How can the analyst's valuation process foster the development of an appropriate stock recommendation?

Maria Dimitriou*
University of Macedonia, Greece

ABSTRACT

The effective investment research report suggests that five steps of the valuation process be required in order to obtain a successful investment decision that the valuation task could bring. Thus, this analysis suggests that following this process, a risk-adjusted DCF valuation model is developed and that we should perceive appropriate target price and stock recommendation as a result along with the valuation task. DCF valuation modeling requires numerous assumptions in estimating the intrinsic value combining valuation models and comparing this value to the market price of the firm's stock, correcting possible mistakes and improving efficiency. The results may help to improve the understanding of analysts' valuations, both expected and perceived. The findings also suggest that the information of an effective investment research report should be a crucial stage in the valuation step and can help us to address issues such as how analysts use financial information to generate valuations and stock recommendations.

JEL — G12-14, G17, L66.

* Ph.D. Candidate in Field of Research: Financial Accounting with Information Systems,

Department of Applied Informatics, School of Information Sciences, University of Macedonia, N. Egnatia Str. 156, 54006, Thessaloniki, Greece

E-mail: mdimitriou@uom.gr, mdimitriou@uom.edu.gr, maria.d.dimitriou@gmail.com

Website: https://www.linkedin.com/in/maria-dimitriou-1b238b63/, https://www.researchgate.net/profile/Maria_Dimitriou3

Identifiers: Web of Science Researcher ID Y-7232-2019, ORCID 0000-0002-6153-7122

https://publons.com/researcher/3121758/maria-dimitriou/, https://orcid.org/0000-0002-6153-7122/print

Πώς μπορεί η διαδικασία αποτίμησης του αναλυτή να προωθήσει την ανάπτυξη κατάλληλης σύστασης μετοχής;

Μαρία Δημητρίου *

ΠΕΡΙΛΗΨΗ

Η αποτελεσματική ερευνητική έκθεση επενδύσεων υποδηλώνει ότι απαιτούνται πέντε στάδια της διαδικασίας αποτίμησης για την επίτευξη μιας επιτυχημένης επενδυτικής απόφασης που θα μπορούσε να επιφέρει η αποτίμηση. Έτσι, αυτή η ανάλυση υποδηλώνει ότι μετά από αυτή τη διαδικασία, αναπτύσσεται ένα προσαρμοσμένου-κινδύνου μοντέλου αποτίμησης ταμειακών ροών και ότι θα πρέπει να αντιληφθούμε την κατάλληλη τιμή-στόχο και τη σύσταση των μετοχών ως αποτέλεσμα κατά τη διάρκεια της διαδικασίας αποτίμησης. Επιπλέον, η μοντελοποίηση αποτίμησης ταμειακών ροών απαιτεί πολυάριθμες παραδοχές για την εκτίμηση της εσωτερικής αξίας συνδυάζοντας μοντέλα αποτίμησης και συγκρίνοντας αυτή την αξία με την τιμή αγοράς της μετοχής της εταιρείας, διορθώνοντας πιθανά λάθη και βελτιώνοντας την αποδοτικότητα. Τα αποτελέσματα μπορούν να συμβάλουν στη βελτίωση της κατανόησης των αποτιμήσεων των αναλυτών, τόσο αναμενόμενων όσο και αντιληπτών. Τα ευρήματα υποδεικνύουν επίσης ότι η πληροφόρηση μιας αποτελεσματικής ερευνητικής έκθεσης επενδύσεων θα πρέπει να είναι ένα κρίσιμο στάδιο στο βήμα αποτίμησης και μπορεί να μας βοηθήσει να αντιμετωπίσουμε ζητήματα όπως ο τρόπος με τον οποίο οι αναλυτές χρησιμοποιούν τις χρηματοοικονομικές πληροφορίες για τη δημιουργία αποτιμήσεων και συστάσεων μετοχών.

JEL - G12-14, G17, L66.

* Υπ. Διδ. στο Πεδίο Έρευνας: Χρηματοοικονομική Λογιστική με Πληροφοριακά Συστήματα,

Τμήμα Εφαρμοσμένης Πληροφορικής, Σχολή Επιστημών Πληροφορίας, Πανεπιστήμιο Μακεδονίας, Εγνατία 156, 546 36, Θεσσαλονίκη, Ελλάδα

E-mail: mdimitriou@uom.gr, mdimitriou@uom.edu.gr, maria.d.dimitriou@gmail.com

Website: https://www.linkedin.com/in/maria-dimitriou-1b238b63/, https://www.researchgate.net/profile/Maria_Dimitriou3

Identifiers: Web of Science Researcher ID Y-7232-2019, ORCID 0000-0002-6153-7122

I. INTRODUCTION- PROBLEM STATEMENT/ISSUE

Analysts' practices and philosophies of their valuations

The firm's valuation is a clearly critical area of concern of Economic and Administrative Sciences, research, and practical application at an international level. Schipper (1991), Brown (1993) and mainly Bradshaw (2011) suggest that: "Further research in directly observing the analysts' decision process of analysis in contrast to examine correlations between financial inputs, outputs, and conditioning variables to understand the analysis process and bases for recommendations".

In this project, we consider this type of approach as an approach of sell-side analysts used to study analysts' valuation process. To appreciate the value of information that researchers can get from sell-side analysts' reports in making recommendations, we must examine, in detail, the different approaches that have been used to investigate this topic. Schipper (1991) indicates that "Knowing how financial accounting information is used should make accounting and finance academics more knowledgeable professors and thus more able to teach future students".

Therefore, instead of intentionally avoiding how financial and accounting information is used, as well as the economic and social aspects of information, that they can get from sell-side analysts' reports in making recommendations, they should explore the approach of sell-side analyst for direct observation. It may, therefore, be advantageous also to investigate the influence of "full information" value using "superior" investment research reports that can be found in international competitions like CFA Institute Research Challenge and recently Ben Graham Center's stock pricing competition.

However, I did not find studies that have attempted to use such a direct approach as a particular methodology to examine the analysts' valuations and to observe the valuation process and findings regarding investment recommendations by the sell-side analyst approach. The possible explanation of having no researcher uses this approach is that the investment research reporting is a complex and time-consuming process.

Besides that, it is challenging to find analysts that are willing to cooperate with researchers to go through the investment research report process except for competition concepts between teams of 3-5 students like the above. Therefore, future investigation using or conducting this methodology would be helpful to better understand the effects of discussion on "full information" value content necessary to the decision-making process.

This paper builds on the perspectives provided by Bradshaw (2011), Schipper (1991) and Brown (1993). They categorize papers published since 1992 and suggest avenues for further research in seven broad areas: (1) analysts' decision processes; (2) the nature of analyst expertise and the distributions of earnings forecasts; (3) the information content of analyst research; (4) analyst and market efficiency; (5) analysts' incentives and behavioral biases; (6) the effects of the institutional and regulatory environment (including cross-country comparisons); and (7) research design issues.

As emphasized by Bradshaw (2009), the study of analysts' information processing is not easily accessed by archival studies and a number of more field-based studies have recently been published, aiming at improving our understanding of how analysts use information for valuation purposes (Beccalli et al., 2014; Bischof et al., 2014; Abhayawansa et al., 2015; Brown et al., 2015). In this area suggests that the need for an immediate response based on basic information followed by more sophisticated analysis corresponds to the real-life situation of many analysts. In line with the earlier work by Barker (1998; 1999; 2000), both Brown et al. (2015) and Abhayawansa et al. (2015) point at the importance of meeting client demands through quick processing and reactions to earnings-related information.

As a result of the above, the analysts' valuation process of companies and business units is not clearly described in the literature and research. In theory, valuation is a relatively simple process of discounting the firm's expected cash flows by investors required rates of return. In practice, valuation is highly complex and diverse process with the following five steps (Pinto, J. E., Henry, E., Robinson, T. R., Stowe, J. D., Cohen, A., 2007):

Step 1: Understanding the business to be valued

Step 2: Forecasting company performance

Step 3: Selecting the appropriate valuation model for the valuation task

Step 4: Converting forecasts to the valuation

Step 5: Making the investment decision (recommendation)

II. PURPOSE/ OBJECTIVES /CONTRIBUTION

Implications for students and teaching as well as for research

The goal of this process is to provide stock recommendations. These recommendations include which stocks to buy, which stocks to sell, and which stocks to hold. Therefore, writing an investment research report is an important part of an analyst's job. Report Writing presents a detailed valuation report with numerous comments on why certain items were included or excluded.

Most valuation reports cover the following three major areas: 1) description (presentation of events, this informs the reader about sales, profits, new products of the company and the macroeconomic and industrial frameworks in which the company operates), 2) analysis and forecasts for industry and business, and 3) valuation and recommendation.

Certain "research reports" have a significant influence on value investing, although this may not always be visible or clear. One question in this thesis is whether valuation forecasts and stock recommendations that are clearer for analyzing their investment base are more successful than others whose assumptions are expressed only indirectly, and usually selectively and /or rather vaguely.

It is widely accepted that decision-makers, independent researchers, and practitioners usually have their thinking and action patterns. It may, therefore, be important to investigate how the valuation process in the format of a research report used by certified financial analysts can encourage the development of critical thinking and action, as well as the added value of such approaches in the design and implementation of necessary innovations in education.

