Flexibility in Financial Accounting Income Strategies and Earnings Management in the Netherlands

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Chapter 9

Summary and discussion

The usefulness of financial statements and the barriers to interpreting accounting data is in debate and there is concern about the quality of financial statements. The concern about the quality of financial statements is neither new, nor typically a problem of financial accounting in the Netherlands. Accounting standards in the Netherlands are however internationally known for their conceptual and flexible nature. Further, there is a lack of effective compliance mechanisms in the Netherlands that have been found necessary in for example the US and the UK. Given this institutional setting there is an intensive need to gain more understanding on financial accounting flexibility in the Netherlands. Knowing more about financial accounting quality in general, and more specifically about managers’ use of financial accounting flexibility, could help to increase the usefulness of financial statements.

The primary purpose of this study is to describe and explain the use of financial accounting flexibility for managerial influence over accounting income in the Netherlands. In order to do so the following four research questions are addressed in this study:

RQ1: What are the general possibilities to adapt financial accounting data within the opportunities offered by accounting standards in the Netherlands?

RQ2: How can financial accounting flexibility be observed and its use for income strategies and earnings management be detected and analyzed?

RQ3: What are the firm specific possibilities to adapt financial accounting data by real transactions and pure accounting decisions?

RQ4: How can the use of financial accounting flexibility for income strategies and earnings management by listed firms in the Netherlands be explained?

Framework and prior research

This study started out with the development of a framework for managerial influence over accounting income in chapter 2. This framework provides an overview of the financial accounting process and takes into account the business environment as well as the accounting
environment. The accounting environment includes the elements that, given the financial position of the firm, influence managerial influence over accounting income. Essential elements in this respect are the incentives to influence accounting income, the constraints on managerial influence over accounting income and the possibilities to influence accounting income. In addition to the framework, chapter 2 provided a discussion of general patterns in income strategies based on five stereotype states of the financial situation of firms and provided definitions of the essential elements of the framework. Income strategy was defined as that part of the firm’s accounting strategy where management considers the economic consequences of different positions on the firm’s income range and where management defines its financial accounting goal in terms of accounting income. Earnings management was defined as a purposeful intervention in the financial accounting process, with the intent of obtaining some private gain (Schipper, 1989).

A discussion of the incentives for managerial influence over accounting income and the prior research related to this subject is provided in chapter 3. Although incentives may also follow from the capital market reactions to accounting data the focus in this study is on the post-contracting role of accounting data. Important incentives that were discussed in this respect are management compensation contracts, debt covenants, taxation, managerial stock options, government regulation, executive changes and the general stakeholder relationship. However, not all the incentives from the firm’s contract set discussed in chapter 3 are relevant in this study since some incentives are only relevant in other institutional settings, relate to specific financial accounting conditions or are only relevant for a pre-selected sample of firms. The following incentives are considered relevant to this study however and are used to explain managerial influence over accounting income in the empirical part of this study: debt covenants, managerial stock options, executive changes and the general stakeholder relationship.

Chapter 4 provides a discussion of the constraints on managerial influence over accounting income and prior research related to this subject. The most important constraints that are discussed in this chapter are ethical standards, the firm’s governance structure, auditing, the probability of observation, market forces and legal constraints. The effectiveness of the
constraints depends on the objectives as well as the methods used to influence accounting income. Managerial influence may be motivated by providing better information, by efficient contracting reasons or by opportunistic reasons to make managers better off at the expense of other contracting parties. Different methods may be used to implement the income strategy and to exert influence over accounting income. Apart from real transactions, accounting income may be influenced through pure accounting decisions within GAAP and beyond GAAP. Among other things, it is argued that constraints are likely to be more effective for accounting interventions beyond GAAP than for accounting interventions within GAAP. However, not all the constraints discussed in chapter 4 are relevant in the empirical part of this study since most constraints are difficult to test or are only relevant for a pre-selected sample of firms. The empirical part of this study does however test for auditor changes and auditor differences. Together chapters 2, 3 and 4 provide the motivation and foundation for the empirical research of this study.

