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Cost allocation in wholesale drug trade

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Cost allocation in wholesale drug trade

ABSTRACT This paper undertook to describe cost allocation processes used in wholesale drug companies, in the context of cost systems, in the State of Merida – mostly focusing on Alberto Adriani municipality – and its effect in decision making and operations. Descriptive, field research was conducted, based on a non-experimental design of a case study. It is concluded that the calculation of per-branch profitability is arbitrary under the system of total costs used by these companies due to allocation of overhead costs. Such allocation is made based on the level of sales of physical units from headquarters to each branch, which disrupts profits. It is recommended to carry out cost allocation for external purposes in accordance with observable generation bases, or cost drivers which measure consumption of resources or the efforts made by headquarters for a specific branch, under the absorption costing system. Overhead cost allocation is not recommended in order to conduct internal evaluation at branches, in pursuance of the provisions in the direct cost system.

KEYWORDS marketing, management accounting, costs, decisions, drugs.

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Asignación de costos en las comercializadoras mayoristas de medicamentos

RESUMEN Este artículo tiene como finalidad describir, en el marco de los sistemas de costos, los procesos de asignación de costos utilizados en las empresas mayoristas de medicamentos del estado Mérida, concentradas en su mayoría en el municipio Alberto Adriani, y su efecto en la toma de decisiones y las operaciones. Se desarrolló una investigación descriptiva, de campo, basada en un diseño no experimental de un estudio de casos. Se concluye que el cálculo de la rentabilidad por sucursales, en el marco del sistema de costos total utilizado por estas empresas, es arbitrario debido a la asignación de gastos indirectos, con base en el nivel de ventas por unidades físicas desde la unidad central a cada sucursal, lo que distorsiona las utilidades. Se recomienda, para fines externos, la asignación de costos de acuerdo con bases generadoras observables o generadores de costos que midan el consumo de recursos o los esfuerzos de la unidad central sobre una sucursal, en el marco del sistema de costeo absorbente. Para evaluar internamente la gestión de las sucursales se recomienda no asignar gastos indirectos, según lo planteado en el sistema de costeo directo.

PALABRAS CLAVE comercialización, contabilidad de gestión, costos, decisiones, medicamentos.

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Distribuição dos custos nas grandes fornecedoras de medicamentos

RESUMO Este artigo tem como finalidade descrever, na abordagem dos sistemas de custos, os processos de distribuição de custos utilizados nas grandes empresas fornecedoras de medicamentos no estado de Mérida, concentradas em sua maioria na cidade de Alberto Adriani, e suas consequências na tomada de decisões nas operações. Se desenvolveu uma pesquisa descritiva, em campo, baseada num plano não experimental de um estudo de caso. Se conclui que o cálculo da rentabilidade por lojas, baseado do sistema de custos totais utilizado por estas empresas, é arbitrário devido à distribuição de gastos indiretos, com base no nível das vendas por unidades físicas partindo da unidade central à loja, o qual distorce as utilidades. Recomenda-se, para fins externos, distribuir os custos de acordo com bases geradoras observáveis ou geradoras de custos que meçam o consumo de recursos ou dos esforços da unidade central sobre uma loja, baseado no sistema de custeio absorvente. Para avaliar internamente a gestão das lojas, recomenda-se não colocar gastos indiretos, segundo exposto no sistema de custeio direto.

PALAVRAS CHAVE contabilidade de gestão, comercialização, custos, decisões, medicamentos.

Introduction

The constant evolution of trade and financial organizations has prompted the emergence of new techniques, tools and information systems that achieve survival, profit maximization and growth. To reach these goals, companies must have an adequate and efficient management of costs, since their success is based on suitable decisions. Based on these assumptions, the importance of knowing in detail the calculation systems and internal costs control is evident, as well as the cost allocation or apportioning between the different components of the organization (central or corporate units and distribution centers) in order to optimize the cost allocation processes, thereby improving the managerial functions of the company.

According to Gonzalez & Morillo (2013) - quoting Sierra (2002), 90 % of small and medium enterprises do not know the cost structure and financial position of each of its business units or products; they only have information on the overall financial situation of the company, product of the inadequate cost systems handled. Morillo (2005) states that the management of these companies - not considering the costs of the business units separately - can make incorrect decisions such as removing units or seemingly unprofitable activities, among other inadequate cost reduction decisions; nor can they optimize the use of resources or make cost projections by business units as they do not know their actual costs accurately, which hinders the control process. According to Jones, Werner, Terrel & Terrel (2001), problems arise from the absence of an adequate cost system, when decisions are made without considering the cost structure, when it is incomplete or incorrect, or when the information about a particular segment of the company is not properly prepared, known as segment reporting[1].

For the Chamber of the Pharmaceutical Industry (Cifar, 2014) (*Cámara de la Industria Farmacéutica* – for its acronym in Spanish), concerning the wholesale traders of drugs and, in general, in all companies in the Venezuelan pharmaceutical chain - companies of strategic nature for the quality of life of the population of any country – we see a constant situation of strong pressures dictated by increasingly aggressive fiscal and economic policies, such as the Fair Prices Organic Act (*Ley Orgánica de Precios Justos* – for its acronym in Spanish), adopted in session of the National Assembly (*Asamblea Nacional* – for its acronym in Spanish) in early 2014 and the drugs prices control and regulation. According to Cifar (2014), these factors affect the pharmaceutical industry, which faces the invariability of prices of 1,144 products since 2003, and this universe of products, 80 % has a maximum selling price to the public less than Bs. 20, and just 5 % of them more than Bs. 50, while the average price of products outside this list and having greater turnover is Bs. 35.

According to Morillo (2005), when steady income is handled in any organization, as a result of price control or regulations, a viable alternative to improve profits and ensure short - term survival of the company is cost control. That is why the need for information and appropriate cost allocation not only depends on internal causes but also to external causes; the internal causes have to do with the needs of increasing or maintaining the profit margin of the company when revenues are constant, and external causes, with the creation of competitive advantages; in the words of Shank & Govindarajan (1995), create greater value to consumers in exchange for a price similar to the competition (differentiation strategy), or create an equivalent value for a lower price (cost leadership strategy). In both cases, it is necessary to know the cost structure to choose the adequate designs and processes.

The Venezuelan pharmaceutical sector involves three types of agents: laboratories, drug

1 Even for external purposes, or as part of financial accounting in Venezuela organizations must submit financial information by operating segment, according to the International Financial Reporting Standard 8 (IFRS-8), considering the basic principle that: "An entity shall disclose information that enables users of its financial statements to evaluate the nature and financial effects of the business activities in which it engages and the economic environments in which it operates "considering that an operating segment is a component of an entity:" (a) that engages in business activities from which it may earn income from ordinary activities and incur expenses (including income from ordinary activities and expenses relating to transactions with other components of the same entity), (b) whose operating results are reviewed regularly by the highest authority in decision - making operation of the entity to make decisions about resources to be allocated to the segment and assess its performance; and (c) on which is available discrete financial information "(Federation of Public Accountants of Venezuela, 2014).

stores (drug wholesale trading companies) and pharmacies: three types of agents are involved in the Venezuelan pharmaceutical sector. Laboratories are responsible for the processing of raw materials for the production of drugs, the packaging of their products and the transfer to different trading wholesalers in the country. Drug stores are the trading wholesalers; they fulfill the function of distributing drugs from their warehouses to retailers. Finally, pharmacies and retail shops are responsible for storing and retail selling pharmaceuticals. Thus, drug stores or trading wholesalers acquire drugs from laboratories in order to subsequently sell them to pharmacies (Cifar, 2014).

The existence and importance of drug stores lies in a first term, in the gap between laboratories and pharmacies and, secondly, on the volume order of the latter. Certainly, pharmacies carry out their orders based on the daily deficit of inventories, demanding variety of drugs in small quantities.

Drug stores, such as pharmaceutical companies, are characterized by operating with central or corporate units where all actions to be performed within the annual operating plans of the company are realized; such corporate units have compliance lines to be followed by branches or distribution centers. Branches or distribution centers, located in different geographical locations in the country, generate costs and revenues, while central or corporate units, such as corporate centralized units or entities do not generate sales revenues, but have a considerable cost structure for the functional support provided to the entire organization, and whose sole function is to coordinate and establish policies and management strategies of the organization.

At the local level, in the state of Merida are three companies engaged in the wholesale marketing of pharmaceutical products and derivatives, mostly concentrated in the municipality of Alberto Adriani. It is the *Corporación Drolanca C.A.* (Drolanca), the *Droguería Farmacéutica Andina C.A.* (Drofandi C.A.) and the *Droguería Merida, C.A.* (Branch of the *Corporación Belloso, C.A.,* Cobeca). The first two have their headquarters in the city of El Vigia, municipality of Alberto Adriani, while the third one is located in the city of Mérida, municipality of Libertador.

All these companies sell wholesale finished pharmaceutical products, and, according to Moreno (2012), have a shared symptoms, as though to calculate the overall profitability of the company sales generated by all branches or distributors located in the central, eastern and western region of the country are grouped into an overall total along with the costs incurred in the same and in the central or corporate units, these companies are characterized by not knowing exactly their cost structures by branches, since these are charged with costs generated by corporate central units that do not generate revenue but large amounts of costs (Moreno, 2012). In addition, according to Cifar (2014), in the chain of the pharmaceutical sector (laboratories, drug stores and pharmacies) drug wholesale trading companies (drug stores) are those with lower profit margins.

Purpose of research

In light of the above, and because of the low profit margins obtained in the drug wholesale trading companies, according to Cifar (2011), it is appropriate to describe (within the framework of cost systems) the cost allocation processes used in drug wholesale trading companies in the municipality of Alberto Adriani, in the state of Merida, in connection with decision - making and operations, in order to implement the principles and theoretical foundations associated with cost accounting as a management tool for the proper decision - making, allowing to perceive the true profitability of the business units according to the needs of each decision.

Knowing the cost system operation could improve the profitability analysis of the drug wholesale trading companies through the formulation of cost allocation or apportioning variables, in line with the different business activities that guide decision - making. Similarly, it could be determined by cost management how profitable each business unit is, or which of these is more beneficial to invest, if it is convenient to invest in other future ones or if it is necessary to merge some of them, by providing knowledge about the more profitable branches or distributors. Secondly, knowing the costs of each unit could facilitate the establishment of criteria to control them and manage their resources in a more efficient manner; thus, from a continuous improvement process, profitability levels could be improved at the same time by reducing expenses and costs.

Literature Review

An organization can only operate successfully if it maintains optimal control over its costs. It should know precisely how much the manufacture of its products or the provision of its services cost.

In this sense, *cost accounting* measures, analyzes and reports monetary and non - monetary information related to the acquisition costs or use of resources within an organization. The calculation of the cost of a product is a function of cost accounting that meets the needs to assess inventories of financial accounting, as well as the cost accounting decision - making needs; for example, the decision of how to allocate prices to products, and the choice of which of them should be promoted (Horngren, Datar & Rajan, 2012). From the above, cost accounting gives companies the ability to determine the cost of producing and selling each item or providing a service, so that management can exercise effective and efficient control of the resources that are available, since it has immediately detailed figures of the direct materials, direct labor, indirect costs incurred in manufacturing, as well as the distribution, administration and sales costs of each product.

The *cost* constitutes the basis for performance and management decision - making evaluation; it is the sacrifice or advantage measured by the price paid or payable to acquire goods or services; i.e. it is the valuation of a good or service (Weil & Maher, 2005). "It refers to expenditures or disbursements made to acquire goods or services" (Lang, 1958, 236 p.), which are classified or grouped according to analytical requirements; for example, by functions linked to the activities of manufacturing or distribution. According to Weil & Maher (2005), some authors use *cost* as synonymous with *expense*; however, when the benefits of the acquisition of goods or services purchased expire, the cost becomes an expense or loss. In this sense, Polimeni, Fabozzi & Adelberg (1994) defined *expenses* as costs that have been produced a benefit to the company. For these authors, these are expired costs that will not generate more profit and therefore must be applied to the income for the period. In that case, the expenses are compared with income to determine the net profit or loss for a period, so that management could take corrective actions.

There is a major cost type according to its identification in the object of costs; it is direct costs and indirect costs. In this regard, Horngren *et al.* (2012) stated that *direct costs* are those associated with an object of costs in particular and may be attributed to such object from an economic and feasible point of view; in this case the term attributable cost is used to describe the allocation of direct costs to a specific object of costs. Moreover, *indirect costs* are those associated with the particular object of costs; however, they cannot be attributed to such object from an economic and feasible point of view.

Another important aspect in cost accounting is in relation to the direct and indirect *allocation costs* processes. According to Amat & Soldevila (2011) and Hansen & Mowen (2007), allocation is the process of allotment of costs to products or objects of costs (item you want to cost) through a process of objective quantification and identification or exact tracking called involvement; given the precision and accuracy of cost allocation process, involvement could only be practiced with the direct costs. When in the allocation process an association, quantification or accurate tracking cannot be established feasibly, as in the case of indirect costs, cost allocation is carried out through a procedure called apportioning or award based on allocation criteria or bases, that are really the bases that generate costs - for example, according to Amat & Soldevila (2011), from an allocation process across departments, but not from a clear and accurate quantification.

According to the literature review conducted, there is a variety of costing systems, according to the elements of production cost; conventional cost accounting also includes absorbing costs and partial cost[2] systems; the latter have emerged by information requirements for decision - making (AMAT & Soldevila, 2011, Horngren *et al*., 2012).

The first, according to Horngren *et al*. (2012), is required for external reporting in many countries, since it measures the costs of all manufacturing resources necessary to produce the

2 By tradition, management accounting is addressed only differentiation between variable costing and absorption costing; and it is treated by authors like Polimeni *et al.* (1994) and Horngren *et al.* (2012), such that costs partial systems comprise only the variable costing system. It is true that systems of partial costs initially emerged as a variable costing system; however this system has joined him wide range of oriented decision - making, such as direct costing and variable costing evolved (AMAT & Soldevila, 2011) systems.

inventory, and is characterized by (according to Backer, Jacobsen & Ramirez, 1997) charging all the production costs (fixed, variable, direct, indirect, among others) to the processed products, assuming that all are necessary to manufacture a certain product. This costing system only makes the distinction between costs able to be inventoried and period costs.

Regarding *partial cost systems*, it is necessary for management to manage relevant information, because there are elements that can distort those generated by cost systems; this happens when you want to distribute costs that are difficult to identify (indirect costs), or costs of constant behavior versus activity level (fixed costs), including the objects of costs; in this case any distribution carried out may jeopardize the fair and proper costing of products. To that end, the partial cost systems were created based on different analysis of contribution margins reported, in which only part of the costs is assigned to objects of costs, avoiding distortions that could generate indirect, fixed costs, etc. (Amat & Soldevila, 2011). The main advantages of the partial cost systems, according to Cordobes, Jacobsen & Ramirez (2000), are: their simplicity, because it is easier and cheaper both on record and in analyzing the non - allocation of certain types of costs; additionally, they are highly useful for analyzing the contribution margin generated by each product or service, or object of costs.

