

## PERFECTING MANAGEMENT ACCOUNTING IN THE FURNITURE INDUSTRY THROUGH THE ABC METHOD

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**Abstract:** *Management accounting is a very good tool for the managers of the entities concerning management and cost control within an entity. A good cost management may certainly be considered an increasing element in the performance of an economic entity. In the previous researches on per order method we have shown that this method is useful and applicable in furniture industry, but we have withheld the technical limits specific to a classic cost calculation method. The main objective of this paper is to observe the applicability of Activity Based Costing (ABC) method of cost managing in an entity in the furniture industry. Also, we want to emphasize its advantages in cost management compared to the order method. The case study presented in this article proves that the ABC method represents a true improvement method for the management accounting, offering powerful tools in the process of cost distribution. The research features a detailed cost calculation through the order method and the ABC method for the particularities of furniture industry in Romania.*

**Key words:** ABC costing method, the order method, furniture industry, cost accounting, accounting, case study

**Jel Codes:** M40, D24, M41.

### Introduction

The ABC cost calculation method is known in the literature of the field as a modern method of cost calculation. It is used by a lot of entities from different areas of activity, both within manufacturing activities as well as in other branches of the economy. Among the main elements which differentiate this method from the other cost calculation methods, we find its special ability to organize cost accounting according to the entity's activities.

Furniture industry in Romania represents a real opportunity for the Romanian industry in terms of obtaining the greatest added value in the entire sector of woodworking. In previous studies (Burja Vasile and Radu Mărginean, 2013) we showed that the furniture industry in Romania goes through difficult moments due to wood's increased cost and lack of qualified workforce. In this context, any element which may contribute to increasing accuracy in managerial decision-making processes could be useful within the sector of furniture industry of Romania and we think that ABC management method is a useful tool in this regard.

The main objective of this paper is the study the applicability of the ABC method within the sector of the wood industry in Romania. We will prove that the method is practically applicable and quite easily implementable after a thoughtful analysis of entity activities. At the same time, through the case study, we will make cost calculation on two production orders through the two methods. Therefore, we will point out the main differences between cost calculations through per-order method

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and cost calculations through the ABC method in furniture industry. We conclude by presenting the reasons for we suggest adopting the ABC method, due to its benefits in improving cost calculation.

### **Research Method**

In the research we have undertaken we combined theoretical approach with a practical one, reviewing the literature of the field for the two management accounting methods – per-order method and Activity Based Costing method (abbreviated as ABC method).

The main objective research that we want to achieve in this paper is to follow the applicability of the modern ABC cost managing method within the furniture industry in Romania, as well as pointing out the eventual differences between the two methods in the calculation process. We intend to revise the literature regarding per-order and ABC methods and to analyse the applicability and advantages of using the ABC method through a case study. In this regard in our research we will use the comparisons method.

Procedurally, the reviewed literature presents many approaches at different stages of the problem of cost calculation through the ABC method, all basically presenting the same procedure of the ABC method. Understanding the objectives of each stage, we ascertain that in the case study we will present the calculations obtained in a way that we consider easily understandable and easy to follow.

### **Literature Review**

In the Accounting Law republished in Romania, Law 82/24.12.1991, art. 1, paragraph 1, there are stipulated two types of accounting namely, financial accounting and management accounting (Accounting Law, 1991). The main difference occurs from the orientation of the type of accounting, financial accounting being more orientated towards the entity's external issues, presenting performances to the entity through external factors (International Accounting Standard 1, point 7), whilst the managerial or management accounting is especially oriented for reaching internal needs, offering useful data directly to management.

Regarding the run-down of procedures and regulations in effect for management accounting, the law in Romania stipulates certain elements which have to be taken into consideration when organizing the managerial accounting. Technical aspects concerning the organization of management accounting is found in the legal framework, the Order of the Ministry of Public Finance no. 1826/2003, published in Romania's Official Monitory no. 23/2004, in the document entitled "Specifications Regarding Certain Measurements Referring to Organizing and Conducting Management Accounting".

This document specifies that in the management accounting it can be utilised accounts specific to management accounting (The 9<sup>th</sup> class from the Chart of Accounts), it can be developed accounts in financial accounting or it can be used own technical-operative evidence (Order 1826, 2013, art.2). From practical activities we could see that in the modern approach of costs calculating through ERP (Enterprise Resource Planning) computer programs, management accounting is held after an own technical-operative evidence. There are used a complex of elements which are made available by the specific of the software programs that use different nomenclatures of articles, managements, cost centres or instruments specific to budgets etc.

