DETECTING INCOME SMOOTHING BEHAVIOURS OF TURKISH LISTED FIRMS THROUGH DISCRETIONARY ACCOUNTING CHANGES

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ABSTRACT

Income smoothing is deliberate actions of management to prevent sharp decreases and increases in an income figure. Smooth income streams indicate strength and stability, therefore in order to appear strong and stable, firms try to have smooth income figures. In the income smoothing literature, we see many examples of incentives of income smoothing. Some of them are:

1. to have better relations with company owners, investors, creditors, suppliers, and workers,
2. to have higher security prices and lower cost of capital,
3. to benefit from bonus compensation,
4. to benefit from tax advantage, and
5. to create more stable capital markets.

The main objective of this study is “to detect income smoothing behaviours of Turkish listed companies through empirical tests using discretionary accounting changes”. Discretionary accounting changes (DACs) were accepted as income smoothing instruments because they can have big impacts on the reported earnings and cannot be done without management’s discretion.

It is impossible to know real intents of managers; therefore, income smoothing was assumed to be one of the possible motivations of DACs, other possible motivations were also searched in this study.

The research comprises the companies listed on Istanbul Stock Exchange (ISE) between the years 1998 and 2003. Financial institutions were excluded because of accounting and reporting differences. As seen in the table, footnotes of firms in 1289 firm-years were scrutinised.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of firms of which footnotes were examined</th>
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<tbody>
<tr>
<td>1998</td>
<td>216</td>
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<td>1999</td>
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<td>2000</td>
<td>233</td>
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<td>2001</td>
<td>235</td>
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<td>2002</td>
<td>227</td>
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<td>2003</td>
<td>156</td>
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<td>TOTAL</td>
<td>1289</td>
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The smoothing behaviour index of Moses (1987) was used to determine income smoothers and non-smoothers. Positive values of SB mean the analysed firm is an income smoother.

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To apply this formula, we can get the reported earnings of a firm from its income statement and calculate prechange earnings by adding or subtracting the monetary effect of a discretionary accounting change. However it is impossible to know exactly the expected earnings number that the firm’s management tries to smooth toward.

In order to estimate expected earnings of a firm, Moses used Simple Random Walk Model (SRWM). Additionally, many studies chose only one estimation model. However, in this study, in order to decrease the risk of using an unsuitable model, four models were used to predict expected earnings.

SRWM says that expected earnings in the year of accounting change is equal to the reported earnings of previous year.

The second model says that, previous year’s earnings should be adjusted with the inflation rate and expected earnings in the year of accounting change is equal to the inflation-adjusted reported earnings of previous year. In the examination period of this study, the average inflation rate in Turkey was 48 percent. This shows us the necessity of inflation adjustment.

According to the 3rd model, average earnings growth over five preceding years is calculated and it is assumed that previous year’s earnings will grow at the same rate.

In the fourth model, it is estimated that in the year of accounting change, return on assets ratio will be equal to the average of the past five years’ return on assets ratios.

Parallel to the studies in the related literature, firm size, ownership structure, industry, debt ratio, prechange earnings deviation, directional impact of the accounting changes and industry were determined as the possible variables affecting income smoothing behaviors of firms, and hypotheses were developed related to these variables.

Besides income smoothing, having a net income close to zero and economical crises were hypothesised to be other incentives of making DACs.

The results of the statistical tests and analyses showed that there are mainly three possible motivations of discretionary accounting changes other than providing high quality financial reports:

The first one is income smoothing. Because nearly 60 % of the sample firms were determined as smoothers and 40 % of the sample firms were determined as non-smoothers, income smoothing may be considered an important factor in discretionary accounting change decisions.

Analyses show that firms with positive prechange earnings made income decreasing DACs and firms with negative prechange earnings made income increasing DACs. Therefore; decreasing reported income
in order to decrease tax liability and decreasing losses to give better messages about future profitability are other possible incentives of making DACs.

DACs were made mostly in the years that Turkey faced big economical crises. Therefore the characteristics of the time period, or in other words different economical, operational, risk and opportunity conditions, are other possible factors that managers take into consideration while making DACs.

Reference: