

“Differential Reporting and Earnings Quality: More is Better?”**ABSTRACT**

In a context where financial statements are public, the choice between alternative reporting regimes constitutes a signal towards external stakeholders. Generally, the voluntary choice of more complex and expensive regimes acts as a signal of firms' transparency and commitment to publishing high-quality financial disclosure. However, in the absence of any form of control or audit, opportunistic behaviors could be incentivized. Drawing on the literature about the relation between IFRS voluntary adoption and earnings quality, we investigated whether the same conclusions are confirmed for SMEs. Using a sample of 4,054 Italian companies and 12,093 firm-year observations, we compared three earnings quality proxies between a group of companies that voluntarily opted for the “Full” rules and a sub-sample of the larger population of companies that used the simplified rules. Our results suggest that for SMEs the signaling power of accounting rules' choice could lead to wrong conclusions. Indeed, we observe a positive relationship between the choice of the “Full” rules and income smoothing behaviors (H1), while the same choice appears to reduce the probability to disclose SPOS. Hence, this evidence confirms a strong presence of “label adopters” between the group of companies that opted for the “Full” rules. Finally, the results suggest that opportunistic behaviors are more frequent for firms settled in a “non-cooperative” social environment (H2). Instead, for firms settled in a “cooperative” social environment, it is possible to observe a strong positive impact of the same choice on the variability of earnings over cash flows and a negative impact on earnings variability, suggesting a higher presence of “serious” adopter.

Keywords: differential reporting, earnings quality, SME, reporting environment

JEL Classification: M41, M10

1. Introduction

Differential reporting has become a relevant theme around 2003 when the discussion about the introduction of simplified accounting rules for SMEs (cd. differential reporting) assumed general interest in accounting studies (For a review see Evans et al. 2005 and Mkasiwa,2014). Different users, information needs, and cost-benefits assessments have been identified as rationales for the presence of a set of accounting rules devoted to the smallest entities (Jarvis et al. 2003; Evans et al. 2005; Baldarelli et al. 2007; Deaconu et al. 2008).

Accordingly, both the EU Accounting Directive (Dir, 2013/34/EU) and the International Financial Reporting Standards (IFRS) provide a set of Full standards and a separate set of simplified rules for smaller entities.

The grounds of this choice are synthesized in the Dir.2013/34/EU which states that “users of financial statements typically have a limited need for supplementary information from small undertakings, and it can be costly for small undertakings to collate that supplementary information”.

Once enforced, the simplified rules represent a burden only for national regulators, who cannot require the provision of additional mandatory financial information, while companies are not prevented from choosing the Full rules.

Therefore, when preparing financial statements, SMEs must deal with the choice between simplified and Full accounting rules.

At least, this choice may affect the costs related to the preparation of financial information, the level of disclosure and the accounting quality.

While the first two effects are related to the structure of the simplified accounting rules (which, generally, require the preparation of an abridged version of the Balance Sheet, Income Statement and Notes and, consequently, are both less expensive and detailed than the Full ones), the implications on accounting quality of the choice between alternative sets of accounting rules haven't been investigated yet.

This paper contributes to the literature in several ways. First, to the best of our knowledge, this is the first study that examines the relationship between the choice of accounting rules and accounting quality for small and medium-sized entities. Thus, this study adds to the literature that addresses financial reporting quality in private firms (Ball and Shivakumar 2005, 2006, Hope et al. 2013, Haw et al. 2014, Bassemir and Novotny-Farkas 2018, Liu and Skerratt 2018, Sanchez-Ballesta and Yagüe 2020). This study contributes also to the limited literature on the implications of the presence of different reporting regimes (Burgstahler et al. 2006, Hope et al. 2013, Liu and Skerratt 2018, Bassemir and Novotny-Farkas 2018). Finally, by investigating the impact of different socio-economic environments (that for SMEs represent the “*reporting environments*”) on the relation between accounting choice and earnings quality, this study enriches the literature about heterogeneity in accounting quality within private firms that is still scarce (Hope and Vyas 2017, Bassemir and Novotny-Farkas 2018).

In terms of managerial implications, our study can provide useful suggestions for users of SMEs’ financial information. Indeed, it has been observed that the choice of different accounting rules could influence users’ perception of reporting quality (DeZoort et al. 2017). Understanding the relation between this choice and earnings quality is then helpful in order to detect opportunistic behaviours.

The results of this study also offer some policy implications. Indeed, the simplified accounting rules, despite being used by the majority of SMEs, are underinvestigated. As a consequence, comparing the quality of the financial statements prepared according to the two accounting regimes could provide useful suggestions for regulators.

The remainder of the paper is organized as follows. Section 2 briefly describes the regulatory accounting environment in the European context. Section 3 reviews the relevant literature for the formulation of the hypotheses. Section 4 illustrates the research design. Section 5 presents the results and offers a discussion. Section 6 contains the robustness check, while Section 7 draws some conclusions.

2. Differential reporting in Europe

The process that led to a size-based differential accounting system in Europe started in 2002 (Regulation N. 1606/2002). With the aim to reduce the burden of legislation for SMEs, the European Commission started from financial reporting requirements (European Commission 2007), allowing member states to enforce simplified accounting rules for SMEs.

Even if the implementation of these rules was not uniform across Europe (European Commission 2019), simplified accounting rules for SMEs share some common characteristics.

In particular, they allow companies (i) to prepare a condensed version of the balance sheet and income statement (ii) to include an abridged version of notes and, in some cases, (iii) to use simplified measurement criteria for accounts receivable, accounts payable and short-term investments.

Besides the introduction of some comparability issues between the Full and simplified financial statements, these provisions result in a lower degree of disclosure and, consequently, of users' usefulness.

