Analysis of the financial performance of Colombia by region 2009-2012: an approach to the evaluation of territorial competitiveness

Análisis del desempeño financiero por regiones de Colombia 2009-2012: un enfoque de evaluación de competitividad territorial[*]

Carlos Eduardo Castaño Ríos [**]
José Enrique Arias Pérez [***]

Research article

Abstract

The aim of this paper is to present the corporate financial performance evaluation in Colombia by region for the period 2009-2012, based on comprehensive financial analysis, with an approach from territorial competitiveness. Financial information reported to the Superintendency of Corporations was used, which was classified according to the five major regions of the country. It was found that the Amazon region has difficulty obtaining long-term financing; the highest EBITDA and best cash generation capability was found in the Andean region, and finally, the Caribbean has the highest operational cycle and lowest profitability, which affects its competitiveness

Keywords: structural analysis of financial statements, financial statement analysis, regional competitiveness, cash flows.

JEL: M41, M20, L50, E40

Resumen

El objetivo de este artículo es presentar la evaluación del desempeño financiero empresarial por regiones en Colombia para el período 2009-2012, a partir del análisis financiero integral, con un enfoque desde la competitividad territorial. Se utilizó la información financiera reportada ante la Superintendencia de Sociedades, la cual se clasificó en las cinco grandes regiones del país. Se encontró que la región amazónica tiene dificultades para obtener financiamiento a largo plazo; en la zona andina el EBITDA es más alto y hay mayor capacidad de generación de efectivo, y por último, el Caribe presenta el mayor ciclo operacional y la más baja rentabilidad, lo que afecta su competitividad.

Palabras clave: análisis estructural de estados financieros, análisis de estados financieros, competitividad regional, flujos de efectivo.

INTRODUCTION

Financial evaluations are traditionally carried out according to the individual results of companies, which serve as an input for decision making and the formulation of strategies in order to improve profitability and revenues or to reduce costs in a certain period of time.

However, this same logic is extrapolated to the evaluation of the economic performance of groups of companies based in different territories or belonging to a particular economic sector, with the purpose of establishing the favorability of the financial conditions for the development of the businesses; which, in other words, generates the level of competitiveness of a region or of a sector (Lomb and Rozas, 2009, IMD, 2011, Candau et al., 2014, Wang & Wang, 2014, Charles & Zegarra, 2014), by its direct impact on the attraction of investment and the creation of value (Porter, 1990).

For the Colombian case, a series of studies by sectors such as services, mining, construction, commerce, industry and agriculture (Correa, Castaño & Mesa, 2010, 2011, Castaño & Arias, & Ospina, 2010; Castaño & Arias, 2013), which approach the analysis of regional economic performance from the perspective of financial evaluation; which requires expansion and dissemination in order to provide new tools that promote the effectiveness and relevance of many policies and strategies coming from governmental, trade union and private sector entities, which sometimes do not correspond to the financial reality of the productive apparatus of a given territory and, in the long run, have little impact on regional competitiveness (Altenburg, Wolfgang & Jörg, 1998).

Hence the importance of this article, which evaluated the corporate financial performance of the five regions of Colombia from 2009-2012, using comprehensive financial analysis, based on the study of the financial information reported in the databases of the Superintendency of Corporations in the period 2009-2012. The analysis started from the basic structures of the accounting reports and reached the traditional financial indicators of liquidity, profitability and debt.

The article's overall development will be as follows: the first section approximates the concept of the evaluation of corporate financial performance, especially with regard to comprehensive financial analysis, then the relationship between financial analysis and regional competitiveness. Subsequently the methodology is presented, the proposed analysis techniques are applied to the regional aggregated information and the results obtained are shown. Finally, some final considerations are made that collect the analysis of the most relevant aspects found in this research, and future discussions in this area are suggested.

EVALUATION OF CORPORATE FINANCIAL PERFORMANCE THROUGH AN INTEGRAL FINANCIAL ANALYSIS

Financial analysis is part of the key process after the issuance of financial statements. From the information of the accounting information system, structures are constructed and emphasis is placed on the preservation of habitual results. Thus, Correa, Castaño and Ramírez (2010) express that financial analysis is "a process that interprets and studies the economic-financial situation of an economic entity, not only from the point of view of financial statements but rather completely, contextualized and structural" (p. 188).

Similarly, Professor Cañibano (1996) defines financial analysis as a "comparative study of the information contained in the different financial statements, in order to draw conclusions about the economic and financial situation of the entity to which they belong, making use of those technical instruments that facilitate the aforementioned comparisons."

On the other hand, Aguiar et al. (1998) consider that the analysis of financial statements is:

> An activity consisting of performing mathematical operations to calculate changes in the balances of items over (sic) years, determining financial ratios or indexes, as well as integral percentages of trends, in order to interpret the financial information of the entity as correctly as possible (p. 16).

In order to elucidate corporate financial performance by regions over a given period, different methods have emerged in recent years, namely, the structural analysis of financial statements (Bernstein, 1993; Ortiz, 2004; García, 1999; Correa, 2005, Sinisterra, Polanco & Henao, 2005), analysis through financial indicators, (Bernstein, 1993; Ortiz, 2004; García, 1999; Correa, 2005, Sinisterra, Polanco & Henao, 2005), the analysis of financial sums (Hermosilla, 2002), the distinction between the operative and the financial, (Tascón & Amor, 2007), the analysis of the cash flows (Moscoso, Correa & Jaramillo, 2006), the analysis of the capacity to generate dividends (Bernstein, 1993), comprehensive financial analysis (Correa, Castaño & Ramírez, 2010, Correa, Castaño & Mesa, 2010), as well as other modalities of individual analysis of elements of the financial information such as inventories, portfolio and opportunity costs (CAPM model) for each type of organization.

However, of all of them, the most recommended method is the comprehensive financial analysis, because initially it does not require detailed information of the companies and can be made with ease from the global data of the financial statements.

As mentioned earlier, this article only deals with the evaluation of the financial performance of economic sectors with the comprehensive financial analysis of the financial statements, through the revision of the financial statements and their structure, as well as the traditional financial indicators of liquidity, debt and profitability; which can be used to identify the financial health of economic entities (Correa, 2005, García, 1999, Ortiz, 2004, Block, Hirt & Danielsen, 2010, Brooks, 2012, Brigham and Ehrhardt, 2013, Chen et al., 2014), which in this case is taken as a concept for the analysis of business performance, but is seen as a region.

The investment structure makes it possible to establish to what extent the total assets are concentrated in the operation, i.e., on the short term; or in the production capacity and the fixed assets that correspond to the medium and long term (Vivas, 2005, García, 1999, Ortiz, 2004, Correa, Castaño & Mesa, 2010). This, among other things, makes it possible to establish whether companies are concentrated on their economic activity or are being transformed into an investment company, and the existence of investment policies such as the planned renewal of assets.

