

*Full Length Research Paper*

# **Role and contribution of administrative accounting to small and very small businesses**

**Karagiorgos A.<sup>1\*</sup>, Gaitanaki Alexandra<sup>2</sup>, Ignatiou O.<sup>2</sup> and Terzidou A.<sup>3</sup>**

<sup>1</sup>Department of Accounting, School of Business, Univeristy of Nicosia, 2417, Cyprus.

<sup>2</sup>Department of Business Administration, University of Macedonia, 156 Egnatia Street, GR 54636, Greece.

<sup>3</sup>Taxation and Financial Management of Strategic Decisions, Department of Business Administration, University of Macedonia, 156 Egnatia Street, GR 54636, Greece.

Received 16 April, 2020; Accepted 15 June, 2020

**The aim of this work is to study the main factors that influence the collaboration between the firm and a cost specialist. The paper highlights key aspects of administrative accountings activities performed by Small and medium enterprises (SMEs) and factors that differentiate them due to their nature and small size. Empirical research was conducted through questionnaires to Greek small and micro (very small) firms. Data were processed through a multiple regression analysis, while the results emphasize the importance and utilization of administrative accounting practices and tools. The importance of accounting skills and procedures were found less significant inside a firm but vital for the accounting specialists cooperating with management. Results demonstrate a shift of decision making from owners to accountants and specialists, elevating them as partners responsible for administrative and cost accounting strategies. The application of cost accounting practices combined with knowledge of which skills SMEs owners should hone, allows better collaborations with experts. Finding balance between management and administrative accounting, together with the required accounting background of both parts can significantly reduce communication and cost related miscalculations. The study shows shifts in significance of traditionally important factors of administrative accounting. However, further research is needed to highlight the nature behind each fluctuation. The present study highlights a particular shift from the need of key accounting skills, formerly indicative of SMEs managers, to closer collaboration with administrative accounting experts and their emergence as responsible for cost strategies implementation.**

**Key words:** Small business, micro business, costing, managerial accounting, cost accounting, administrative accounting.

## **INTRODUCTION**

Small firms play an important role in the economic and sustainable development of every nation (Longenecker et al., 2005) while contributing decisively to local communities and economies (Devins, 1999; Friar and

Meyer, 2003; Peterson et al., 1986). Small and micro (very small) businesses are considered the mainstays of a country's economy. Particularly in small countries such as Greece, small and micro firms share the largest part of

\*Corresponding author. E-mail: [alkiskar@gmail.com](mailto:alkiskar@gmail.com).

the market, since 6 out of 10 employees work in very small companies. The latter clearly demonstrates their great importance in the Greek economy (European Commission, 2018). However, these businesses have significantly higher failure rates than large companies (Stanworth and Gray, 1991). This is mainly caused by the existence of similar problems and decisions to their larger counterparts, but with the absence of advantages offered by specialists in their staff members and different layers of management (Raymond and Magnenat-Thalmann, 1982).

Globalization and fiscal deficiencies change the economic environment and as a result a firm's ability to achieve competitive advantage. It is evident that the survival of small and micro firms depends on competitive and risk management, especially due to the prompt responses towards aforementioned outside challenges (Camison, 1997).

Evidently, the financial crisis of 2009 has been a driving force for change in the use of administrative accounting. The resulting ongoing opportunities can lead to a stronger position and a better view of administrative accountants in decision-making processes (Endenich, 2014). Proper accounting information is vital for successful management in any firm or organization, whether large or small (European Commission, 2018).

However, despite the great importance of administrative accounting for measuring financial performance in small and micro-enterprises, a small number of studies approach the specific cost accounting related obstacles small firms face, in spite of the potential for competitive advantage (Sorros et al., 2017). Thusly conducting an empirical research on the role and contribution of administrative accounting in small and micro enterprises, could highlight factors that hinder a thorough exploitation of cost data and strategies. For example due to continuous developments in the field of electronic bookkeeping, small and micro firms are in need for modern administrative accounting strategies (Chong et al., 2019).

The appliance of cost activities or strategies, combined with the knowledge of which skills small firm owners should hone, allows better collaborations with experts. Misplaced investments in training and strategic decisions can be particularly burdensome for small firms. This research argues the existence of potential readjustments in the roles and responsibilities of cost specialists and firm owners. Results demonstrate shifts related to the significance of traditionally important administrative accounting skills of owners towards closer and substantial owner to specialist collaboration.