Chapter 5 provides an overview of financial accounting flexibility in the Netherlands based on the Civil Code and the authoritative statements in the CAR Guidelines. The aim of this chapter is to answer the first research question:

RQ1: What are the general possibilities to adapt financial accounting data within the opportunities offered by accounting standards in the Netherlands?

The results indicate that there are at least 85 discretionary accounting items relating to accounting methods and accounting estimates. It should however be stated that it is impossible to conclude from the findings that financial accounting is more flexible in the Netherlands than in other countries because the research was not aimed to be comparative.

*Detecting managerial influence over accounting income*

Since managerial influence over accounting income is an unobservable phenomenon proxy variables are used to study managerial influence over accounting income. A discussion of the methods to detect managerial influence over accounting income and the prior research related to this subject is provided in chapter 6. The second research question reads:

RQ2: How can financial accounting flexibility be observed and its use for income strategies and earnings management be detected and analyzed?
This question has two dimensions in this research. The first dimension is the question how financial accounting flexibility is observed and its use for income strategies and earnings management is detected and analyzed in prior studies. The second dimension is the development of alternative proxies to detect managerial influence over accounting income. The aim of chapter 6 is to answer the first part of the second research question. From the discussion of prior research it follows that it is possible to use a single accounting item or a portfolio of accounting items as a proxy variable for managerial influence. When there is a trade-off between different incentives and different discretionary accounting items it is likely that managers will treat the firm’s set of accounting choices as a single comprehensive decision. A portfolio of discretionary accounting items is more realistic from an economic point of view and is therefore likely to result in more powerful tests of managerial influence over accounting income. Further, it is possible to detect managerial influence by directly observing accounting method choice and also by indirectly observing accounting method choice and estimates. This last approach is usually referred to as an accrual approach. From the discussion it can be concluded that these methods have some major disadvantages that reduces the explanatory power of the tests. When using a direct portfolio approach the problem is the relative impact of each accounting method and when using an indirect approach the most important problem is related to measuring the non-discretionary part of the accruals. The problems of prior proxy variables leave room for the development of alternative measurement variables. Based on the accounting environment in the Netherlands the development of alternative measurement variables concentrates on non-current accounting items.

In chapter 7 the proxies for managerial influence over accounting income are described that are used in the empirical part of the study. There are three relevant dimensions when studying managerial influence over accounting income. The first dimension is the possibility to exert influence over accounting income and is measured in this study with the income range proxy (IR). The income range proxy reflects the relative possibilities to influence accounting income before taxes as a percentage of turnover. The second dimension is the position of accounting income on the income range and is measured in this study with the income strategy proxy (IS). The income strategy proxy can be interpreted as a proxy that captures the degree of
liberalism or conservatism of a firm’s income strategy. Finally, the third dimension is the difference between unadjusted income and accounting income and is measured in this study by the earnings management proxy (EM). The earnings management proxy captures the purposeful accounting interventions aimed at the implementation of the firm’s income strategy. The three proxy variables are measured at two levels in order to differentiate between discretionary accounting items where the effect on accounting income can be distilled directly from the financial statements (level 1) and accounting items where the effect on accounting income requires benchmarking in order to separate the discretionary part from the non-discretionary part of the accounting item (level 2). The proxy variables measured on level 2 include the accounting items of level 1 as well. Based on the fact that the adjusted $R^2$ of the regression models are between 0.0693 and 0.2932 it can be concluded that the tests that are based on these newly developed proxies have above average explanatory power in a setting where there is no pre-selected sample of firms with above average change of managerial influence over accounting income. By developing an alternative approach in detecting managerial influence over accounting income the second part of the second research question is answered.

Empirical analysis

The aim of the empirical analysis described in chapter 8 is to answer the last two research questions:

RQ3: What are the firm specific possibilities to adapt financial accounting data by real transactions and pure accounting decisions?

RQ4: How can the use of financial accounting flexibility for income strategies and earnings management by listed firms in the Netherlands be explained?

The empirical analysis is concerned with hypothesis development and independent variable measurement. The independent variables of this study are categorized in three groups:

1. Financial variables that capture the firm’s financial situation. The financial variables taken into account are growth, solvency, return on equity and net profit margin;
2. Contracting or agency variables that capture the firm's incentives and constraints. The contracting variables taken into account are debt covenants, stock options, executive changes, size and auditor changes;

3. Control variables that control for outside influences. The control variables that are taken into account are year, age, industry, market and auditor.