Conversely, the financing structure reveals how investments are financed from the perspective of temporality, that is, short or long term obligations; or from the agents' approach, which refers to the participation percentage of creditors, reflected in liabilities and owners, in the equity (Vera, 2001; García, 1999, Correa, Castaño & Mesa, 2010).

On the other hand, income statements reveal important financial information, in terms of the profits obtained by the development of the economic activity, after covering the expenses that allow income to be generated (Vivas, 2005; Carvalho, 2010; Correa, 2005). This can be determined through different profit margins, including the gross, operating, net and EBITDA (Correa, 2005; García, 1999; Ortiz, 2004).

Added to this, the tax burden makes it possible to establish whether the income tax payment represents a higher or lower value compared to the income generated (Rhenals, 2003), and, in this way, determine the favorability of the conditions offered by the territories for carrying out economic activities.

While the cash flow statement makes it possible to examine the capacity to generate cash and cash equivalents, to meet obligations, pay dividends, and determine their external financing needs (Manus, 1995; Correa, 2005, Carvalho 2010, Correa, Castaño & Mesa, 2010), and in this way, detect possible risks that threaten the permanence of companies over time.

As for the indicators that account for liquidity, profitability and debt, Table 1 shows a summary of their forms of analysis and to whom the results obtained are mainly directed.

Table 1. Summary analysis of liquidity, profitability and debt

VARIABLE	TEMPORAL APPROACH	AGENTS	MODE OF ANALISIS
Liquidity	Short term	• Administration • Clients • Providers	• Static • Dynamic
Profitability	Long term	• Administration • Shareholders or partners • Financial creditors	• Internal • External
Debt	• Short term • Long term	• Administration • Financial creditors	• Historical – level of debt • Projected – ability to pay

Source: Correa, Castaño & Ramírez (2010, p. 186).

The observed approaches for each variable analyzed from the point of view of the financial analysis require a detailed and special reading, because it is based on the temporal approaches that the decisions take on value. It is also clear that users of the accounting information are going to request various types of information that exceed the expectations of the usual content of the financial statements.

EVALUATION OF CORPORATE FINANCIAL PERFORMANCE AND REGIONAL COMPETITIVENESS

Competitiveness has been a subject of great importance for companies in recent years, due mainly to the competition generated by globalized markets and the dizzying dynamics of the economy, where consumer tastes change daily for the benefit of the most innovative entrepreneurs and to the detriment of those who do not have survival strategies (Candau et al., 2014; Wang & Wang, 2014; Charles & Zegarra, 2014). In the same way, Castaño y Arias (2013, p. 87) suggest that:

> Competitiveness is often understood as the creation of value-added goods and services using efficient methods, which allows the maintenance of high wages and attractive capital returns in order to support a sustained investment; and expresses itself in factors of various kinds, namely, in institutions, infrastructure, the macroeconomic environment, health and education, labor market efficiency, sophistication of the financial market, the availability of technologies, size of the market, business sophistication and innovation (WEF,

2011), or in terms of economic performance, government efficiency, business efficiency, and infrastructure (IMD, 2011).

In terms of competitiveness it is necessary to divide its form of analysis into four large dimensions: meta, macro, meso and micro (Altenburg et al., 1998), which correspond to different units of analysis, namely countries, regions, cities, economic sectors or enterprises.

Therefore, competitiveness in a broad sense refers to the ability of companies to produce products and services of superior quality, at a lower cost compared to their national and international competitors (Porter, 1990), as well as the favorability the territories offer for the development of businesses (Lombana & Rozas, 2009), whose evaluation and impact can be observed from a financial perspective.

In the meantime, it is also necessary to distinguish that in financial terms competitiveness is understood as "achieving a profitability equal to or greater than the rivals in the market. If the profitability of a company in an open economy is lower than that of its rivals, even if it has the means to pay its workers, suppliers and shareholders, it will sooner or later be weakened to zero and become negative" (Vallejo, 2003, p. 5).

Thus, the results of the comprehensive financial analysis applied to the set of companies located in the different regions of the country, constitutes an approach to evaluate the competitiveness of these territories, because it allows the identifying of the business trends according to the financial characteristics that are developed in the regions in terms of investment structures, financing, tax burden, liquidity and profitability, among others, which mainly establish the attraction of investment and the capacity to create value (Porter, 1990; Lombana & Rozas, 2009; CPC, 2013; BM, 2013; Charles & Zegarra, 2014).

THE COLOMBIAN REGIONS AND THEIR ECONOMIC ACTIVITIES

According to authors such as Nieto and Ángel (2007), Moreno and Posada (2007) and Galvis and Meisel (2012), the country is subdivided into five large regions that can be differentiated by their cultures, climatic and demographic conditions, as well as economic activities. These regions are: Amazon, Andean, Caribbean, Pacific and Orinoquía. This configuration affects the financial performance of the company insofar as advantages or disadvantages are observed in the achievement of the different social objects of the companies that are located in one place or another.

For the purposes of this work, the departments that make up each major region and its main economic activities are presented below (Castaño, Vanegas & Ospina, 2010):

Amazon: Is composed of the departments Putumayo, Caquetá, Vaupés, Guainía and Amazonas. Its main economic activities are cattle raising, fishing, mining and forestry.

Andean: The departments of Huila, Tolima, Cundinamarca, Boyacá, Caldas, Quindio, Risaralda, Antioquia, Santander and Norte de Santander are located in this region. Economic activity is mainly focused on commercial, financial, service and agricultural activities, and in addition this area is the main driver of the industrial development of the country

Caribbean: Here are found departments such as la Guajira, Magdalena, Cesar, Atlántico, Bolívar, Sucre, Cordoba, San Andrés and Providencia. Its economic activities are very diverse and range from livestock exploitation to industrial activities and financial services; nevertheless, the region possesses great strength and is the tourism center of the country.

Orinoquía: it is composed of the departments of Meta, Arauca, Casanare, Guaviare and Vichada. The economy of the region is based on activities such as cattle raising and oil extraction.

Pacific: The departments that are part of this southwestern region of Colombia are Chocó, Valle del Cauca, Cauca and Nariño. There are mainly found economic activities such as mining, forestry, fishing, agriculture, and some services such as financial, transport and general trade activities

METHODOLOGY

The research was of a documentary nature, oriented towards the localization, registration, recovery, processing, analysis, interpretation and discussion of information coming from secondary sources (Galeano, 2004), properly, that reported by companies to the Superintendency of Corporations of Colombia (Table 2).

Table 2. Distribution of businesses by regions of Colombia

Region	2009		2010		2011		2012	
	No.	%	No.	%	No.	%	No.	%
Amazon	23	0.09 %	22	0.09 %	23	0.08 %	24	0.09 %
Andean	19.699	79.84 %	19.094	80.17 %	22.057	81.10 %	21.359	80.65 %
Caribbean	2.113	8.56 %	1.975	8.29 %	2.214	8.14 %	2.200	8.31 %
Orinoquía	250	1.01 %	243	1.02 %	286	1.05 %	298	1.13 %
Pacific	2.589	10.9 %	2.483	10.43 %	2.618	9.63 %	2.601	9.82 %
General total	**24.674**	**100 %**	**23.817**	**100 %**	**27.198**	**100 %**	**26.482**	**100 %**

Source: elaborated by the authors based on information from the database of the Superintendency of Corporations for the period 2009 to 2012.