The paper contributes in response to this need to recognize the value of hidden information. In this project, we consider an investment research report which creates challenges for academic research, defining stock recommendation and target price, in other words, a sell-side analyst approach to study analysts' valuations process in the context of existing literature. The specific objectives are the readers to:

•Experience a sell-side analyst approach to study analysts' valuations process considering the example of investment research report beyond valuation models.

•Realize the value of hidden information in developing a robust and reliable valuation model implemented in excel spreadsheets and making an informed investment decision, especially for investment report preparers.

•Recognize the benefits and positive impact that this example has from a pedagogical perspective with the assistance of ICT (Information and Communications Technology) as an open challenge.

III. RESEARCH QUESTION/S

The following are the questions to be asked:

1. When and how are analysts' valuation processes, five steps, and other related valuation aspects (accounting/ financial and other information) used, treated/ communicated as to be realistic at the case report of CCH?

2. Which are the recognized valuation models that have been applied? Why were these valuation models chosen concerning geographic regions and product categories?

3. What are the effects of these models in making appropriate investment recommendations? How accurate are the predictions and the target price associated with geographic regions and product categories? Does any of the valuation models make the security look better (or worse)?

IV. DESIGN /METHODOLOGY /APPROACH

A real-life valuation project/experience description

In the previous section, the problem is posed, and the solution is outlined. Although to achieve the paper's purpose, this section intends to coverage every step of the valuation process. The following subsections focus on stock recommendation, the goal of the valuation process.

V. RESEARCH RESULTS, DISCUSSION AND CONCLUSIONS

A. Investment summary of a real-life valuation project/experience

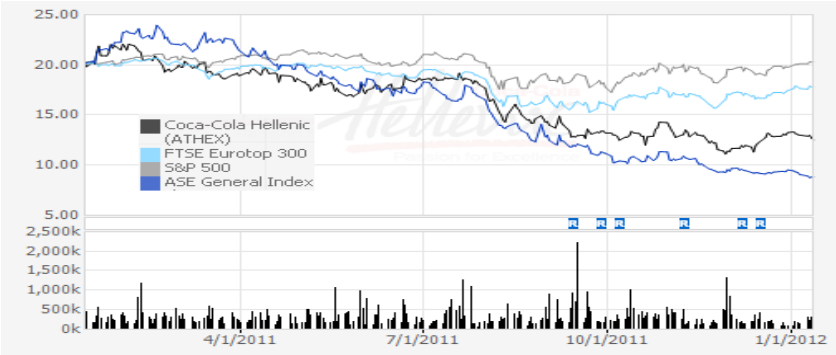
We initiate coverage of CCHBC with an accumulate rating and a target price of € 14,57, offering a 16,56% upside from the current stock price as of 12/01/2012. Coca Cola HBC is one of the world's largest bottlers of products and the second-largest bottler of The Coca-Cola Company. During the 2008 recession, Coca Cola HBC was able to maintain its margins, mainly thanks to improving economic trends in developing markets and its exposure to Russia and Nigeria.

Management targets to increase revenues from Eastern Europe & Russia and Nigeria primarily through product line expansion, innovation, and improvement in operation cost by SAP Wave II platform in twenty countries until 2012, as well as the reduction of operation cost in established markets will play main role. This strategy is expected to deliver a 2011-2014 Volume in unit cases CAGR of 2,3%, EBITDA CAGR of 2,7%, and EPS CAGR of 3,26 %. Further efficiency in European operations will support margin expansion. EBITDA margin is expected to increase from 13% in 2010 to 13,5% in 2014.

Our target price of € 14,57, is based on a Discounted Cash Flow and Multiple Analysis. As the group operates in regions with different levels of growth, margins, and risks, our DCF is based on a sum of the parts approach that values the main geographic business in each region: Western Europe and both Eastern Europe and West Africa. Also, the Sensitivity analysis values Coca Cola Hellenic at geographical and aggregate levels. Our target price is the base case estimate of the prices resulting from our DCF and our Multiple Analysis.

Main risks are connected to Coca Cola HBC's expansion into new markets: the Group's ability to succeed in entering new markets in Nigeria and Russia is mostly related to the success of new product launches, besides, the high margins of these markets could be negatively impacted by an increase in rivalry among existing local players as well as the entrance of new competitors and bad weather condition in East Europe. Moreover, a relevant degree of volatility in the Group's net profit is tied to Emerging and Developing Markets' economic growth and their exchange rates with the Euro. Finally, a stronger than expected increase in PET resin, sugar, juice concentrate, and fuel costs could have a direct impact on the Group's operating margins.

Figure 1. Coca Cola HBC's share price in the last 12 months. Source: http://www.coca-colahellenic.com



B. The Highlights of the Investment Research Report

Table of Highlights (2008-2014)

	2008	2009	2010	2011E	2012E	2013E	2014E
Net sales (€ M)	6980,7	6543,6	6793,6	6827,6	6895,8	6999,3	7139,3
EBITDA (€ M)	1039,0	1019,3	1046,5	889,6	902,9	925,5	962,5
Net Income (€ M)	227,6	399,2	423,2	321,6	328,1	334,6	348,0
Earnings/share (€)	0,62	1,09	1,16	0,89	0,91	0,94	0,98
Dividends/share (€)	0,25	0,28	0,30	0,23	0,24	0,24	0,25

- **We initiate coverage of Coca Cola Hellenic with an accumulate rating and a target price of 14,57 €, which offers a 16,56% upside from the current stock price as of 12/01/2012.** CCHBC is the largest European manufacturer of beverages and one of the leading players in the sparkling category in Europe and West Africa. After the successful turnaround of its business, and the recent downturn of the central-Western European and the Balcan economies, CCHBC's main growth drivers are differentiation by new innovative healthier products and reduction of the operation cost.

- **CCHBC will grow revenues and margins** as there are improvements in economic conditions to Developing and Emerging Markets in East Europe. Expansion in Russia and Nigeria, the launch of new healthier products, will consolidate volume growth with a 2,3% CAGR from 2011 to 2014. EBITDA margin will increase by 2011-2014 from 13% to 13,5%, also because of efficiency improvements in operations with the SAP Wave II platform in 20 countries.

- **The net financial position is expected to stabilize.** Supported by volume growth and margin expansion, Operating Cash Flow is expected to increase, and OCF to sales ratio to rise from 11,6 in 2011 to 12,2 in 2014. Based on our estimates, CCHBC's net financial position will stabilize around € 2,415.5 M from 2011 to 2014. This fact will leave CCHBC with ample financial flexibility to expand the production capacity and gain market share.

- **Valuation.** Our valuation methods lead to a target price of 14,57 € by the start of 2012. We think CCHBC may offer long term upside if it succeeds in executing its 2011-2014 business plan. This fact will be crucial for CCHBC as the economic crisis impact the demand in its established markets. We evaluate Coca Cola Hellenic by applying two techniques: Discount Cash Flow and Multiple Analysis.

- **The main risks to our target price are** the failure to expand into new markets due to unsuccessful product launches and the increase in the level of competition in current markets. Other risks come from lower than expected growth in Emerging Markets, volatility in exchange rates, and a stronger than expected increase in PET resin, sugar, juice concentrate, and fuel costs.

Figure 2. Coca Cola HBC's share price from 11/2011 to 01/2012. Source: http://www.coca-colahellenic.com

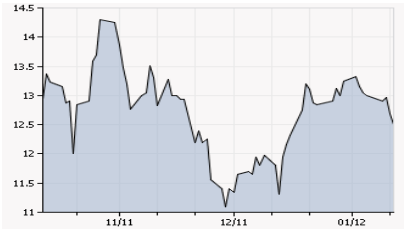


Table 1. Market Profile (as of 01/12/2012). Source: www.capital.gr and personal estimates

Market Profile (as of 01/12/2012)		**Relative Performance of Coca-Cola Hellenic:**	
Market Capitalization	4,57 billion EUR	**ATHEX**	
Shares Outstanding	363,11M	12m	-37.97 %
Main Shareholders:		3m	-6.51 %
The Coca Cola Company	23%	1m	+10.52 %
Kar-Tess Holding S.A.	23%		
Free Float	54%	**FTSE Eurotop 300**	
		12m	-12.47 %
Opening and Closing Price	12.76 - 12.5 / -2.04%	3m	+5.42 %
52-Week Range	11.1 - 22.1	1m	+4.72 %
Volume / 30-Day Average	278.54K / 192.80K	**S&P 500**	
		12m	+0.74 %
		3m	+7.63 %
Coca Cola HBC's multiples		1m	+5.69 %
P/E before tax	8	**ASE General Index**	
P/E after taxes	10,5	12m	-56.04 %
Price to book value (P/BV)	1,5	3m	-18.15 %
Price to sales (P/S)	0,7	1m	-3.74 %

Forward ratios

EV (in €'000)	**2012E**	**2013E**	**2014E**
EV	5.540	5.182	5.114
EV/EBIT	11,2	10,3	9,9
EV/EBITDA	6,1	5,6	5,3
EV/Sales	0,8	0,7	0,7

C. The "Black Box" Concerns

Given the importance of analysts' valuation in today's and tomorrow's ever-changing world, it is extremely important to look at the documented investment base (the "black box") that creates forecasts, valuation practices, and stock recommendations.