The actual differential reporting regime has been enforced by Directive 34/EU/2013. Indeed, despite it has represented a milestone in the harmonization process between the European reporting framework and the IFRS one, the Directive recognized the burden of financial reporting for micro undertakings, allowing the Member States to exempt them from most of the requirements applicable for SMEs and large companies.

The reporting framework resulting after the implementation of the Directive is, thus, three-fold.

Indeed, most of EU countries provided one set of Full rules for the largest enterprises, one set of "simplified" rules for SMEs and one set of "ultra-simplified" rules for micro-entities.

In this context, while the Full rules share many common points with the IFRS, the provision of simplified measurement criteria for assets and liabilities has rendered the simplified regimes substantially different from the first. As a consequence, it is possible to identify at least two sets of accounting rules within national contexts.

One fundamental feature of simplified accounting rules is that they are not mandatory. This implies that, when a company fulfils the requirements to adopt one simplified regime, it can choose between that and the most complex rules.

Several reasons may address this choice. First, SMEs are usually family-owned and controlled. Thus, the choice may be intended to protect the socio-emotional wealth of the family (Gomez-Mejia et al. 2014). Second, SMEs can devote limited resources for the preparation of financial statements (Dir, 2013/34/EU). Thus, the choice may be influenced by the availability of human and financial resources. Third, SMEs' accounting choices may be influenced by the geographical-social context in which they are established (Putnam et al. 1993, Tabellini 2010, Daske et al. 2013).

Whatever the reason, in a context where financial statements are public, the choice to adopt the most complex rules can be considered as a signal (Liu and Skerrat 2018, Palazuelos et al. 2019) for external users of financial information.

The aim of this research is, thus, to understand whether this signal is related to a better quality of financial information or not.

3. Earnings quality for SMEs

The greatest part of the literature on earnings quality is focused on public companies. Coherently with the “opportunistic behaviour hypothesis” (De Meyere et al. 2018), it is supposed that public firms are subject to pressure from the market to meet earnings targets. Therefore, they should have greater incentives to engage in earnings management than private ones (Givoly et al. 2010).

However, several studies have observed that earnings management is higher (and earnings quality lower) for private than for public firms and this evidence is confirmed in different contexts. Among the others, Beatty and Harris (1999), focusing on the banking sector, observed higher earnings quality in public firms; Ball and Shivakumar (2005) reported the same trend in the UK; more recently, Hope et al. (2013) confirmed this trend in the US.

As reported by Liu and Skerrat (2018) a small number of studies focused on private firms have considered different reporting regimes. In particular, Burgstahler et al. (2006) confirmed that, among

large European companies adopting different reporting regimes, private companies are involved in higher levels of earnings management than public ones. Hope et al. (2013), focusing on US companies, observed that, in general, private companies exhibit a higher level of earnings management, whilst this trend disappears in settings where public firms are more likely to manage earnings. More recently, Bassemir and Novotny-Farkas (2018) investigated the effect of IFRS voluntary adoption on financial reporting quality and, after the identification of different types of IFRS adopters, found some evidence about IFRS' contribution to earnings quality.

In general, these studies suggest that private companies will have lower earnings quality when they are under a less restrictive reporting regime (Liu and Skerrat 2018), implying that *ceteris paribus* the choice of more complex accounting rules should ensure higher earnings quality.

In the context of our research, SMEs have several incentives to engage in earnings management behaviours. First, since the users of financial statements are mainly banks and financial institutions, income smoothing behaviours could be helpful in order to stabilize economic and financial performance and maintain the credit score. Second, as the corporate income tax strictly depends on the net income/loss arising from the income statement, income smoothing behaviours could be intended to manage the tax burden. Moreover, the choice to disclose small positive earnings (SPOS) could be aimed at avoiding the unfavourable fiscal disciplines for companies with systematic losses. Third, since most SMEs are family-owned and controlled, earnings management behaviours could be motivated by the desire to protect families' non-economic benefits (e.g. reputation, identification with the company), avoiding the disclosure of losses that could be a signal of family's failure to manage the business.

That said, the choice to opt for the Full rules can be considered as a signal of the quality of financial reporting and firms' transparency (Barth et al. 2008, Christensen et al. 2015, Calabrò et al. 2020) towards external stakeholders.

Consequently, in a context where SMEs can choose between simplified and Full rules, the choice of more complex accounting rules should be related to firms' commitment to publishing high-

quality financial information (Cameran et al. 2014) and, thus, entail lower levels of earnings management (Soderstrom and Sun 2007).

H1: There is a positive relationship between the choice of the Full rules and earnings quality.

The choice to opt for the Full rules requires human and financial resources to comply with the regulations. However, at present, most national regulations do not require any form of control or auditing on SMEs financial statements. Thus, companies can be incentivized to take the reputational benefits related to this choice, without neither improving financial reporting's quality nor bearing the related costs.

Previous research has already investigated these opportunistic behaviours with reference to the voluntary choice of IFRS (Leuz 2010, Brown 2011, Pope and McLeay 2011, Cameran et al. 2014). They suggest that the choice of a more complex accounting system is not related per se to an increase in accounting quality. Rather, different incentives may impact on the consequence of this choice.

When dealing with alternative reporting regimes, firms have considerable discretion in how they implement the new standards. Daske et al. (2013) identify two types of adopters: for «label adopters» the choice of the ordinary regime could not be related to an increase in earnings quality, while «serious adopters» may be more committed to prepare high-quality financial statements.

In particular, for SMEs, the presence of “serious adopters” and “label adopters” could be influenced by the socio-economic environment (Daske et al. 2013) which, in absence of public accountability, characterizes the reporting environment.

Indeed, for private companies, financial information has a crucial role “in addressing market imperfections in the form of agency conflicts and information asymmetry” (Francis et al. 2008). Consequently, the relation between the “reputational effect” (Cameran et al. 2014) of Full rules adoption and accounting quality may depend on the reporting environment and, ultimately, on stakeholders' approach to collective action.

Putnam et al. (1993) already introduced the distinction between “cooperative” and “non-cooperative” social environments. The first are characterized by generalized reciprocity and cooperation and by a social contract that “is not legal but moral”. In the second, instead, social ties are dominated by mutual distrust and the social contract is based on legal norms.

In a “cooperative” environment, financial information should be generally perceived as reliable, even if it is transferred via private channels. In that context, the signal related to the adoption of a more complex set of accounting standards should not increase per se companies’ legitimation. The reputational effect of the choice of the Full rules is limited and companies will not benefit from a “label” choice of the Full rules. Thus, we expect to observe a higher number of “serious adopters”.

In contrast, in a “non-cooperative” environment, the choice of the Full rules can act as a strong signal towards external stakeholders, increasing the perceived legitimation of the company in the market. In the absence of any form of control, this choice could not be related to an increase in earnings quality. Companies are incentivized to take the benefits related to a “label” choice, without bearing the costs. Thus, we expect to observe a higher number of “label adopters”.

H2: The relation between the choice of the Full rules and earnings quality differs between companies settled in a “cooperative” environment and those settled in a “non-cooperative” environment.

4. Methods

4.1. Sample Selection

The empirical setting is provided by Italian non-financial companies that, despite being eligible to adopt the simplified regime, voluntarily chose the Full rules for the preparation of their annual financial reports for at least three financial years (2016-2017-2018). This choice is motivated by the need to observe those firms which made a “permanent” switch towards the Full rules.¹

¹ In the absence of legal constraints, the choice of the Full rules is potentially reversible at the end of each accounting period.

Those firms are characterized by the following size thresholds (i) Total assets below € 4.4 million; (ii) Total revenues below € 8.8 million; (iii) Number of employees below 50.

To ensure comparability within the sample, we included only unconsolidated limited liability companies. The resulting sample was then composed of 2,027 companies.

The choice of Italy as the empirical setting of this study is motivated by two main reasons. First, the characteristics of the Full rules, which are closer to the IFRS after the 2015 reform (Di Pietra, 2017), significantly diverge from the simplified ones². As a consequence, the choice of the Full rules can be considered as particularly burdensome as opposed to the simplified rules. Second, Italy is characterized by a strict social and cultural dichotomy between North and South (Putnam et al. 1993, Tabellini 2010), which respectively represent a “cooperative” and a “non-cooperative” social environment.

Indeed, while in Northern Italy civil engagement is led by reciprocity and networks, in Southern Italy social relations are ‘vertically structured’ and legal based. Thus, we expect to observe a higher number of “serious adopters” in Northern Italy. In that context, companies will not benefit from a “label” choice of the Full rules, as the mere reputational effect of that choice is limited. On the contrary, for Southern companies the signal related to the choice of the Full rules is stronger and, consequently, companies are more incentivized towards a “label” choice.

For each company, we collected all the financial information available in AIDA (Bureau van Dick database for Italian companies) from 2016 to 2019. We excluded 2020 data that embody the effect of the COVID-19 pandemic and that may distort the results of the empirical analysis.

In order to create a control sample from the larger population of companies that adopted the simplified rules in the same years (115,324), we used the propensity-score matching technique as proposed by Rosembaum and Rubin (1983).

² The Italian Simplified regime is characterized by the exemption from the preparation of the Cash-Flow Statement and the Management Report; reduced compulsory information in the Notes; and, above all, different measurement criteria for receivables, debts, and short-term securities.

This technique matches observations from two groups on some relevant dimensions using the estimated likelihood of receiving treatment (Shipman et al. 2017).

In the context of this study, the treatment is the choice of Full rules, while the matching is performed on three-dimensional thresholds relevant for the choice of the accounting rules (total assets, total revenues, and n° of employees) measured in FY 2016-2017-2018. Thus, consistently with the assumption of EU regulations (Directive 34/EU/2013), we implicitly assume that, *ceteris paribus*, similar companies in terms of total assets, total revenues, and n° of employees should have comparable information needs and perform equivalent cost-benefit assessments. Moreover, in order to balance the geographical distribution of the control group, we included also the Macroregion of settlement (North vs South)³ among matching variables.

The final sample is composed of 4,054 firms and 12,093 firm-year observations (the sample does not include 69 observations for 2019 due to some missing data).

4.2. Earnings quality

Previous literature has traditionally identified three measures of earnings quality: earnings management, timely loss recognition, and value relevance (Dechow et al. 2010, Cameran et al. 2014). Because our study investigates the behaviours of companies that prepare simplified financial statements, some data were not available (among the others: market value, discretionary accruals⁴, operating cash flows). For this reason, an adaptation effort was needed to determine the relevant measures.

Following Barth et al. (2008) and Bassemir and Novotny-Farkas (2018), we assume that, all other things being equal, lower levels of earnings management indicates higher earnings quality. Thus, in order to assess if the choice of more complex accounting rules impacts accounting quality, we compare the level of earnings management between the entire population of companies that

³ For the purpose of this research, we classified in the NORTH all the companies settled in Valle d'Aosta, Piemonte, Lombardia, Trentino Alto Adige, Veneto, Friuli-Venezia Giulia, Liguria, Emilia Romagna, Toscana and Marche regions. The remaining regions (Lazio, Umbria, Abruzzo, Campania, Molise, Basilicata, Calabria, Puglia, Sicilia and Sardegna) were classified as SOUTH.

⁴ The simplified balance sheet does not provide information about the classification of debt between financial and non-financial. For this reason, we could not use DeFond and Park (2001) simplified measure of discretionary accruals.

chose the Full rules and the matched group of SMEs that prepare financial reports according to the simplified regime. In particular, we examine (i) income smoothing behaviours and (ii) small positive earnings (SPOS).

First, we assume that earnings quality should be negatively related to income smoothing behaviour. Indeed, firms that promptly recognize gains and losses should exhibit (i) higher earnings variability (ΔNI) and (ii) higher variability of earnings relative to cash flows ($\Delta NI/\Delta CF$) than firms engaging in income smoothing behaviour⁵.

Coherently with Barth et al. (2008), the first empirical metric was defined as the variance of the residuals of the following random effects panel regression model:

MODEL 1

$$\Delta NI_{it}(\text{Earnings variability}) = a_0 + a_1 \text{Size}_{it} + a_2 \text{SalesGrowth}_{it} + a_3 \text{FinLeverage}_{it} + a_4 \text{FCFO}_{it} + a_5 \text{Auditors}_{it} + a_6 \text{Industry}_{it} + a_7 \text{SimOrd}_{it} + a_8 \text{Year}_t + u_i + \varepsilon_{it}$$

The dependent variable ΔNI is defined as the change in Net Income scaled by the lag of Total Assets; while SIZE is the natural logarithm of total assets; SALES GROWTH is the change in Net Sales; FINLEVERAGE is the ratio between Total Debt (both short and long term) and Total Equity; as for FCFO, in the absence of a cash flow statement for the companies which opted for the Simplified rules, we built an indirect simplified measure for all sampled companies⁶ that is scaled by the lag of Total Assets; AUDITORS is a dummy variable that is set to 1 if companies' financial statements are audited and 0 otherwise; INDUSTRY is a set of dummy variables representing the macrosector of activity according to NACE classification. SIMORD is a dummy variable that is set to 1 if the company opted for the Full rules and 0 otherwise. Finally, we included the year of observation (YEAR) among control variables.

⁵ Barth et al (2008) suggest a third measure for income smoothing behaviours that is the Spearman correlation between accruals and cash flow from operating activities. As abovementioned, data constraints related the structure of simplified financial statements do not allow to determine this measure.

⁶ FCFO= Gross operating income x (1- company tax rate) + Amortization and Depreciation costs + Other non-monetary costs (provisions) - D Account receivables - D Inventories - D Other current assets + D Account payables+ D Other current liabilities.

Once the residuals were determined, we used the F-test in order to compare the variance between the two groups. Coherently with our hypotheses, we expect that the target group will show a higher value of variance compared to the control group.

The second empirical metric was then defined as the standard deviation of Earnings variability (Model 1 – not scaled) divided by the standard deviation of Cash flows variability (not scaled) determined through the following random effects panel regression model:

MODEL 2

$$\Delta CF_{it} \text{ (Cash flows variability)} = a_0 + a_1 Size_{it} + a_2 SalesGrowth_{it} + a_3 FinLeverage_{it} + a_4 FCFO_{it} + a_5 Auditors_{it} + a_6 Industry_{it} + a_7 SimOrd_{it} + a_8 Year_t + u_i + \varepsilon_{it}$$

In this case, the dependent variable is defined as the change in Cash Flow (total). The control variables remain unchanged.

Once more, after the prediction of the ratio between ΔNI and ΔCF residuals, we used the F-test in order to compare their variance between the target and the control group. Since earnings management is related to a lower variability of ΔNI on ΔCF , we expect the target group to show a higher value of variance than the control group.

Second, in order to measure earnings management behaviours through small positive earnings (SPOS), we measured the probability of small positive profits through a panel logistic regression model that is defined as follows:

MODEL 3

$$SPOS_{it} \text{ (Small Positive Earnings)} = a_0 + a_1 Size_{it} + a_2 SalesGrowth_{it} + a_3 FinLeverage_{it} + a_4 FCFO_{it} + a_5 Auditors_{it} + a_6 Industry_{it} + a_7 SimOrd_{it} + a_8 Year_t + u_i + \varepsilon_{it}$$

The dependent variable SPOS is defined as a dummy variable which is set to one when the ratio between the net income and total asset is between 0 and 0.01 and 0 otherwise. The control variables remain unchanged.

In order to determine if the probability of small positive earnings is influenced by the choice of the accounting rules, we observed the sign and coefficient of the variable SIMORD. *Ceteris paribus*, a negative coefficient implies a lower probability of reporting small positive earnings for Full rules adopters.

Thus, H1 will be tested comparing the three proxies for earnings quality defined above (variability of net income, variability of net income on cash flows, and small positive earnings) between the group of companies that opted for the Full rules (target group) and the matched group of simplified rules adopters (control group).

In order to test H2, we capture the reporting environment through the variable DU_SOUTH, which takes value 1 if the company is based in the South and 0 otherwise. As abovementioned, we expect that the strict social and cultural dichotomy between North and South (Putnam et al. 1993, Tabellini 2010) has an impact on the relation between the choice of accounting rules and accounting quality. Thus, the sample will be split into two groups (North-based and South-based companies) in order to assess if the choice of the Full rules in cooperative and non-cooperative environments has a different impact on earnings quality.

4.3. Descriptive Statistics

[Insert Table 1 here]

The descriptive statistics summarized in Table 1 suggest that, for sampled companies, the standard deviation of ΔNI is higher than ΔCF . Moreover, the presence of small positive earnings is concentrated in the last quartile. As for the control variables, the results show that sampled companies are highly indebted as the average FINLEVERAGE is 5.603 (Median = 2.473). Finally, only 20.5% of companies' financial reports are audited, while 42.3% of sampled companies are based in the South.

[Insert Table 2 here]

The analysis of the correlation matrix (Table 2) shows that ΔNI and ΔCF are positively correlated with SALESGROWTH and FCFO and negatively related to SPOS, as intuitively expected. The variable SPOS is positively related to SIZE, FINLEVERAGE and DU_SOUTH and negatively correlated to SALESGROWTH, FCFO, AUDIT and SIM_ORD. The last evidence is particularly interesting as it implies that audited firms and Full rules adopters are less inclined to manage earnings through SPOS. We also observe the presence of a significant correlation between the control variables. For instance, AUDIT and SIZE are strongly correlated, while South-based companies are negatively related to SIZE and AUDIT. Finally, SIMORD and AUDIT are positively related, suggesting that Full rules adopters are more inclined to be audited.

5. Results and discussion

After having defined the measures for earnings quality, we first test H1 comparing the variability of ΔNI , proxied by the residuals of Model 1 between the two groups. The results of the regression models are reported in Appendix. Despite the difference in earnings variability being low, the results of the F-test suggest that Full rules adopters show lower earnings variability with reference to the control group ($p=0.000$). Second, we observed the variability of ΔNI over ΔCF , measured by the ratio between the residuals of Model 1 (not scaled) and those of Model 2 (reported in Appendix). The results confirm the trend observed for ΔNI . Full rules adopters show lower variability of

earnings over cash flows. The results of both tests are summarized in Table 3.

[Insert Table 3 here]

Third, the results of Model 3 (Table 4) support the presence of a statistically significant relation at the 0.1 level between the choice of the Full rules and the lower probability of managing earnings through SPOS. As for the control variables, it is possible to observe a strong negative effect of SALES GROWTH, FCFO and AUDIT on the probability of SPOS. These results suggest that the occurrence of SPOS is negatively related to (i) firms' growth; (ii) the presence of external control on financial statements, (iii) the choice of Full accounting rules. Finally, FINLEVERAGE has a positive impact on SPOS, implying that highly indebted firms are more likely to disclose SPOS.

[Insert Table 4 here]

In brief, our empirical evidence confirms the impact of accounting rules' choice on income smoothing behaviours (proxied by ΔNI and ΔNI over ΔCF). However, the sign of the relation is opposite to our expectations, implying that there is a relevant number of "label adopters" among Full rules adopters. On the contrary, we observe a negative impact (significant at the 0.1 level) of Full rules' choice on the presence of SPOS.

H1 is then partially supported.

The counterintuitive relation between the choice of the Full rules and income smoothing behaviours implies that this choice does not imply an increase in the reporting quality. However, this result should be interpreted with caution. First, as abovementioned, previous literature has suggested the presence of a relation between a more complex accounting regime and better accounting quality. Nevertheless, since the choice of the Full rules is not related to any form of control or audit, companies have high discretion in applying those rules. This discretion may inevitably reduce the signaling power of the choice in terms of firms' commitment to transparency towards external stakeholders, incentivizing the presence of "label" adopters. Second, despite the sampling process via PSM, the sample is not equally distributed in terms of geographic distribution. Indeed, the percentage of companies that opted for Full rules is higher in Southern Italy than in Northern Italy

(49.6% vs 48.2%). Therefore, we need to analyze the potential effect of different reporting environments to better interpret the results.

In order to test H2, we capture the reporting environment through the variable `DU_SOUTH`, which takes value 1 if the company is based in the South and 0 otherwise. With the aim of testing the impact of the reporting environment on the relation between accounting choice and income smoothing behaviours, we have divided the sample into two groups (North-based and South-based companies) and observed whether the results of the empirical analyses for H1 remain unchanged.

The evidence of the empirical analysis (Table 5) shows that, in a “cooperative” environment (such as Northern Italy), the relation between the choice of the Full rules and income smoothing behaviours is ambiguous. Indeed, this choice is related to a lower variability of ΔNI , while there is a positive impact on ΔNI over ΔCF . At the same time, in a “non-cooperative” environment (Southern Italy), the choice of the Full rules generates a different impact. Indeed, Full rules adopters show a lower degree of variability of ΔNI and ΔNI over ΔCF than the control group.

[Insert Table 5 here]

Finally, in order to test the impact of the reporting environment on the relation between the choice of accounting rules and the probability of managing earnings through SPOS, in Model 3 we add an interaction term between the variables `DU_SOUTH` and `SIM_ORD`. Our empirical model (Table 6) supports the presence of the *main effect* between the two variables and the target variable (respectively $p=0.000$ and $p=0.07$). In particular, the result for `DU_SOUTH` suggests that, *ceteris paribus*, South-based companies are more prone to disclose SPOS. Meanwhile, the variable `SIM_ORD`, which was significant at the 0.1 level in Model 3, has reinforced its predictive power.

The lack of significance of the interaction term could be explained in the light of the results of Model 3. As the relation between `SIM_ORD` and SPOS is not strongly significant, the moderating role of `DU_SOUTH` is not observable. Indeed, the relation between `SIM_ORD` and SPOS, which is supposed to be negative (H1), must be read in conjunction with the highest propensity of South-based firms to opt for the Full rules. As a consequence, the variable `SIM_ORD` incorporates a

confounding effect that reduces its explanatory power. The introduction of the interaction term is then helpful in order to disentangle this effect, and this is confirmed by the explanatory power of the two variables of interest. However, the weak correlation between SPOS and SIM_ORD ($\rho = -0.034$) does not allow to confirm the presence of a moderating effect for DU_SOUTH.