The Colombian business fabric is scattered across the national territory, although its concentration in some regions of the country is well known, as evidenced by the participation of the Andean region of about 80% in relation to companies that reported

information for the database of the Superintendency of Corporations. Therefore, it is the region with the greatest influence on the country's economy.

The Pacific region has the second greatest business concentration, with approximately 10% of the total of companies that reported information to the Superintendency of Corporations. It is followed by the Caribbean region with a participation of about 8%. On the other hand, the regions of the Orinoquía and the Amazon are the ones that present the smallest amount of companies, since they comprise about 1% and 0.09% respectively.

The information provided by the Superintendency of Corporations, revealed, in aggregate figures, the status of the various items of the assets, liabilities, equity, revenue, costs and expenses of the companies in question. This was then used to classify companies across the five regions of the country, Amazonian, Andean, Caribbean, Orinoquía and Pacific; and to build upon them, the indicators related to the comprehensive financial analysis

Based on this information, frequency tables and graphs were produced, which allowed the analysis of the results by region, which were discussed among the research team, and served as the basis for the construction of this article.

RESULTS

Financial Position
The balance sheet is one of the most important financial statements that companies report to the Superintendency of Corporations, and it consists of the investment structure that corresponds to the total assets and the financing structure that forms the liabilities and equity.

Investment Structure

The investment structure shows significant variations in regions such as the Amazon and the Caribbean, moving from a concentration in the operation (short term) to an investment in production capacity and fixed assets (long term), while in the other regions it remains very stable. Table 3 shows the composition of the investment in the different regions of the country.

Table 3. Investment structure

Region	2009		2010		2011		2012	
	Short term Investment	Long term Investment	Short term Investment	Long term Investment	Short term Investment	Long term Investment	Short term Investment	Long term Investment
Amazon	70.13 %	29.87 %	59.69 %	40.31 %	61.15 %	38.85 %	60.57 %	39.43 %
Andean	32.43 %	67.57 %	31.84 %	68.16 %	32.56 %	67.44 %	35.67 %	64.33 %
Caribbean	41.96 %	58.04 %	29.68 %	70.32 %	27.48 %	72.52 %	36.06 %	63.94 %
Orinoquía	57.25 %	42.75 %	58.85 %	41.15 %	56.07 %	43.93 %	54.78 %	45.22 %
Pacific	33.03 %	66.97 %	31.40 %	68.60 %	32.55 %	67.45 %	33.40 %	66.60 %

Source: elaborated by the authors.

Table 3 shows how companies located in the Andean, Caribbean and Pacific regions concentrate the majority of their resources in the long term, with a share of the total non-current assets close to 70%; which indicates that they have a more solid structure, with significant investments in assets such as property, plants and equipment. On the other hand, in the regions of the Amazon and Orinoquía this is established to the order of 40%, with which the structure is oriented more towards the short term; which means that companies in these regions require greater solvency to carry out their operations, which would make them more oriented to the provision of services and trade, than to industry, since the latter activity requires long-term operational assemblies such as machinery, intangibles, buildings, among other things.

Financial structure

In terms of the structural analysis of financial statements, it is important to know how the investments of the companies that are part of the business fabric of the different regions are being financed. This allows the understanding of financial characteristics of the regions that limit or not their growth. This analysis can be done from two perspectives, the first known as the temporality approach and the second, the agent approach (see Tables 4 and 5).

Table 4. Financial structure – temporality

Region	2009		2010		2011		2012	
	Current structure	Capital structure	Current structure	Capital structure	Current structure	Capital structure	Current structure	Capital structure
Amazon	42.75 %	57.25 %	40.98 %	59. 02 %	43.65 %	56.35 %	41.54 %	58.46 %
Andean	23.36 %	76.64 %	24.08 %	75.92 %	24.83 %	75.17 %	24.98 %	75. 02 %
Caribbean	30.43 %	69.57 %	26.06 %	73.94 %	25.88 %	74.12 %	27.52 %	72.48 %
Orinoquía	43.98 %	56.02 %	44.51 %	55.49 %	39.75 %	60.25 %	35.72 %	64.28 %
Pacific	21.47 %	78.53 %	20.97 %	79.03 %	22.42 %	77. 58 %	22.21 %	77.79 %

Source: elaborated by the authors.

Table 4 presents the financing structure of the different regions of the country, as from the temporality approach. Under this type of analysis, one should understand the composition of the financing that supports the assets in the short and long term (current and capital structure, respectively). From this point of view, it is found that in the Amazon region, the trend is towards short-term financing, with a current structure of between 40% and 44%, which means that greater efforts have to be made to cover the debt in periods of time not greater than one year, which means a low possibility of long-term leverage, which could be more favorable. As for the Andean, Caribbean and Pacific regions, there is evidence of longer-term financing through long-term liabilities and equity, with a capital structure of between 70 and 79% during the years analyzed. For its part, the Orinoquía region presents an improvement in its financial structure from this point of view, since it has managed to move from a current structure that represented 43.98% of its total funding in 2009, to 35.72% for 2012.

From the agent-based approach or the property of the enterprise (Table 5), the Andean and Pacific regions have managed to maintain fairly similar results, where equity financing exceeds 50% (internal financing) of the total financing of the company. The other regions, for their part, have not been able to sustain themselves with external (liability) financing exceeding 50% of their total funding, implying the possibility of less financial leverage and maximum support from their own resources. However, it also implies greater control and ownership of assets held as investment structures.

Table 5. Financial structure – agents

Region	2009		2010		2011		2012	
	Liabilities	**Equity**	**Liabilities**	**Equity**	**Liabilities**	**Equity**	**Liabilities**	**Equity**
Amazon	49.54 %	50.46 %	48.62 %	51.38 %	53.20 %	46.80 %	51.10 %	48.90 %
Andean	35.23 %	64.77 %	35.93 %	64.07 %	36.31 %	63.69 %	37.08 %	62.92 %
Caribbean	47.33 %	52.67 %	44.76 %	55.24 %	53.33 %	46.67 %	54.89 %	45.11 %
Orinoquia	57.62 %	42.38 %	60.45 %	39.55 %	56.42 %	43.58 %	54.74 %	45.26 %
Pacific	34.89 %	65.11 %	35.15 %	64.85 %	37.11 %	62.89 %	36.33 %	63.67 %

Source: elaborated by the authors.

Under the perspective of financing and analysis based on the agents involved, it is remarkable how the companies located in the Andean and Pacific regions have achieved an apparent structural behavior that denotes an interest in the domination and total control of the owners of the businesses, without prejudice to the possibilities to leverage through debt.

Income statement

The income statement reveals important financial information, in relation to the benefits obtained by the development of the economic activity after covering the expenses that allow the generation of income. This situation, in general terms, can be analyzed through the gross, operating, net and EBITDA profit margins, which can be seen in Table 6.

Table 6. Profit margins

Gross margin	2009	2010	2011	2012
Amazon	24.59 %	25.30 %	22.71 %	15.39 %
Andean	29.84 %	29.13 %	29.74 %	27.93 %
Caribbean	18.96 %	20.49 %	21.12 %	25.18 %
Orinoquía	19.78 %	16.25 %	16.53 %	27.57 %
Pacific	25.44 %	25.35 %	25.02 %	26.19 %
Operating margin	**2009**	**2010**	**2011**	**2012**
Amazon	3.44 %	5.41 %	5.16 %	4.68 %
Andean	8.65 %	8.80 %	9.96 %	7.87 %
Caribbean	4.12 %	4.22 %	5.99 %	5.42 %
Orinoquía	4.12 %	3.93 %	4.08 %	7.94 %
Pacific	6.94 %	5.49 %	7.08 %	8.18 %
Net margin	**2009**	**2010**	**2011**	**2012**

Amazon	2.23 %	3.41 %	2.24 %	1.67 %
Andean	7.09 %	6.54 %	7.44 %	5.45 %
Caribbean	2.51 %	2.44 %	2.97 %	3.47 %
Orinoquía	2.06 %	2.22 %	1.99 %	6.32 %
Pacific	4.12 %	3.41 %	4.45 %	5.69 %
EBITDA margin	**2009**	**2010**	**2011**	**2012**
Amazon	5.67 %	7.53 %	7.24 %	5.50 %
Andean	12.45 %	13.02 %	13.98 %	12.65 %
Caribbean	7.59 %	7.80 %	8.87 %	10.11 %
Orinoquía	5.91 %	5.44 %	5.80 %	9.07 %
Pacific	9.80 %	9.17 %	9.69 %	10.97 %

Source: elaborated by the authors.

Profit margins are percentages obtained from the calculation of profit at different levels (gross, operating and net) in relation to sales, which help to explain the profitability of the company. But they are not measures of profitability, since they do not show the yield of the resources available to generate said profit. As shown in Table 6, the EBITDA margin has the highest levels in the Andean region, with a result between 12% and 14%, which makes this area the most attractive in the country, under a measure that gives indications regarding the generation of cash associated with the operation. The second most striking region in terms of this indicator is the Pacific, with an EBITDA margin close to 11% in the 2012 period and that has remained above 9% during all the years of evaluation. On average, the region with the lowest EBITDA margin results is the Amazon region, which has a negative impact on the capacity to generate cash flows in the businesses located in this area of the country.

As for the gross margin, this represents the perceived profit from sales after deducting costs. The Andean region is the one that shows better performance in its gross margin, representing approximately 28% of the revenues for 2012, which means lower costs for sales compared to other regions. This situation shows the operation of this region to be more efficient than the others, although the region of Orinoquía, which did not have such positive results during the years 2009 to 2011, achieved an interesting recovery for 2012 and is very close to the results obtained by the Andean region. After these two regions are located the Pacific and the Caribbean, with results close to 26% and 25% respectively, which makes it possible to understand that the costs of their activities are lower than those generated in the Amazon region. The latter region is the one with the lowest gross margin, with a result for 2012 of around 15%.

The operating margin is the portion of the perceived profit from sales after deducting costs and operating expenses. As with the gross margin, the operating margins in the Andean region for 2009 are close to 8%; on the other hand, for the year 2011 it reached almost 10%. This indicates that the structure of costs and expenses compared to the revenues generated in this region is more efficient than for the others in the period 2009-2011. However, for the 2012 period, the Pacific region managed to position itself in first place in terms of performance with an operating margin of 8.18% and the Orinoquía region in

second with a yield of 7.94%. On the other hand, the Amazon region, on average, has the lowest operating margin, with results between 3% and 5%, due to the presence of high costs and expenses compared to the income that can be generated.

The net margin, on the other hand, is an indicator that incorporates not only the effect of the costs and expenses on the income, but also of the operations denominated "non-operational" and of the expense generated by the payment of income tax. It is observed that after these effects, the best result is presented in the Andean region for the years 2009-2011. However, by 2012, the Orinoquía region is in first place, driven by greater efficiency in the use of its resources and a lesser tax burden compared to other regions of the country, as will be presented later. On the other hand, the regions that present lower net margins are the Amazon and the Caribbean, with results between 1.7% and 3.5% in the period evaluated.

Tax burden

The tax burden allows us to establish in which regions the payment of income tax represents a higher value or lower value compared to the income generated. This indicator shows more or less structural behavior for the periods analyzed in each of the regions, except for the Pacific region where there is significant growth of this result, as presented in Table 7

Table 7. Tax burden

Tax burden	2009	2010	2011	2012
Amazon	1.30 %	1.58 %	1.36 %	1.66 %
Andean	2.17 %	2.22 %	2.83 %	2.41 %
Caribbean	1.12 %	1.16 %	1.35 %	1.56 %
Orinoquia	1.32 %	1.32 %	1.34 %	1.31 %
Pacific	1.60 %	1.61 %	1.92 %	2.23 %

Source: elaborated by the authors.

Meanwhile, Table 7 shows that the Caribbean and Orinoquía regions have the lowest tax burden, which indicates the effect of some benefits that could be associated with the economic activities carried out in these regions. On the other hand, the region that allocates the most revenue for the payment of tax is the Andean, the most representative of the sample, since it allocates more than 2% for this payment throughout the analyzed period, which is higher in relation to the average for the regions, to which is added the Pacific region with a result of 2.23% for 2012, implying growth of more than half a percentage point in a period of only four years.

Cash flows

The cash flow statement allows us to examine the companies' ability to generate cash flows and, based on this, to evaluate possible continuity risks of the organizations. From the regional point of view, as shown in Table 8, only the Orinoquía region for 2011 and the Caribbean region for 2012, obtained negative results in their cash flows generated by the activities of their operation, which is considered quite dangerous, as it directly affects the ability to adequately carry out its social purpose. In the other regions, there is no evidence of continuity risks, since the cash flows generated by the companies in their operation are positive.

Table 8. Cash flows by region (figures in thousands of Colombian pesos)

Operating Activities	2009	2010	2011	2012
Amazon	$ 1,682,979	$ 6,964,711	$ 10,481,746	$ 5,186,125
Andean	$ 24,693,996,634	$ 28,854,708,334	$ 24,067,665,006	$ 19,307,523,605
Caribbean	$ 2,566,777,315	$ 2,295,192,599	$ 2,004,377,140	$ (651,827,050)
Orinoquía	$ 55,147,000	$ 91,615,381	$ (614,197)	$ 175,979,380
Pacific	$ 2,791,612,551	$ 2,999,627,673	$ 2,177,846,511	$ 2,238,522,624
Investment activities	**2009**	**2010**	**2011**	**2012**
Amazon	$ (1,616,992)	$ (2,147,900)	$ (6,538,010)	$ (869,027)
Andean	$ (28,838,784,428)	$ (21,358,128,333)	$ (24,204,427,325)	$ (28,950,766,327)
Caribbean	$ (2,937,184,102)	$ (3,473,614,171)	$ (4,028,498,744)	$ (5,025,033,835)
Orinoquía	$ (84,474,750)	$ (88,464,951)	$ (63,357,974)	$ (164,853,821)
Pacific	$ (1,688,501,787)	$ (1,767,918,748)	$ (2,310,792,192)	$ (1,999,441,741)
Financing activities	**2009**	**2010**	**2011**	**2012**
Amazon	$ (772,754)	$ (5,532,736)	$ (2,116,180)	$ (3,907,960)
Andean	$ 4,288,117,718	$ (5,271,706,209)	$ 3,115,719,631	$ 10,058,522,103
Caribbean	$ 582,953,457	$ 1,069,125,267	$ 2,389,660,523	$ 5,578,256,324
Orinoquía	$ (41,298,750)	$ 21,746,233	$ 77,607,209	$ (21,184,311)
Pacific	$ (848,301,384)	$ (1,107,814,345)	$ 513,945,993	$ (369,849,063)

Source: elaborated by the authors.

From the point of view of the cash from operation activities, it is evident that the Andean region has the greatest capacity to generate cash flows, followed by the Pacific, although to a lesser extent. The regions of Orinoquía and the Amazon are the ones that present smaller flows of cash as a product of their operation, indicating little capacity to attract cash revenue as a result of the development of their main activity; likewise, the Caribbean region presented a very negative year in 2012 in this regard, which implies the need to review future strategies so that the operation of the companies located there is viable.

On the other hand, as regards cash for investment activities, it is evident how all the regions to a greater or lesser extent make investments in infrastructure and non-current assets in order to improve their productive capacity. For the purposes of the cash used in these activities, it is observed that the Andean and Caribbean regions are really far ahead of what is invested in other regions. Meanwhile, the Amazon region is that with the least resources used in investment activities, which suggests growth for the region to be quite unlikely.

Regarding cash for financing activities, there is no stable behavior in one region relative to another (Table 8). In some regions, these flows were negative (for example, for all the periods evaluated for the Amazon), indicating that the companies used cash flows to pay for the financing acquired or to distribute profits. In other areas, flows were positive (the Caribbean, throughout the evaluation period), which implies capitalization processes and access to the financial system for the development of new investment activities.

It is observed that the Caribbean and Andean regions are those that have resorted to financing activities in order to obtain cash, which constitutes a debt that in the future will generate higher payments due to the high debt level. Another element will be in the returns expected by investors who also left their resources in this region in order to finance their activities. For its part, the Pacific region has used its resources to cover financial debt or pay dividends to its owners, which entails the withdrawal of cash resources for these activities.

Analysis of financial management indicators

In general terms, the financial health of businesses is visible in the good balance between liquidity, profitability and debt. This approach can be extrapolated to the regions, since good indicators need to be developed on these three fronts to promote economic growth and increase competitiveness.

Liquidity indicators

Liquidity indicators are one of the most important elements in a company's finances, since they indicate the availability of cash funds in the short term. Therefore, it is one of the most important variables that any organization must study, since it is related to the short term and the components of the company's working capital, such as cash, inventories, accounts receivable, suppliers and in general all the components of the operational cycle of an organization.

This component is not only linked to the short term but also to organizational management, that is to say, based on its study the financial management of the elements that compose working capital can be understood and evaluated, since these are the main causes for its result, and its favorable state depends on the continuity of the company on the short term.

In order to evaluate the liquidity of the regions of the country, static and dynamic analysis methods were used, since this indicator should be estimated periodically and in the long term, to establish the efficiency of the regions in the exploitation of their assets in order to generate a profit on the short term, a turnover of cash sufficient to cover its short-term obligations and generate surpluses.

When analyzing the liquidity of the regions from a static point of view, two financial management indicators of recognized technical value are used, such as the current ratio and

the acid test. From the current ratio can be known the ability of companies to meet their short-term debts, compromising their current assets. Despite the different results of the regions, it can be said that all of them have good liquidity, since they have sufficient resources to satisfy their short-term obligations, from the point of view of the current ratio, that is, using all current assets and liabilities for the analysis, as the results of the regions show that the value of one is exceeded, which means that current assets exceed current liabilities (Table 9).

Table 9. Static liquidity indicators

Region	2009		2010		2011		2012	
	Current ratio	Acid-test	Current ratio	Acid-test	Current ratio	Acid-test	Current ratio	Acid-test
Amazon	1.64	0.99	1.46	0.99	1.40	1.08	1.46	1.13
Andean	1.39	1.00	1.32	0.96	1.31	0.97	1.43	1.03
Caribbean	1.38	0.92	1.14	0.79	1.06	0.75	1.31	0.92
Orinoquía	1.30	0.82	1.32	0.80	1.41	0.91	1.53	1.00
Pacific	1.54	1.12	1.50	1.06	1.45	1.05	1.50	1.05

Source: elaborated by the authors.

In this same line is found the indicator called the acid test, which excludes inventories, that is, that companies are able to pay current liabilities without carrying out their inventories. It is observed that there are liquidity deficiencies in almost all regions, with the strongest for 2012 being the Pacific (1.05) and Amazonian (1.13 times) regions. In addition, it should be noted that most regions have a strong influence from the inventories, since a significant change is seen between the current ratio and the acid test.

The dynamic liquidity indicators are divided into two groups: those of rotations and cycles. In the first, it is intended to analyze the days of accounts receivable, inventory days and supplier days, which account for the time it takes these accounts to change so as to become cash transactions. The cycle indicators show the time that the company takes to convert the resources that enter into its productive system into final goods and pass again to resources in order to increase the wealth of the business.

The accounts receivable days allow us to understand the time it takes to rotate the portfolio in terms of days, and to thus be aware of the average terms given to customers or debtors. In this sense, the Caribbean region for 2012 is one in which the portfolio takes the longest time to be recovered, with 154 days (see Table 10). Subsequently, there are regions such as the Pacific and the Andean, where the terms are also quite long (between 92 and 100 days to recover the portfolio during 2012). On the other hand, the Amazon region is where the portfolio takes the shortest time to be converted into cash, with terms that decreased from 89 days in 2009 to just 26 days in 2012. This demonstrates the effectiveness in the collection of money owed by customers in this region and also readiness in the payment by those who purchase goods and services.