The applicability of the traditional methods of managing the entities' costs within the furniture industry was presented in the specialty literature, particularly for the classical per-order method (Mărginean Radu, 2015). At the same time, among the cost management methods applicable to the furniture industry we mention standard costing method. Compared to the per-order method, it has the

ability of operatively following production. Data provided is opportune and useful to the factors implied in the managerial decision-making processes (Mărginean Radu, 2013).

Per-activities cost calculation method is known in the specialty literature as the ABC method. Elena Barbu states that the method was developed by General Electric, around the 1960s emphasizing then that the majority of indirect expenses originate from product manufacturing. The method was subsequently (1970-1980) developed by American researchers Cooper, Kaplan, Porter, Miller and French researchers Mevelec, Lebas or Lorino. These succeeded in bringing an important addition, defining a new and rational method of repartition the consumption per products, operations or sales areas. Lack of correct allocation of indirect costs led to an inaccurate production cost understanding. This method improves cost calculation through a better and more realistic cost allocation. (Elena Barbu, 2004, p. 150).

Briciu Sorin et. al. (2010) outlines the fact that the ABC cost calculation method start from the concept that the data provided by traditional cost methods are not useful to the managers. They are particularly interested in evaluating the efficiency of the decisions of allocation the resources within their entities. C.A.M.I. (International Consortium for Advanced Processing) defines in the '80s the ABC method as being that method utilized for identifying the causes of connections between cost inductors and the cost of the activities for measuring the costs of the process to which cost objective and activities refer to. The main principle of the ABC method may be described as follows: activities consuming products/services that in their turn consume resources. The resources are needed for activities and in processes development, because the processes are made from activities (Briciu Sorin et. al., 2010, pp. 333-334).

The processes of perfecting cost calculation may imply quite complex methods. Horngreen et. al. starts from the following main stages (Charles Horngren, 2006, pp.157-165):

- Direct costs assigning – the assignment of the largest number of direct costs is recommended, aiming to reducing indirect expenses;
- Creating lots of indirect costs and homogenizing them, in a cost homogenous lot, all costs having the same cause–effect relationship;
- The chosen base of assignment must have as main criteria the cause-effect relationship;

The steps for implementing a cost calculation system per activities according to Horngreen et. al. (Charles Horngren, 2006, pp.162-165) are:

1. Identifying the products which are the chosen cost objectives;
2. Identifying the products' direct costs;
3. Choosing indirect cost assignment basis of products;
4. Identifying indirect costs associated with each assignment basis;
5. Calculating indirect cost assignment unit share of products, per unit, afferent to the chosen assignment basis;
6. Calculating indirect costs assigned to products

According to Bâtcă-Dumitru G. et. al. (2019), the elements which are specific to cost analysis based on the ABC method may be externalized emphasizing more cost characteristics, therefore (Bâtcă-Dumitru G. et. al. 2019):

- “Exploitation common (indirect) costs are not assigned anymore to products through an inexact and arbitrary interest, but in accordance with products' actual participation, as calculation objects within the enterprises' activities.
- Per-processes calculation costs are a total cost production calculation, because it does not only take into account the direct cost, but also the indirect production ones. This concept of

total costs is based on the fact that long termed, almost every cost is variable and thus have decisional relevance;

- Per-processes cost calculation is oriented towards long term decisions and may be regarded as a real support for an entity's strategic problems.
- The enterprise's functional assembly is represented through activities and processes".

The literature of the field approaches the problem of shifting from classical cost calculation methods to modern methods, among which we mention the ABC (Activity Based Costing) method. In this regard, Căpuşneanu S. et. al. states that traditional cost calculations are excessively based on the parallel between defining and calculating previously calculated costs and effective costs, hence providing information that does not directly helps the management. Among these methods are: per-order calculation method, phase method, global method, as well as other methods characterized by production elements and rigid processing. The need for adopting the ABC method within the entities in Romania, according to the same author, comes from the following causes (Căpuşneanu S. et. al., 2011):

- Failure to fathom the elements that are specific to cost accounting
- Existent deficiencies within cost calculation classical systems
- Diversification of information required by management
- Making modifications in the strategic positioning of the entities