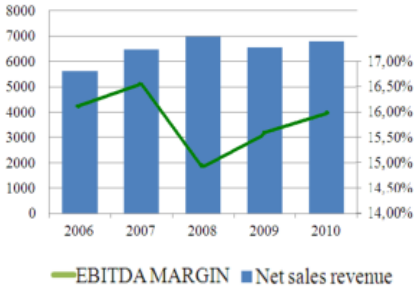
This section can be viewed as the "black box," in fact, analyst's valuation process, the hidden information, otherwise analysts' research, analysts' analysis, or analysts' decision process before the valuation and stock recommendation in the next section. Thus, the analyst's valuation process is clarified even more for a coherent and complete picture. The understanding of the industry, companies, and value drivers is the following.

1. Business Description

Coca-Cola Hellenic began a business in Greece in 1969. It was formed in 2000 as a result of the merger of the Athens-based Hellenic Bottling Company and the London-based Coca-Cola

Beverages, with headquarters in Athens. Since then, CCHBC has undertaken ten joint acquisitions. Nowadays, CCHBC is the second-largest bottler of products of The Coca-Cola Company in terms of volume. Its unique portfolio of world-leading brands mixes of geographies (operations across 28 countries) and market execution capabilities make **Coca-Cola Hellenic a leader in the alcohol-free beverage industry.** The average number of full-time equivalent employees in the first nine months of 2011 was 42,088 (42,725 for the first nine months of 2010). Its two major shareholders are the Kar-Tess Holding S.A., a private holding company, and The Coca-Cola Company. Coca-Cola Hellenic‘s shares are listed on the Athens Exchange (ATHEX: EEEK), with a secondary listing on the London Stock Exchange (LSE: CCB). Its American Depositary Receipts (ADRs) are listed on the New York Stock Exchange (NYSE: CCH). It is one of only three beverage companies worldwide to earn a place on the DJSI World index, and one of just two to make it into the DJSI Europe index. In 2010, **Coca Cola Hellenic dominates the market** with increase in net sales revenue 6,794 € million (+4%) while in the first nine months of 2011, net sales revenue grew with a 3% increase in developing markets and a stable performance in established and emerging markets, compared to the same period of the previous year. At period 2008-2010 Coca Cola Hellenic has an improvement both in EBITDA (+6%) and EBITDA Margin from 14, 91% to 15, 96%.

Figure 3.Sales and EBITDA Margin (million €). Source: Company’s Annual Report(2010)



Product Portfolio. Coca-Cola Hellenic produces markets and sells a diverse range of ready-to-drink nonalcoholic beverages. Its product portfolio consists of:

Figure 4. Diverse & balanced country portfolio. Source: Company’s Annual Report (2010)

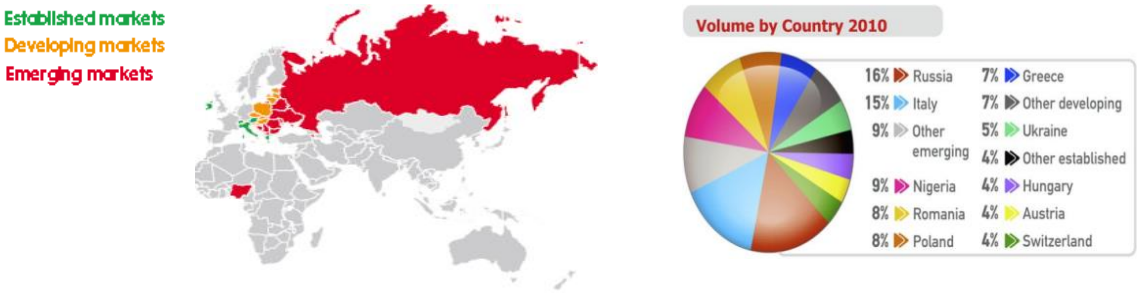
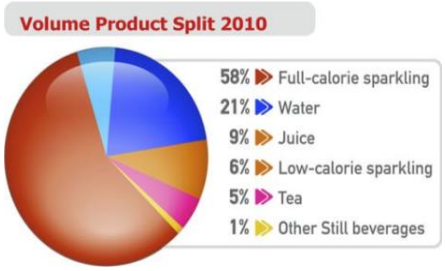


Figure 5. Diverse product portfolio. Source: Company’s Annual Report (2010)



-Sparkling beverages (64%): The leading brands are Coca-Cola, Coca-Cola Light (diet Coke), Fanta, and Sprite. The range covers: sugared, 'low sugar' and 'sugar-free' sparkling beverages, in an increasingly diverse range of packaging designed to match today's diverse lifestyles.

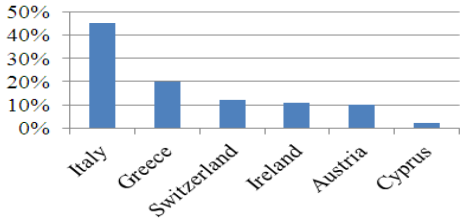
-Still beverages (15%): The range covers: ***1)Juice beverages (9%)*** - The leading brands are Amita, Dobry, and Cappy, offering in a variety of flavors and convenient packages, ***2)Ready-to-drink teas (5%)*** - The leading brand licensed by Nestea, offering in a variety of flavors, and ***3)Energy drinks and Sports drinks*** (Burn, illy coffee, powerade) (1%).

-Waters (21%): The leading brands are Avra, Lilia, and Bonaqua, offering in a range of flavors and tastes.

Geographic Segments. Coca-Cola Hellenic groups its markets into three following segments:

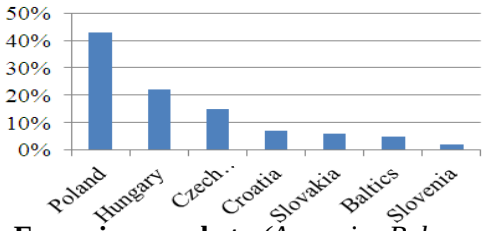
-Established markets *(Austria, Cyprus, Greece, Italy, Northern Ireland, Republic of Ireland, Switzerland)*: This key market contributed €291 million to the Group's operating profit in 2010, a -11% decrease compared to 2009 and it is expected to decline more in 2011 driven by weak consumer sentiment, austerity measures, and taxes in Greece and Italy although there is a low single-digit increase in Switzerland.

Figure 6. Established markets in West Europe (Volume Split). Source: Company's Annual Report (2010)



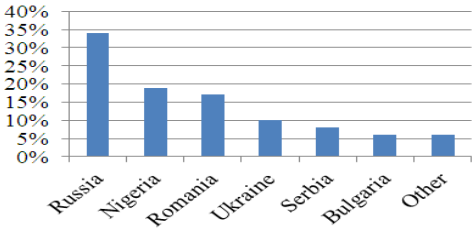
-Developing markets *(Bal tics (Estonia, Latvia, Lithuania), Croatia, Czech Republic, Hungary, Poland, Slovakia, Slovenia)*: The most promising area contributed €92 million to the Group's operating profit for 2010, -6% below the prior year and it is expected to decline more in 2011.

Figure 7. Developing markets in East Europe (Volume Split). Source: Company's Annual Report (2010)



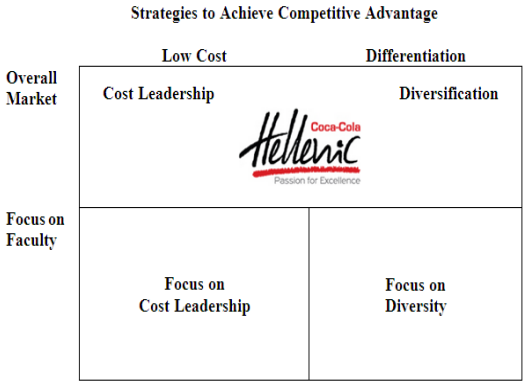
-Emerging markets *(Armenia, Belarus, Bosnia and Herzegovina, Bulgaria, FYROM, Moldova, Montenegro, Nigeria, Romania, Russia, Serbia, Ukraine)*: The most significant region in which CCHBC operates contributed €299 million to the Group's 2010 operating profit in 2010, +32% higher than in 2009 and it is expected further growth in 2011 as the economic recovery continues.

Figure 8. Emerging markets in East Europe & West Africa (Volume Split). Source: Company's Annual Report (2010)



CCHBC's Strategy. CCHBC's main growth drivers are both **cost leadership** - being the lowest cost producer while offering products comparable to those of other companies, so that products can be priced at or near the industry average (light-weighting in both PET and glass packages); and **differentiation** - offering unique products (e.g. Coca-Cola Zero) or services (e.g. SAP Wave 2) that are widely valued by buyers so that the company can command premium prices. In the first nine months of 2011, Net Sales Revenue grew ahead of volume with a 3% increase in developing markets and is expected to increase 9% by 2014 while a stable performance in established and slow growth in emerging markets.

Figure 9.



To support growth in **Developing markets,** CCHBC expands its product line with a focus on value-added products with healthy positioning.

Conversely, in **Established markets**, given that the prospects for economic recovery are very negative, CCHBC will try to maintain with new healthier product innovations, marketing and price discounting, new levels of business process efficiency and customer service, perhaps acquisitions of local companies as Loux in Greece. In February 2011, CCHBC sold all its interests in Eurmatik S.r.l., the vending operator in Italy. The disposal of Eurmatik S.r.l resulted in a gain of €0.8 million in the Group's established segment.

Finally, in **Emerging markets,** CCHBC is to focus on building brand loyalty, expansion, and new product launches. On 20 April 2011, the Group, along with TCCC, acquired through Multon ZAO, the Russian juice joint venture, all outstanding shares of MS Foods UAB, a company that owns 100% of the equity of Vlanpak FE ("Vlanpak"), a fruit juice and nectar producer in Belarus.

