TEST Engineering & Management

January – February 2020
ISSN: 0193-4120 Page No. 15245 - 15252

Current State and Future Perspectives of Applying Fair Value Measurement in Financial Reporting of Small Manufacturing Companies in Republic of Croatia

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Article Info
Volume 82
Page Number: 15245 - 15252
Publication Issue:
January-February 2020

Article History
***Article Received**: 18 May 2019*
***Revised**: 14 July 2019*
***Accepted**: 22 December 2019*
***Publication**: 28 February 2020*

Abstract

Adequate non-financial and financial information are critical for companies' management to make rational business decisions. The most important financial information for that process are results of the accounting information systems that are presented in the form of financial statements. Therefore, in order for companies' management and other stakeholders to make informed business decisions, it is important that the information contained in financial statements are of a high quality, i.e. realistic and objective. In order to achieve that, it is crucial to adequately assess and evaluate positions of the financial statements. In the majority of global economies, as well as in the Republic of Croatia, companies that dominate almost every economic sector are micro and small companies. Financial reporting, especially the assessment and evaluation methods for financial statements' positions are prescribed by relevant accounting standards where the biggest discussions among the academics and practitioners are raised about the usefulness and applicability of using fair value measurement by smaller companies. The main purpose of this study was to explore the current state and extent to which Croatian micro and small companies in the sector of manufacturing of coke and refined petroleum products apply fair value measurement for their financial reporting. In addition, the aim of this paper was also to make proposals for simplification of the financial reporting requirements for smaller companies.

Index Terms— *Accounting Standards, Fair Value Measurement, Manufacturing Sector, Micro and Small Companies, Republic of Croatia.*

I. Introduction

Micro, small and medium-sized companies, "despite their size, are important contributors to the national economies of countries around the world. In most countries, they represent the majority of companies, provide most of the employment and also make an important contribution in terms of income generation" [14, p. 2]. The same situation is in the Republic of Croatia. The share of micro, small and medium-sized companies in total number of companies in Republic of Croatia in 2018 was 99,73%, and this share is relatively constant over years, while they employed 72,18% of total employees [5]. Furthermore, micro and small companies comprised 98,58% of total companies in Republic of Croatia in 2018 and they employed 52,58% of total employees [5].

"However, they encounter several challenges that hinder their development opportunities, such as poor managerial skills, unqualified labour and reduced access to finance due to information asymmetry (or, when finance is granted, they have to pay higher interest rates)" [14, p. 5]. Because of that, accounting and financial reporting can have very important role in supporting micro, small and medium-sized companies "development by decreasing the information asymmetry problem. (…) In addition, accounting and reporting is a powerful tool for owners and/or managers of small and medium-sized companies, provided they have the necessary skills to understand the information, to make adequate business decisions in terms of allocation of resources, determining the amount of financing required, and the like" [14, p. 5].

Regarding that, it is very important that micro, small and medium-sized companies "financial reporting framework supports their development by providing relevant information

Acknowledgment

This paper is the result of a project called „*Current State and Perspectives of Using the Fair Value Measurement in Financial Reporting of Small Enterprises*" which was financed by the University of Zagreb as a short-term research support for 2019.

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for proper and successful decision making, without extra-burden, with the benefits prevailing the costs" [8, p. 364]. The most important simplification for those types of companies would be when they would not need to prepare their financial statements using *fair value measurement* for some financial statements' positions that should be measured at this method.

The research question of this paper was: *to what extent do micro and small companies in the sector of manufacturing of coke and refined petroleum products in Republic of Croatia apply fair value measurement for their financial reporting?* According to the research question, the research objective of the paper was *to explore the current state and extent to which Croatian micro and small companies in the sector of manufacturing of coke and refined petroleum products apply fair value measurement for their financial reporting*. The research population comprised 15 companies in subject manufacturing sector under *NKD 2007* section C – *Manufacturing*, division 19 – *Manufacture of coke and refined petroleum products*, group 19.2 – *Manufacture of refined petroleum products*, with class 19.20 – *Manufacture of refined petroleum products*. In order to achieve research objective, methods of analysis, synthesis, classification, comparison and descriptive statistics were applied.