Căpuşneanu S. et. al. (2011) also lists a set of advantages of the ABC method:

- Obtaining production costs having higher accuracy than using the traditional methods;
- It concentrated on the real nature of cost behaviour, hence helping to identify the activities with no value;
- It uses the concept of cost inductors which directly emphasize the cause-effect relationship between allotted costs and the basis of cost allotment;
- Offers flexibility regarding the problem of costs on manufactured products or provided services, having the possibility to adapt according to the general chart of accounts in Romania;
- Emphasizes the relation between basic activities and auxiliary activities;

The stages of cost calculation through per-order method and the ABC method may be summarized as follows:

Table 1.

**Synthesis of cost calculation through per-order method and ABC method**

<b>Per-order method</b>	<b>ABC Method</b>
<ul style="list-style-type: none"> <li>✓ Expenses are differentiated in: direct and indirect expenses and the basis for assigning the indirect expenses is chosen</li> </ul>	<ul style="list-style-type: none"> <li>✓ Activities and cost inductors per each activity are identified;</li> </ul>
<ul style="list-style-type: none"> <li>✓ The cost bearer is represented by order  <math display="block">C_{total} = \frac{\sum_{i=1}^n Chdi + \sum_{i=1}^n Chi}{qi}</math>                     Where:                      Ctotal = total unit cost                      Chdi = direct expenses                      Chi = indirect expenses and                      qi = quantity per product unit</li> </ul>	<ul style="list-style-type: none"> <li>✓ The unit cost per inductor is calculated:  <math display="block">KiA = \frac{ChA}{SiA}</math>                     Where:                      KiA = the cost per each inductor afferent to A activity;                      ChA = expenses afferent to activity                      SiA = the sum of the A activity inductors</li> </ul>
<ul style="list-style-type: none"> <li>✓ K repartition coefficient on indirect expenses is determined, by using the formula:  <math display="block">K = \frac{Tchi}{Br}</math></li> </ul>	<ul style="list-style-type: none"> <li>✓ Determining indirect costs of the absorbed activities on type of products by multiplying the unit cost of the consumed inductors on each product:</li> </ul>

Per-order method	ABC Method
<p>Where,  <i>Tchi</i> = total of indirect expenses per period  <i>Br</i> = assignment basis, which in per-order method usually is the cost of direct incomes together with income taxes;</p>	<p>Where:  <math>CA_j = K_{iA} \times VA_j</math>  <i>CA<sub>j</sub></i> = indirect costs afferent to A activity absorbed by j product;  <i>VA<sub>j</sub></i> = the volume of the activity's inductor</p>
<p>✓ The calculation of final cost will be the sum resulted from the cost of the intermediate products or component parts, therefore:  <math>C_t = ct_1 + ct_2 + \dots + ct_n + \sum C_{da} + \sum C_{ia}</math>                      Where:  <i>C<sub>t</sub></i> = the cost of final product;  <i>Ct1, ct2, ct<sub>n</sub></i> = the cost of component parts;  <i>Cda</i> = general direct expenses of assembly and perfecting;  <i>Cia</i> = general indirect expenses</p>	<p>✓ Absorption of indirect costs:  <math display="block">C_{ij} = \sum_{A=1}^n CA_j</math>                      Where:  <i>C<sub>ij</sub></i> = indirect expenses absorbed by j product;  <i>A</i> = activity;  <i>CA<sub>j</sub></i> = indirect costs afferent to the activity A absorbed by j product;</p>

Source: Own processing after Delia David et. al. (2018) and Briciu S. et. al. (2010, pp. 284-286).

### Case study

Our case study starts from other researches that we previously made within the sector of furniture industry in Romania, through which we showed that the classical per-order method is applicable in this sector and brings important advantages, but it also brings disadvantages too. At the same time, we stated and we consider that in the furniture industry, a step forward is needed towards approaching a modern cost calculation method.

Two orders will be given for being manufactured and the manufacturing will be made in three sections: Section 1 (S1) Preparation and Tailoring, Section 2(S2) Veneering, Section 3(S3) Packing and Storage of Finished Products.

The two orders have the next products:

- Order 1: Product York Wardrobe (A) – 30 Wardrobes
- Order 2: Product York Nightstand (B) – 60 nightstands

From the management accounting, for the month of December 2019, there were extracted the expenses for their analysing and processing in the management accounting, based on the justifying documents, as follows, total expenses of 96565,43 Ron. Expenses assignment on destinations is featured then in table 2:

Table 2.

### Expenses assignment from financial accounting

Accounting expense with:	Section 1		Section 2		Section 3		Administrative	Selling expenses	Maintenance costs	Central heating	Other indirect costs	Total of expenses
	Com. A	Com. B	Com. A	Com. B	Com. A	Com. B						
Raw materials	12500	7500	5050	5500	5545	2550	0	0	0	0	0	38645
Consumables	0	0	500	250	100	250	0	0	0	0	0	1100

Accounting expense with:	Section 1		Section 2		Section 3		Administrative	Selling expenses	Maintenance costs	Central heating	Other indirect costs	Total of expenses
	Com. A	Com. B	Com. A	Com. B	Com. A	Com. B						
Consumption of inventory objects	0	0	0	0	0	0	200	80	0	0	320	600
Energy and water	0	0	0	0	0	0	250	0	450	3000	2500	6200
Currier fees	0	0	0	0	0	0	400	0	0	0	0	400
Commissions	0	0	0	0	0	0	500	0	0	0	0	500
Banking services	0	0	0	0	0	0	700	0	0	0	0	700
Marketing and legal advice	0	0	0	0	0	0	3000	800	0	0		3800
Staff incomes	7560	3200	5560	1050	3380	800	6000	2000	1800	1700	2080	35130
Contribution 2.25%	170.1	72	125.1	23.625	76.05	18	135	45	40.5	38.25	46.8	790.425
Amortizations	0	0	0	0	0	0	1750	200	750	800	5200	8700
TOTAL	20230.1	10772	11235.1	6823.625	9101.05	3618	12935	3125	3040.5	5538.25	10146.8	96565.43

Source: Own projection of authors

As it is concluded from Table 2, from the financial accounting based on certain elements specific to the utilized software, expenses per destinations were assigned. We have to mention the fact that in this stage of development of ERP systems and of automation of production systems one works based on production projects which embed stages production networks, both for final products and semi-manufactured products. Reporting the production is made on special apps in sections that allow the users to report in real time what they manufacture, data regarding the delivered production, the stage of production, working hours or timekeeping in sections. The best ERP systems assure accounting of the obtained production, delivery in sections, automatically drawing up the primary documents, management discharge for: raw materials, materials, semi-manufactured products and so forth.

From the reports regarding consumer tickets, based on high-performance reporting system of delivered production, expenses in the three sections could be established for each of the two orders. Regarding the expenses on staff's incomes, according to their destination and based on timekeeping in sections and on Production – Manufacturing Report, there could be exactly established and distributed the expenses with the staff's salaries directly productive per production sections and per orders (implicitly per product). Based on timekeeping, expenses on destination salaries were emphasized.

As indirect expenses, besides salary reporting in the auxiliary sections, there are other sorts of indirect expenses which will have to be assigned: commissioning consumption of inventory items, expenses on energy and water, expenses resulted from delegations, currier fees, banking services, marketing consulting and ERP economic system consulting, as well as expenses on amortization. In production section it is impossible to track the usage of machineries on each and every product,



therefore the expenses on amortization are considered as indirect production expenses, subsequently being assigned per orders and per products.

In order to follow on the cost calculation on the two products, we will present the working procedures using two methods: per-order method and ABC method.

### I. Cost assignment in Management Accounting using Per-order Method

In the management accounting held using per-order method, the cost bearer is represented by **production internal order** that connects the customer's firm order with the production networks per each finished or semi-finished product. Hence, having in the system the intern production orders, based on recopies, one gets the costs of raw materials and materials and of semi-finished products.

In the per-order cost calculation method case, we will firstly try to determine the direct costs for the two orders. Benefitting from the ERP system used by the corporate entity we can quite precisely find the direct costs for expenses on raw materials, consumables, expenses on gross wages / salaries of the directly productive staff, and associated taxes paid by the entity (CAM 2,25% - work insurance contribution). As it results from the table 2, total direct costs sum up a total of 61779,90 Ron. The rest of the expenses that cannot be directly imputed on a product are indirect costs.

According to calculation methodology in the per-order method we will calculate and assign direct expenses on production orders, and implicitly, on final products. There also is the practice of placing a production intern order for each product that a client ordered.

Using the classic per-order method we will assign indirect expenses on orders coming from: expenses on administrative personnel (TESA), selling expenses, maintenance expenses, central heating expenses, as well as other indirect expenses. In order to make these calculations we will use the calculus of repartition  $k$  coefficient, which will be calculated by having repartition basis the total of direct gross wages and taxes afferent to the staff in the direct productive sections (practice used within the entities that use the per-order method).

Using table 2 we show repartition basis for  $k$  coefficient of 22034,86 Ron. This includes direct wages and taxes for the A product of 16871.3 Ron and direct wages and taxes for the B product having a total amount of 5163,63 Ron. Relating total indirect expenses to each department or section, we will get the  $K$  coefficient for each and every product and for each and every section.

Table 3.

#### Calculating the K coefficient and assigning indirect per-order expenses

Current number	Section or department	Total expenses per section or department	Repartition base			Calculated K	Values of indirect expenses per orders	
			Order A	Order B	Total		Order A	Order B
1	2	3	4	5	$6=(4+5)$	$7=(6/3)$	$8=(7 \times 4)$	$9=(7 \times 5)$
2	TESA	12,935.00	16871,3	5163,63	22034,86	0.5870	9,903.83	3,031.17
3	Sale	3,125.00	16871,4	5163,64	22034,86	0.1418	2,392.69	732.31
4	Maintenance	3,040.50	16871,5	5163,65	22034,86	0.1380	2,327.99	712.51
5	Central heating	5,538.25	16871,6	5163,66	22034,86	0.2513	4,240.42	1,297.83
6	Other indirect expenses	10,146.80	16871,7	5163,67	22034,86	0.4605	7,769.01	2,377.79

Source: Projection of authors

In table 3, total indirect expenses have been centralized per sections from table 2 and using the calculation formula of K coefficient, values for indirect expenses to be assigned per order in each order within each section or implicated department, were determined. The K coefficient is calculated as division between the total of the assignment basis and the total of expenses per sections. The values of indirect expenses to be assigned per each section are found by multiplying the coefficient of each section/department by expenses on direct wages and taxes per each product.

Table 4.

**Forming the full commercial cost through per-order method**

Expenses section	Product A Unit value	Order A value	Product B Unit value	Order B value
1. Total direct costs of which:	1,352.21	40,566.25	353.56	21,213.63
1.1 Raw materials	769.83	23,095.00	259.17	15,550.00
1.2 Consumables	20.00	600.00	8.33	500.00
1.3 Expenses on personnel's wages	550.00	16,500.00	84.17	5,050.00
1.4 Contribution expenses CAM(2.25%)	12.38	371.25	1.89	113.63
2. Total indirect costs, of which:	808.04	24,241.26	123.65	7,419.29
2.1 Administrative personnel	330.13	9,903.83	123.65	3,031.17
2.2 Maintenance	77.60	2,327.99	50.52	712.51
2.3 Central heating	141.35	4,240.42	11.88	1,297.83
2.4 Other indirect expenses	258.97	7,769.01	21.63	2,377.79
3. Sales costs:	79.76	2,392.69	39.63	732.31
Full commercial cost	<b>2,240.01</b>	67,200.20	<b>489.42</b>	29,365.23

Source: Projection of authors

**II. Cost repartition in management accounting using ABC method**

**Step 1. Identifying the entity's activities and the afferent expenses**

According to the methodology of cost repartition the ABC method, the entity's activity was analysed as well as the specific of present costs. Therefore, with the purpose of assigning indirect expenses, as a result of the analysis, we concluded that the entity may be analysed especially based on four activities:

1. *Preparing and starting-up the production*
2. *Functioning and maintenance*
3. *Managing the entity*
4. *Distribution and service*

The direct expenses are very clear regarding their destination and they will be assigned to the two orders, at the level of articles. Indirect expenses identified in table 2 will be assigned per activities, according to the specific of each and every activity.

Table 5.