## LITERATURE REVIEW

### Contribution of administrative accounting

Administrative accounting as an information system

supports managers in their duties. The need for timely and accurate cost information is essential to calculate the real cost of services (Diavastis et al., 2016). It collects information allowing better planning and decision makings processes. Administrative accounting is considered a practical tool widely applied in company management (Kucharczyk and CieÅlak, 2014). It includes a set of planning and control actions, where planning defines action. Respectively "actions" create requirements for control that generates in turn further planning and corrective actions (Walther and Skousen, 2009).

Small and very small businesses seem to have less need for continuous monitoring of their goals and therefore make less use of administrative accounting tools. Their focus is mainly on problems of a productive nature. Businesses that maintain a proper system of administrative accounting tend to invest more in their planning and procedures than smaller firms. There is also a positive correlation between corporate internationalization and structured management accounting tools (Broccardo, 2014).

However, in their study, Westman et al. (2019) mentioned that the behavior of some SMEs can be better characterized by the rational-economic model. In that concept, factors that influence the perception of importance regarding sustainability include increasing sales that lead to higher benefits for the firm. On the other hand the behavior of a firm can also derive from the combined influence of social and rational-economic factors, as explained in entrepreneurs driven by ideological motivations and rationality (e.g. ecopreneurs).

Chen et al. (2019) suggested that choosing a level of internal coordination such that the marginal bureaucratic costs offsets the marginal economies in the short run may prove suboptimal in the long run. The diversified firms may benefit from limiting the extent of coordination between their businesses, foregoing short run synergies towards long run flexibility. Firms that adopt a more conglomerate like structure may outperform others when diversifying into unrelated or moderately related businesses. Conglomerate structures should be especially valuable for innovation in each business. They used a simulation to study adaptation in diversified firms, arguing that coordination between businesses to realize synergies may limit adaptation within businesses. The long run performance advantage of diversified firms has a curvilinear relationship with relatedness. Firms may be better off limiting the level of coordination between businesses so as to maintain long run flexibility (Chen et al., 2019). Through administrative accounting firms achieve more elaborate coding of accounting knowledge, better preparation for successions in family owned firms. Furthermore, it facilitates necessary actions such as shifts to event-based decision making (rather than based on personal experience), and collection of appropriate information by outside investors and creditors (Hiebl, 2013).

### **Personal accounting skills related to administrative accounting**

There is a considerable scope for improvement through elevating an accountant to the level of a "business partner", as well as achieving better awareness regarding administrative accounting tools, in decision making. Usually, in small businesses, the owner is responsible for administrative accounting decisions. Accounting on these firms is utilized as a bookkeeping tool and rarely as a mean for solid decision making practices. With the exception of pricing and some decisions regarding production, decisions are made usually without adequate financial information. Evidently, not all administrative accounting tools are suitable for small businesses. However, increased awareness proves important in cases of potential or eminent economic growth. Thusly, accounting training programs become necessary for SMEs (Prowle, 2013).

Perren and Grant (2000) formed a diagrammatic representation depicting the administrative accounting procedures performed in a small business. While it was not a timetable of events, therefore implying general time relationships, the processes could occur simultaneously. The key to this perspective was for owners and employees to act as creators of routine management accounting in a 'microcosm' shaped by a cycle of action, externalization and custom.

On the other hand, Zor et al. (2019) results argue that SME owners and investors should be prepared for the possibility of different candidates for the CEO position to implement and extensively use budget strategies. In their study it is mentioned that the common practice of a SMES that adopts an appealing budget for the lenders, but not implement it thoroughly, should be taken into consideration before constructing theoretical models and proposing practical solutions.

These routines are still under the control of owners but more flexible by nature. Sources of administrative accounting knowledge include previous personal experience of the firm's staff (e.g. owner-manager, employees), as well as specialists, and data available from accounting software. The owners control the "internal environment", but support should be offered on their own terms. It is argued that owners rarely prefer general training programs as well as sophisticated techniques inappropriate for their particular circumstances (Perren and Grant, 2000). The above lead to the following research hypothesis:

**H<sub>1</sub>:** *Personal accounting management skills are not linked to the contribution of administrative accounting to small and very small businesses.*

### **Procedures applied to the success of small and micro businesses**

Small and micro businesses have a significantly higher

level of failure rates than large businesses (Stanworth and Gray, 1991). Studies demonstrate a difficulty in achieving basic financial management activities, resulted from a lack of awareness regarding complex financial planning methods and accounting tools. Hall and Young (1991) mentioned that administrative accounting was absent from 38% of the failed small firms, while Randall and Horsman (1998) found a correlation between failure and administrative accounting. The current inability of understanding the importance of sound financial management shifts, traces back to hesitations hiring accounting specialists and limited access to financial information (DeThomas and Fredenberger, 1985).