Cordobés *et al*. (2000) suggested that there are different partial cost systems; some of them can be identified according to the classification of costs, according to the activity level and their identification in the object of costs. Thus, there appear some types of partial cost systems as a result of the combination between costs classified according to the activity level and those classified under their identification in the object of costs. The first are variable costs and fixed costs, and the latter are direct costs and indirect costs. Therefore, variable costs systems, direct costs systems and evolved costs systems arise.

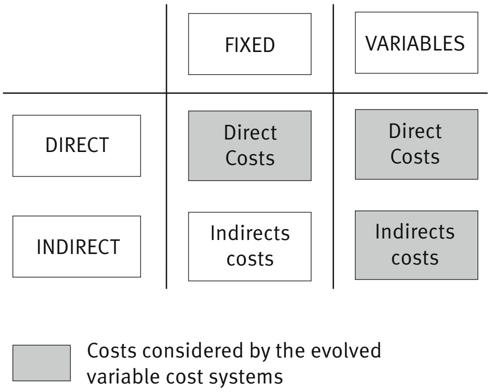
The variable cost system is characterized by the fact that the only costs which are considered as part of the cost of manufactured products are the variable costs, because fixed costs only represent the ability to produce and sell, regardless of what is manufactured (Backer *et al*., 1997); thus, variable production costs are the only ones which are taken as items able to be inventoried, while fixed production costs are considered costs for the period. Some authors like Ramirez (2013) use the term direct costing as a synonym for variable costing. However, other authors like Marín Uribe (2011, p. 298) explain the reasons why direct costing and variable costing are not the same. "The variable costing includes as costs able to be inventoried, not only direct production costs, but also indirect manufacturing costs", since there are also indirect variable costs.

The *evolved variable costs system*, according to Amat & Soldevila (2011), is a system in which costs allocated to products are variable costs plus all direct fixed costs (Figure 1); the latter are unrelated to the production volume and can be identified with respect to the object of costs for analysis, unlike the fixed indirect costs, which are not related to the production volume and cannot be attributed to an object of cost. For Mallo, Kaplan, Meljem & Jimenez (2000), the evolved variable costs system arises from the need for information of new organizations or companies which have substantial investments reflected in high levels of fixed costs.

Within the framework of the partial cost systems, another system of partial costs is the direct costs system, which is characterized (according to Morillo, 2007), by assigning only direct costs to the products or objects of cost, i.e. only costs in the calculation of product costs which directly allocable, with objective criteria, to the objects of costs are considered (see figure 2). This system allows us to find the contribution margin, for which we must deduct from income only the direct costs, regardless of their behavior, as well as the direct expenses of products marketing, such as fees and delivery or transport of finished product expenses. Thus, all costs and expenses regarded as indirect are taken to the results as the costs for the period. For Morillo (2007, p. 277), using the calculated marginal contribution boils down to an observation of the behavior or results obtained "for each product line or sales segment in the company, without the distortions that may arise from the arbitrary or misguided distribution of the indirect costs". Therefore, the direct costs system (for internal purposes) may be greater than the variable costs system and the evolved variable costs system.

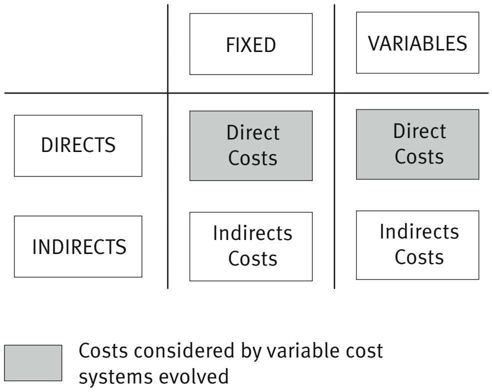
In any case, partial costs systems help to prepare reports by segment (*segment reporting*); this, according to Jones *et al*. (2001), is a report that provides information about a particular segment, considering the latter as a part of the organization run by an individual or team, or part of the organization from which information is required

FIGURE 1. Product costs in the evolved variable costs system.



Source: Authors, based on data from Amat & Soldevila (2011).

FIGURE 2. Product Costs in the direct costs system



Source: Authors, based on data from Amat & Soldevila (2011).

separately, in order to evaluate or to optimize decisions. Reports of a particular segment should not be dulled with information from other segments or the company in general, but must provide specific and detailed information on income and costs of the segment in particular, in order to obtain a margin by segment. However, income may be easily identified by segment, but information on costs is a delicate task. For Jones *et al*. (2001), variable costs can sometimes be easily associated with a segment and included in their respective reports, while some fixed costs can be hard to associate, so they can be classified as common fixed costs or indirect costs to benefit several segments or the entire organization, and as direct or traceable fixed costs. This analysis presented by Jones *et al*. (2001), is associated with the evolved variable costing presented by Mallo *et al*. (2000) and Amat & Soldevila (2011). According to Jones *et al*. (2001), there are some cases of common variable costs, so we could continue their analysis also discriminating the variable cost into indirect and direct, which corresponds to the cost analysis carried out on the direct costing considering the segment of the company as object of costs.

Since the common or indirect costs benefit various segments, and these segments managers often have little or no control over these costs, Jones and his colleagues recommend wonder whether "the cost will continue in case the segment disappear"; if the cost continues, this is a common cost, but if the cost disappears together with the segment, it is a direct cost (Jones *et al*., 2001, p. 411).

This has been a subject of debate, because those who claim that reports on individual segments excluding indirect costs should be submitted argue that managers of the segment have little or no control authority over costs that benefit or impact in various segments. Such costs should not be included in the management reports of their segments. Thus, reports by segment have better information about their usefulness or performance results since they only consider direct costs over which the segment manager has control (Jones *et al*., 2001).

The direct costs system is generally used to decide on the removal of a product or segment of the company, or simply to evaluate its performance, considering the direct costs as avoidable to eliminate the product, or controllable for management in case of evaluation (Jones *et al*., 2001, Amat & Sodevila, 2011). When it comes to evaluating performance by product line or segments of the company, the above is at the principle of the "controllability", according to which managers should be responsible only for financial results associated with activities that may influence or control (Antle & Demski, 1988), i.e. that managers cannot be responsible for revenues, expenses, costs and investments that are not under their control. In implementing this principle, managers should be evaluated only from the performance measures they can influence or control. In other words, the manager evaluation should be performed depending on what he controls, given the close relationship between the content of information and a sense of control.

It is understood in this principle that controllability is the manager's ability to affect the entries to obtain results from, for example, investment decisions and resource allocation; thus, managers influence outcomes, which should be measures in which a performance indicator should be controllable. In the accounting literature that is essential for the development of incentives for managers; the latter should be evaluated on the actions of those they have control, there that this principle has been widely used for the design of accounting reports facing the performance evaluation.

Similarly, regarding cost controllability, for Weil & Maher (2005), the success of the accounting system will depend on its ability to differentiate between controllable and uncontrollable costs, which does not depend on their behavior facing the level of activity, as not all uncontrollable costs can be fixed costs, while not all controllable costs are variable costs. On the other hand, controllability is related to the dimension of time, according to which costs resulting from decisions of prior periods are not controllable in the short term and in the long term; all costs could be controlled, at least to some point. For example, control over the acquisition of fixed assets occurs when management approves the purchase; after that date, depreciation expense is uncontrollable.