**Expenses repartition per activities in financial accounting**



ACTIVITY		Consumption of inventory items	Energy and water expenses	Carrier fees expenses	Delegation expenses	Banking services expenses	Marketing and consulting expenses	Amortization expenses	Wages with taxes expenses	TOTAL OF EXPENSES PER ACTIVITY
1	Preparing and starting-up the production	320	/	/	/	/	3000	/	2126.8	5446.8
2	Functioning and maintenance	/	5950	/	/	/	/	8500	3578.75	18028.75
3	Management	200	250	400	500	700	/	/	6135	8185
4	Distribution and services	80	/	/			800	200	2045	3125
TOTAL OF EXPENSES		600	6200	400	500	700	3800	8700	13885.55	34785.55

Source: authors' projection

Each activity is resource consuming. In table 5 we assigned the expenses per each product, presented within table 2, as follows:

**1. Activity of starting-up the production** includes expenses on *inventory items, marketing expenses (expenses connected with soft consulting for TESA) and expenses on wages and associated taxes* that are connected to preparing and starting the production process. These sum a total of **5446,8 Ron** and the most part of the expenses is represented by consulting ones made by the administrative staff and the expenses on indirect wages.

**2. Regarding the activity of functioning and maintenance** *expenses on energy and water, expenses on amortization and expenses on wages and associated taxes* are totally cumulated of **18028,75 Ron**. Expenses on energy and water come from the maintenance department, central heating and other indirect expenses. Amortization expenses are summed up from all sections, including the direct productive ones. Wages expenses and associated taxes come from auxiliary sections respectively, maintenance and central heating.

**3. The administration** activity of the entity takes the total indirect expenses summing **8185 Ron**, from: *consumption of inventory items, energy and water, carrier fees, delegations, banking services and wages expenses together with the afferent taxes*.

**4. The Entity's activity of distribution and services** takes indirect expenses coming from: *consumption of inventory items, marketing and consulting expenses, amortization expenses and wages and tax expenses*, summing **3125 Ron**.

### Step 2. Establishing cost inductors per each activity

By analysing the elements that may be considered as cost "causes" per each activity, for an expenses repartition as close to reality as possible, we presented in table 6, **the cost inductors** per each activity, as well as their quantum.

Table 6.

#### Cost inductors and their volume quantum

Activity	Cost inductor	Product A	Product B	Inductor cost volume
Preparing and starting the production	Hours per soft consulting (hours)	40	20	60
Functioning and	Machinery time (total hours)	2700	1500	4200

maintenance				
Administration	Direct wages and taxes (Ron)	16871.3	5163.63	22034.88
Distribution and service	Products weight (kg)	150	40	190

Source: own projection of authors

Taking into account the specific of the ABC method studied in the field literature, as well as the analyses made with the practitioners, the elements which cause costs may and have to be the main factors according to which the cost inductors are established.

We could observe that within the activity of **preparing and starting the production** the largest expenses weight is represented by consulting expenses. These were received on invoice and special schedules and therefore a number of hours per consulting could be assigned.

Referring to the activity of **functioning and maintenance** we consider the machinery time as being the most appropriate cost inductor. From the evidences of technical staff could be pointed out a number of machinery hours afferent to the two orders, as it results from table 6.

Repatriation of indirect expenses for the **administration** activity will be made according to direct wages of the direct productive workers with their afferent taxes, identifies in table 2.

We consider that the **distribution and service** activity has unit products weight as cost inductor. According to this indicator deliveries are especially appointed and other expenses that might be directly correlated with this indicator may be identified within the company.

### Step 3. Cost absorption using the ABC method

Table 7.

#### Indirect cost absorption using the ABC method

No	Activity	Cost inductor	Activity cost	COST INDUCTORS VOLUME			Costs absorption		
				Product A	Product B	Total volume	Unit cost inductor	Product A	Product B
0	1	2	3	4	5	6	$7=3/6$	$8=7x4$	$9=7x5$
1	Preparing and starting the production	Consulting hours	5446.8	40	20	60	90.78	3631.2	1815.6
2	Functioning and maintenance	Machinery hours	18028.75	2700	1500	4200	4.2926	11589.9	6438.84
3	Administration	Direct wages and taxes	8185	16871.25	5163.63	22034.88	0.3715	6266.94	1918.06
4	Distribution and service	Products' weight	3125	150	40	190	16.447	2467.11	657.895

Source: authors' projection

As it results from table 7 calculation procedure anticipates the calculation of unit cost per inductor, dividing the total expenses per activity to the inductors' total volume. After we get the unit cost per inductor, the obtained value is multiplied by the volume of each cost inductor per product. We

may observe that in this moment we got the reports on indirect expenses assigned using the ABC method, as follows:

- Order A: 23955,15 Ron indirect expenses (798,51 Ron unit indirect cost for 30 products)
- Order B: 10830,40 Ron indirect expenses (180,51 Ron unit indirect cost for 60 products)

By verifying we can observe that adding the total indirect expenses per orders we get the same quantum of indirect expenses namely, 34785,55 Ron.