For example cloud management and accounting software procedures could add to the value proposition of a firm, while on the other hand a closer interaction between accounting managers and cloud accounting vendors could form more accurate and up to date systems (Rudansky-Kloppers and Van den Bergh, 2019). In a different perspective, Chong et al. (2019) examined the relationships among the level of sophistication of a firm's performance measurement system (PMS) through measurement systems such as the balanced scorecard (BSC). PMSs encompass both financial and nonfinancial performance measures used to operationalize strategic objectives. The importance and benefits of interactive performance measurement systems increase with firm size. They measured Size by the number of employees in the firms. Employees are commonly used as a proxy for organizational size since financial measures may distort comparisons dew to potential accounting different treatments (Chenhall, 2003) or figures from sales and total assets (Hoque and James, 2000).

It is evident that administrative accounting systems are not always comparable to those of general financial accounting, especially in the case of SMEs. However, small firms often express dissatisfaction towards their adopted administrative accounting systems (McChlery et al., 2005). Moreover, factors responsible for frequent failures lead to inadequate record keeping and poor inventory skills. Small firm operators need logbooks, inventory control and pricing procedures for successful operation (Umeji and Obi, 2014). The above lead to the following research hypothesis:

**H<sub>2</sub>:** *The processes used for the success of small and micro businesses are not linked to the contribution of administrative accounting to small and micro businesses.*

### **Use of administrative accounting in small and very small businesses**

There is a significant difference in the amount and type of administrative accounting procedures, undertaken by small businesses depending on a number of factors, (Prowle, 2013) the main of which are:

- (i) Size, since larger firms use administrative accounting more than smaller ones.
- (ii) Financial constraints on profitability, cash flow and credit availability (firms subject to more restrictions use administrative accounting in a deeper level compared to those with fewer restrictions).
- (iii) The demands of outside stakeholders.
- (iv) The background and experience of senior management teams (managers with a non-financial background are less likely to use administrative accounting).
- (v) The nature of operations and the environment in which the firm operates.

Administrative accounting in micro firms is influenced by the owner or manager, since accounting decisions are based on the owner's knowledge, personal experience and time. On the other hand, accountants employed in the firm and computer-based accounting software are important factors for enabling and expanding complex administrative accounting procedures. In addition small businesses tend to depend on strategies communicated through simple drafts or even orally, with the evident absence of formal and written procedures (Alattar et al., 2009). Most small and micro businesses have their own informal use of administrative accounting. They prefer to prepare a monthly report on costs and costing.

The main uses of administrative accounting adhere to simple costing methods, annual turnovers, cash budgeting, and constant-cost analysis. The main objectives are pricing, cost reduction, planning, budgeting and cost sharing (Ilias et al., 2010), even though different accounting and financial perspectives can contribute to unutilized business strategies. For example usually small and medium-sized enterprises seem to benefit little from international exports. However, a research by Chong et al. (2019) showed that if the complete value chain is used as measurement, instead of the traditional gross arrangements, the value added increases significantly. This highlights the importance of more accurate accounting methods as well as the potential of small and micro firms to take advantage of opportunities provided by international trade through newer methods. The most commonly used traditional practices are cost control systems and cash flow planning, while only recently small firms started including activities such as benchmarking and reporting on financial and non-economic performance. In addition, high implementation cost, non obligatory cost measurement procedures, and general financial constraints further diminish the role of administrative accounting (Cuzdriorean, 2017).

The main source of information for a manager regarding administrative decisions comes from business reports or the latter's combination with financial assessments prepared by the chief accountant. Financial benchmarks, analytical information obtained using administrative accounting methods, as well as non-financial indicators, are considered the main tools for

decision-makers. In order to improve the financial position of small and micro firms, managers should use information derived from the appliance of operational and strategic administrative accounting methods. However, preparation costs and time hinder cost based strategies and activities (Khocha, 2017). The above lead to the following research hypothesis:

**H<sub>3</sub>:** *The use of administrative accounting in small and micro enterprises is not linked to the contribution of administrative accounting to small and micro enterprises.*

### **Use of specialists in administrative accounting in small and micro enterprises**

It is common for businesses to manage accounting information through electronic means and tools. However, the extent to which their full potential is reached remains questionable. There seems to be a significant prospect for administrative accountants to extend their services to smaller companies. For example, presentations of data through graphs, accompanied by appropriate interpretations, could increase small companies' financial skills in respect to customers and lead to increased demand for administrative accounting services (Marriott and Marriott, 2000). The role of administrative accounting specialists is, using the language of the "*microcosm*" that owners operate, to help the latter identify and implement appropriate administrative accounting routines.