For every explanatory variable hypotheses are developed for the effect on the income range, income strategy and earnings management proxy. The sample data used to test the hypothesis are gathered by a detailed examination of financial statements for a group of 603 firm-years over the period 1988-1997.

From the evidence provided in chapter 8 we can conclude that the firm specific possibilities to adapt financial accounting data by real transactions and pure accounting decisions are on average 5% of total turnover for level 1 measurement and 9% for level 2 measurement. Further, the findings indicate that the cross sectional differences in the income range (IR) of firms can primarily be explained by the contracting variable options, the financial variables and the control variable industry. As predicted the results indicate that there is a positive relationship between the growth a firm (multivariate only level 2) and the ability to exert influence over accounting income. Finally, the control variable industry seems to be an important variable in respect to financial accounting discretion. The result of the univariate test indicates that retail, wholesale, food and services firms have relatively low possibilities to influence accounting income compared to publishing and construction firms.

Further, the results indicate that firms on average report relatively liberally due to permitted violations of clean surplus accounting in the Netherlands. Especially the possibility to write off goodwill against reserves seems important in this respect. The findings indicate that the cross sectional differences in the income strategy (IS) of firms can be primarily explained by three influences. First, the income strategy is associated with the financial variables average turnover growth, NPM (not on level 1) and ROE. The first association is negative, indicating that firms with higher average turnover growth report on average more conservatively than firms with lower average turnover growth. Second, the results indicate that firms with
managerial stock options report on average more liberal than firms without managerial stock options (for level 2 not significant at a 0.05 level in the second regression model). This may be an indication that firms with managerial stock options use their managerial influence over accounting income in order to put the best foot forward and stimulate the stock price of the firm. Finally, the results indicate that the control variables year and auditor are significant. From the control variable auditor it may be concluded that firms audited by the largest three audit firms in the Netherlands (and Arthur Andersen and Deloitte & Touche on level 2) generally report significantly more conservative than firms audited by the other audit firms.

Finally, the findings indicate that the cross-sectional use of financial accounting flexibility for earnings management (EM) by listed firms in the Netherlands can primarily be explained by the financial situation and control variables. The significant financial variables are average growth in turnover and NPM. Average turnover growth has a negative coefficient, indicating that firms with relatively low average turnover growth have on average more positive accounting interventions than firms with relatively high average turnover growth. NPM on the other hand has a positive coefficient, indicating that there is a significant positive relationship between high NPM and positive accounting interventions. This is logical since positive accounting interventions increase NPM. Finally, the control variables market and auditor have a significant relationship with earnings management. From the control variable market it may be concluded that index firms have relatively more negative accounting interventions than non-index firms. There may be a relation here with the control variable auditor since index firms are exclusively audited by Big 6 auditors. Although not significant for all Big 6 audit firms, the results indicate that, compared to firms audited by non-Big 6 audit firms, firms audited by Big 6 auditors on average have negative accounting interventions. The findings are consistent with the notion that cross-sectional differences in managerial influence over accounting income may be explained by effective turnover on the Amsterdam Stock Exchange, industry, growth, managerial stock options, profitability and audit characteristics. For the more skeptical, at a minimum a number of empirical regularities have been identified that are worth further investigation.
Limitations, recommendations and implications

The explorative nature of this research implies that one should be cautious with drawing conclusions on the basis of the evidence provided. This does not only hold for the graphical presentations of individual firm flexibility provided in Appendix C, but also for the empirical results provided above. The most obvious limitations of this study are the quality of the proxy variables for managerial influence over accounting income and the independent variable measurement. As stated in chapter 7 this study’s approach in measuring financial accounting discretion and managerial influence over accounting income is based on a number of specific assumptions. Second, treatment of the discretionary accounting items in the approach is also based on a number of assumptions. By definition some of these assumptions violate “real world” financial accounting practice and thereby limit the method used. Further, any study is limited by the data available. In the case of this research all data are collected from financial statements and discretionary accounting items are only taken into account when there are disclosed in the financial statements. The use of financial statements leads to a degree of subjectivity in the interpretations of financial statements in order to get the relevant accounting data set. Although the same holds for data collected from databases, this means that results derived from the data set need to be interpreted with care because the outcome of the analysis is at most a fairly accurate proxy of the real accounting interventions based on the items listed in Table 7.1. Regarding the empirical evidence a number of specific assumptions have been made in the independent variable measurement. Again by definition some of these assumptions are simplifications of the reality and thereby limit the method used.