Table 2. The internal environment of Coca-Cola Hellenic. Source: personal estimates

The internal environment of Coca-Cola Hellenic (Attributes of the organization)	
Strengths	**Weaknesses**
+ The leader in all countries which operates	– The prices that the bottling company uses are fixed by the prices of the Coca-Cola controls.
+ Broad and balanced geographic footprint	– Some gaps in market share of Juice, Iced tea
+ Wide product range	– Staff's fear of redundancies
+ Successful promotional activity	– No dividend distribution with tax-effective way
+ Customer centricity	– High lending
+ Consumption per capita growth potential	– High advertising
+ Highly experienced management team	– High investments
+ Strong balance sheet	– Processes and systems
+ Continued free cash flow generation	– Operation cost
+ Globally recognized commitment to sustainability	

Figure 10. Value Chain of Coca-Cola Bottling Company S.A.. Source: personal estimates

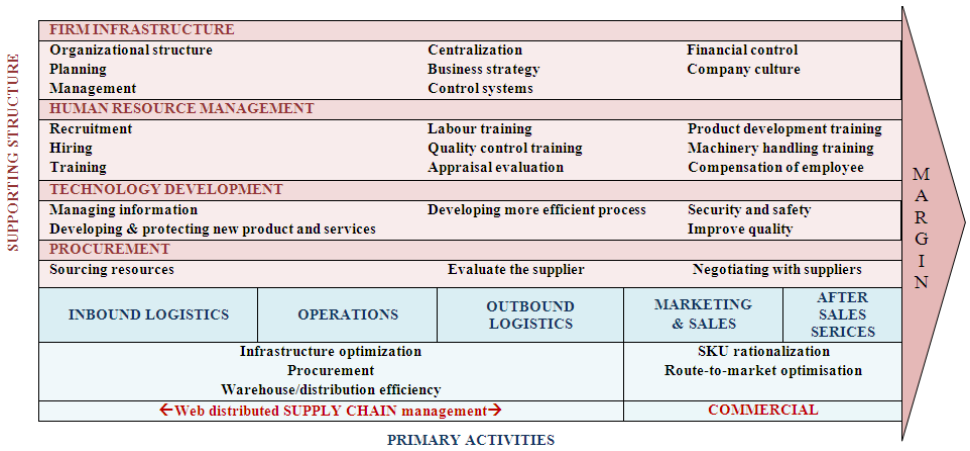
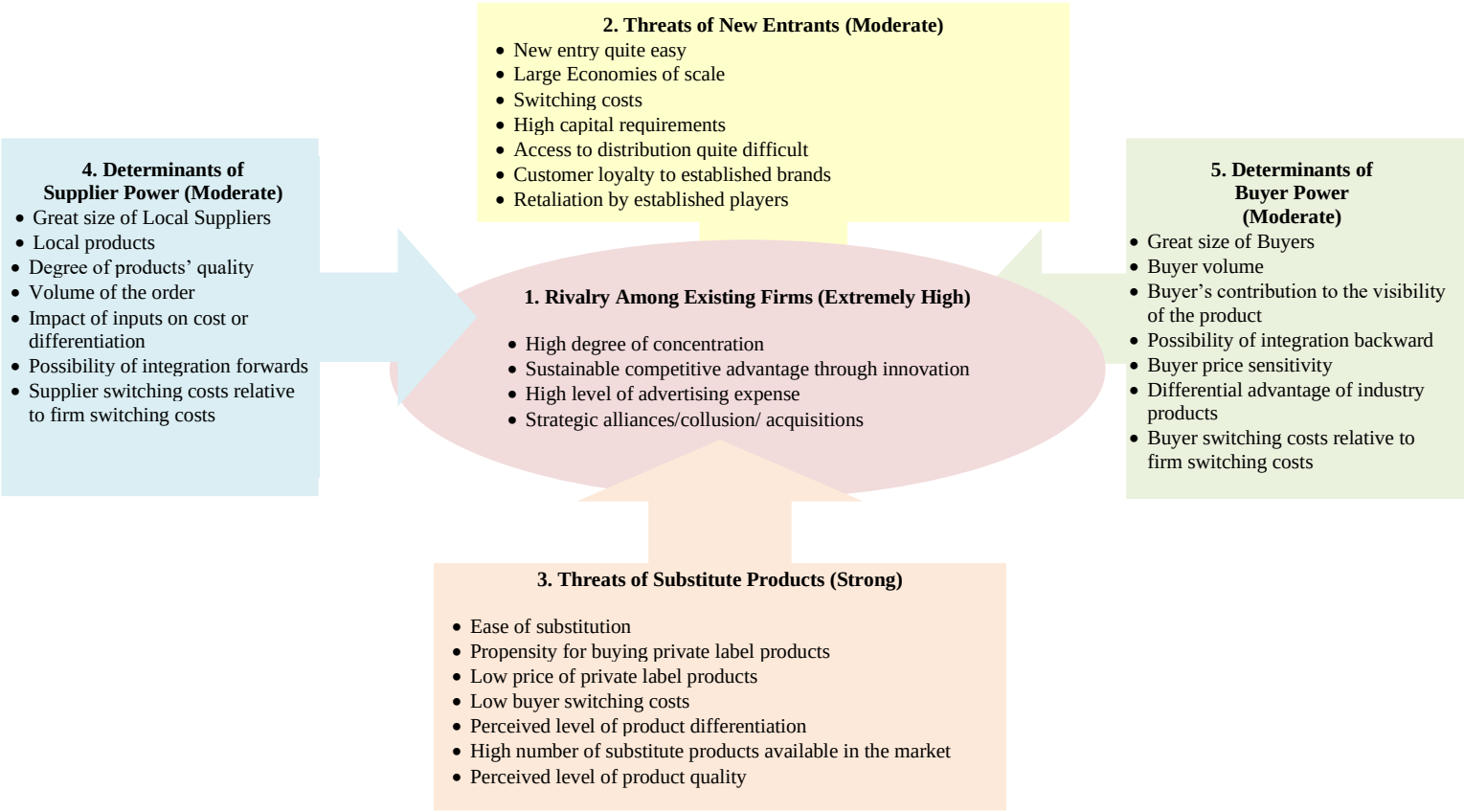


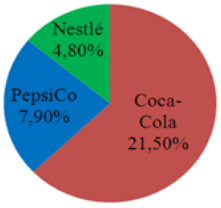
Figure 11. Porter Five Forces Analysis of the Food & Drinks Industry. Source: personal estimates



2. Industry Overview and Competitive Positioning

According to Food for Thought (FFT)'s market study, the size of the Soft Drinks & Juices Market in Europe, as this is captured by the 16 largest countries in Europe, was EUR 72.9 bn in 2009, or 6.6% of all the food and drink market of EUR 1,111 bn. The Soft Drinks & Juices Market in Europe is highly fragmented. There are 784 companies operating in this market, with the Top-10 companies accounting for c.50% of the total sales. Major players are Coca-Cola with a market share of 21.5%, followed by PepsiCo (7.9%) and Nestlé (4.8%) (Figure 12).

Figure 12. Top three major players in the industry across Europe. Source: http://foodmarkets.wordpress.com/2010/10/26/soft-drinks-market-europe/



The study covers 112 country and 7 product markets, with The Coca-Cola Company, have a leading presence, being present in 57 markets, in 26 of which are covered by Coca-Cola HBC S.A. (following by two markets: Asia (Armenia) and West Africa (Nigeria), CCHBC completes presence in 28 markets). However, the Soft Drinks & Juices Market in Europe is forecast to decline at an average annual real -1.16% during the 2009 - 2012 period, compared to 0.51% for the whole food and drink market.

In this section, we analyze the three main markets in which CCHBC operates: Sparkling beverages, Water, and Juices.

Figure 13. Product Market Share. Source: http://foodmarkets.wordpress.com/2010/10/26/soft-drinks-market-europe/

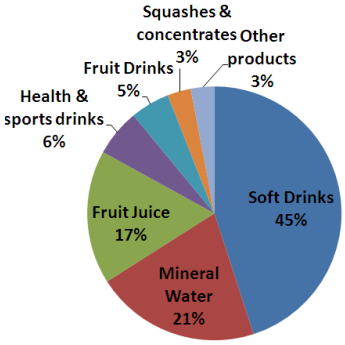
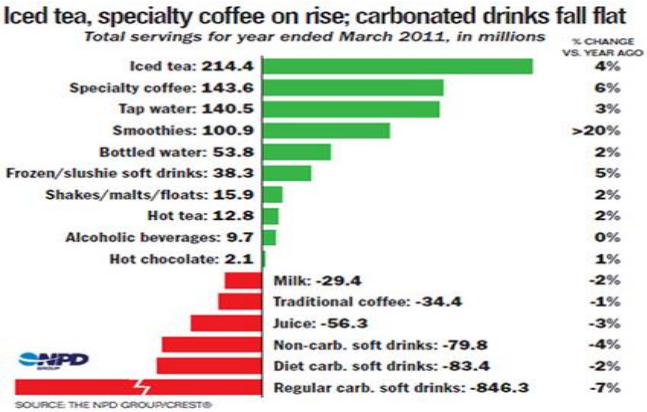


Figure 14.Total servings for the year ended March 2011 in millions. Source: http://www.euromonitor.com/medialibrary/Image/SD_SoftDrinks2010TrendsandFutureDirections.jpg



Sparkling beverages or Soft Drinks

This market is the largest and most popular product market (among the seven products currently selected in figure 13), which makes up 45% of the total 2009 Western European soft drinks market or EUR 32.6 bn. Worldwide, the most significant trends of recent years are three: a) the clear trend for balanced diet has turned part of the consumer public by soft drinks to juices and even in the most ' strengthened ' by them, b) branded products elbowed by private label that gains small but continuously growing market shares, and c) traditional bottlers who are distinguished for the quality of their products are now trying with more and more ways to reach the general public. The market has opportunities to grow due to innovations for beverages with low calories.