II. Theoretical Background

Micro, small and medium-sized companies, because of its specific business characteristics and smaller scope of work in contrast to large and publicly accountable companies, usually are a subject of applying simplified requirements for its external or general purpose financial reporting. In the Republic of Croatia, Accounting Act defines the criteria, i.e., total assets, income and average number of employees, for companies' classification into micro, small, medium-sized and large companies (table 1). Micro companies are those companies that do not exceed two out of three requirements in the column for micro companies in table 1, while small companies are companies that exceed requirements for micro, but do not exceed two out of three requirements in the column for small companies. All amounts are expressed in *Croatian Kuna* (further in text: HRK).

Table 1. Companies' classification criteria

Criteria	Micro company	Small company	Medium-sized company
Total assets	2.600.000	30.000.000	150.000.000
Total income	5.200.000	60.000.000	300.000.000
Average number of employees	10	50	250

Source: [10].

In the Republic of Croatia, micro, small and medium-sized companies are obliged to apply the *Croatian Financial Reporting Standards* (further in text: *CFRS*) for preparation and disclosure of their financial statements, that are primarily intended for external users. *CFRS* are a simplified version of the *International Financial Reporting Standards* (further in text: *IFRS*), meaning that they are based on full *IFRS* but with modifications in order to reflect the needs of users of micro, small and medium-sized companies' financial statements and cost-benefit considerations [7, p. 7]. *CFRS* set out "recognition, measurement, assessment, presentation and disclosure requirements dealing with transactions and events that are important in general purpose financial statements" [11, p. 2]. Furthermore, *CFRS* are designed to apply to general purpose financial statements of all profit-oriented companies [11, p. 2].

"General purpose financial statements are directed towards the common information needs of a wide range of users, for example, shareholders, creditors, employees and the public at large. The objective of financial statements is to provide information about the financial position, performance and cash flows of an entity that is useful to those users in making economic decisions" [7, p. 7]. In the Republic of Croatia, according to the Accounting Act, micro and small companies need to prepare and publicly disclose the balance sheet, profit and loss account and notes to the financial statements [10].

In order to comprehend and be able to 'read' financial statements as a basis for rational business decision making it is crucial to understand the basic accounting terms and concepts, that include recognition, measurement, assessment, financial statements' positions, accounting policies, etc. In order for financial statements to express true and fair view of company's financial position, performance and cash flows, their positions need to be adequately assessed, initially recognised and subsequently measured.

"Recognition is the process of incorporating in the balance sheet and profit and loss account an item that meets the definition of financial statements positions" [11, p. 6] and satisfies the following criteria:

a) "it is probable that any future economic benefits associated with the item will flow to or from the company, and
b) the item has a cost or value that can be measured reliably" [11, p. 6].

"Measurement is the process of determining the monetary amounts at which the positions of financial statements are recognized and expressed in balance sheet and profit and loss account" [11, p. 5]. Regarding measurement bases, there are several different methods of measurement, of which two most common used are *historical cost* and *fair value*. *Historical cost* can be defined as "the amount of cash or cash equivalents paid or the fair value of the consideration given to acquire certain asset at the time of its acquisition or construction" [11, p. 124], or, if it is applicable, the amount that can be attributed to certain asset upon initial recognition in accordance with the requirements of subject CFRS [11, p. 124]. "*Fair value* is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction" [11, p. 14]. For micro and small companies, it would be simpler to implement and would require less cost to, initially and at each subsequent balance sheet date, measure its financial statement positions at *historical cost*. On the other side, applying *fair value measurement* is very questionable in accounting and reporting of micro and small companies.

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III. Literature review

Analysing the extent to which Croatian small companies apply *fair value measurement* for biological assets in the field of financial reporting of agricultural, forestry and fishing activity for 2017, resulted in confirmation that *fair value application* is not largely represented and therefore it was raised the question about the appropriateness of using *fair value measurement* in financial reporting of micro, small and medium-sized companies [3]. In addition to that, analysis of the application of *fair value measurement* for biological assets in large and listed companies from the real economy in Republic of Croatia in 2015, also confirmed that the majority of companies use *cost method* over *fair value method* [12]. Analysing whether small manufacturing companies in the Republic of Croatia apply *fair value measurement* in their financial reporting for long-term tangible assets in 2017 revealed that the majority of companies apply *cost model* compared to the *revaluation model* [13].