Furthermore, more technologically advanced owners and accountants should be utilized by their older generation counterparts for recommendations and exploring new perspectives (Rudansky-Kloppers and Van den Bergh, 2019). For example accountants with experience in small companies argue that the importance of digital based accounting takes a larger proportion of their workload in comparison to their bigger company's counterparts. Proper cost benefit analysis and information on technical knowledge are necessary for small firms in order to supervise their respected digitized methods. However, it is evident that top management support is crucial for overcoming eminent digital reporting obstacles (Alkhatib et al., 2019). For example, third-party professionals could collaborate in order to improve a small firm's productivity regarding tax processes (Efobi et al., 2019). The above lead to the following research hypothesis:

**H<sub>4</sub>:** *The use of administrative accounting specialists in small and micro enterprises is not linked to the contribution of administrative accounting to small and micro businesses.*

### **METHODOLOGY**

The research concerns the role of administrative accounting in

**Table 1.** Aggregate table of variables.

Variable	Definition	Studies
Dependent variable V1: Contribution of administrative accounting	Contribution of administrative accounting to small and micro enterprises	Hiebl (2013), Broccardo (2014)
Independent variable V2: Personal skills	Personal Accounting Skills regarding administrative accounting	Prowle (2013), Perren and Grant (2000)
Independent variable V3: Applied procedures	Procedures applied to the success of small and micro businesses	Stanworth and Gray (1991), DeThomas and Fredenberger (1985), Hall and Young (1991), Randall and Horsman (1998), McChlery et al. (2005), Umeji and Obi (2014)
Independent variable V4: Using administrative accounting	Use of administrative accounting in small and micro enterprises	Prowle (2013), Alattar et al. (2009), Ilias et al. (2010), Cuzdriorean (2017), Khocha (2017)
Independent variable V5: Use of administrative accounting experts	Use of accounting specialists in small and micro businesses	Marriott and Marriott (2000), Perren and Grant (2000)

Source: Constructed by the Author/s.

small or very small businesses. The firms had to meet one of two key criteria. Respondents had to employ staff ranging from 1 to 10 (very small firm) and 11 to 50 (small firm) people. Alternatively, the turnover or annual balance sheet total should not exceed 2 million euro (very small) or 10 million euro (small). Basic aspect of this paper was that the study had the questionnaires answered by owners or employees responsible for cost accounting decisions and cost strategies. Due to the size of the companies, there was no need for sector based segmentation as the main concern of research was to measure universal administrative accounting procedures.

Initially 150 questionnaires were sent, of which 73 responded. The sample is representative based on previous similar surveys regarding small and medium enterprises (Stefanou, 2002) and "*the specific nature of SME's business culture*" (Hyz, 2011).

### Research questionnaire

Through the review of literature, a questionnaire was sent via e-mail to small and very small businesses. In the EU 92% of all enterprises are micro, while in Greece the respective percentage is 96% (Balios et al., 2016). The questionnaire included 25 closed and multiple Likert questions, divided into six parts. The first examined the general characteristics of the firm. The other parts each relate to an independent variable: 1) personal skills, 2) procedures used, 3) use of administrative accounting and 4) use of administrative accounting experts. The sixth part relates to the dependent variable that is the contribution of administrative accounting.

### Measuring variables

The dependent variable, V1 is defined as the "Contribution of administrative accounting", evaluated by seven indicators: "business efficiency", "pricing", "management and cost reduction", "budgeting and cost-sharing", "planning, control and decision making", "identify production costs" and "product productivity planning and investing".

The first independent variable V2 was named "Personal Skills" and is assessed by four indicators: accounting training programs cost information, knowledge of administrative accounting and correct pricing of products.

The second independent variable is defined as "Applied procedures", measured by four indicators: accounting, the use of recorded events, inventory/ inventory control, and the use of formal-written procedures for pricing and accounting.

The third independent variable, V3 is "Using administrative accounting", evaluated by three indicators: the use of administrative accounting software, the use of costing and budgeting practices for planning and auditing, and the use of reporting for decision making.

The fourth independent variable V4 is defined as 'Use of administrating accounting experts', measured by 2 indicators: the use of a specialist consultant when making an important business decision and the recruitment of specialist internal management. The reliability of all variables was assessed with the Cronbach's Alpha.

Descriptive statistics were used for a more complete analysis of the results. More specifically, descriptive analysis was used to identify the factors associated with the contribution of administrative accounting to small and micro enterprises. The analysis of the correlations of the variables was followed, and the empirical research concludes by presenting the results of the multiple regression analysis. The summary of these variables can be found at Table 1.

