taxes) divided by total assets as of the end of 2013. The stocks are sorted from the highest to the lowest ratio and divided into three bins. Bins one and three represent the firms with the highest and lowest EBIT-to-asset ratios, respectively. Abnormal returns and CARs reported in the first and third rows are in percentages. t-statistics are reported in second and fourth rows. The fifth rows show the number of observations. \*\* and \* denote significance at 1% and 5%, respectively.

**Panel A – Market reaction to the tax bill according to firm leverage**

<u>CAR</u>	Equity to Debt bins		
	1 - Least Levered	2	3 - Most Levered
<b>Day [0]</b>	-0.1 <i>-1,031</i>	-0.8 <i>-0,795</i>	-1.1 <i>-1,096</i>
<b>[-5,+5]</b>	1.6 <i>1,640</i>	3.2 <i>3,130**</i>	4.8 <i>4,640**</i>
<b># of obs</b>	25	25	25

**Panel B – Market reaction to the tax bill according to income stream**

<u>CAR</u>	EBIT to Asset bins		
	1 - Highest Income	2	3 - Lowest Income
<b>Day [0]</b>	-0.7 <i>-0,735</i>	-1.1 <i>-1,047</i>	-1.1 <i>-1,131</i>
<b>[-5,+5]</b>	4.9 <i>4,868**</i>	2.5 <i>2,449**</i>	2.2 <i>2,200*</i>
<b># of obs</b>	25	25	25

Investor reaction to the announcement of ACE is most pronounced in the most levered 25 firms with the lowest equity-to-debt ratio (CARs of 4.8 percent and statistically significant) and least pronounced in the least-levered 25 firms with highest equity-to-debt ratio (CARs of 1.6 percent and statistically insignificant). In line with our hypothesis that levered firms with room to increase their equity capital may benefit more from the tax subsidy, abnormal returns increases across the equity-to-debt bins with those firms with the lowest equity-to-debt ratios benefitting the most.

The firm can benefit from the tax bill only if it has positive income. Thus, we hypothesize that market reaction to the tax bill for firms with large income streams will be more pronounced. We measure the relative magnitude of income stream with

EBIT (earnings before interest and taxes) normalized by total assets as of the end of 2013. We sort the 75 non-financial firms into three bins of 25 firms according to their EBIT-to-asset ratio. Bins one and three cover the firms with the highest and lowest EBIT-to-asset ratios, respectively. Panel B of Table 4 reports abnormal returns on and the 11-day CARs around the announcement date in the three bins sorted according to income stream. Investor reaction to the announcement of ACE increases in the level of income that the firm can protect from tax. 11-day CARs for the 25 firms with the largest (smallest) income stream is 4.9 (2.2) percent and statistically significant.

This study contributes to the existing literature on how tax regulation in general and ACE in particular affects corporate decision-making. To our knowledge, this is the first empirical study that investigates whether and how investors price the introduction of ACE. Investors price the anticipated effect of the tax regulation on firm value. The 11-day cumulative abnormal returns of 3.2 percent around the introduction of the tax bill measures the effect of the ACE on firm value. While this is the first study investigating how investors price the effect of ACE, a strand of papers investigates how equity tax shields change corporate and governmental decision-making around the world. Table 5 summarizes the main findings of these related papers.

Starting with Croatia in 1994 (Keen and King, 2002), Brazil (Klemm, 2006), Italy (Staderini, 2001; Oropallo and Parisi, 2005), Austria and Belgium (Princen, 2012) implemented bills allowing for corporate equity tax shields. Most recently Turkey also introduced a new tax bill in 2015 that allows for equity tax shields. First strand of papers focuses on the government. Keen and King (2002) show that tax revenue decreases following the implementation of ACE in Croatia whereas Oropallo and Parisi (2005) find that the tax burden (hence tax revenue) of the firm (government) increases (decreases) after the abolition of ACE in Italy. Second strand of papers focuses on the firm. Staderini (2001) and Princen (2012) show that firms decrease leverage following the implementation of ACE. Keuschnigg and Dietz (2007) and Finke et al. (2014) show that leverage would decrease in Swiss and German firms in simulations of ACE implementation. Contrary to the decrease in leverage documented in these studies, Klemm (2006) fails to find a change in debt-financing structure of firms in Brazil.