Survey research conducted in the USA in 2009 on more than 220 private company financial professionals revealed, already then, that among the top three *U.S. GAAP* areas that were not considered relevant for decision making was *fair value measurement* (28%) [4, p. 3]. Also, in the same research, results revealed that top area of accounting that respondents see as needing the greatest degree of simplification is area of *fair value measurement* (40%) [4, p. 3]. Research conducted by the South African Institute of Chartered Accountants on their members' experiences with *IFRS for SMEs* revealed that "the vast majority of the respondents prefer the *historical cost model* of accounting to the *fair value model* or a *combination of the two*" [14, p. 89].

"Nowadays, *fair value measurement* is still in a low-level stage in China. Fair value theory's study is not perfect and accounting personnel's professional skills need to improve. There are still some problems in the practical use of fair value measurement" [15, p. 221]. This situation is very similar to situation in the Republic of Croatia because of complex set of accounting rules for micro, small and medium-sized companies, and connected with that, relatively lower levels of accountants' knowledge that necessitates organising continuous education that should rise the accounting profession at a higher level [3, p. 1122]. For deciding whether use or not to use the *fair value measurement*, it should always consider does alternative measurement models exists, and if they exist, then weight *pros* and *cons* of this types of financial statements measurement methods (table 2).

Table 2. Advantages and disadvantages of applying fair value measurement

Pros	Cons
- *timely and reliable information* - *accurate valuation* - *more information in the financial statements* - *measurement of true income* - *standard of accounting* - *method of survival in a difficult economy*	- *pricing deviations; absent of market price* - *poor valuation technique and higher cost* - *false scent of poor company's operations* - *loss of reliability of financial information* - *reducing investors' satisfaction* - *misleading information* - *manipulation of the price by companies* - *losing the historical perspective*

Source: [6, pp. 6-9; 15, pp. 221-223].

IV. Research methodology and empirical research results

First Release on the *Number and Structure of Business Entities* prepared by the Croatian Bureau of Statistics for the December 2018 reports that there was 149.973 active legal entities, of which the majority of them, 126.982 or 84,67% entities were trade companies, 79.076 or 52,73% entities were entities in crafts and trades and free lances, 22.054 or 14,71% were institutions, bodies, associations and organisations, and 937 or 0,62% were co-operatives [1].

Table 3. Number of entities in Republic of Croatia in December 2018

	Number of registered legal entities	Share of entities in total number	Number of active legal entities	Share of entities in total number
Total	**264.043**	**100,00%**	**149.973**	**100,00%**
Trade companies	191.932	**72,69%**	126.982	**84,67%**
Co-operatives	3.156	**1,20%**	937	**0,62%**
Institutions, bodies, associations and org.	68.592	**25,98%**	22.054	**14,71%**
Entities in crafts and trades and free lances	-	-	79.076	**52,73%**
C - Manufacturing	**20.756**	**7,86%**	**14.357**	**9,57%**

Source: [1].

According to the *Croatian National Classification of Activities* (further in text: *NKD 2007*) in section C are grouped companies in manufacturing sector. So, in section C – *Manufacturing* in December 2018 there was 14.357 active legal entities [1]. The share of active legal entities in manufacturing in total number of active legal entities in Republic of Croatia in December 2018 was 9,57%. This analysis can be seen in Table 3. Out of 14.357 active legal entities in manufacturing in December 2018, 14.354 were profit entities, three were non-profit, while 7.412 of them were crafts and trades and free lances [1].

The main purpose of this study was to explore the current state and extent to which Croatian micro and small companies in the specific manufacturing sector, that is, in the *manufacturing of coke and refined petroleum products* apply *fair value measurement* for their financial reporting. According to this, the subject of the analysis are companies in manufacturing sector under *NKD 2007* section C – *Manufacturing*, division 19 – *Manufacture of coke and refined petroleum products*, group 19.1 – *Manufacture of coke oven products*, with class 19.10 – *Manufacture of coke oven products*, group 19.2 – *Manufacture of refined petroleum products*, with class 19.20 – *Manufacture of refined petroleum products* [9].