### Scale reliability results

Table 2 presents the reliability index of the questionnaire variables. Cronbach's Alpha values are above 0.7, so the scales reliability for all variables is evident.

## RESULTS

### Descriptive statistics

Table 3 shows that the largest percentage (60.3%) is commercial enterprises and the majority, 32.9% of respondents are in the management. Finally, the largest percentage, (60.3%), has 9 years' experience. Table 4 presents the descriptive elements of the variables. The last column calculates the volatility coefficient (CV) which indicates that the observations are scattered.

**Table 2.** Cronbach's Alpha.

Variable		Cronbach's Alpha
V1	Contribution of administrative accounting	0.913
V2	Personal skills	0.729
V3	Applied procedures	0.835
V4	Using administrative accounting	0.782
V5	Use of administrative accounting experts	0.821

Source: Constructed by the Author/s.

**Table 3.** Descriptive statistics.

Question	Answer	Frequency	Rate (%)
Size	Small	35	47.9
	Micro	38	52.1
Main activity	Commercial	44	60.3
	Industrial	8	11
	Mixed	9	26
	Other	2	2.7
Position	Accountant	16	21.9
	Administration	24	32.9
	Operator-Head	18	24.7
	Other	15	20
Years of experience	4-Jan	15	20.5
	8-May	14	19.2
	9 and more	44	60.3

Source: Constructed by the Author/s.

**Table 4.** Variables' descriptive elements and volatility.

Variable	Mean	Std. deviation	Coefficient of variation (%)
Personal skills	3.3425	0.67380	20
Applied procedures	3.8219	0.79412	21
Use of administrating accounting experts	3.2877	0.94985	29
Using administrative accounting	3.3790	0.92181	27
Contribution of administrative accounting	3.8160	0.60772	16

Source: Constructed by the Author/s.

### Correlation analysis

At this point, correlations of the variables with the Pearson index were tested and their results are presented in Table 5. There is a statistically moderate linear correlation between the dependent variable with the independent variable "Using administrative accounting" (V4) and the independent variable "Using accounting experts" (V5). Furthermore, there is a low linear correlation with the independent variable "Applied

procedures" (V3). On the other hand, there is no statistically significant linear correlation between the dependent variable "Accounting Accounting Contribution" and the independent variable "Personal Skills" (V2).

### Regression analysis

At this point, the main objective of regression is to examine whether the independent variables can be used

**Table 5.** Correlations.

Correlations		V1	V2	V3	V4	V5
V1	Pearson Correlation	1	0.052	0.353**	0.426**	0.621**
	Sig. (2-tailed)		0.663	0.002	0.000	0.000
	N	73	73	73	73	73
V2	Pearson Correlation	0.052	1	0.544**	0.312**	0.093
	Sig. (2-tailed)	0.663		0.000	0.007	0.431
	N	73	73	73	73	73
V3	Pearson Correlation	0.353**	0.544**	1	0.610**	0.253*
	Sig. (2-tailed)	0.002	0.000		0.000	0.031
	N	73	73	73	73	73
V4	Pearson Correlation	0.426**	0.312**	0.610**	1	0.170
	Sig. (2-tailed)	0.000	0.007	0.000		0.151
	N	73	73	73	73	73
V5	Pearson Correlation	0.621**	0.093	0.253*	0.170	1
	Sig. (2-tailed)	0.000	0.431	0.031	0.151	
	N	73	73	73	73	73

\*\*Correlation is significant at the 0.01 level (2-tailed). \*Correlation is significant at the 0.05 level (2-tailed). Source: Constructed by the Author/s.

**Table 6.** ANOVA.

ANOVA <sup>a</sup>						
Model		Sum of square	df	Mean square	F	Sig.
1	Regression	13.510	4	3.377	17.557	0.000 <sup>b</sup>
	Residual	13.081	68	0.192		
	Total	26.591	72			

<sup>a</sup>Dependent Variable: Contribution of administrative accounting; <sup>b</sup>Predictors: (Constant), personal skills, procedures used, use of administrative accounting, use of administrative accounting specialists. Source: Constructed by the Author/s.

to predict the values of the dependent variable. Since the relationship between variables X and Y is linear, this regression model results:

$$\text{Administering Accounting Contribution} = b + b1 * \text{Personal Skills} + b2 * \text{Procedures} + b3 * \text{Use of Administering Accounting} + b4 * \text{Use of Accounting Specialists (1)}$$

Next comes the ANOVA table, which checks whether the multiple regression model is statistically significant. That is, it checks whether the dependent variable has a linear relationship with at least one of the independent variables. Table 6 shows that the model is statistically significant, since Sig = 0.000 < 0.05 and hence the dependent variable has a linear relationship with at least one of the independent variables. As seen in Table 7, H<sub>3</sub>

and H<sub>4</sub> are rejected and the independent variables “use of administrative accounting” and “use of administrative accounting experts” have a statistically significant effect on the independent variable 'administrative accounting contribution' while H<sub>1</sub> and H<sub>2</sub> are not rejected.