Water

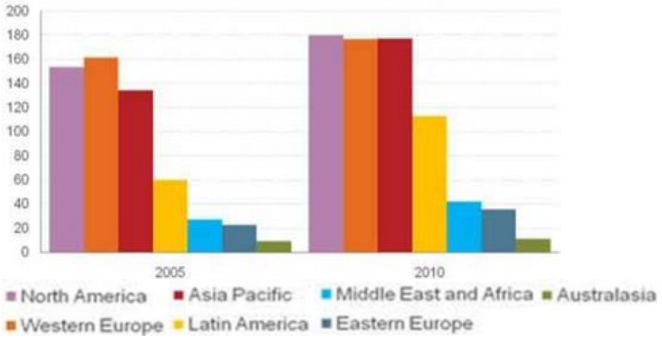
This market is the second-largest product market, accounting for 21% of the Western European total market, or EUR 15.3 bn. Bottled Water performances based on annual real % growth (2010-2011) with +2% (figure 14). Following several years of double-digit growth, bottled water is being hit by the economic crisis. 2009 saw a notable migration towards private labels and a slowdown of volume growth, yet the impact of the crisis was more severe in 2010 when volume

sales started to register negative growth with many price-sensitive consumers opting to drink tap water. However, the market has opportunities to grow in Eastern Europe & Russia, due to two main factors: increasing disposable incomes and the bad quality of tap water.

Juices

This market is the third-largest product market, accounting for 17% of the Western European total market, or EUR 12.7 bn. The decline in the juice category slowed to mid-single digits in 2011 as there are many private label products at low prices. According to Euromonitor International Research in Nigeria, Juice is expected to grow by 7% 10-11 CAGR of in total volume terms, which is slower than the 10% 09-10 CAGR. In this section we analyze the trends in three main regions in which CCHBC operates: Western Europe, Eastern Europe & Russia, and West Africa. In the adjacent Figure 15 shows the trend by each region in soft drinks value sales (in $ billion).

Figure 15. Soft drinks value sales in $ billion, Trend from 2005 to 2010 by region. Source: Recent study by The NPD Group: http://insidepenton.com/nrn/images/CHART_SpecialtyCoffeeTeaRise.jpg



Western Europe: an aging core business

In 2010, Western Europe took the second region in soft drinks value sales globally after North America. The largest country market, Germany makes up 20% of the total soft drinks market in the world or EUR 72.9 bn, following by U.K. and Italy (30%) and the five largest country markets, including France and Spain (27%). However, economic challenges remain throughout this market as the sovereign debt crisis in countries like Greece, Italy, Spain, and Portugal continues to impact growth in the Eurozone. In this market there are CCHBC's established markets, which are mainly driven by Italy, which accounts for 15% of total sales following by Greece (7%). The crisis seems to continue for much longer, and the tax measures taken to increase government revenue both in Italy and in Greece are not only ineffective but also is expected to hit even more the sales.

On the other hand, the demand for soft drinks in Italy is predicted to grow slightly from 2011-2014. Growth will be driven by three factors: population growth, economic recovery, and purchasing behavior being increasingly oriented towards healthy products. This last trend is affecting almost all soft drinks categories, and in this respect bottled water has the advantage of being naturally healthy.

Eastern Europe & Russia: boosting sales

In 2010, Eastern Europe took the sixth region in soft drinks value sales globally before Australasia. In Eastern there are CCHBC's developing and emerging markets in which there are improving economic trends. However, the largest market of the two in terms of volume for Coca Cola Hellenic is the emerging one with Russia as a leader country of CCHBC's total volume.

Russian soft drinks market recognized as the largest and fastest growing among the Eastern European ones. Increases in disposable income, decreasing unemployment and a stabilization of the currency brought about the effect of "delayed demand" and the people are ready to spend money on consumer goods again. In recent years, Russia has adopted a trend of switching to healthy foods, i.e. mineral water and juices.

West Africa: a developing world business

In 2010, this market took the fifth region in soft drinks value sales globally before Eastern Europe. Here, there is Nigeria, CCHBC's emerging country in Africa, the third market in terms of volume for Coca Cola Hellenic. Total volume growth will continue to be strong in Nigeria, with a CAGR of 7% in 2011, although this will slow in later years due to slower GDP growth. Juices and bottled water will continue to be strong performers, although growth will be considerably slower than the still-new RTD tea category.

Market drivers vary depending on geographic area and type of product. The three reference markets for Coca Cola Hellenic are sparkling beverages in Western Europe (Italy), sparkling beverages, Juices, and bottled water both in Eastern Europe & Russia (Russia) and in West Africa (Nigeria). The competitive scenario can be summarized in Table 4, 5and 6.

Western Europe

The most relevant drivers of competition are the brand presence, promotional activity, business process, quality, innovative products, price and distribution channel:

–**Brand Presence:** The visibility of brands and expand is a distinguishing factor.

–**Promotional Activity:** Increased promotional activity offset the adverse impact on sales in the immediate consumption channels from economic conditions and weak consumer sentiment.

–**Business Process:** Efficiency improvements in distribution and production resulted in notable cost savings.

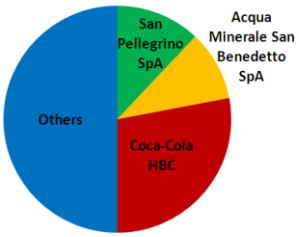
–**Quality:** The desire for healthier products drives sales of RTD tea and low-calorie cola sparkling beverages, while the sales increases for mixers and energy drinks.

–**Innovative Products:** The best opportunity in soft drinks remains with the most innovative products that can combine new types of fruit flavors with a perception that they are healthier.

–**Price:** Economic constraints have forced consumers to become more considered about their spending, and many have turned to private labels.

–**Distribution channel:** The off-trade channel is still the main channel for soft drinks. The growth in this channel was stronger than in the on-trade channel, as consumers were more reluctant to consume soft drinks out of the home.

Figure 16. Market share of sparkling beverages in Italy. Source: http://www.euromonitor.com, and personal estimates



Sparkling beverages in Italy. As we can see from Figure 16, the list of main competitors in Italy (San Pellegrino SpA, Acqua Minerale San Benedetto SpA, and Coca-Cola HBC Italia Srl) is short and the concentration is high with a total market share of nearly 50%. This level of concentration has led to a stable market, characterized by a lack of new launches, with companies having little reason to invest heavily in innovation since it would not be rewarded in terms of adequate returns or market share growth. These three companies invest in substantial advertising campaigns focused on increasing brand loyalty. Coca-Cola increased its advertising activities because of the FIFA World Cup, which has always represented an excellent opportunity for Coca-Cola to strengthen its presence and visibility. Companies are likely to focus on health aspects, both in terms of new products and advertising, in an attempt to exploit the trend of increased health awareness in Italy as the successful launch of coca-cola zero. Within sparkling cola beverages, the fastest growth category was low-calorie cola, which gives plenty of room for further growth. Coca-Cola is the leading brand, with a share of 27% of total volume, followed by Fanta, with a share of 14%.The successful implementation of SAP Wave 2 in Italy is expected to provide competitive advantages by facilitating closer functional integration, enhancing Coca Cola Hellenic's commercial capabilities, and improving overall customer service levels.

Eastern Europe & Russia

The most relevant drivers of competition are brand presence and weather conditions:

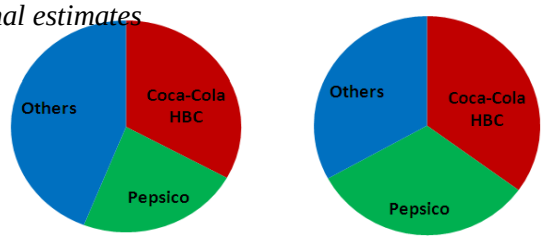
– **Brand Presence:** The visibility of brands and expand is a distinguishing factor.

– **Financial Capacity:** As there are many opportunities for growth and expansion by acquisitions.

– **Weather conditions**: Unseasonably cold and rainy weather conditions in Eastern Europe in the summer months may have a negative impact on revenues.

Sparkling Beverages, Juices, and Bottled Water in Russia. The leading players focused on building brand loyalty and expansion. Coca-Cola started its business in Russia in 1991 and now owns 14 local factories. The company has invested US$2 billion in Russia over the past two decades, while PepsiCo has been present in the market since 1974, currently were operating 11 factories and has invested about US$3 billion in Russia over the last ten years. To hold on to its leading position, PepsiCo Holdings OOO announced the acquisition of Wimm-Bill-Dann Produkty Pitania OOO in 2010. Between them, Coca-Cola and PepsiCo control 56% (33% and 23% respectively) of sparkling beverages sales, 67% (35% and 32% respectively) of juices sales (boosted by the Nidan acquisition by Coca-Cola) and 27% (10% and 17% respectively) of bottled water in total volume terms (Figure 17). The most popular brands of sparkling beverages in Russia are Coca-Cola, Pepsi, Fanta, Sprite, and 7-Up.