As it can be seen from the Table 4, the total number of companies in section C – *Manufacturing*, division 19 – *Manufacture of coke and refined petroleum products* is 17 companies. All of these companies are registered for *manufacturing of refined petroleum products* (class 19.20), while no company is registered for the *manufacturing of coke oven products* (class 19.10). Out of total number of analysed companies, 10 of them are micro companies, five are small companies, one company is medium-sized, while one company is large. According to the results, analysed division 19 – *Manufacture of coke and refined petroleum products* represents around 0,13% of the total number of companies in section C – *Manufacturing*.

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Table 4. Number of companies in Republic of Croatia in section C – *Manufacturing*

Section/division/ group/class of activity	Micro	Small	Medium	Large	Total
Section C	10.912	2.048	438	121	**13.519**
Class C 19.20	10	5	1	1	**17**

Source: Authors' preparation by using the data gathered from [2].

Regarding these results, the research covers *Croatian micro and small companies* registered for *manufacture of refined petroleum products* that publicly disclosed their annual financial statements for 2018. In accordance with the publicly disclosed data, 13 micro and small companies that *manufacture refined petroleum products* prepared and publicly disclosed their annual financial statements for 2018, while two of them did not disclose their annual financial statements. In the end, in the analysis were included 13 companies out of 15 subject companies. Analysis of the financial statements covered analysis of the balance sheet, profit and loss account and notes to the financial statements.

Furthermore, around 46% of analysed companies employ zero employees, 40% of them employ between one and nine employees, and around 13% of companies employ between 10 and 49 employees (table 5). Medium-sized company in this economic section, division, group and class employs between 50 and 249 employees, while large company employs more than 250 employees. Considering those numbers, it can be concluded that, by the number of companies, *manufacturing of coke and refined petroleum products* represents very small part of the Croatian economy.

Table 5. Number of employees in Republic of Croatia in companies registered for class C 19.20 – *Manufacture of refined petroleum products*

Number of employees	N	% N
0	7	46,67%
1-9	6	40,00%
10-49	2	13,33%
Total	15	100,00%

Source: Authors' calculation by using the data gathered from [2].

As it can be seen from the table 6, the majority of micro and small companies, 60%, that are registered for *manufacturing of refined petroleum products* have their headquarters in Central Croatia, 20% of them have their headquarters in City of Zagreb and Mediterranean Croatia, while in the Eastern Croatia no company has its headquarter.

Table 6. Croatian region of the company's headquarter

Region	N	% N
Central Croatia	9	60,00%
City of Zagreb	3	20,00%
Eastern Croatia	0	0,00%
Mediterranean Croatia	3	20,00%
Total	15	100,00%

Source: Authors' calculation by using the data gathered from [2].

Regarding the legal organisational forms of companies, 14 companies included in the analysis are limited liability companies, while one company is simple limited liability company. No company in the analysis has an obligation for auditing of their financial statements, so no one of them disclosed audited financial statements. As it was mentioned earlier, micro and small companies in the Republic of Croatia are obliged to apply a simplified version of the *IFRS*, named the *CFRS*. Analysis of the notes to the financial statements of companies included in this study revealed that 12 companies for preparing their financial statements apply *CFRS* in accordance with the *Croatian Accounting Act*, while one company did not disclosed in its notes to the financial statements the information about applying any type of financial reporting standards.

Table 7 shows descriptive statistics of chosen financial indicators for 13 companies included in the analysis. Analysed companies on average have 4 employees. Average total assets value is 12,2 million HRK, average total revenues are 5,9 million HRK, while average net profit is 601 thousand HRK. Considering that the standard deviation for these indicators is extremely high (coefficient of variation ranging from 141% to 311%) it is better to observe position mean measurement as median. As it can be noted, the results quite differ. The first half of analysed companies have 2 or less employees, the value of total assets is 3,8 million HRK or less, total revenues 590 thousand HRK and net profit 5.346 HRK or less, while the other half have those values or higher for all indicators. Comparing with the size criteria, prescribed by the Croatian Accounting Act, it can be concluded that average and median indicators for analysed companies are within classification criteria for micro and small companies. Over 76% of analysed companies ended 2018 with positive financial result.