Table 10. Current asset turnover

Accounts receivable days	2009	2010	2011	2012
Amazon	89	85	86	26
Andean	101	94	99	100
Caribbean	94	101	98	154
Orinoquía	68	65	71	53
Pacific	105	106	101	92
Days in inventory	**2009**	**2010**	**2011**	**2012**
Amazon	89	63	40	11
Andean	65	63	63	64
Caribbean	69	61	56	97
Orinoquía	62	61	55	51
Pacific	60	65	62	63
Accounts payable days	**2009**	**2010**	**2011**	**2012**
Amazon	79	65	80	17
Andean	57	59	59	56
Caribbean	57	58	70	89
Orinoquía	48	48	35	35
Pacific	48	49	53	47

Source: elaborated by the authors.

Days in inventory show the speed at which these assets are realized or converted into cash. In this indicator, it is possible to observe the evident search for a minimum of inventories for the Amazon region, which goes from a rotation of 89 days of inventory available for the operation in 2009, to only 11 days in 2012 (see Table 10). Likewise, there is a deterioration in this indicator for the Caribbean region, which went from a result in 2009 of 69 days of inventory to one of 97 days for 2012. The other regions are relatively stable, although Orinoquía managed to go from 62 days to 51 days from the beginning to the end of the period under analysis.

The accounts payable days serve to determine the average term given to companies and involve an estimated time in which the company finances its activity with these inputs received and which are not yet paid. Regarding this indicator, it can be seen that the longest term granted by suppliers is in the Caribbean region with 89 days in 2012, which reduces its scope of financial performance. In addition, although the Amazon region in the same period achieved a time of 17 days, its results are very changeable and unstable in the period under review, so it would be possible for the following year to have a high degree of accounts payable days again. In addition, it is observed that the Andean region has a

homogenous turnover of accounts payable days during the evaluation period, with more days to pay given to customers than those offered by suppliers, which is not good from the financial point of view, since it requires more working capital to leverage the credit it offers to customers. The regions of Orinoquía and the Pacific, for their part, have financing from suppliers of between 35 and 47 days for the year 2012, as the situation is more difficult, since they must pay the suppliers much more quickly than the other regions, which may constitute cash difficulties to pay on time.

The operational cycle is the relationship that shows the need for resources of the company to operate in the short term such as inventories and accounts receivable. It is the sum of the days that are recovered from the portfolio plus the days of inventory turnover. This indicator represents the time that elapses between the investment of the money and its entrance into the company. Of the regions analyzed, it is observed that for 2012, the region with the most unfavorable result is the Caribbean with 252 days, while the Amazon, which had 178 days in 2009, managed to move to a more favorable situation in 2012 with 38 Days (Table 11).

Table 11. Operational and cash cycles

Operational cycle	2009	2010	2011	2012
Amazon	178	148	126	38
Andean	166	157	162	164
Caribbean	163	162	154	252
Orinoquía	130	126	126	103
Pacific	165	171	163	155
Cash cycle	2009	2010	2011	2012
Amazon	99	83	46	20
Andean	110	98	103	108
Caribbean	106	105	84	163
Orinoquía	82	78	91	69
Pacific	117	121	111	108

Source: elaborated by the authors.

As regards the cash cycle, it is understood that this relates to the financing offered by suppliers to the company; therefore, it shows the operating cycle less the accounts payable days. In this way, it represents the time needed to receive cash free of payments by the organization. The shortest cash cycle is in the Amazon region, with 20 days for 2012. The Pacific region is also highlighted, with a cash cycle of 69 days in 2012. As for the Caribbean region, it was found that its cash conversion cycle improved considerably in the period evaluated, going from 106 days in 2009 to 163 days in 2012. According to this scenario, companies in this region require greater resources to finance their actions.

Profitability indicators

Profitability indicators are a percentage ratio that express the relationship between the level of profit and the level of investment in the company. They are measurements of the efficiency in the use of the resources of the organization and are variables that allow the measurement of the effectiveness of the administration of the company to control the costs and expenses and, in this way, to convert the sales into profits. The profitability analysis should mainly take a long-term look at the company to avoid possible imbalances in business finances.

The ROI (Return on Investment) (internal approach) and Return on Equity (ROE) (external approach) were used to assess the return on assets and the equity of the Colombian companies, whose individual results can be seen in Table 12.

Table 12. Indicators of the return on assets and equity

ROI	2009	2010	2011	2012
Amazon	3.34 %	4.97 %	3.68 %	8.65 %
Andean	4.98 %	4.57 %	5.16 %	4.22 %
Caribbean	2.26 %	1.64 %	1.95 %	1.85 %
Orinoquía	3.14 %	3.60 %	3.06 %	11.76 %
Pacific	2.96 %	2.31 %	3.14 %	4.49 %
ROE	**2009**	**2010**	**2011**	**2012**
Amazon	6.61 %	9.68 %	7.86 %	17.68 %
Andean	7.96 %	7.13 %	8.11 %	6.71 %
Caribbean	4.29 %	2.96 %	4.18 %	4.11 %
Orinoquía	7.42 %	9.09 %	7.03 %	25.99 %
Pacific	4.54 %	3.56 %	4.99 %	7.05 %

Source: elaborated by the authors.

The return on the total assets or investment of the company is represented in the ROI. This index shows that the Amazon and Andean regions were the ones that offered the best returns on assets in the period 2009 to 2011. For the Amazon region, a change from 3.34% in 2009 to 3.68% in 2011 was presented, while the Andean region had an ROI of 4.98% and in 2011 it obtained a result of 5.16%. However, for 2012, the regions with the best performance were Orinoquía with 11.76% and the Amazon region with 8.65%, which shows an adequate management of resources that has generated significant yields from less resources.

The least profitable region was the Caribbean, which had only 2.26% for 2009 and achieved a result of 1.85% for 2012, which means that this region poses a significant investment risk, since the return would have be expected to be low.

Meanwhile, the profitability generated by the company's equity and that expresses the return that is being offered to the owners of the capital, should be measured based on the net profit of the year so as give the ROE as a result. Regarding this indicator, the Amazon and Orinoquía regions are the most profitable for 2012 with an ROE of 17.68% and 25.99% respectively, which indicates that with the assets owned by the companies of these regions, they are getting excellent results. The Caribbean region, on the other hand, was the one that offered the lowest levels of profitability with 4.29% for 2009 and 4.1% for the period 2012.

Debt indicators

The level of debt indicates the proportion in which the creditors participate in the total value of the company. It also serves to identify the risk assumed by creditors, the risk of the owners of the economic entity and the convenience or inconvenience of the level of debt presented. It should be noted that it cannot be said that debt is bad for an organization, since if the interest rate paid on the debt is lower than the returns obtained in the investment, then the debt is beneficial; however, there will always be a default risk when this level of debt is very high.