## DISCUSSION

Initially, regarding the respondents' personal skills in administrative accounting the majority, monitors several accounting training programs and is knowledgeable of accounting information and practices. Furthermore the employees are capable to handle cost-related information adequately. Regarding the procedures used, firms follow the necessary procedures mentioned in literature. Thusly small and micro companies undergo strategic actions

**Table 7.** Coefficients.

Model	Coefficients <sup>a</sup>					
	Unstandardized coefficients		Standardized coefficients	t	Sig.	
	B	Std. error	Beta			
	(Constant)	2.107	0.323		6.529	0.000
1	Personal Skills	-0.140	0.092	-0.155	-1.530	0.131
	Procedures	0.080	0.095	0.104	0.839	0.404
	Use of Administrating Accounting	0.209	0.071	0.317	2.951	0.004
	Use of Administrating Accounting Specialists	0.355	0.056	0.555	6.302	0.000

<sup>a</sup>Dependent Variable: Administrating Accounting Contribution.  
Source: Constructed by the Author/s.

towards successful enterprising. Furthermore, in terms of administrative accounting, results showed that the majority makes frequent use of such practices. Finally, regarding the use of administrative accounting experts, the majority answered that when it comes to making an important decision, they receive adequate advice, from a specialist when the need arises. At the same time, hiring an administrative internal accountant is considered an important move, as it would greatly contribute to business success.

Results demonstrate a statistically significant linear positive correlation between the contribution of administrative accounting and the use of administrative accounting. The regression also shows that this independent variable is statistically significant. Exactly the same applies to the relationship between the use of specialists in administrative accounting and the contribution of administrative accounting. The above findings are similar to those of Ilias et al. (2010), Cuzdriorean (2017) and Khocha (2017), who point out the main uses of administrative accounting, but also to those of Marriott and Marriott (2000) and Perren and Grant (2000), which emphasize the importance of specialists in administrative accounting, which will lead to increased demand for administrative accounting services.

However, the research showed an absence of a statistically significant linear correlation between the dependent variable and the independent variable "Personal Skills". The regression reveals that this factor does not add to the contribution of administrative accounting. This result is inconsistent with the findings of Prowle (2013) and Perren and Grant (2000) who argue that the proper use of administrative accounting relates both to knowledge and to appropriate education. Furthermore, regarding the independent variable "Applied procedures", although there was a low linear correlation with the contribution of administrative accounting, the regression showed that it was not significant. However, Hall and Young (1991) and Randall and Horsman (1998) argue that there is a correlation between the observance of the necessary procedures that contribute to the success of a small business and administrative

accounting.

These differences should be considered particularly important. Administrative accounting practices are usually partially implemented in Greece. Cost strategies are based more on experience of owners and managers, than on the application of standard rules and standardized implementation steps (Sorros et al., 2017). Furthermore, the Greek taxation system is far more complex in comparison to that of other developed countries, including E.U. Cases of bureaucracy and strong taxation driven system affects the implementation of accounting methods hindering the extension of administrative accounting processes in terms of time and personnel needed for a firm to implement them (Karagiorgos et al, 2020). Moreover, Efobi et al. (2019) found that in the case of developing countries, the transition to electronic tax administration systems is followed by important implications. On the other hand small firms are more likely to adopt new computerized accounting systems, when their owners are educated in finance. Thusly, factors of skills and procedures could be affected depending on the taxation and financial environment, in which they are used more than previously thought.

## Conclusions

Small and micro enterprises are an integral part of global economy. In order to achieve competitiveness; these firms undertake proportionally more tasks and initiatives. In this context, it is necessary for small and micro firms to apply accurate cost calculation methods on a daily basis, to the majority of their business activities. Determining the effectiveness and deviations of an activity can be achieved through administrative accounting, since it is one of the main information sources available to business management (Marius et al., 2012). Cost related information offers strategic advantage regarding decision making and profitability. Results show a strong shift in the importance of specialists in the appliance of administrative accounting practices. The latter is more evident in cases



where the development of complex strategies and connection of SMES to the modern digital environment are hindered due to cost and time barriers.

### Theoretical implications

From the present research, the role of experts and administrative accounting is found of grave importance. Research conducted on larger companies on this issue suggests improving communication between accounting and management. However, the nature of small and medium-sized enterprises and their limited financial capacity must be taken into account, as the strategies of large companies cannot be fully or partially implemented. The results show a possible need to readjust the roles and responsibilities between cost managers and owners.