Table 7. Descriptive statistics of chosen financial indicators for analysed companies

Position	Count	Mean	Standard deviation	Median	Minimum	Maximum
Employee number	13	4	**5**	2	0	17
Total assets	13	12.256.413	**19.463.651**	3.896.365	240.956	64.704.505
Long-term assets	13	4.819.861	**11.384.217**	345.957	0	41.205.298
Current assets	13	7.337.437	**16.186.510**	977.414	132.827	59.330.940
Equity	13	-4.542.575	**27.690.919**	113.551	-94.338.960	21.067.310
Long-term liabilities	13	3.448.073	**6.068.042**	202.036	0	15.911.945
Current liabilities	13	13.349.684	**39.338.717**	1.660.017	9.354	143.920.339
Total revenues	13	5.910.644	**8.375.210**	590.327	0	26.219.131
Total expenses	13	5.253.652	**7.464.396**	566.365	0	22.609.868
Net profit	13	601.240	**1.874.509**	5.436	-964.256	6.079.934

Source: Authors' calculation by using the data gathered from [5].

In order to achieve the main purpose, or research objective, of this study, it was investigated how significant specific financial statements' positions, i.e., long-term tangible assets, inventories, equity and liabilities, are in the financial statements of analysed companies in the Republic of Croatia that according to the financial reporting standards can be measured, after initial recognition, at *fair value*. Furthermore, it was explored what types of this financial positions exist and are expressed in financial statements, which *CFRS* are mostly represented and connected with this, and what methods are used for subsequent measure of this positions. The results of this analysis reveal and indicate the usefulness and applicability of using *fair value measurement* for financial reporting of micro and small companies in the Republic of Croatia.

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Table 8. Disclosed and applied *Croatian Financial Reporting Standards* for financial statements' preparation in notes to the financial statements

Croatian Financial Reporting Standard	Number of companies
CFRS 1 – Financial Statements	1
CFRS 2 – Consolidated Financial Statements	0
CFRS 3 – Accounting Policies, Changes in Accounting Estimates and Errors	0
CFRS 4 – Events after the Balance Sheet Date	0
CFRS 5 – Non-current Intangible Assets	10
CFRS 6 – Non-current Tangible Assets	11
CFRS 7 – Investment Property	5
CFRS 8 – Non-current Assets Held for Sale and Discontinued Operations	3
CFRS 9 – Financial Assets	9
CFRS 10 – Inventories	10
CFRS 11 – Receivables	12
CFRS 12 – Equity	9
CFRS 13 – Liabilities	11
CFRS 14 – Prepayments, accrued income/accruals and deferred income	6
CFRS 15 – Revenues	12
CFRS 16 – Expenses	12
CFRS 17 – Agriculture	3

Source: Authors' preparation by using the data gathered from [5].

Analysing notes to the financial statements of subject companies it was seen that differences in disclosing information about relevant accounting standards and valuation methods exist. In the table 8 can be seen results about number of companies that, directly or indirectly, disclosed information about applied *CFRS*. As it was expected, considering their main economic activity which is manufacturing, the majority of companies disclosed information about accounting treatment (i.e., relevant *CFRS*) of non-current intangible and tangible assets, inventories, receivables, liabilities, revenues and expenses. Also, large proportion of them were considering accounting treatment of financial assets, equity, prepayments, accrued income/accruals and deferred income, and investment property.

Manufacturing is an economic sector that is the essence and initiator of every country's economy growth, as well as in the Republic of Croatia. Considering the main economic activity for which analysed companies are registered, i.e., *manufacturing of refined petroleum products*, it can be reasonably assumed that in their balance sheets large proportion of total assets has long-term or non-current tangible assets and current inventories. Because of that it is crucial to adequately assess, or in other words, initially recognize and subsequently measure these positions to assure a true and fair view of company's financial position, performance and to prepare realistic and objective information' basis in order to make rational business decisions. Micro and small companies are especially vulnerable regarding wrong business and financial decisions of their management. By not taking care, ignoring or not having enough knowledge about accounting issues can consequently very suddenly result in ending of company's business. Therefore, micro and small companies' accounting, or more precisely, bookkeeping issues are very often externalized to specialized bookkeeping services whose accountants' knowledge in collaboration with managers' decisions are having great influence on financial positions' recognition, measurement, assessment, or in other words, preparation and final disclosure of general purpose financial statements.