The region with the lowest levels of debt is that of the Pacific, with an approximate result of 35% - 36% in the period evaluated, with the Amazon region close with 35% and 37%. Likewise, the regions with the highest levels of debt are the Amazon, the Caribbean and Orinoquía, with levels above 44% during the 2009-2012 period (Table 13)

Table 13. History of debt indicators

Level of debt	2009	2010	2011	2012
Amazon	49.54 %	48.62 %	53.20 %	51.10 %
Andean	35.23 %	35.93 %	36.31 %	37.08 %
Caribbean	47.33 %	44.76 %	53.33 %	54.89 %
Orinoquía	57.62 %	60.45 %	56.42 %	54.74 %
Pacific	34.89 %	35.15 %	37.11 %	36.33 %
Debt concentration	**2009**	**2010**	**2011**	**2012**
Amazon	86.30 %	84.30 %	82.06 %	81.30 %
Andean	66.32 %	67.03 %	68.40 %	67.36 %
Caribbean	64.29 %	58.23 %	48.53 %	50.14 %
Orinoquía	76.32 %	73.63 %	70.46 %	65.25 %
Pacific	61.55 %	59.67 %	60.41 %	61.11 %

Source: elaborated by the authors.

The concentration of debt shows which portion of the obligations with third parties is destined for the financing of the operation in the short term. In the Amazon region, there was a greater concentration of short-term obligations, with results that exceeded 80% during the evaluation period. This situation can create risks for the companies of this zone

due to the impossibility of covering these obligations with short-term resources. On the other hand, the Andean, Orinoquía and Pacific regions, presented results that surpassed 60% of the debt in the short term. The region with the lowest concentration was the Caribbean, with 50.14% for the year 2012.

Table 14. Debt indicators in perspective

Interest coverage (EBITDA)	2009	2010	2011	2012
Amazon	1.27	1.97	2.10	1.15
Andean	1.04	1.75	1.89	1.73
Caribbean	1.11	0.84	0.69	1.89
Orinoquía	1.87	2.19	2.14	2.77
Pacific	1.19	1.60	1.62	2.06
Financial debt ratio EBITDA	**2009**	**2010**	**2011**	**2012**
Amazon	1.38	1.22	1.19	0.60
Andean	1.46	1.45	1.36	1.35
Caribbean	2.82	4.05	5.03	5.29
Orinoquía	2.78	2.82	2.95	1.32
Pacific	2.11	2.35	2.21	1.70

Source: elaborated by the authors.

From the results obtained in the debt indicators in perspective, there is a noticeable variation in the results obtained in the different years. In this sense, it is not possible to propose structural behaviors towards future years and, therefore, when thinking about this type of indicator, it is only possible to analyze the debt capacity for each period and not as a possible result that will permanently be in the sector. It should be noted that in most cases, the sectors present results in the interest coverage indicator with EBITDA, through which it is possible to pay the interest generated in the period more than once, which implies the ability to acquire more debt in the future. On the other hand, when analyzing the financial debt ratio EBITDA, it is found that for 2012 the Amazon region would be able to pay all of its financial debt with the total EBITDA generated in the period, while the other regions would have to wait for more than a period to achieve it. For example, the Caribbean region would have to wait more than 5.29 years to pay off all of its financial debt, but under the hypothetical case in which it used all of its EBITDA for payment, which is not appropriate in regular business practice.

CONCLUSIONS

It should be noted that the companies located in the regions of the Amazon and Orinoquía, which for 2009 and 2010 did not have a strong infrastructure to boost their development, have been significantly improving their financial performance and have been in the lead

regarding profitability. To this business effort, it is immediately necessary to add the efforts of the state to escape from problems such as the lack of road infrastructure, the absence of economical means of transport, groups outside the law, among others, since these have not allowed the integral development of those regions or the generation of the real confidence that investors require.

On the other hand, it should be noted that companies in regions such as the Andes, the Caribbean and the Pacific enjoy greater facilities for long-term financing, while in the regions of the Amazon and Orinoquía, greater efforts are needed for covering short-term debt, which limits competitiveness due to a lack of access to financing sources that could boost growth and value generation in these regions. Likewise, in the region of Orinoquía, it is observed that the ownership of companies has been lost, due to a decrease in equity participation between 2009 and 2012, a factor that shows difficulties for internal growth, without wishing to state that having debt is not convenient.

In addition, factors such as productivity and efficiency in the management of resources, boost the competitiveness of companies and, therefore, better financial results are observed for the region. In this sense, the results of the companies located in the Andean region are noteworthy, which demonstrates the effect of having closer proximity to resources and better business dynamics. At this point, it is necessary to think about what mechanisms would allow the circulation of wealth by Colombian companies to be greater, so that good returns will not only be offered to those that are mainly in the center of the country, an example of this would be the appropriation of technologies in other regions in order to generate more value in the products and services offered. In addition, policies of equitable tax burdens should be generated, since the proportion of income tax paid is not equivalent to the results obtained by companies in the different regions, which occurs because of exemptions and various tax benefits that are mainly received for the companies that are in regions with greater development or that possess greater investment. It should be noted that the differences between tax burdens propel or not the creation of new companies and the arrival of new capital.

It is remarkable that from the different regions there is, in the vast majority, cash generation from operating activities and that, in addition, investments are being made, as this allows for operational growth. However, it is worrying that much of the growth will not be planned and that the resources invested will be underutilized, which would generate destruction of value and loss of competitiveness. In addition, it is always necessary to evaluate the investment projects and forms of financing, as the form of debt found in some regions may be detrimental to competitiveness in the coming years, taking into account that the return on investment must be higher than the financial cost.

In terms of liquidity, it is notable that regions such as the Amazon and Orinoquía have very favorable results that correspond to the cash cycles. This situation allows us to glimpse the possibility of efficient collection of their sales on credit and a good financial advantage in the optimization of inventories and payment dates to suppliers. Likewise, these regions achieved the maximum results in 2012 in terms of profitability obtained, which goes hand

in hand with the good management of the companies that are part of the business fabric of the region.

With regard to debt, the regions in general have the capacity to acquire more debt in the financial system. However, as discussed in this document, the acquisition of credit must be responsible and evaluated, since an error in acquiring new debt without expecting a return higher than the cost it generates, moves towards the destruction of value within the organization.

Finally, it is worth continuing to consolidate the regional reports with details of the overall financial performance of the companies that reside in those places. The reports require more detailed information by economic sector or business size, in order to specify, as closely as possible, the needs of each region with its particularities. In addition, it is important to observe the financial behavior based on the information contained in other databases such as the Superintendency of Solidary Economy, the Financial Superintendency, among others, as it is of great importance to know the impact of the International Financial Reporting Standards on financial statements and, finally, on how financial indicators should be analyzed when the information provided is outlined under the model proposed by the International Accounting Standards Board (IASB).

REFERENCES

Aguiar, H., Cadavid, L., Cardona, J., Carvalho, J., Jiménez, J. & Upegui, M. (1998). *Diccionario de términos contables para Colombia* (2ª ed.). Medellín: Universidad de Antioquia.