Nevertheless, the presence of the main effect between DU_SOUTH and SPOS constitutes interesting descriptive evidence.

In brief, our results confirm the impact of the reporting environment on the relation between the choice of the Full rules and earnings quality. The negative relation between the choice of the Full rules and earnings quality is confirmed for firms settled in a “non-cooperative” social environment, implying the presence of “label” adopters. Instead, for firms settled in a “cooperative” social environment, we observe (i) a strong positive impact of the choice on the variability of earnings over cash flows (ii) a negative impact on earnings variability, suggesting a higher presence of “serious” adopters despite the ambiguous results.

Thus, H2 is partially supported.

[Insert Table 6 here]

6. Robustness check

Since the sample is sharply divided among North and South based companies, separate regression could be useful in order to disentangle potential confounding effects in Model 4. Indeed, *ceteris paribus*, South based companies are more willing to opt for Full rules and to disclose SPOS (Model 4). Northern companies, instead, are less willing to opt for Full rules and to disclose SPOS. At the same time, the choice of the Full rules is negatively related to SPOS (Model 3).

For this reason, the empirical analysis presented above was replicated performing separate regression for each group (Group 1: Du_South=0 vs Group 2: Du_South=1).

The results are summarized in Table 7. They suggest that for North-based companies there is a strong negative relation ($p < 0.05$) between the choice of the Full rules and SPOS, while for South-based companies the same choice is not significantly related with the target variable.

This evidence implies that if the choice of the Full rules does not impact the probability to disclose SPOS in a “non-cooperative” social environment; the same choice could have a relevant impact in a “cooperative” social environment.

[Insert Table 7 here]

7. Conclusions

In a context where financial statements are public, the choice between alternative reporting regimes constitutes a signal towards external stakeholders. Generally, the voluntary choice of more complex and expensive regimes should act as a signal of firms’ transparency and commitment to publishing high-quality financial disclosure. However, in the absence of any form of control or audit, companies can be incentivized to take the reputational benefits related to the choice, without bearing the costs. In the first case (“serious adopters”), firms’ commitment should increase earnings quality. In the second one (“label adopters”), the choice does not entail an increase in earnings quality.

Drawing on the literature about the relation between IFRS adoption and earnings quality, we investigated whether the same conclusions are confirmed for SMEs that face the option between Full and simplified rules.

Using a sample of 4,054 Italian companies and 12,093 firm-year observations, we compared three earnings quality proxies (Δ NI, Δ NI over Δ CF and SPOS) between the group of companies that voluntarily opted for the Full rules and a sub-sample of the larger population of companies that used the simplified rules over the observation period.

The results for H1 (*There is a positive relationship between the choice of the Full rules and earnings quality*) are ambiguous: they show a positive relationship between the choice of the Full rules and income smoothing behaviours. While the same choice appears to reduce the probability to disclose SPOS.

This evidence can be explained by the presence of “label adopters” between the group of companies that opted for the Full rules.

We further investigated the reason for this opportunistic behaviour, analysing the impact of the reporting environment on the relation between the choice of the Full rules and earnings quality.

Since Italy is characterized by a strict dichotomy between North and South that is reflected in stakeholders' approach to collective action, we hypothesized that opportunistic behaviours should be less frequent in a "cooperative" environment (North-located companies), where generalized reciprocity and cooperation dominate social relations. While, an opposite relation is expected in a "non-cooperative" environment (South-located companies), where social ties are dominated by mutual distrust and the social contract is based on legal norms and the signal related to the choice of the Full rules is much stronger.

The results for H2 (*The relation between the choice of the Full rules and earnings quality differs between companies settled in a "cooperative" environment and those settled in a "non-cooperative" environment*) confirm the impact of the reporting environment on the relation between the choice of the Full rules and earnings quality.

Opportunistic behaviours are more frequent for firms settled in a "non-cooperative" social environment, implying the widespread presence of "label" adopters. Indeed, the three proxies analysed are coherent in suggesting the reduction of earnings quality for the companies which opted for the Full rules.

Instead, for firms settled in a "cooperative" social environment, we observed (i) a strong positive impact of the choice on the variability of earnings over cash flows (ii) a strong negative impact on the probability to observe SPOS. Even if the results for earnings variability do not signal an improvement in earnings quality, it is reasonable to presume a higher presence of "serious" adopter, despite the ambiguous results.

In brief, our results suggest that for SMEs the signalling power of accounting rules' choice could lead to wrong conclusions. The choice is not related *per se* to an increase in earnings quality, rather this relation appears to be influenced by the reporting environment.

This evidence could have several implications. First, we confirmed the presence of a high degree of heterogeneity in accounting quality within private firms. We add to the literature that addresses

financial reporting quality in private firms suggesting that SMEs cannot be considered as a homogenous group and that the reporting environment could be helpful to explain this heterogeneity. Second, our results could be helpful to avoid users' perception of reporting quality being misled by some "aesthetic" choices (as the choice of the Full rules) that are not related to any relevant improvement in earnings quality, reinforcing the results of DeZoort et al. (2017). Third, our results have an immediate policy implication. Indeed, because of the increased complexity of the Full rules, the possibility to opt for this regime should entail some form of control or audit. This could disincentivize the presence of "label adopters".

Because of several limitations, our results should be interpreted with caution. First, since our study involves firms that publish simplified financial statements, we measured income smoothing proxies using some simplified data that could distort the results. Second, we hypothesized that Full rules adopters should have higher earnings quality and observed *relative* measures between the target and the control group. However, we can not affirm if that one group - as a stand-alone - publishes high-quality financial statements. Third, considering that our sample represents only the Italian context, comparative studies can reinforce the strength of the results. Forth, we proxied the reporting environment using the geographical dichotomy between North and South. We acknowledge that, in a different context, other factors could explain opportunistic behaviours.