Figure 17. Main competitors in the market a) of soft drinks and b) juices of Russia. Source: http://www.euromonitor.com, and personal estimates



West Africa

The most relevant drivers of competition are the brand presence, packaging design, innovative products, quality, and price and distribution channel:

– **Brand Presence:** The visibility of brands and expand is a distinguishing factor.

– **Packaging Design:** Increased availability of one-way packages has a positive impact on sales.

– **Innovative Products:** The best opportunity in soft drinks remains with the most innovative products that can combine new types of fruit flavors with a perception that they are healthier.

– **Quality:** Increased health consciousness among Nigerians, who are becoming more concerned about their sugar intake, is leading many to choose juices instead of sparkling beverages, thereby limiting demand for sparkling beverages. The bottled water category continued to perform strongly in Nigeria due to the scarcity of safe drinking water and electricity. The new RTD tea category continues to develop.

– **Price:** In bottled water in 2009 of brands Mowa (Dansa Foods Ltd) and Aquafina (7-Up Bottling Co Nigeria) have not yet caught on strongly, but their positioning at a lower price in comparison to the leading Eva brand (Coca-Cola Nigeria Ltd) may help them to build share in the coming years.

– **Distribution channels:** Traditional open markets and the traffic channel continued to dominate volume sales in Nigeria. Many consumers buy these drinks for consumption at home or on the go or for entertaining guests at parties and other events. The supermarkets/hypermarkets channel, in particular, is increasing its presence. The recent boom in the fast-food industry has resulted in the dynamic growth of on-trade volume sales.

Figure 18. Market share of sparkling beverages in Nigeria. Source: http://www.euromonitor.com, and personal estimates

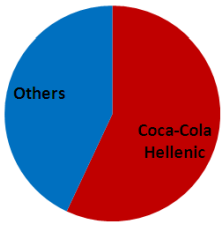


Figure 19. Soft Drinks Forecast Performance, Global Top 10 Volume Growth Rates (%)2009-2014. Source: http://www.euromonitor.com/medialibrary/Image/SoftDrinksMAMarketOpportunities2010.jpg

Sparkling Beverages, Juices, and Bottled Water in Nigeria

In Nigeria, Coca-Cola and PepsiCo have more than 40% of the beverage volume share combined, primarily through their sparkling category. There is a tremendous opportunity for growth. Coca-Cola and PepsiCo are coming into this region in a big way. Coca-Cola HBC's sparkling category dominance with 57% of off-trade volume sales in 2010 due mainly to its vast distribution network, which is crucial in a country where the road networks remain challenging. It also benefits from aggressive advertising and brand-building activities.

Moreover, increased availability of one-way packages resulting from increased capacity had a positive impact on sales of brand Coca-Cola in 2010, while Sprite volume grew in the low double-digits, supported by the continued roll-out of the Ultra glass bottle. Coca-Cola continues to dominate sales in two categories, sparkling beverages (57%) and bottled water (50%), thanks

to its well-established name in Nigeria, a strong distribution network, and massive marketing expenditure (Figure 18). Coca-Cola Nigeria Ltd is followed by 7-Up Bottling Co Nigeria (Pepsico), which only entered the bottled water category in 2009. In juices, CCHBC continued to gain category share and expand its product portfolio. **Competition: Local players** have a strong presence, supported by the government's ban on imported juice in Nigeria. Thus, Chi Nigeria Ltd leads in two categories –juices and RTD tea – with a well-known brand name and marketing emphasizing its Nigerian origins, while the first brand of RTD tea category is Cway Food & Beverages Co Nig Ltd, launched only in 2008. The RTD tea and Juice categories are expected to continue to develop in future with new companies likely to enter, which in turn will lead to an increase in the number of brands, flavors, and pack types being launched. **Multinationals:** Nestle is the leader in still beverages with around an 11% share, following by Coca-Cola (7%) and Danone (3%), while PepsiCo did not appear in the top five. **Substitution:** Nigerians, who are becoming more concerned about their sugar intake, is leading growing numbers to choose juice instead of sparkling beverages, thereby reducing the demand for them. However, this will be offset by a slowing economy and competition from "nutritious" flavored milk drinks, which are considered to be healthy and filling. **The best opportunity in soft drinks** remains with the most innovative products that can combine new types of fruit flavors with a perception that they are healthier.

3. Financial Analysis

In this section, we present the principal assumptions on which we base our valuation. We use 10-14 CAGR for consistency with the company's strategic plan.

Sales: Growth was driven by the most innovative products and expansion in Developing and Emerging Markets while in Established by healthy value-added products and cost reduction.

Western Europe: maintaining its position in a flat growth scenario

Volume is expected to slightly decrease thanks to the launch of new healthier beverages like coca-cola zero. It is expected a -3,2% volume CAGR and a revenue CAGR -2,4% from 2010 to 2014 as economic crisis impact demand and consumers switch to cheaper private label brands, CCHBC forced to reduce prices and increase packaging offers to maintain its market share. However, acquisitions of local manufacturers such as Loux or closing factories in Greece and transportation in Bulgaria where taxation is lower are likely scenarios.

Eastern Europe & Russia

Coca-Cola HBC is strengthening its leadership position in the beverage market in Russia with its expansion in the juice market and entry in the bottled water market. With Multon ZAO and Nidan Soki OAO, Coca-Cola challenged PepsiCo's juice market dominance in Russia. Growth in sparkling beverages is driven by the launch of new coca-cola zero and Fanta Grape by 2011, with higher prices and healthier than the usual ones.

West Africa: expansion in Nigerian beverage range

The best opportunity in soft drinks remains with the most innovative products that can combine new types of fruit flavors with a perception that they are healthier. The introduction of healthier beverages in Nigeria is expected to expand unit growth and increased saturation in the category, as well as the acquisition scenario of local brands. CCHBC is expected to expand unit growth to 1,081.2 M unit cases in emerging markets and 540.6 M unit cases in developing markets with a 1,7% CAGR and 8,4% CAGR respectively from 2012 to 2014.

Figure 20. Source: personal estimates using Excel

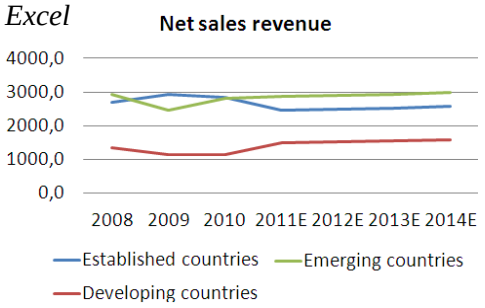
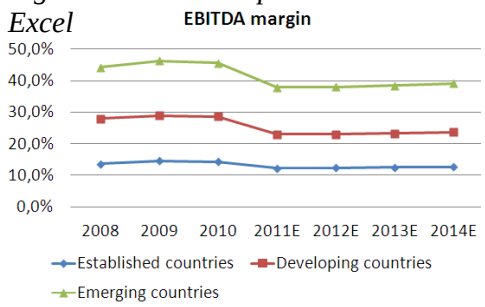


Figure 21. Source: personal estimates using Excel



Margins: Unique and diverse geography product portfolio leads to improvements in profitability.

We forecast EBITDA margin improvement from 13% in 2011 to 13,5% in 2014, driven by:

Efficiency improvements in Eastern Europe & Nigeria: Developing and Emerging markets represented 58% (17%, 41% respectively) of sales in 2010 while we estimate an increase by 2014 to 64% (22%, 42% respectively) but contributed too approximately from 59% of EBIT in 2010 to 65% (19%, 46% respectively) by 2014, and for even a larger percentage of earnings. According to our estimates, we expected EBITDA margin in CCHBC's emerging markets to remain substantially higher than the company's average at 15,4% in 2014.

Changes in product mix: Better pricing and category mix benefit EBITDA margin mainly in emerging and developing countries. Coca Cola Hellenic is committed to pursuing a premium pricing strategy, but the introduction of new beverages in Established markets with a low price will put some pressure on margins. Nevertheless, we expect the EBITDA margin in established markets to increase from 12, 3% in 2011 to 12,7% in 2014.

Improvements in operating efficiencies: Coca Cola HBC's on-going investment in coolers, marketing, additional production capacity, and continuous improvement in its processes and customer service through the implementation of SAP Wave 2 across its markets, improve operational efficiency, enhance customer service and also enables in a sound balance sheet and strong cash flow.

Innovations in the industry: Manufacturers are, for example, likely to increasingly replace artificial components with natural substances such as the sweetener stevia or the stimulant guarana; as a result, Health-conscious consumers will be ready to pay more for natural, ecological, low-sugar, or functional drinks with different health benefits.

Figure 22. Source: personal estimates using Excel

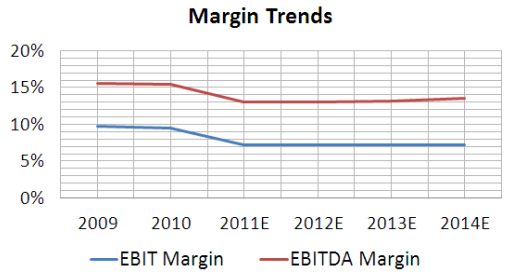
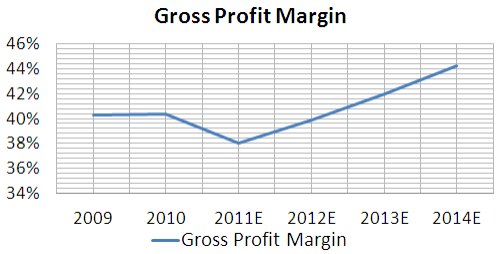


Figure 23. Source: personal estimates using Excel



Cash Flow: Increasing along with revenues and margins.