According to the *CFRS* 6 – *Non-current Tangible Assets*, "non-current tangible asset is asset:

a) that is held for use in the production or supply of goods or services, for rental to others, or for administrative purposes, and
b) is expected to be used during more than one period
c) that is intended to be used on an ongoing basis for the purpose of companies' activities" [11, p. 46-47].

According to the *CFRS* 10 – *Inventories*, "inventories are current tangible assets:

a) held for sale in the ordinary course of business
b) in the process of production for such sale, or
c) in the form of materials or supplies to be consumed in the production process or in the rendering of services" [11, p.71-72].

Companies its long-term tangible assets and inventories *initially* recognise at *historical cost*, while they can subsequently, i.e., after the initial recognition, measure it on another measurement bases, for example:

a) companies can their long-term tangible assets subsequently measure either at the lower of cost less any accumulated depreciation (or amortisation) and impairment losses and the recoverable amount (*cost model*) or the lower of the revalued amount and the recoverable amount (*revaluation model*)
b) companies can their inventories subsequently measure at the lower of *cost* and estimated selling price less costs to complete and sell, i.e., *net realisable value* [7, p. 20; 11, p. 50, 73].

This kind of assets' measurement is in accordance with the accounting principle of prudence. Equity is defined as the residual interest in the assets of a company after deducting all its liabilities, so its recognition and measurement depends primarily on assets and liabilities that influence change in the equity [11, p. 83-87]. "A liability is a present obligation of the company arising from past events, and the settlement of which is expected to result in an outflow of company's resources" [11, p. 87].

For initial recognition of long-term tangible assets, analysed companies in the Republic of Croatia, that revealed this information in their notes to the financial statements (12 companies), use *historical cost*, while for subsequent measurement all of them use *cost model*, over *revaluation model* (table 9). All 12 companies use straight-line amortisation method, which is allowed also according to Croatian tax regulation. The most important long-term tangible assets in balance sheets of analysed companies are plants and equipment, land, buildings, machinery and transportation assets. As it can be seen from the table 10, on aggregate level, long-term tangible assets have significant

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share in companies' total assets, while they comprise almost total share of long-term assets. For small companies, on aggregate level, long-term tangible assets (63,91%) are more important in total assets than for micro companies (21,14%).

Table 9. Initial recognition and subsequent measurement methods of selected financial statements' positions in analysed companies in the Republic of Croatia

Financial statements' position	Types of position	Number of companies	Accounting treatment - CFRS	Initial recognition	Subsequent measurement	
Long-term tangible assets	- plants and equipment - land - buildings - machinery - transportation assets - tangible assets in preparation	**12**	**CFRS 6**	**historical cost**	cost less any accumulated depreciation and impairment losses	**12 companies**
					straight-line amortisation	**12 companies**
Inventories	- raw materials - work-in-progress and finished goods - merchandise - prepaid inventories - non-current assets classified as held for sale	**10**	**CFRS 10**	**historical cost**	lower of cost and net realizable value	**7 companies**
					historical cost	**3 companies**
					weighted average cost method	**8 companies**
					FIFO method	**1 company**
Equity	- share capital - capital reserves - retained earnings/ transferred loss - revalorisation reserves - net profit/loss	**12**	**CFRS 12**	in accordance with related measurement of assets and liabilities	in accordance with related measurement of assets and liabilities that influence change in equity	
Liabilities	- current liabilities - non-current liabilities	11	**CFRS 13**	fair value	amortised cost using effective interest method *or* fair value	

Source: Authors' calculation by using the data gathered from [5].

According to this result, very important for realistic and objective financial position and performance is how companies are assessing and measuring it most important positions of their financial statements. It can be concluded, that for measuring long-term tangible assets of companies in the *manufacturing of refined petroleum products* in the Republic of Croatia more important is *cost model*, and according to that results standard setter should consider revising the need for using *revaluation model* for micro and small companies, which is more costly and timely alternative to the *historical cost model*.