Another costing system of high impact on operations is the activity - based costing (ABC), which, according to Pavlatos & Paggios (2009), is a simple system focused on two stages in which the resources are assigned to the activities and subsequently to the products or objects of costs, based on the amount of activities required to manufacture the products. In other words, resources or costs are allocated to activities, where they are also allocated to object of costs from a causal link between the cost drivers and the activities (Player & Lacerda, 2002). This system is based, according to Caldera, Baujín, Ripoll & Vega (2007), in three basic premises: a) the products or services require and consume activities; b) activities in turn consume resources or cause costs; c) resources cost money. Hence, according to Chea (2011), ABC objectively allocates the costs based on the cost - effect relations.

Methodology

To reach the goal set, a descriptive transactional field – type research was conducted. This research was in turn based on a non - experimental design of a case study as an empirical research that studies the cost systems in their natural context with multiple data sources (Yin, 2014). The case study is defined as a methodology increasingly accepted in administrative sciences to explain complex relationships or details non – detectable through surveys or where conducting experiments is impossible, and in this study, to explore and describe the actual context in which the phenomenon occurs, with few precedents. In that sense, the target population for this research was determined by the entire costs systems used by drugs trading wholesale companies located in the municipality of Alberto Adriani, in the state of Merida. This finite population under study was identified from the directory prepared by the Chamber of Industry and Commerce of the State of Merida (*Cámara de Industria y Comercio del Estado de Merida*). Only two drugs trading wholesale companies (drug stores) located in the municipality of Alberto Adriani, in the state of Merida were identified in this list. These distribution companies are among the largest in the country; one ranks as the third national and the other is sixth, according to the statistical report of August of 2012 provided by the Venezuelan Chamber of Drug Stores (Cavedro - Cámara Venezolana de Droguerías – for its acronym in Spanish). These data justify the choice of municipality of Alberto Adriani, in the state of Merida, as spatial area of this research.

Since the population size is reduced, and the pilot test of the data collection instruments yielded results that tend to consider the companies to study as highly homogeneous with respect to the variables under study (level of activity, required types and amount of imported inputs, income level, type of expenditures incurred, among others), it was decided to carry out an thorough study of the objects of study, i.e. a census. For this reason, sampling methods are omitted in this research, as well as the methods for the selection of the sample size.

Data collection in this research was carried out using primary sources, supported by personal interviews, survey technique and observation guide, whose instruments are presented in the appendix. Structured interview guide and questionnaire (see Appendix) were applied to managers belonging to the administration and financial planning and operations departments of the companies under study. It has to do, specifically, with front - line managers (administration and finance, marketing and sales, operations, human resources managers) and second - line (accounting, payroll, information technology, purchasing, credit and collection , purchasing, sales, logistics, systems and developments, loss prevention and control, quality managers), for a total of twenty six (26) managers, which provided data on the performed business activity, company operations and general characteristics of the cost accumulation systems. Similarly, the financial statements and the observations made to them were provided by the departments of financial planning, which operate as an advisory unit or *staff* to the administration and finance division in charge of managing the modules and companies' financial and cost - related information. The data collection instruments were tested for content validity by the ranges ratio coefficient (CPR – *Coeficiente de Proporción de Rangos* – for its acronym in Spanish) statistical procedure based on expert judgment method (Hernandez, 1994). With this coefficient, the concordance level of the judgement of the experts who evaluated the data collection instruments was measured; specifically, the instruments were evaluated by five experts in the following fields: research methodology, cost accounting, financial management and statistics. Once the instruments were designed, we proceeded to implement a pilot test to the companies mentioned in the municipality of Alberto Adriani, in the state of Merida, under study, to verify the reliability and operability thereof.

Results

Generally speaking, when considering the accounting system we could see that 46 % of the population surveyed said that the *purpose of the general accounting of the company* is to determine and disclose the profit or loss of the organization at the end of the fiscal year, while 31 % believe that this should be limited to provide the information required for planning and control of operations carried out by the company. Finally, a small portion of the interviewed managers considered that accounting also provides financial and economic information to facilitate the operational, tactical and strategic decision - making.

The reliability and timeliness of information thrown by the *accounting records for decision - making*, most of the interviewed managers (56 %) said that the way the accounting records are kept, including the allocation of costs incurred by the accounting system and the calculation of benefits among the branches by the corporation, are totally incorrect, while 44 % of the managers estimated that accounting records made in the company provide fairly reliable and timely information for decision - making, associated with the management of daily operations (marketing and sales, human resource, payroll, credit and collections, purchasing, quality management, etc.). Given these responses, it is necessary to assess or review of the situation in this regard, inasmuch as it affects the overall management of the organization.

Regarding the *current costs allocation policies*, 54 % of the interviewed managers perceived that the cost allocation policy is wrong, and does not conform to the financial and administrative situation of the organization operations, where some branches generate more income but receive an inequitable amount of costs; this allocation does not efficiently support the decision - making process in the company. We could add to this proportion the opinion of 23 % of managers, who said they were moderately in disagreement in that such policies are flawed and inadequate facing the financial and administrative situation of the organization operations. Only 23 % of the interviewed managers stated that such allocations are accurate for the decision - making process in the company (totally agree). This means that more than half of the managers think that the cost allocation policy to branches is not adequate, and it is not equitable because it hinders the display of the operational, financial and administrative situation of the company.

In view of the detailed determination of the cost structure, including cost allocation, for the profitability calculation by organizational centers or units, it was necessary to analyze the calculation methodology used by the units under study. To do this, firstly, it was important to deepen on the *business development cycle* of the drugs trading wholesale companies, with a view to identifying the resources required to carry out each of the phases of the operating process.

In this sense, the distribution process begins with the issuance of the purchase orders for the different laboratories (commercial providers) by the purchasing department; such issuance is in terms of the demand and the requirements of the pharmaceutical market. Once the negotiation process is specified by the central unit with the laboratories through trade agreements and financial discounts conditions, the shipment of the units to each branch of the surveyed wholesalers is activated, where each branch – through a merchandise reception and invoice verification procedure – inventories are consigned, in order to meet the needs of major customers (pharmacies); these, by means of a work team, generate orders to be shipped to their retail outlets. Subsequently, the logistical process of billing and dispatch of goods is activated, in which the sales team can meet the needs of the sector. Finally, the business cycle is closed at the moment customers (pharmacy) pay the invoices associated with the products shipped, under the negotiated discounts conditions and payment terms. This business cycle takes place and feedback several times during all accounting periods, depending on the behavior of the market.

Expenditures or value transfers incurred during the previous operation cycle in the drugs trading wholesale companies are in respect of: drugs to be marketed (goods for sale), staff expenses, patents, taxes, general maintenance, professional fees, leases, systems expenses, overheads, telecommunications, sales commissions, fleet maintenance, stationery costs and external and own financing interest expenses, among others. It was noted that such expenditures are included in the structure used by the companies studied to measure the profitability associated with its management, and in which the costs and expenses allocation of the corporate unit is applied to branches. Specifically, in Table 1 - prepared from averaged figures and obtained by the researcher in the observation performed to the financial statements of the companies studied - the profit and loss statement is illustrated with the operating income of each branch, as a result of the management in the activities performed. This report estimated the income per branch located in different geographical parts of the country, from their own revenues obtained as a result of their drugs selling operations, accompanied by their respective discounts, sales offers and returns, cost of sales, laboratories financial discounts, among other things, in order to determine the gross operating profit.