Sales growth and margin expansion will increase operating cash flow. According to our estimates, Coca Cola Hellenic will generate € 826.6 M operating cash flow per year on average for the next three years. We forecast OCF to sales ratio to reach 12,2% by 2014, moving from 11,6% of 2011. This cash flow will be used to finance € 369.1 M in capital expenditure, € 213,5 M increase in net working capital by 2014, and a reduction in net financial position. As far as dividends are concerned, we estimate an average 20, 9% payout ratio from 2011 to 2014, with a dividend per share rising from € 0, 23 in 2011 to € 0, 25 in 2014 because of taxation.

Figure 24. Source: personal estimates using Excel

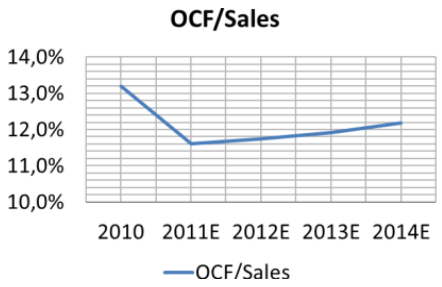
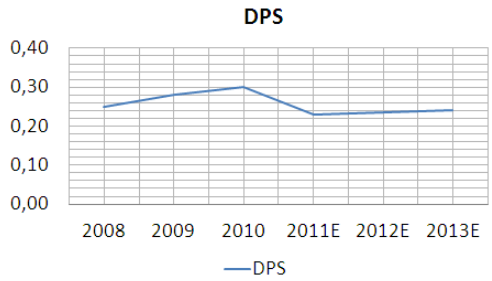


Figure 25. Source: personal estimates using Excel



Financial structure

According to our estimates, the Net Financial Position will decrease by 2014. We believe that the resulting debt to equity ratio of 0.29 leaves room for financing future growth plans. We estimate financial charges to increase over the next years because of rising interest rates. However, the impact on the income statement will be moderate.

Figure 26. Source: personal estimates using Excel

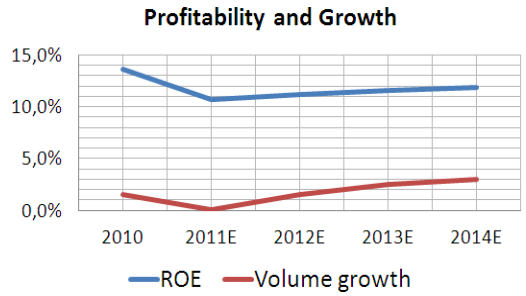
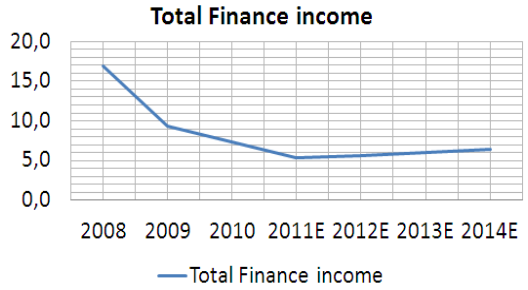


Figure 27. Source: personal estimates using Excel



Corporate Governance and Social Responsibility

Based on our firm conviction that Corporate Governance (CG) and Corporate Social Responsibility (CRS) could enhance the sustainability of the company, and consequently its long-term value, we performed an assessment of Coca Cola Hellenic in these areas of interest.

Corporate Governance. Coca-Cola Hellenic continuously reviews the Company's corporate governance standards and procedures in light of the ongoing debates and rulemaking projects in Greece, Europe, and the United States, in order to ensure that its corporate governance systems remain in line with international best practices.

Corporate Social Responsibility. The alcohol-free beverage industry is very concerned about CSR. Since 2002 Coca-Cola Hellenic publishes its Social Responsibility Report. 2010 CSR Report has been prepared under the G3 guidelines of the Global Reporting Initiative (GRI), making CCHBC the first European food and beverage company reach the A+ level. The group focuses on CSR performance and sets targets for each of the four pillars of corporate social responsibility – marketplace, environment, workplace, and community (figure 28). Country operations of the Company actively support 14 local networks.

Figure 28. Source: Company's 2010 CSR Report

CSR Issue	CSR Targets
Marketplace 	Expanse of beverages range Reduction of average calorific content of beverages Provision highly visible nutritional information Marketing responsibility Promotion of physical activity & active lifestyles
Environment 	Bottling plants' performance according to four environmental key performance indicators (KPIs): Water, Energy, Waste & Recycling
Workplace 	Safe, Fair and Inclusive Workplace Challenging and rewarding careers Workplace practices
Community 	Development of local communities Protection of water and the local environment Disaster relief and recovery

D. The DCF valuation modeling Concerns

A key element of research reports supporting a recommendation is the valuation of the security. In this process, equity valuation models help to specify what is to be forecasted, directs to the information needed to make the forecast, and shows how to relate the forecasted data into an intrinsic value estimate (Pinto, J. E., Henry, E., Robinson, T. R., Stowe, J. D., Cohen, A., 2007). A valuation model is a mechanism that converts a set of forecasts of (or observations on) a series of company and economic variables into a forecast of market value for the company's stock. Structures of valuation models often include many assumptions and parameters. Each valuation model and technique have its strengths and weaknesses.

Choosing the model that best reflects the best description of the situation and assure that key assumptions and value drivers make sense, we build a comprehensive and systematic valuation model based on valuation theory.

The valuation model can be considered a formalization of the relationship that is expected to exist between a set of corporate and economic factors and the market's valuation of these factors (Elton, Gruber, Brown, & Goetzmann 2011). Barker, R (2001) argues that a good understanding of valuation methods requires two main things: the first is an analytical review of the models, and the second is an evaluation of the data that are available for the use of these models. It is because of this; there is a significant relationship between the choice of valuation models and the available data. Valuation, however, is relevant and critical to active investment strategies, risk factors that objectively address the uncertainty associated with investing in the security (Pinto, J. E., Henry, E., Robinson, T. R., Stowe, J. D., Cohen, A., 2007).

Literature suggests three major valuation model categories: 1. Asset-based Valuation, 2. Absolute Valuation or Discounted Cash Flow models and 3. Relative Valuation or Price Multiple models. Other methods, such as the yield-based valuation method, which focuses on dividend yield when the investment priority is income, or option valuation models that explicitly consider management flexibility in the value creation process, are not the subject of this paper. The broad criteria for model selection are that the valuation model is consistent with the characteristics of the company

we value; appropriate given the availability and quality of data; and consistent with the purpose of valuation, including the analyst's ownership perspective (Pinto, J. E., Henry, E., Robinson, T. R., Stowe, J. D., Cohen, A., 2007).

Analysts depend on accurate forecasts combined with an appropriate valuation model to construct their valuations, obtaining a useful estimate of intrinsic value. The more information that is known about the company, the industry, and the company's position within the industry, the more realistic and supportable the assumptions made in the projections will be. The analyst integrates the analysis of industry prospects and competitive and corporate strategy with financial statement analysis to formulate specific numerical forecasts of such items as sales and earnings.

Analysts may consider qualitative as well as quantitative factors in financial forecasting and valuation. Qualitative factors and other considerations may affect a recommendation and merit discussion. The quality of the analyst's forecasts, the expectational inputs used in valuation models, is a crucial element in determining investment success (Pinto, J. E., Henry, E., Robinson, T. R., Stowe, J. D., Cohen, A., 2007).

1. Valuation

We value Coca Cola Hellenic by applying two techniques: Discounted Cash Flow (DCF) and Multiple Analysis. The DCF model is based on a sum-of-the-parts approach that values the three main geographic businesses of the company separately. We deem this approach to be appropriate as the Group operates in regions with different levels of growth, margin, and risk. The Multiple Analysis is used to correct our results at geographic and aggregate levels.