Table 10. The significance of long-term tangible assets at the aggregate level of analysed companies in the Republic of Croatia

Positions	Micro and small companies	Micro companies	Small companies
Count	13	9	4
Aggregate total assets	159.333.366	92.837.021	66.496.345
Aggregate long-term assets	62.658.198	19.925.428	42.732.770
Aggregate long-term tangible assets	62.123.466	19.627.103	42.496.363
Average share of aggregate long-term tangible assets in aggregate total assets	**38,99%**	**21,14%**	**63,91%**
Average share of aggregate long-term tangible assets in aggregate total long-term assets	**99,15%**	**98,50%**	**99,45%**
Average share of aggregate long-term assets in aggregate total assets	**39,33%**	**21,46%**	**64,26%**

Source: Authors' calculation by using the data gathered from [5].

For companies in manufacturing, key current tangible assets are inventories, so it is clear that its measurement models can greatly influence companies' financial position and performance. In the Republic of Croatia, all companies that revealed information about the initial recognition of inventories (10 companies), apply *historical cost*, while majority of them (seven companies) report that inventories can *subsequently* be measured at *the lower of cost and net realisable value*. Further information are not revealed. Minority of companies (three companies) reported that they for subsequent measurement of inventories use only *cost model*. Considering revealed information that are very scarce, it is questionable how many companies indeed do use *net realisable value*. For inventory costing, eight companies apply *weighted average cost method*, while only one company applies *first in-first out (FIFO) cost method*.

Table 11. The significance of inventories at the aggregate level of analysed companies in the Republic of Croatia

Positions	Micro and small companies	Micro companies	Small companies
Count	13	9	4
Aggregate total assets	159.333.366	92.837.021	66.496.345
Aggregate current assets	95.386.676	72.911.593	22.475.083
Aggregate inventories	8.534.346	1.238.577	7.295.769
Average share of inventories in aggregate total assets	**5,36%**	**1,33%**	**10,97%**
Average share of inventories in aggregate total current assets	**8,95%**	**1,70%**	**32,46%**
Average share of aggregate current assets in aggregate total assets	**59,87%**	**78,54%**	**33,80%**

Source: Authors' calculation by using the data gathered from [5].

As it can be seen from the table 9, the most important types of inventories for analysed companies in the Republic of Croatia are raw materials, work-in-progress, finished goods and merchandise, what is logical considering its main economic activity. Furthermore, as it can be seen from table 11, inventories have greater share in current assets of small companies (32,46%) than in micro companies (1,70%), as well as in total assets.

Table 12. The significance of equity at the aggregate level of analysed companies in the Republic of Croatia

Positions	Micro and small companies	Micro companies	Small companies
Count	12	8	4
Aggregate total assets	94.628.861	28.132.516	66.496.345
Aggregate total equity	35.285.487	3.171.905	32.113.582
Aggregate original share capital (paid in equity)	27.028.010	2.623.010	24.405.000
Aggregate earned equity	8.257.477	548.895	7.708.582
Average share of aggregate total equity in aggregate total assets	**37,29%**	**11,27%**	**48,29%**
Average share of aggregate paid in equity in aggregate total equity	**76,60%**	**82,70%**	**76,00%**
Average share of aggregate earned equity in aggregate total equity	**23,40%**	**17,30%**	**24,00%**
Average share of aggregate paid in equity in aggregate total assets	**28,56%**	**9,32%**	**36,70%**
Average share of aggregate earned equity in aggregate total assets	**8,73%**	**1,95%**	**11,59%**

Source: Authors' calculation by using the data gathered from [5].

How company finances its assets, from equity or liabilities, is also very important information for company' management decision making and primarily for its internal stakeholders, but also for some external stakeholders. Basically, equity is made up of two parts, paid-in equity and earned equity. For all analysed companies, micro and small, paid-in equity has greater share in its total equity than earned equity (table 12). From the analysis of companies' equity and liabilities share in

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total assets, one company resulted as an outlier and it was removed from further analysis.

From table 13 it can be seen that in aggregate total liabilities, for small companies, larger share have long-term than current liabilities, while the situation is opposite for micro companies. Regarding previous analysis of equity, it can be concluded that majority of companies' (10 out of 12 companies, or 83,33%) finance their assets more trough liabilities than trough equity, while only two companies, or 16,67%, finance it more trough equity than liabilities.