Table 8.

**Making complete cost using the ABC method**

Section of costs and expenses	Quantity per orders		Product A	Order A	Product B	Order B
	Product A	Product B	Unit value	Total value	Unit value	Total value
1	2	3	4=5/2	5	6=7/3	7
<b>1. Total direct costs of which:</b>	<b>30</b>	<b>60</b>	1,352.21	40,566.25	353.56	21,213.63
Raw materials	30	60	769.83	23,095.00	259.17	15,550.00
Consumables	30	60	20.00	600.00	8.33	500.00
Expenses on staff's wages	30	60	550.00	16,500.00	84.17	5,050.00
CAM contribution expenses(2.25)	30	60	12.38	371.25	1.89	113.63
<b>2. Total activity costs of which:</b>	<b>30</b>	<b>60</b>	798.51	23,955.15	180.51	10,830.40
Preparing and starting the production	30	60	121.04	3,631.20	30.26	1,815.60
Functioning and maintenance	30	60	386.33	11,589.91	107.31	6,438.84
Administration	30	60	208.90	6,266.94	31.97	1,918.06
Distribution and service	30	60	82.24	2,467.11	10.96	657.89
<b>Complete commercial cost</b>			<b>2,150.72</b>	64,521.40	<b>534.07</b>	32,044.03

Source: authors' projection

For analysing the results obtained through the two cost calculation methods, we make table 9:

Table 9.

**Analysing the differences between the obtained results**

Total costs	Per-order method				ABC method			
	Product A (York Wardrobe)		Product. B (York Nightstand)		Product A (York Wardrobe)		Product. B (York Nightstand)	
	Total	Unit	Total	Unit	Total	Unit	Total	Unit
<b>Direct expenses</b>	40,566.25	1,352.21	21,213.63	353.56	40,566.25	1,352.21	21,213.63	353.56
<b>Indirect expenses</b>	26,633.95	887.80	8,151.60	135.86	23,955.15	798.51	10,830.40	180.51
<b>Total cost</b>	67,200.20	<b>2,240.01</b>	29,365.23	<b>489.42</b>	64,521.40	<b>2,150.71</b>	32,044.02	<b>534.07</b>

Source: authors' projection

As one can observe, there are significant differences between the two calculation methods. Product A, York Wardrobe, has a 89,3 Ron lower production cost per piece in the ABC method as compared to per-order method, the share of assigned indirect expenses being lower. In the ABC method, product A has a 4% lower production cost than in the per-order method.

In the case of product B, using the ABC method, we have identified a higher unit cost with 44,65 Ron than in the per-order method. In this case we have a 9,12% higher unit cost than the one obtained using the per-order method.

It is quite easily noticed that at such differences, the corporate entity's management could make different decisions regarding production process, especially in the situation in which a decision is made to produce a higher quantity of both products. Making the sales prices is also directly dependent on complete commercial price.

### **Conclusions**

Procedurally, the ABC method is properly considered a modern method of cost calculation, very important pros being evident regarding the problem of cost management in management accounting. Among the pros that we consider important we list:

- Increase in the accuracy of cost calculation due to using the notion of cost activity and inductors, regarding the repartition of indirect expenses;
- Ensuring a better repartition of indirect expenses per activities by determining an appropriate cost repartition base, through directly following the cause-effect relationship among activities and cost inductors per activities;
- Possibility for the management to separate certain processes or activities conducted within the entity, for evaluating their true capacity of participating in creating value for the entity;
- Create an overview on the way in which the entity's resources are consumed by activities and therefore increase the quality of the accounting data.

The Furniture industry in Romania is a special sector of industrial branches in our country. In the context in which a decrease in used wood and a better added value is desirable, we consider the investments in furniture processing as being opportune, detrimentally to processing wood for timber export or other primary products obtained by processing wood. In order for the entities conducting activities in the furniture industry to be sustainable and to be able to undertake their activity having a professional management that is adapted to modern methods of economy, we recommend the ABC method for cost management and an ERP software for different processes which need to be integrated.

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