We find that investors price the tax shield that would arise from the anticipated switch from debt to equity financing documented in the prior literature at the

announcement of the tax bill. Investors without observing the changes in capital structure and the accompanying tax shield that would be realized price the expected value of the tax shield. Furthermore, investors differentiate between firms who will potentially benefit from the tax shield more based on the level of leverage and income stream. Our findings coupled with the findings in the literature indicate that tax bills that allow for equity tax shields change corporate decision-making and that investors price the effect of these changes in corporate decision-making on firm value.

**TABLE 5 – Related literature**

Table 5 reports the sample and the main findings of related papers on ACE tax regulation.

<b>Empirical Papers</b>	<b>Country</b>	<b>Period in which ACE tax bill is in effect</b>	<b>Sample Years</b>	<b>Main Result</b>
M. Keen and J. King (2002)	Croatia	1994 - 2000	1998	Tax revenues decrease by roughly one third in 1998
A. Klemm (2006)	Brazil	Since 1996	1990 - 2000	No change in capital structure following the implementation of ACE
A. Staderini (2001)	Italy	1997 - 2003	1993 - 1998	Debt-to-asset ratio decreases following the implementation of tax bill
F. Oropallo and V. Parisi (2005)	Italy	1997 - 2003	2000	Tax burden of firms decreases following the abolition of ACE
S. Princen (2012)	Belgium	Since 2006	2001 - 2007	Debt-ratio decreases following the implementation of ACE
C. Keuschnigg and M.D. Dietz (2007)	Switzerland	NA	NA	Simulation forecasts debt-to-asset ratio to decrease following the implementation of tax bill
K. Finke, et al. (2014)	Germany	NA	2005 - 2007	Simulation forecasts debt-ratio to decrease following the implementation of tax bill

#### **4. Conclusion**

This paper investigates whether and how the introduction of tax regulation that provides a deduction for equity financing affects shareholder value in Turkish firms listed on Borsa Istanbul. IFS Capital Taxes Group proposed this new tax regulation (Allowance for Corporate Equity –ACE–) in 1991 that provides a deduction for equity when a company calculates its taxable profits. So far, Croatia, Brazil, Italy, Austria and Belgium implemented the tax regulation. Recently in 2015, Turkey passed ACE tax bill. The regulation aims to encourage firms to issue equity instead of debt. It applies to all firms incorporated in Turkey except for financial institutions (such as banks and insurance companies) and government-owned enterprises.

We investigate investor reaction to the new tax regulation on announcement day for the 100 largest firms listed on Borsa Istanbul. The 11-day cumulative abnormal returns around the announcement day average 3.2 percent for the 75 non-financial firms that are covered in the tax bill and 2.7 percent for the 25 financial firms that are exempted from the regulation. We also find that not all firms are equally affected by the tax bill. Cumulative abnormal returns around the announcement of the tax bill for highly levered firms (measured using equity-to-debt ratio) who may find it easier to switch from debt to equity financing when equity has tax advantages prove significantly higher. Results show that investor reaction to the announcement of ACE is most pronounced in the most levered 25 firms (statistically significant CARs of 4.8 percent) and least pronounced in the least-levered 25 firms (statistically insignificant CARs of 1.6 percent). Furthermore, cumulative abnormal returns for firms with large income streams (measured using EBIT-to-asset ratio) that may be shielded from tax with the new regulation also prove significantly higher. Results indicate that investor reaction to the announcement of ACE increases in the level of income that the firm can protect from tax. 11-day CARs for the 25 firms with the largest income stream is 4.9 percent and statistically significant whereas that for smallest income stream is 2.2 percent.

This study shows that investors price the anticipated effect of the tax regulation on firm value. Furthermore, investors differentiate between firms who will potentially benefit from the tax shield more based on the level of leverage and income stream. Our findings coupled with the findings in the literature indicate that tax bills that

allow for equity tax shields change corporate decision-making and that investors price the effect of these changes in corporate decision-making on firm value. We believe this is the first empirical paper that investigates whether and how investors price the introduction of ACE and how tax bill allowing a deduction for equity financing affects corporate decision-making.

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