Finally, Table 1 presents the cost structure necessary to carry out the marketing cycle, categorized into three sections for each branch. This categorization was determined, in this research, having as main input the general and trial balances and the observed charts of accounts, where the found accounting concepts items, in combination with information provided by the interviewed managers. The first section refers to administrative expenses, which includes staff expenses, municipal patents and other taxes derived from the Organic Law on Science, Technology and Innovation (Locti – *Ley Orgánica de Ciencia, Tecnología e Innovación* – for its acronym in Spanish), general maintenance, professional fees, leases, general systems and expenses, among others. According to the observed data in the staff expenses group we could find, in turn, the concepts of wages, contractual obligations such as contributions the Occupational Safety and Health System (SSO - *Seguridad y Salud Ocupacional* – for its acronym in Spanish), LVH, National Institute for Training and socialist Education (Inces – *Instituto Nacional de Capacitación y Educación Socialista* – for its acronym in Spanish), social benefits, vacation, vacation bonuses, profits and other concepts that apply under the guideline already mentioned. The second section includes operating and sales expenses, with everything concerning telecom expenses, sales commissions, stationery and other supplies expenses, travel expenses, fleet maintenance, uncollectible accounts losses, loss prevention and control expenses, and differences in inventories, among other concepts associated with the business operation, advertising and marketing expenses. The third section presents the financial income and expenses for depreciation, financing interests and income due to interests, among other items that the company uses to record items that have no direct relation to their own business operations (marketing).

In the very same Table 1, the cost structure - categorized in administrative, financial and operational - corresponds largely to expenses of the central unit allocated to each of the branches, according to the variables considered by the company, under the total costing or absorption system. That is, in the administrative, operational and financial expenses submitted by branches, there is a cluster of expenses resulting from the operations of the corporate unit (staff expenses, depreciation, general taxes, expenses for financial costs), all of them generated by departments belonging to the central unit, which are distributed among the branches. Such distribution is justified because, firstly, the departments of the central unit support the development of the branches operations and, secondly, because the central units do not generate their own income to support their cost and expenses structure.

The calculations for the allocation of expenditures are made, according to information provided by the interviewed managers, on the assumption that all costs of the corporate unit must be distributed proportionally according to sales levels in units, among the branches. Such distribution base (number of units sold) is applied in the companies studied, since it is a base commonly used in the sector, given the ease of calculation or achievement, for tax purposes and financial accounting. Similarly, according to the information gathered, managers indicated that this variable is used since it indicates the position or participation of the company in the domestic pharmaceutical market. This generates great distortion, as manifested by the same managers, because when the allocation is carried out only in terms of a commercial variable (level of sales for each branch), is unfairly awarded to branches with expenses that in fact had not been generated by them and of which they are not responsible for.

Therefore, we can say that the current system of profitability calculation by branch has inefficiencies in its design and operation, since the sharing of costs and expenses under this single variable can, first, allocate expenses that do not reflect the support given to corporate level; i.e., without the central unit having supported, developed and invested on the business unit (branch) enough efforts as to justify the affectation of the cost structure of those business units. For example, in the case of expenses associated to the support staff working at the corporate or central level located in their various areas of work (procurement, human resources, finance, internal audit, among others.), these workers invest the same amount of man - hours or effort to support the management of the various branches, regardless of the level of sales they obtain in their operations; that is, in many respects, the sales level of each branch is totally different from the effort or support level developed by the central unit.

Secondly, as stated by all the managers interviewed, the sales levels of each branch depend on the socio – demographic conditions of the population of the region in which the branch is located, which determines the demand of the regional pharmaceutical market served, as well as the preference level of final customers. This preference and demand level determines, in turn, the composition of the drugs sales mix (brand name and generic drugs, price regulated and non - regulated drugs). In these circumstances, branches settled in regions with high levels of demand for brand name, not generic drugs or with uncontrolled prices, would be unfairly allocating higher expenses for support staff at the corporate level, because they obtain higher sales levels.

According to the arguments above, which have been collected in interviews applied to managers, the full expenditure of the central unit or corporate level is allocated to each branch unfairly and inaccurately. This affects the branches' indicators, and results in a misleading financial statement for senior management, misrepresenting, in turn, the decision - making process, as indicated by the same interviewed managers. Specifically, 54 % of the interviewed managers stated that they fully agree that current levels of profitability per branch are not optimal, because they are not representative, since the cost - benefit ratio is not calculated properly for branches generating more revenue. These managers agree that the returns by branches are not satisfactory, since there is inadequate cost allocation. It should be noted that this high percentage of managers needs to include 46 % of the remaining interviewed managers, who stated that they were in moderate disagreement as to the assertion that current levels of profitability are optimal and representative of each branch's operations.

Similarly, 54 % of the interviewed branch managers and line managers fully agree that the current cost system is not suited to the financial situation of the organization, while 46 % of managers (moderately agree) indicate that the system, while not optimal, fulfills the functions of allowing the practice of financial statements analysis required to branches and at central corporate level, from gross profits in sales or before the branches are allocated expenditures of the central or corporate level. From the above, the same 54 % of managers think that a cost accounting system with a higher degree of detail or precision provides greater benefits in the operation and management of the company, with a more equitable and efficient resource allocation process.

Based on the above, and in view of evaluating the performance of each branch, we could simulate the use of a direct costing system by not allocating costs and expenses incurred in the corporate central unit to branches. Table 2 presents the cost structure and profitability of each branch in the direct costing system, where branches are