This study extends contemporary research in respect of managerial influence over accounting income by focusing on financial accounting discretion and income strategies as well as on earnings management. The evidence in this study suggests that individual accounting decisions are part of an overall firm income strategy. The results for earnings management are less conclusive and the models have less explanatory power in this respect. The lower explanatory power of the earnings management models may be explained by the fact that the proxy variables concentrate on non-current accounting items. When managers prefer long run income increasing accounting methods to report liberally, this will on average be measured by the income strategy proxy. However, when managers prefer non-current accounting
interventions to manage earnings between years, this will not be measured by the income strategy proxy because discretionary non-current accounting has less presence in the proxy variables. In order to improve the results for earnings management the inclusion of non-current discretionary accounting items will provide more insight in the cross sectional differences in earnings management. A second suggestion for future research is testing the volatility of accounting income over the research period compared to the volatility of unadjusted accounting income. This test could provide insight in the use of the discretionary accounting items for income smoothing purposes. Finally, the results indicate that the financial variables that capture the firm's financial situation are relevant in explaining cross sectional differences in all three dimensions of managerial influence over accounting income. It is therefore suggested that future research should focus on financial variables as well as on contracting variables.

Noise and bias in accounting data arises among other things from managers' use of financial accounting flexibility. Managerial influence over accounting income matters for those who use, regulate, prepare and audit financial statements because financial statements have economic consequences. It is important for users of financial statements to realize that there are at least 85 discretionary accounting items relating to accounting methods and accounting estimates in the Netherlands. Accounting income results from the application of GAAP and these conventions can be applied to produce a range of different accounting income numbers. Although the results indicate that there are significant differences among industries, this range is on average between 5% and 9% of total turnover in the Netherlands. When taking into account an average net profit margin of 7% this is indeed the difference between reasonable good and bad, reasonable healthy and alarming unhealthy, just above the line or well under the line.

For those who regulate financial accounting in the Netherlands it is important to realize that there are numerous incentives for management to exert influence over accounting income. The results of this study indicate among other things that firms on average report relatively liberal due to permitted violations of clean surplus accounting. Further, the results indicate that besides financial variables managerial stock options seem to be a factor of influence in
this respect. In a climate where the quality of financial statements and genuine auditor independence in relation to clients are in debate, regulators should question the wisdom of preserving financial accounting flexibility at the present level in a voluntary environment without effective compliance mechanisms.

Due to the inherent subjectivity when preparing financial statements, managerial influence over accounting income as such cannot be classified as misleading and is not by definition unethical. However, it is important for those who prepare financial statements to realize that widespread opportunistic managerial influence over accounting income will ultimately lead to loss in credibility of management and will result in a decline in the perceived usefulness of financial statements. Given the present financial accounting flexibility in the Netherlands firms may signal their motivations for managerial influence over accounting income by for example an efficient governance structure and adequate disclosure of their influence over accounting income. An adequate disclosure of accounting principles and accounting estimates enables users to adjust for accounting policies and ensures comparability of financial statements. Finally, it is important for auditors to realize that they play an important role in constraining managerial influence over accounting income. The findings in this research indicate that there may be differences among audit firms in this respect. However, the differences may also be explained by for example industry differences when certain audit firms have a large market share in certain industries. For accounting interventions outside GAAP the role of the auditor is fairly straightforward. For managerial influence within GAAP this role is more complex, but in the end auditors should be aware of the fact that they have an important function with respect to safeguarding the quality of financial statements. When users have different expectations about the role of auditing in this respect, the "expectation gap" may result for example in unwarranted litigation.