Altenburg, T. Wolfgang, H. & Jörg, M.-S. (1998). Building Systemic Competitiveness. Concept and Case Studies from Mexico, Brazil, Paraguay, Korea and Thailand. *Reports and Working Papers of the German Development Institute*, (3), Berlin.

Bernstein, L. (1993). *Análisis de estados financieros: teoría, aplicación e interpretación*. Barcelona: Ediciones S.

Block, S., Hirt, G. & Danielsen, B. (2010). *Foundations of Financial Management*. New York: McGraw-Hill, Irwin Series.

BM (2013). *Doing Business 2014*. Washington: BM.

Brigham, E. & Ehrhardt, M. (2013). *Financial Management: Theory & Practice*. Portland: Cengage Learning.

Brooks, R. (2012). *Financial Management: Core Concepts*. Corvallis, Oregon: Prentice Hall.

Candau, F., Goujon, M., Hoarau, J. & Rey, S. (2014). Real exchange rate and competitiveness of an EU's ultra-peripheral region: La Reunion Island. *International Economics*, *137*, 1-21.

Cañibano (1996). Contabilidad. Análisis de la realidad económica. Madrid: Editorial Pirámide.

Carvalho, J. A. (2010). *Estados financieros: normas para su preparación y presentación* (2ª ed.). Bogotá: ECOE.

Castaño; C. E. & Arias, J. E. (2013). Análisis financiero integral de empresas colombianas 2009-2010: perspectivas de competitividad regional. *Entramado, 9* (1), 84-100.

Castaño, C. E. & Arias, J. E. (2014). Análisis financiero integral de empresas colombianas 2009-2012 desde la perspectiva de la competitividad. *Revista Actualidad & Divulgación Científica, 17*(1), 275-284.

Castaño, C. E., Vanegas, L. & Ospina, F. (2010). Evaluación del desempeño financiero de las regiones en Colombia para el año 2009. *Contaduría Universidad de Antioquia, 56*, 157-181

Charles, V. & Zegarra, L. (2014). Measuring regional competitiveness through Data Envelopment Analysis: A Peruvian case. *Expert Systems with Applications*, *41* (11), 5371-5381.

Chen, R., Chidambaran, N., Imerman, M. & Sopranzetti, B. (2014). Liquidity, Leverage, and Lehman: A Structural Analysis of Financial Institutions in Crisis. *Journal of Banking & Finance,* 1-76. Article in press.

Correa, J. A. (2005). De la partida doble al análisis financiero. *Contaduría Universidad de Antioquia, 46*, 169-194.

Correa, J. A., Castaño, C. E. & Mesa, R. J. (2010). Desempeño financiero empresarial en Colombia en 2009: un análisis por sectores. *Perfil de coyuntura económica, 15*, 149-170.

Correa, J. A., Castaño, C. E. & Mesa, R. J. (2011). Panorama financiero empresarial en Colombia 2009-2010: un análisis por sectores. *Perfil de coyuntura económica, 18*, 145-165.

Correa, J. A., Castaño, C. E. & Ramírez, L. J. (2010). Análisis financiero integral: elementos para el desarrollo de las organizaciones. *Lúmina, 11*, 180-193.

Correa, J. A., Moscoso, J. & Jaramillo, F. (2006). Modelo integral de los flujos de fondos a los flujos de caja libre y a las decisiones financieras. En *III Simposio Nacional de Docentes de Finanzas* (pp. 1-34). Bogotá.

CPC (2013). *Informe nacional de competitividad 2013-2014*. Bogotá: CPC.

Galeano, M. (2004). *Estrategias de investigación social cualitativa. El giro de la mirada*. Medellín: La Carreta.

Galvis, L. & Meisel, A. (2012). Convergencia y trampas espaciales de pobreza en Colombia: evidencia reciente. *Documentos de trabajo sobre economía regional, 177*, 1-26.

García, O. (1999). *Administración financiera. Fundamentos y aplicaciones*. Cali: Prensa Moderna.

Hermosilla, J. (2002). El método de masas financieras: una alternativa de análisis de estados financieros. *Revista Legis del Contador, 11*, 129-150.

IMD (2011). *World Competitiveness Yearbook*, Ginebra: IMD.

Lombana, J. & Rozas, S. (2009). Marco analítico de la competitividad: Fundamentos para el estudio de la competitividad regional. *Pensamiento & Gestión, 26*, 1-38.

Manus, C. (1995). Estado de flujos de efectivo. *Cuadernos de Estudios Empresariales*, 5, 179-202.

Moreno, A. & Posada, H. (2007). Evolución del comercio intraindustrial: fundamentos para el estudio de la competitividad regional. *Lecturas de Economía, 66*, 83-118.

Moscoso, J., Correa, J., & Jaramillo, F. (2006). Modelo integral de los flujos de fondos a los flujos de caja libre ya las decisiones financieras. En *Memorias del III Simposio Nacional de Docentes de Finanzas* (pp. 1-34).

Nieto, P. & Ángel, D. (2007). Las oportunidades que ofrece el TLC: ¿contribuyen a la convergencia en el desarrollo y crecimiento de las regiones colombianas? *Equidad y desarrollo, 7*, 91-109.

Ortiz, H. (2004). *Análisis financiero aplicado y principios de administración financiera*. Bogotá: Universidad Externado de Colombia.

Porter, M. (1990). *The Competitive Advantages of Nations*. New York: The Free Press.

Rhenals, R. (2003). El problema fiscal colombiano: ¿Se trata de una baja presión tributaria? *Perfil de Coyuntura Económica, 1*, 39-60.

Sinisterra, G., Polanco, L. & Henao, H. (2005*). Contabilidad sistema de información para las organizaciones*. Bogotá: Mc Graw Hill.

Superintendencia de Sociedades de Colombia. (2014). Sistema de información y reporte financiero empresarial –SIREM-. Recuperado de http://sirem.supersociedades.gov.co/Sirem2/

Tascón, M. & Amor, B. (2007). La distinción entre operativo y financiero como base para el análisis contable: la aportación de Penman. *Contaduría Universidad de Antioquia, 51*, 131-158.

Vallejo, P. (2003) *Competencia y estrategia empresarial*. Bogotá: Pontificia Universidad Javeriana. 256 p.

Vera, M. (2001). Gestión financiera de la pequeña y mediana industria de la ciudad de Maracaibo. *Revista de Ciencias Sociales 7*(1),65–89.

Vivas, O. (2005). *El análisis de los estados financieros para la toma de decisiones la gerencia pública*. Tesis de doctorado no publicada. Tecana American University, Caracas, Venezuela.

Wang, Z. & Wang, Y. (2014). Evaluation of the provincial competitiveness of the Chinese high-tech industry using an improved TOPSIS method. *Expert Systems with Applications, 41* (6), 2824-2831.

WEF (2011). *The global competitiveness report 2010-2011*. Ginebra: WEF.