### Practical implications

Due to technological developments in the field of electronic bookkeeping, small and medium-sized enterprises could aim at a shift towards modern cost, management and sales strategies. Learning basic technological skills and working closely with accountants could relieve management of technical accounting decisions, leaving specialist with a range of administrative decisions regarding accounting, tax or costing practices. In this case, a cost-benefit analysis would be needed, since higher accounting management fees and jointly share decision-making responsibilities would be necessary steps towards renewal of SMEs strategies and policies.

### Managerial implications

Factors such as taxation and the socioeconomic environment of a country in which a firm is located could affect its ability to implement cost strategies. Skills and procedures vital for administrative accounting practices are not applied or considered important, unless other requirements related to taxation and bookkeeping prevailing are met. The application of cost accounting practices combined with the knowledge of which skills SMEs owners should hone, allows better collaborations with experts. Misplaced investments in learning and training can be particularly burdensome for small firms. Finding balance between management and administrative accounting, together with the required accounting background of both parts can significantly reduce communication and cost related miscalculations.

### Future research

A more in depth analysis would discern the exact factors

that hinder the appliance of administrative accounting. Arguably future research could illuminate the influence high rates of complexity regarding taxation systems and legislature have to administrative practices in small or very small firms.

### Limitations

Although some important conclusions have been drawn from research, questionnaire methodology retains some issues of subjectivity and impartiality. In addition, the theoretical structures studied showed a general tendency in decreasing the significance of traditionally important factors regarding administrative accounting. However, the exact causes for these effects have not been determined and should be studied further.

### CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

### REFERENCES

- Alattar J, Kouhy R, Innes J (2009). Management accounting information in micro enterprises in Gaza. *Journal of Accounting and Organizational Change* 5(1):81-107.
- Alkhatib E, Ojala H, Collis J (2019). Determinants of the voluntary adoption of digital reporting by small private companies to Companies House: Evidence from the UK, *International Journal of Accounting Information Systems* 34(2019):1-18.
- Balios D, Daskalakis N, Eriotis N, Vasiliou D (2016). SMEs capital structure determinants during severe economic crisis: The case of Greece. *Cogent Economics and Finance* 4(1):1145535.
- Broccardo L (2014). Management Accounting System in Italian Smes: Some Evidences and Implications. *Advances in Management and Applied Economics* 4(4):1.
- Camison C (1997). La competitividad de la PYME industrial española: Estrategia y competencias distintivas. Civitas Madrid.
- Chen M, Kaul A, Wu B (2019). Adaptation across multiple landscapes: Relatedness, complexity, and the long run effects of coordination in diversified firms. *Strategic Management Journal* 40(11):1791-1821.
- Chenhall RH (2003). Management control systems design within its organizational context: Findings from contingency-based research and directions for the future. *Accounting, Organizations and Society* 28(2-3):127-168.
- Chong S, Hoekstra R, Lemmers O, Van Beveren I, Van Den Berg M, Van Der Wal R, Verbiest P (2019). The role of small-and medium-sized enterprises in the Dutch economy: An analysis using an extended supply and use table. *Journal of Economic Structures* 8(1):1-24.
- Cuzdriorean D (2017). The Use of Management Accounting Practices by Romanian Small and Medium-Sized Enterprises: A Field Study. *Journal of Accounting and Management Information Systems* 16(2):291-312.
- DeThomas AR, Fredenberger WB (1985). Accounting needs of very small business. *The CPA Journal* 55(10):14-15.
- Devins D (1999). Supporting established micro businesses: Policy issues emerging from an evaluation. *International Small Business Journal* 18(1):86-96.
- Diavastis I, Anagnostopoulou E, Drogalas G, Karagiorgos T (2016). The Interaction Effect of Accounting Information Systems User Satisfaction and Activity-Based Costing Use on Hotel Financial Performance: Evidence from Greece. *Journal of Accounting and*