TABLE 1. Profitability by branch

PROFITS AND LOSS	MÉRIDA		CENTRAL-WESTERN		WEST		EAST		DISTRITO CAPITAL		TOTALS	
SALES (UNITS)	1.592.538		1.834.765		1.294.741		1.103.977		746.420		6.572.441	
	24,23%		27,92%		19,70%		16,80%		11,36%			
GROSS SALES	-34.495	100%	-17.174	100%	-31.850	100%	-23.182	100%	-20.205	100%	-126.907	100%
Promotions given	1.468	4,25%	723	4,21%	1.179	3,70%	866	3,74%	769	3,81%	5.005	3,94%
	29,33%		14,44%		23,56%		17,30%		15,37%		100%	
Gross sales minus promotions	-33.027	95,75%	-16.452	95,79%	-30.671	96,30%	-22.316	96,26%	-19.436	96,19%	-121.902	96,06%
Wholesale discounts	4.458	12,92%	2.367	13,78%	4.138	12,99%	2.741	11,82%	2.583	12,78%	16.287	12,83%
Early payment discounts	1.738	5,04%	732	4,26%	1.721	5,40%	1.237	5,34%	1.037	5,13%	6.466	5,10%
Exoneration from loss of discounts	0	0,00%	1	0,01%	0	0,00%	53	0,23%	0	0,00%	54	0,04%
Sales returns	298	0,86%	134	0,78%	168	0,53%	101	0,44%	282	1,39%	982	0,77%
NET SALES	-26.533	76,92%	-13.218	76,96%	-24.643	77,37%	-18.184	78,44%	-15.533	76,88%	-98.112	77,31%
Sales Cost	22.991	66,65%	11.452	66,68%	21.337	66,99%	15.491	66,82%	13.372	66,18%	84.642	66,70%
Early payment income	-946	2,74%	-597	3,47%	-970	3,05%	-806	3,48%	-512	2,54%	-3.831	3,02%
Financial income for non return	-18	0,05%	-11	0,06%	-17	0,05%	-15	0,06%	-14	0,07%	-75	0,06%
Purchase volume discount	-98	0,28%	-24	0,14%	-72	0,23%	-65	0,28%	-59	0,29%	-318	0,25%
Other income and costs in purchases	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%
TOTAL SALES COSTS	21.928	63,57%	10.820	63,00%	20.278	63,67%	14.605	63,00%	12.787	63,28%	80.418	63,37%
GROSS PROFIT	-4.605	13,35%	-2.397	13,96%	-4.365	13,71%	-3.579	15,44%	-2.747	13,59%	-17.694	13,94%
MANAGEMENT EXPENSES	1.747	5,06%	1.540	8,97%	1.623	5,10%	1.282	5,53%	1.046	5,18%	7.238	5,70%
Staff expenses	1.171	3,40%	1.011	5,89%	994	3,12%	812	3,50%	651	3,22%	4.640	3,66%
Administrative charges	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%
Patent	106	0,31%	32	0,18%	235	0,74%	127	0,55%	124	0,61%	623	0,49%
Other taxes	282	0,82%	325	1,89%	229	0,72%	196	0,84%	132	0,66%	1.165	0,92%
General maintenance	59	0,17%	42	0,25%	52	0,16%	37	0,16%	14	0,07%	204	0,16%
Stationery and other administrative supplies	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%
Professional fees	25	0,07%	20	0,12%	13	0,04%	11	0,05%	9	0,04%	78	0,06%
Rental	8	0,02%	8	0,05%	6	0,02%	5	0,02%	4	0,02%	30	0,02%
IT	17	0,05%	21	0,12%	16	0,05%	12	0,05%	8	0,04%	75	0,06%
General expenses	41	0,12%	47	0,28%	37	0,12%	40	0,17%	26	0,13%	192	0,15%
Insurance	28	0,08%	27	0,16%	32	0,10%	28	0,12%	11	0,06%	126	0,10%
Legal and administrative procedures	1	0,00%	0	0,00%	1	0,00%	1	0,01%	0	0,00%	3	0,00%
Third party services	7	0,02%	3	0,02%	7	0,02%	11	0,05%	65	0,32%	93	0,07%
Banking fees	2	0,01%	2	0,01%	2	0,00%	1	0,01%	1	0,00%	8	0,01%
OPERATION EXPENSES	537	1,56%	355	2,07%	449	1,41%	389	1,68%	288	1,42%	2.018	1,59%
OPERATING EXPENSE	530	1,54%	347	2,02%	443	1,39%	385	1,66%	285	1,41%	1.990	1,57%
Telco expenditure	22	0,06%	13	0,08%	18	0,06%	16	0,07%	14	0,07%	84	0,07%

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PROFITS AND LOSS	MÉRIDA		CENTRAL-WESTERN		WEST		EAST		DISTRITO CAPITAL		TOTALS	
Sales commissions	32	0,09%	28	0,16%	24	0,08%	29	0,12%	20	0,10%	133	0,10%
Stationery and other operational supplies	25	0,07%	14	0,08%	20	0,06%	13	0,06%	20	0,10%	91	0,07%
Travel expenses	86	0,25%	92	0,54%	67	0,21%	85	0,37%	40	0,20%	369	0,29%
Freight and cargo shipping	13	0,04%	14	0,08%	10	0,03%	8	0,04%	6	0,03%	50	0,04%
Rental for Operations	7	0,02%	5	0,03%	3	0,01%	3	0,01%	20	0,10%	39	0,03%
Fleet Maintenance	53	0,15%	60	0,35%	120	0,38%	81	0,35%	26	0,13%	341	0,27%
Loss prevention and control expenses	84	0,24%	45	0,26%	61	0,19%	71	0,31%	52	0,25%	312	0,25%
Reserve for land policy	43	0,13%	21	0,13%	40	0,13%	29	0,13%	25	0,13%	159	0,13%
Supplies	49	0,14%	31	0,18%	41	0,13%	26	0,11%	20	0,10%	166	0,13%
Irrecoverable loss	61	0,18%	1	0,01%	2	0,01%	0	0,00%	11	0,05%	75	0,06%
Difference in inventories	57	0,16%	22	0,13%	38	0,12%	23	0,10%	32	0,16%	171	0,13%
ADVERTISING AND MARKETING	7	0,02%	8	0,04%	5	0,02%	5	0,02%	3	0,02%	27	-0,02%
Advertising income	-9	0,03%	-10	0,06%	-7	0,02%	-6	0,03%	-4	0,02%	-36	0,03%
Advertising and marketing expenses	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%
Promotions for clients	17	0,05%	19	0,11%	14	0,04%	12	0,05%	8	0,04%	70	-0,05%
Lab promotion expenses	4	0,01%	5	0,03%	4	0,01%	3	0,01%	2	0,01%	19	-0,01%
Total management	13	0,04%	15	0,08%	10	0,03%	9	0,04%	6	0,03%	52	-0,04%
Income from commercial promotion fund	-174	0,50%	-200	1,16%	-141	0,44%	-120	0,52%	-81	0,40%	-716	0,56%
Expenses from commercial promotion fund	168	0,49%	193	1,12%	136	0,43%	116	0,50%	79	0,39%	691	-0,54%
Total lab management	-6	0,02%	-7	0,04%	-5	0,02%	-4	0,02%	-3	0,01%	-25	0,02%
OPERATING INCOME	-2.321	6,73%	-503	2,93%	-2.293	7,20%	-1.908	8,23%	-1.413	7,00%	-8.438	6,65%
FINANCIAL EXPENSES	304	0,88%	514	2,99%	228	0,72%	145	0,62%	48	0,24%	1.238	0,98%
Depreciation and Amortization	77	0,22%	74	0,43%	60	0,19%	68	0,29%	32	0,16%	311	0,24%
External financing interest	256	0,74%	295	1,72%	208	0,65%	177	0,76%	120	0,59%	1.056	0,83%
Own financing interest	29	0,09%	34	0,20%	24	0,08%	20	0,09%	14	0,07%	121	0,10%
Financial transaction tax	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%
Income from interest	-18	0,05%	-12	0,07%	-10	0,03%	-6	0,02%	-6	0,03%	-51	-0,04%
Valuation accounts	-37	0,11%	128	0,75%	-27	0,08%	-115	0,49%	-104	0,51%	-154	-0,12%
Other income and expense	-3	0,01%	-6	0,03%	-27	0,09%	-1	0,00%	-8	0,04%	-44	0,04%
NET OPERATING PROFIT	-2.018	5,85%	11	0,06%	-2.065	6,48%	-1.763	7,60%	-1.366	6,76%	-7.201	5,67%
ISLR (INCOME TAX)											2.681	2,11%
NET PROFIT											-4.520	3,56%

Source: Authors.