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Conflict of interest: none

Appendix

Model 1 Regression results

Δ NI	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
SIZE	0	0.002	-0.18	0.855	-0.004	0.003	
SALESGROWTH	0.073	0.005	16.05	0	0.064	0.082	***
FINLEVERAGE	0	0	0.33	0.743	0	0	
FCFO	0.022	0.008	2.86	0.004	0.007	0.036	***
AUDITORS	0.007	0.003	2.19	0.028	0.001	0.014	**
DU_MANUF	-0.004	0.006	-0.74	0.461	-0.016	0.007	
DU_SERVICES	-0.003	0.006	-0.56	0.579	-0.015	0.008	
DU_TRADE	-0.002	0.006	-0.36	0.718	-0.014	0.01	
SIM_ORD	-0.002	0.003	-0.95	0.344	-0.007	0.003	
2018	-0.006	0.003	-1.99	0.046	-0.012	0	**
2019	0.001	0.003	0.45	0.651	-0.005	0.007	
Constant	0.006	0.015	0.41	0.682	-0.023	0.035	
Mean dependent var	0.005		SD dependent var	0.139			
Overall r-squared	0.025		Number of obs	12,093			
Chi-square	307.512		Prob > chi2	0.000			
R-squared within	0.028		R-squared between	0.017			

*** $p < .01$, ** $p < .05$, * $p < .1$

Model 1 (not scaled) Regression results

Δ NI (not scaled)	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
SIZE	6.748	2.284	2.95	0.003	2.272	11.225	***
SALESGROWTH	102.94	5.537	18.59	0	92.087	113.792	***
FINLEVERAGE	0.005	0.01	0.46	0.648	-0.016	0.025	
FCFO	60.869	9.189	6.62	0	42.86	78.879	***
AUDITORS	8.526	4.022	2.12	0.034	0.643	16.409	**
DU_MANUF	-1.946	7.067	-0.28	0.783	-15.798	11.905	
DU_SERVICES	0.802	7.303	0.11	0.913	-13.512	15.117	
DU_TRADE	-1.257	7.311	-0.17	0.864	-15.587	13.073	
SIM_ORD	-0.819	3.068	-0.27	0.79	-6.831	5.194	
2018	-6.769	3.73	-1.81	0.07	-14.079	0.541	*
2019	2.115	3.756	0.56	0.573	-5.248	9.477	
Constant	-54.977	17.989	-3.06	0.002	-90.235	-19.719	***
Mean dependent var	4.488		SD dependent var	170.680			
Overall r-squared	0.038		Number of obs	12,093			
Chi-square	480.300		Prob > chi2	0.000			
R-squared within	0.038		R-squared between	0.041			

*** $p < .01$, ** $p < .05$, * $p < .1$

Model 2 Regression results

Δ CF	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
SIZE	23.325	2.384	9.78	0	18.652	27.998	***
SALESGROWTH	62.547	5.78	10.82	0	51.218	73.876	***
FINLEVERAGE	0.003	0.011	0.25	0.805	-0.019	0.024	
FCFO	435.845	9.592	45.44	0	417.044	454.645	***
AUDITORS	-0.844	4.199	-0.20	0.841	-9.074	7.385	
DU_MANUF	-4.601	7.378	-0.62	0.533	-19.061	9.859	
DU_SERVICES	-0.748	7.624	-0.10	0.922	-15.692	14.195	
DU_TRADE	-3.264	7.633	-0.43	0.669	-18.223	11.696	
SIM_ORD	2.971	3.202	0.93	0.353	-3.305	9.248	
2018	-5.23	3.893	-1.34	0.179	-12.861	2.401	
2019	13.089	3.921	3.34	0.001	5.403	20.775	***
Constant	-203.63	18.779	-10.84	0	-240.437	-166.823	***
Mean dependent var	12.562		SD dependent var	192.086			
Overall r-squared	0.172		Number of obs	12,093			
Chi-square	2517.882		Prob > chi2	0.000			
R-squared within	0.203		R-squared between	0.130			

*** $p < .01$, ** $p < .05$, * $p < .1$

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Tables**Table 1.** Descriptive Statistics

Variable	n	M	Median	SD	First quartile	Third quartile
Δ NI	12,093	0.005	0.001	0.139	-0.014	0.019
Δ CF	12,093	0.011	0.001	0.116	-0.027	0.039
SPOS	12,093	0.239	0	0.427	0	0
SIZE	12,093	7.344	7.458	0.71	6.866	7.915
SALESGROWTH	12,093	0.052	0.023	0.281	-0.062	0.124
FINLEVERAGE	12,093	5.603	2.473	145.14	0.99	6.096
FCFO	12,093	0.094	0.077	0.168	0.016	0.159
AUDITORS	12,093	0.205	0	0.404	0	0
DU_MANUF	12,093	0.426	0	0.495	0	1
DU_TRADE	12,093	0.262	0	0.44	0	1
DU_SERVICES	12,093	0.26	0	0.439	0	1
DU_SOUTH	12,093	0.423	0	0.494	0	1
SIMORD	12,093	0.488	0	0.5	0	1