- Management Information Systems 15(4):757-784.
- Efobi U, Beecroft I, Belmondo T, Katan A (2019). Small Business Use of the Integrated Tax Administration System in Nigeria. ICTD African Tax Administration 2019:1-33.
- European Commission (2018). An official website of the European Union, The small business act for Europe. Available at: <https://www.ggb.gr/sites/default/files/basic-page-files/Greece%20-%202018%20Fact%20Sheet.pdf>
- Endenich C (2014). Economic crisis as a driver of management accounting change: Comparative evidence from Germany and Spain. *Journal of Applied Accounting Research* 15(1):123-149.
- Friar JH, Meyer MH (2003). Entrepreneurship and start-ups in the Boston region: Factors differentiating high-growth ventures from micro-ventures. *Small Business Economics* 21(2):145-152.
- Hall G, Young B (1991). Factors Associated with Insolvency amongst Small Firms. *International Small Business Journal* 9(2):54-63.
- Hiebl MRW (2013). Management accounting in the family business: Tipping the balance for survival. *Journal of Business Strategy* 34(6):19-25.
- Hoque Z, James W (2000). Linking balanced scorecard measures to size and market factors: Impact on organizational performance. *Journal of Management Accounting Research* 12(1):1-17.
- Hyz AB (2011). Small and medium enterprises (SMEs) in Greece- Barriers in access to banking services. An empirical investigation. *International Journal of Business and Social Science* 2(2):161-165.
- Ilias A, Razak, MZ, Yasoa MR (2010). The Preliminary Study of Management Accounting Practices (MAPs) in Small Business. *Global Business and Management Research Journal* 2(1):79-80.
- Karagiorgos A, Lazos G, Leontiadis N (2020). Taxation efficiency and accounting assisted transparency, insight into a European framework. *Journal of Accounting and Taxation* 12(1):28-38.
- Khochha N (2017). The Organization of management accounting at small enterprises in Ukraine. *Baltic Journal of Economic Studies* 3(1):271-279.
- Kucharczyk M, CieÅlak I (2014). The issue of management accounting in small and medium-sized enterprises. *Proceedings of International Academic Conferences: International Institute of Social and Economic Sciences* 0702301:736-752.
- Marius CD, Denisa CM, Florina BRI (2012). Managerial accounting—a source of information for an efficient management in SME. *Procedia-Social and Behavioral Sciences* 62:521-525.
- McChlery S, Godfrey P, Meechan L (2005). Barriers and catalysts to sound financial management systems in small sized enterprises. *Journal of Applied Accounting Research* 7:1-26.
- Marriott N, Marriott P (2000). Professional accountants and the development of a management accounting service for the small firm: barriers and possibilities. *Management Accounting Research* 11(4):475-492.
- Longenecker JG, Moore CW, Petty W, Palich LE (2005). Small business management: An entrepreneurial emphasis. Available at: <http://ecsocman.hse.ru/text/19208050/>
- Perren L, Grant P (2000). The evolution of management accounting routines in small businesses: A social construction perspective. *Management Accounting Research* 11(4):391-411.
- Peterson RA, Albaum G, Kozmetsky G (1986). The public's definition of small business. *Journal of Small Business Management* 24(3):63-68.
- Prowle M (2013). Management Accounting Practices of (UK) Small-Medium-Sized Enterprises (SMEs). *Chartered Institute of Management Accountants* 9(4):1-14.
- Randall R, Horsman S (1998). Can Failure in SMEs be Reduced by Better Management Accounting? In *National Small Firms Policy and Research Conference* 1:153-190.
- Raymond L, Magnenat-Thalmann N (1982). Information Systems in Small Business: Are They Used in Managerial Decisions? *American Journal of Small Business* 6(4):20-26.
- Rudansky-Kloppers S, Van den Bergh K (2019). The absorption and usage of cloud accounting technology by accounting firms in Cape Town for services provided to their clients. *African Journal of Science, Technology, Innovation and Development* 11(2):161-180.
- Sorros J, Karagiorgos A, Mpelesis N (2017). Adoption of activity-based costing: A survey of the education sector of Greece. *International Advances in Economic Research* 23(3):309-320.
- Stanworth J, Gray C (1991). *Bolton 20 Years on: The Small Firm in the 1990s*. Paul Chapman Publishing: University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship. London.
- Stefanou JC (2002). Accounting information systems (AIS) development/acquisition approaches by Greek SME. In *European Accounting Information System Conference (ECAIS)*. 23-24th April. P 113.
- Umeji AU, Obi CA (2014). Cost accounting skills needs of small business operators. *American Journal of Industrial and Business Management* 4(5):246.
- Walther LM, Skousen CJ (2009). *Managerial and cost accounting*. Bookboon.
- Westman L, Luederitz C, Kundurpi A, Mercado AJ, Weber O, Burch SL (2019). Conceptualizing businesses as social actors: A framework for understanding sustainability actions in small-and medium-sized enterprises. *Business Strategy and the Environment* 28(2):388-402.
- Zor U, Linder S, Endenich C (2019). CEO Characteristics and Budgeting Practices in Emerging Market SMEs. *Journal of Small Business Management* 57(2):658-678.