TABLE 2. Direct costing system

	MÉRIDA	CENTRAL- WESTERN	WEST	EAST	DISTRITO CAPITAL	TOTALS
PROFIT AND LOSS						
SALES (UNITS)	1.592.538	1.834.765	1.294.741	1.103.977	746.420	6.572.441
	24,23%	27,92%	19,70%	16,80%	11,36%	100,00%
Gross sales	-34.495	-17.174	-31.850	-23.182	-20.205	-126.907
Promotions given	1.469	724	1.180	867	770	5.010
	29,32%	14,46%	23,55%	17,30%	15,37%	100,00%
Gross sales minus promotions	(33.026)	(16.450)	(30.670)	(22.315)	(19.435)	(121.897)
Wholesale discounts	4.462	2.372	4.142	2.744	2.585	16.305
Early payment discounts	1.740	733	1.722	1.238	1.038	6.471
Exoneration from loss of discounts	-	1	-	53	-	54
Sales returns	265	97	142	79	266	848
NET SALES	(26.559)	(13.247)	(24.664)	(18.202)	(15.546)	(98.219)
Sales Cost	23.014	11.479	21.356	15.508	13.383	84.740
Early payment income	(946)	(597)	(970)	(806)	(512)	(3.831)
Financial income for non return	(18)	(11)	(17)	(15)	(14)	(75)
Purchase volume discount	(123)	(53)	(93)	(83)	(71)	(422)
TOTAL COSTS OF SALES	21.927	10.819	20.277	14.604	12.786	80.412
Direct operational cost and expense	1.286	909	1.243	915	771	5.124
Contribution Margin (*)	(3.347)	(1.520)	(3.145)	(2.683)	(1.989)	(12.683)
Marginal Profitability	9,70%	8,85%	9,87%	11,57%	9,84%	9,99%
Operating cost and expense (specification of the central corporate unit)						5.482
Earning before taxes						(7.201)
ISRL (Income Tax)						2.681
Profit after ISLR (Income Tax)						(4.520)
NET PROFITABILITY AFTER ISLR (INCOME TAX)						3,56%

Source: Authors.

not assigned any costs or expenses incurred in other units (central unit or other branches) considered as indirect, thereby allowing us to evaluate their results based on the income and expenses of which they are responsible. Obviously, operating expenses in the amount of 5,482 million *Bolívares* from the corporate central unit are not going to be avoided in case of eliminating any branch, so they must be submitted to find the total income of the corporation; this is why the overall result of the corporation in Tables 1 and 2 remains constant (Bs. 4.52 million bolivars).

The main use of the direct cost system is the calculation of the contribution margin of each branch, without the distortions generated by the costs and indirect expenses distribution. For example, according to contribution margins, the branch that brings lower profits is located in the Capital District (*Distrito Capital*), because its income (Bs. 15,546 million) barely covers the costs and expenses incurred in it. From this analysis, such branch management must be improved. It is to be noted that, in case of removing the Capital District branch, such a decision involves not only savings of Bs. 771,000, but also the non – collection of Bs 15.54 million as annual income.

Conclusions

The complexity of wholesale traders of drugs at national level requires that the financial information is the most appropriate and relevant as possible, tailored to the management needs. This is emphasized when considering the changing and competitive legal and social environment of the domestic pharmaceutical market, in which any improvement in the quality of services, both internal and external, will require an expedited decision - making, supported, in turn, on a relevant financial analysis, which provide benefits for the marketing operations of pharmaceutical products nationwide, as well as for the final consumers.

Since 46 % of the interviewed managers indicated that the purpose of company accounting is to determine and disclose the profit or loss of both the organization and each branch at the end of the fiscal year, it is recommended to warn this considerable proportion of managers that accounting currently is not limited to keeping accounts in an arithmetic fashion, but also provides a historical account of economic and financial events of the organization with its results.

From the data collected and analyzed, and based on (mostly qualitative) information collected from the expertise of the interviewed managers, and defined geographically in drug wholesale trading companies located in the municipality of Alberto Adriani, in the state of Merida, Venezuela, we can state that the system of total or absorbing costs currently used by the wholesale traders of drugs in the municipality of Alberto Adriani, in the state of Merida (in which the costs or expenses of the corporate units are allocated to branches in terms of sales volumes of the latter) it is not the most appropriate to assess the branches' management. This leads to rendering a vague and misleading financial picture in which managers have no real information on the result or profit of the commercial management of each of the branches. That is, the calculation of profitability by branches under the total costs system used by wholesale traders of drugs is deemed arbitrary by its indirect expenses allocation based on the level of sales by the physical units of each branch, which distorts the profits of each of the branches. These expenses are considered as indirect with respect to branches (object of costs), since they cannot be identified and quantified accurately and in an economically feasible manner in each of the branches.

Although the total profit generated by the corporation is the same using the absorption costing system used in the wholesale traders studied, the profitability of each branch is different depending on the level of expenditure allocated to the corporate central unit. Therefore, such expenses incurred by the corporation at the central level - and thus indirect with respect to the branch - must be allocated according to a more suitable base or cost generator that reflects the level of support or effort invested by the central unit in each of the branches, that indeed show a consistent case – effect relation for each concept or expense, which Hansen & Mowen (2007) called observable generating bases, and measuring the consumption of resources and efforts on a determined branch. These bases could represent factors that cause the use of resources, supported on activities, i.e., the amount of activity or effort of the central unit that demands every branch, for example, number of consultancies, hours of work, number of workers, and even the same sold units, to apportion the shipment costs. Thus, the corporate entity becomes a service provider to branches with a fair costs distribution to all units (branches) of the organization.

In this sense, the use of activity - based costing (ABC) could also provide relevant information, such as methodology that measures the activities' cost and performance. Cost items in this case would be the branches, and cost drivers, the factor that causes a change in the cost of an activity such as competitive measures that simultaneously serve as connection between activities and indirect or criterion costs for allocating costs to activities or activity centers (Torres, 2010). In that direction, "the more *Cost Driver* activity units (...) identified for an activity (...), the greater the indirect costs associated with that activity" (Romero, 1998, p. 49); e.g. number of suppliers, amount of purchase orders or performed material deliveries, etc.

It is necessary to note that the main use of absorption costing recommended with the appropriate indirect expenses allocation bases, for determining the cost and profitability structure per branch, is the preparation of financial statements for external purposes, since branches receive a fee or costs and expenses allocation allowing the full operation of the company from the corporate central units. With this cost structure, the company can comply with the information requirements required externally, such as those requested by the National Superintendence for the Defense of Socio Economic Rights (SUNDDE – *Superintendencia Nacional para la Defensa de los Derechos Socio Económicos* – for its acronym in Spanish), within the framework of the implementation of the Fair Prices Act (2014) (*Ley de Precios Justos*), as amended on November 8, 2015, based on the accounting systems established in the companies registered in the Single Register of Persons who Develop Economic Activities (RUPDAE – *Registro Único de Personas que Desarrollan Actividades Económicas* - for its acronym in Spanish). Also, we can comply with the current set of generally accepted accounting principles applicable in Venezuela, such as the Financial Reporting Standards (VEN-NIF – *Normas de Información Financiera* - for its acronym in Spanish) for large companies (VEN-NIF-GE - *Normas de Información Financiera para Grandes Entidades* - for its acronym in Spanish) and for medium - small businesses (VEN-NIF-PYMES[3] - *Normas de Información Financiera para Pequeñas y Medianas Empresas* - for its acronym in Spanish) dedicated to the measurement and disclosure of inventories and thus the determination of their cost structure[4]. "The costs of inventories processing shall include the costs directly related to the production units (...) as direct labor. They shall also include (...) indirect variable or fixed costs "(VEN-NIF-GE, NIC-2, section 12, and VEN-NIF-SMEs, section 13.8).

Although absorbing costs systems should continue being used in the wholesale traders studied - to meet the legal requirements set forth in the preceding paragraph -, it is noted that the results of this research are not intended to eliminate or modify the current costing system, but generate an alternative costing system capable for generating reports for an optimal decision - making. In this regard, it is imperative that the wholesale traders of drugs studied develop a management accounting system, in order to further support the decision - making process that allows to create more value in business operations and generating action plans aimed to optimize their cost and expenses structures. That is, internally to some decision - making related to the management of each branch and the profits earned by each cost systems based on partial costing, specifically under the direct cost system, which offers a more detailed and realistic vision of the company management in its various branches not to receive the costs and expenses allocation incurred in the corporate central unit. Thus, the direct costs system only shows revenues, costs and expenses incurred in the same branch, costs and expenses of which are responsible for, as well as the central unit costs that can be tracked or identified specifically as the branch, as simulated in table 2.