Table 13. The significance of liabilities at the aggregate level of analysed companies in the Republic of Croatia

Positions	Micro and small companies	Micro companies	Small companies
Count	12	8	4
Aggregate total assets	94.628.861	28.132.516	66.496.345
Aggregate total liabilities	59.327.374	24.944.611	34.382.763
Aggregate total current liabilities	29.625.551	13.550.083	16.075.468
Aggregate total long-term liabilities	29.701.823	11.394.528	18.307.295
Average share of aggregate total liabilities in aggregate total assets	**62,69%**	**88,67%**	**51,71%**
Average share of aggregate total current liabilities in aggregate total liabilities	**49,94%**	**54,32%**	**46,75%**
Average share of aggregate total long-term liabilities in aggregate total liabilities	**50,06%**	**45,68%**	**53,25%**
Average share of aggregate current liabilities in aggregate total assets	**31,31%**	**48,17%**	**24,17%**
Average share of aggregate long-term liabilities in aggregate total assets	**31,39%**	**40,50%**	**27,53%**

Source: Authors' calculation by using the data gathered from [5].

V. CONCLUSION

Micro, small and medium-sized companies are significant drivers and contributors to the national economies of countries around the world, as well as, to Croatian economy. Furthermore, micro and small companies represent the majority of companies in the Republic of Croatia, around 99% in 2018, and also employ large share of employees, more that 50% in 2018. Because of their significance and specific characteristics that distinguishes their way of doing business in consideration to large, or even medium-sized companies, it is crucial to lower administrative burdens for those types of companies. One of those administrative alleviations could be further simplification of financial reporting requirements, primarily those requirements related to applying *fair value measurement* for smaller companies.

Considering all that, the main research question of this paper was: *to what extent do micro and small companies in the sector of manufacturing of coke and refined petroleum products in Republic of Croatia apply fair value measurement for their financial reporting?* Following that, the research objective was *to explore the current state and extent to which Croatian micro and small companies in the sector of manufacturing of coke and refined petroleum products apply fair value measurement for their financial reporting*. In order to achieve the research objective of this study, it was investigated how significant long-term tangible assets, inventories, equity and liabilities are in the financial statements of 13 companies in the manufacturing sector under *NKD 2007* section C, division 19, group 19.2, class 19.20 – *Manufacture of refined petroleum products* and how they initially recognise and subsequently measure it.

The research results showed that all 12 companies, which revealed information about *subsequent measurement* of their long-term tangible assets, use *historical cost model* over *revaluation model*. Majority of companies, seven of them, report that inventories can *subsequently* be measured at *the lower of cost and net realisable value*. Since they did not revealed any further information about inventory measurement, and three companies reported that they, for subsequent measurement of inventories, use only *cost model*, it is questionable how many companies do really *use net realisable value*. Liabilities are measured according to *CFRS* 13 – *Liabilities*, which gives to possibilities of *amortised cost using the effective interest method* or *fair value*. Since companies did not gave any further information, except that they for initial recognition and subsequent measurement apply *CFRS* 13, it is also questionable how many companies really apply *fair value*. Measurement of equity is in direct relationship with measurement of assets and liabilities. In the end, it can be concluded that the majority of analysed companies apply *cost model* for subsequent measurement of their most important assets, long-term and current tangible assets, and *amortised cost* for its non-current and current liabilities, that consequently, directly or indirectly, affects companies' equity.

Considering the research results, the main recommendation and proposal for Croatian, European, and even international, standard setters would be *to strategically revise the necessity of applying fair value measurement for smaller companies*, and particularly for micro and small companies, in order to achieve, justify and act according to the European Union's vision aimed at those types of companies: *'think small first'*. Regarding non-consistency in the form and information disclosed in the notes to the financial statements of micro and small companies, second recommendation would be aimed at improving and conducting continual professional education of accountants in order to rise their level of knowledge and, by doing so, lead the quality of services of accounting profession on a much higher level. This is very important because rational business decisions of various stakeholders of micro and small companies primarily depends on accounting and financial reporting.

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