Table 2. Correlation Matrix

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
(1) Δ NI	1.000												
(2) Δ CF	0.153*	1.000											
(3) SPOS	-0.026*	-0.044*	1.000										
(4) SIZE	0.012	0.075*	0.065*	1.000									
(5) SALES GROWTH	0.152*	0.155*	-0.046*	0.051*	1.000								
(6) FINLEVERAGE	0.003	0.001	0.035*	0.002	0.002	1.000							
(7) FCFO	0.051*	0.393*	-0.108*	-0.043*	0.161*	-0.004	1.000						
(8) AUDIT	0.023*	0.035*	-0.065*	0.332*	0.022*	-0.004	0.015	1.000					
(9) DU_MANUF	-0.007	-0.004	0.013	0.001	-0.008	0.003	0.011	0.021*	1.000				
(10) DU_TRADE	0.005	-0.001	-0.014	0.009	0.001	-0.003	-0.003	-0.021*	-0.511*	1.000			
(11) DU_SERVICES	0.000	0.006	0.007	-0.011	0.007	-0.001	-0.002	-0.012	-0.513*	-0.353*	1.000		
(12) DU_SOUTH	0.000	-0.018*	0.046*	-0.107*	0.006	0.014	-0.036*	-0.093*	-0.013	-0.006	0.026*	1.000	
(13) SIM_ORD	-0.005	0.006	-0.034*	0.019*	0.014	-0.018*	-0.010	0.096*	-0.025*	-0.025*	0.040*	0.014	1.000

* $p < 0.05$

Table 3. F-test Δ NI and Δ NI over Δ CF

Variables	Obs	SD (Sim)	SD (Full)	SD (Combined)	Prob
Variability of Δ NI	12,093	0.023	0.021	0.022	0.000***
Variability of Δ NI over Δ CF	12,093	17.1	16.129	31.237	0.000***

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 4. Model 3 Random-effects logistic regression

SPOS	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
SIZE	0.61	0.072	8.49	0	0.469	0.751	***
SALESGROWTH	-0.454	0.124	-3.66	0	-0.698	-0.211	***
FINLEVERAGE	0.005	0.001	4.49	0	0.003	0.007	***
FCFO	-1.242	0.215	-5.78	0	-1.664	-0.821	***
AUDIT	-1.027	0.132	-7.76	0	-1.286	-0.768	***
DU_MANUF	0.283	0.225	1.26	0.208	-0.158	0.724	
DU_TRADE	0.066	0.233	0.28	0.778	-0.391	0.523	
DU_SERVICES	0.265	0.232	1.14	0.254	-0.19	0.72	
SIM_ORD	-0.168	0.094	-1.79	0.073	-0.351	0.016	*
2018	0.013	0.068	0.19	0.851	-0.121	0.147	
2019	-0.129	0.07	-1.86	0.063	-0.266	0.007	*
Constant	-6.331	0.573	-11.04	0	-7.455	-5.207	***
Mean dependent var	0.239		SD dependent var		0.427		
Number of obs	12,093		Chi-square		181.587		
Prob > chi2	0.000		Akaike crit. (AIC)		11565.011		

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 5. F-test Δ NI and Δ NI over Δ CF (North and South)

Variables	Obs	SD (Sim)	SD (Full)	SD (Combined)	Prob	Obs	SD (Sim)	SD (Full)	SD (Combined)	Prob
	NORTH					SOUTH				
Variability of Δ NI	6,972	0.022	0.02	0.021	0.000***	5,121	0.024	0.022	0.023	0.000***
Variability of Δ NI over Δ CF	6,972	20.14	20.973	20.544	0.017**	5,121	11.58	4.737	8.870	0.000***

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 6. Model 4 Random-effects logistic regression with interaction term

SPOS	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
SIZE	0.626	0.072	8.69	0	0.485	0.767	***
SALESGROWTH	-0.462	0.124	-3.72	0	-0.705	-0.219	***
FINLEVERAGE	0.005	0.001	4.43	0	0.003	0.007	***
FCFO	-1.218	0.215	-5.67	0	-1.638	-0.797	***
AUDITORS	-0.986	0.132	-7.45	0	-1.246	-0.727	***
DU_MANUF	0.276	0.225	1.23	0.22	-0.165	0.716	
DU_TRADE	0.062	0.233	0.27	0.79	-0.395	0.519	
DU_SERVICES	0.252	0.232	1.08	0.278	-0.203	0.707	
ST(DU_SOUTH)	0.174	0.048	3.60	0	0.079	0.269	***
ST(SIM_ORD)	-0.091	0.047	-1.93	0.053	-0.182	0.001	*
SOUTH*SIM_ORD	0.064	0.046	1.37	0.17	-0.027	0.154	
2018	0.013	0.068	0.18	0.855	-0.122	0.147	
2019	-0.13	0.07	-1.86	0.063	-0.267	0.007	*
Constant	-6.528	0.571	-11.42	0	-7.648	-5.408	***
Mean dependent var	0.239		SD dependent var	0.427			
Number of obs	12,093		Chi-square	195.152			
Prob > chi2	0.000		Akaike crit. (AIC)	11554.368			

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 7. Model 4 Separate random-effects logistic regression

SPOS	Du_South=0		Du_South=1	
	Coef.	p-value	Coef.	p-value
SIZE	0.393***	0	0.885***	0
SALESGROWTH	-0.267	0.13	-0.644***	0
FINLEVERAGE	0.006***	0.001	0.004***	0.004
FCFO	-1.448***	0	-0.946***	0.002
AUDIT	-1.017***	0	-0.837***	0
DU_MANUF	0.283	0.336	0.308	0.376
DU_TRADE	0.075	0.805	0.11	0.761
DU_SERVICES	0.26	0.393	0.279	0.435
SIM_ORD	-0.268**	0.032	-0.035	0.803
2018	-0.077	0.401	0.119	0.248
2019	-0.089	0.337	-0.186*	0.078
Constant	-4.831***	0	-8.285***	0
Observations	6,972		5,121	

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$