Use of the direct costs system in the case of the wholesale traders studied is also justified as argued by authors like Hansen & Mowen (2007) on the precision and accuracy of the cost allocation process, in that any indirect costs allocation is less accurate than the allocation performed to the

3 According to the Federation of Public Accountants of Venezuela (2014) (*Federación de Colegios de Contadores de Venezuela*), the current accounting regulatory body applicable in Venezuela since 2008, called VEN-NIF, and subdivided for large entities (VEN-NIF-GE) and for small and medium - sized entities (VEN-NIF-PYME)

4 To measuring inventories, VEN-NIF and accounting of conventional costs should include direct and indirect costs of processing or service provision, as well as include in its cost structure overheads of the company (selling expenses and distribution and administrative expenses) (Morillo, 2013).

direct costs (from a physical, specific or unique identification), due to the accuracy of indirect costs is determined by the strength of the cause – effect relation of the selected allocation base. Also, Hansen & Mowen (2007) argued that in the absence of such a relation "the best policy may be just to allocate the traceable costs to the objects" (p. 38).

In addition to the use of the direct cost system - considering the scope of this investigation, the theoretical delimitation thereof, the importance of drug wholesale trading companies in order to contribute to the investigative process – it could be interesting to explore a set of research topics for the evaluation of the branches' management and decision - making, such as activity - based costing and costing at the level of customer, areas and routes, for an expedited profitability analysis by means of the submittal of the income statement report in the product lines sold in these companies.

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Appendix

UNIVERSIDAD DE LOS ANDES
MÉRIDA VENEZUELA

INTERVIEW GUIDE ADDRESSED TO SENIOR MANAGEMENT OFFICIALS, IN ORDER TO OBTAIN INFORMATION TO CHARACTERIZE BUSINESS UNITS AND DEPARTMENTS OF THE COMPANY

1. Do workers receive educational guidance through workshops and programs regarding the vision, mission and values of the company?

   Always ____
   Sometimes ____
   Never ____

2. The organizational structure of the company is:

   Linear or hierarchical ____
   Lines and staff (personnel or divisions) ____
   Functional ____

3. Do you believe that the organizational structure leads to proactive success of your company?

   Totally ____
   Moderately ____
   Scarcely ____

4. Do you believe that the establishment of the command lines of the company are the most appropriate to your operation?

   Yes ____ No ____

5. How are accounting records kept in the company? And according to the selected alternative or alternatives, briefly describe the registration process.

   Automatic records ____
   Manual records ____

6. The general accounting of the company's purposes are (check all that apply):

   ____ Provide the information required for planning and control of operations carried out by the company.

   ____ Provide financial and economic information to facilitate strategic, tactical and operational decision.

   ____ Determine and disclose the profit or loss of the company at the end of the fiscal year.

   ____ Prepare and submit financial and economic information to apply for bank or commercial credits.

   ____ Projecting the future business possibilities.

   ____ Prepare and submit tax returns, such as Value Added Tax (IVA – *Impuesto al Valor Agregado* – for its acronym in Spanish) and Income Tax (ISLR – *Impuesto sobre la Renta* - for its acronym in Spanish).

   ____ Anticipate the tax effects of the operations performed by the company.

   ____ Serve as proof to third parties to support the veracity of business operations, especially in those judicial acts in which accounting has the character of corroborating evidence

7. Who does the accounting of the company? (Check only one).

   Accounting department, area or division of the company ____
   Company staff dedicated to it ____
   A freelance professional outside the company ____
   An office, branch or accounting firm ____
   A consulting or management consulting firm ____

8. Is there a cost accumulation system currently in the company?

   Yes ____ No ____

9. How useful is the information provided by the cost accounting?

   ____ Not useful
   ____ Scarcely useful
   ____ Fairly useful
   ____ Highly useful
   ____ Very highly useful

10. Do you know the cost structure of the company?

Yes _____ No _____

If Yes, how is the cost structure of the company determined?

_____ Based on experience

_____ Based on any technical method

_____ Based on any procedure or accounting system

11. Does the company determine its operating costs based on (check all that apply):

Historical or actual costing _____

Costing by orders or specific requests _____

Costing by process _____

Costing by operations or sections _____

Absorption costing _____

Variable costing _____

Activity - based costing _____

12. Are there cost centers or major and supporting departments in the branches?

Yes _____ No _____

13. The grouping of costs in departments or cost centers aims to:

_____ Apportion costs to products and / or services

_____ Know the costs of the departments or main and auxiliary centers

_____ Others

14. Are the profitability levels of each business unit calculated in the company?

Yes _____ No _____

15. Do you think the cost accumulation system and profitability levels of each business unit influence in decision - making?

Yes _____ No _____

16. Are the profitability levels of each business unit evaluated?

Yes _____ No _____

17. In the company, for what kind of decisions is information on the business profitability necessary?

_____ Pricing

_____ Evaluating branch operation

_____ Generation of savings plans or cost reduction

18. Are you aware of the purpose of the accumulation cost system for measuring profit margins in the company?

Yes _____ No _____

19. Should the organization, as a wholesale trading company, consider the behavior of commercial statistical variables to distribute the costs associated with the operation of each business unit?

Yes _____ No _____

UNIVERSIDAD DE LOS ANDES

QUESTIONNAIRE ADDRESSED TO MANAGERS OF FIRST AND SECOND LINE, BRANCH OPERATIONS AND SALES MANAGEMENT, IN ORDER TO OBTAIN INFORMATION FOR A CHARACTERIZATION OF THE COMPANY'S BUSINESS UNITS AND DIVISIONS

INSTRUCTIONS: Read and analyze each of the following statements that are presented in the attached table, and point out the option you deem relevant.

No.	QUESTION	FULLY AGREE	AGREE	IRRELEVANT	DISAGREE	FULLY DISAGREE
1	Do you feel identified with the vision and mission of Corporación DROLANCA?					
2	Do you think that the current organizational structure is adapted to the situation of Corporación DROLANCA?					
3	Do you believe that the current structure of command lines in the company efficiently supports the decision - making process?					
4	Do you think the departments that are part of the corporate business unit properly support the operations of the branches?					
5	Do you think that departments in branches properly form the hierarchical structure of the business unit?					

To continue

No.	QUESTION	FULLY AGREE	AGREE	IRRELEVANT	DISAGREE	FULLY DISAGREE
6	Do you think that accounting records performed in the company provide reliable and timely information for decision - making?					
7	Do you believe that the current costs distribution policies efficiently support the decision - making process in DROLANCA?					
8	Are the current levels of profitability associated with each business unit in the company optimal?					
9	Does the current costs system utilized at the company allow for optimal levels of financial analysis?					
10	Do you believe that a cost accounting system with a higher degree of detail in the design and implementation will provide greater benefits in the operation of the company?					

UNIVERSIDAD DE LOS ANDES MERIDA VENEZUELA

OBSERVATION GUIDE

ASPECTS TO BE OBSERVED	
Aspects	**Observation**
1. Trade process for drugs purchasing and wholesaling.	
1.1 Business process phases	
1.2 Use of resources	
1.2.1 Supplies	
1.2.2 Workforce / Labor	
1.2.3 Direct and indirect costs in the business process	
2. Cost accumulation systems	
Object of costs (name and characterization)	
2.1 Classification of resources used in the operating process	
2.2 Types of accounts used to record operations	
2.3 Types of accounting entries performed	
2.4 Types of auxiliary and main ledgers utilized	
2.5 Types of cost reports prepared in the company	