Table 12. DCF and Sensitivity Analysis. Source: personal estimates using Excel

DCF models characteristics	
West Europe	
Model	**Stable growth**
East Europe & Russia, Nigeria	
Model	**Two-stage**
	Analytic stage
	Perpetuity

DCF Analysis	
Variable	**Base case estimate**
Beta	0,85
Risk-free rate	7%
Equity risk premium	3,40%
FCFE perpetuity growth rate	0,5%
FCFE 1st stage growth	1,5%
FCFE 2nd stage perpetuity growth	1,0%
Cost of Equity	9,9%
Target Price	**11,12**

DCF Analysis					
(€ '000)	**2010**	**2011**	**2012**	**2013**	**2014**
Net Income	423,2	321,6	328,1	334,6	348,0
- (1- d) (Capital Exp. - Deprec'n)	-46,06	-60,98	-12,87	-19,64	-40,41
- (1- d) Change in Work. Capital	-151,03	202,16	106,05	127,00	152,27
Free Cash flow to Equity (FCFE)	620,29	180,45	234,88	227,27	236,16

d	29,03%	31,91%	31,56%	31,06%	30,13%
Reported growth		9,92%	30,16%	-3,24%	3,9%
Operating Cash Flow	895,9	792,9	809,9	834,5	869,1
Western Europe	313,6	277,5	283,5	292,1	304,2
Eastern Europe & Russia	545,2	482,6	492,9	507,9	528,9
West Africa	37,1	32,8	33,5	34,5	36,0
Capital Spending CAPEX	322,9	309,9	392,6	395,3	378,6
Western Europe	113,0	108,5	137,4	138,3	132,5
Eastern Europe & Russia	196,5	188,6	238,9	240,6	230,4
West Africa	13,4	12,8	16,3	16,4	15,7
Free Cash flow to Equity (FCFE)	620,29	180,45	234,88	227,27	236,16
Western Europe	217,10	63,16	82,21	79,54	82,65
Eastern Europe & Russia	377,51	109,82	142,95	138,32	143,72
West Africa	25,68	7,47	9,72	9,41	9,78
PV Western Europe		63,16	74,81	65,87	1168,09
PV Eastern Europe & Russia, Nigeria		117,29	138,93	122,33	2291,32
			1	2	3
Equity Value		180,5	213,7	188,2	3459,4
					4041,81
					11,12

Discounted cash flow analysis:

Our DCF values Coca Cola Hellenic at € 11,12 per share for the start of 2012. We estimate this price with the separate valuation of West European, East European, and Nigerian operations. Figures are broken down across the regions according to the following assumptions:

Sales: Western Europe reaches approximately 28% of total sales by 2014 while Eastern European, and Nigeria account for the remaining 72%.

Capex: the € 1.35 bn CAPEX outlined in CCHBC's industrial plan is divided across the regions according to their relative contribution to sales, in line with management's allocation history in forecast period 2011-2014.

Change in net working capital will increase in 2011-14. We divide the total change in net working capital across regions according to the relative sales growth.

Table 13. Assumptions and results of the sum-of-the-parts analysis (2010-2014). Source: http://www.taxrates.cc/html/nigeria-tax-rates.html

	Western Europe	**Eastern Europe**	**Nigeria**	**Aggregate**
Revenues CAGR	-2,4%	3,7%		1,3%
Volume CAGR	-3,2%	4,1%		1,8%
EBITDA margin	12,3%→ 12,7%	12,8%→13,2%		13,5%
Tax rate*	43%	13%	25%	38,0%
Cost of Equity	9,9%			9,9%
Equity Value (€ '000)	1469	2862		4332
Price (€)	4,04	7,87		11,92

*Tax rates in Italy, Russia, and Nigeria respectively

More detailed assumptions are made on each business region, based on the forecasted competitive scenario described below:

In Eastern Europe & Russia, volume and net sales revenues per unit increase because of product line expansion in the juice market and in exceptional heat in summer 2010. EBITDA margin is higher than the company's average but slightly decreasing over time because of competitive pressures by Pepsico after the acquisition of 66% of Russian Wimm-Bill-Dann. As far as sparkling category is concerned, we do not expect significant margin improvements except from the launch of coca-cola zero and light as there is trend for healthier beverages.

In Nigeria, sparkling beverages and water category volumes sharply increase as well as the net sales revenues increase along with the EBITDA margin because of the introduction of healthier beverages.

In Western Europe, sparkling beverages volumes and net sales revenues per unit decrease because of declining demand, while a new launch of coca-cola zero and juices growth in volumes sold but lower than expected because of a lower price model and offers in many categories of beverages and juices. EBITDA margin increases because of cost reductions.

Main conclusions of our analysis are that:

-Established Countries are at the moment Coca Cola HBC's cash cow, with high revenue contribution but modest growth potential and that

-The majority of CCHBC's value comes from Established and Emerging Markets. In fact, despite generating small volumes and revenues, operations in Developing markets have an extraordinary growth outlook and limited tax rate (Table 16). In emerging markets, Russia, size, and growth combined are by far the biggest source of value for CCHBC, following by Nigeria, even though it is penalized by substitution.

Sensitivity analysis

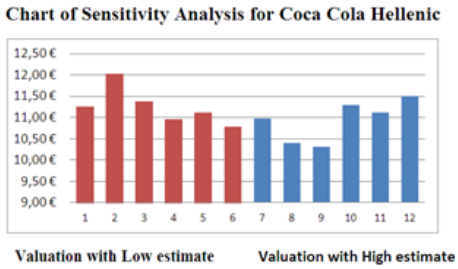
Table 14 shows our base case and the highest and lowest reasonable alternative estimates. The column "Valuation with Low Estimate" gives the estimated value of CCHBC based on the low estimate for the variable on the same row of the first column and the base–case estimates for the remaining variables. "Valuation with High Estimate" performs a similar exercise based on the high estimate for the variable at issue.

Table 14. The base case and the highest and lowest reasonable alternative estimates. Source: personal estimates using Excel

DCF Analysis				**Sensitivity Analysis**	
Variable	**Base case estimate**	**Low estimate**	**High estimate**	**Valuation with Low estimate**	**Valuation with High estimate**
Beta	0,85	0,8	0,9	11,26 €	10,98 €
Risk free rate	7%	6%	8%	12,03 €	10,39 €
Equity risk premium	3,40%	3,04%	4,73%	11,37 €	10,31 €
FCFE perpetuity growth rate	0,5%	0%	1%	10,96 €	11,30 €
FCFE 1st stage growth	1,5%	1,5%	1,5%	11,12 €	11,12 €
FCFE 2nd stage perpetuity growth	1,0%	0,5%	1,5%	10,78 €	11,49 €
Cost of Equity	9,9%				
Target Price	**11,12**				

As the above chart of sensitivity analysis shows, the value of CCHBC is very sensitive to the inputs. Of the four variables presented, the stock valuation is least sensitive to the range of estimates for the equity risk premium and beta. The range of estimates for these variables produces the smallest ranges of stock values (from € 10,31 to € 11,37 for the equity risk premium and € 10,98 to € 11,26 for beta). The stock value is most sensitive to the extreme values for the risk-free rate and the FCFE growth rate.

Figure 29. The chart of sensitivity analysis. Source: personal estimates using Excel



2. Valuation based on comparables

In this section, we calculate a market-based range and a target price by comparing the valuation of companies in the sparkling and still beverage categories with that of Coca Cola HBC.

CCHBC's peer group. To obtain an accurate market-based valuation, it is critical to identify a set of listed peers that are comparable. Among the currently listed companies, we define three different groups of comparable companies. Table: (a) the companies that are direct competitors of Coca Cola HBC in Europe are subsidiaries of Pepsico and the growing entry of local competitors, for example Loux (Greek Anonymous Industrial Trading company) ; (b) those companies whose core business is the production of beverages (sparkling and still beverages portfolio of Pepsico, sparkling beverages and juices portfolio of Loux); and (c) those large corporations whose business is largely diversified such as Pepsico business in food and snacks by 63% and Nestea in food processing by 73%. We conclude that there is no direct comparison for Coca Cola HBC.

Figure 30. Life Cycle Matrix and Competitors. Source: personal estimates

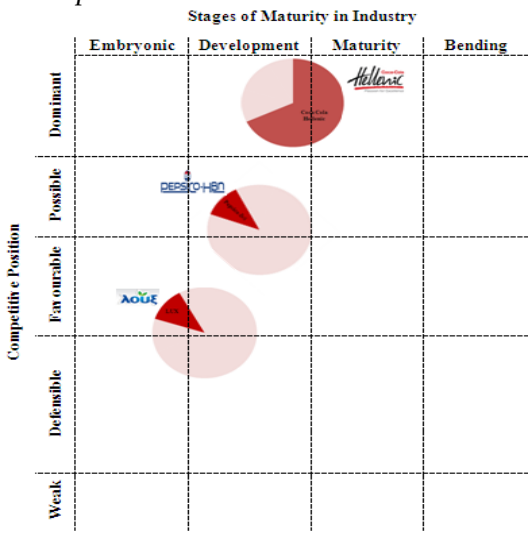
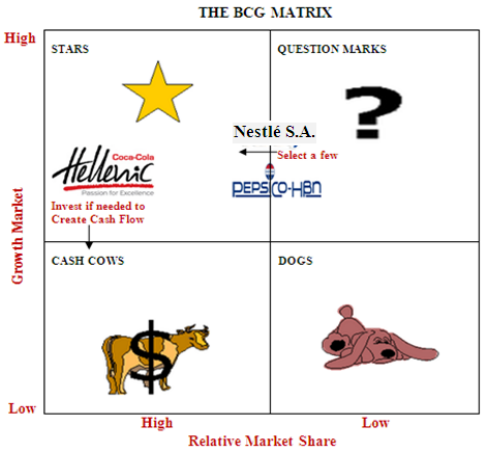


Figure 31. BCG Matrix. Source: personal estimates



As we can see from figure 30, Coca-Cola Hellenic is located in the phase of maturity, as the year's active in the industry and the wider environment. Concerning its position in the industry, the company is located in a very strong position and is expected to dominate a dominant position.

Global players. Coca Cola HBC (as the second bottler in terms of volume of The Coca Cola Company), Pepsico and Nestle have very different growth rates and profit margins. To highlight the disparity, we show in the matrix below (figure 31) for each company difference between those two measures from the same measures of Coca Cola HBC. Consequently, it is more realistic to compare Coca Cola HBC to sparkling beverages and juice categories. However, they have several

different characteristics, such as positioning, market exposure, business diversification and product range, which make them also imperfect companies with which to compare CCHBC.

Star-CCHBC has a uniquely diverse geography and the world's most loved brands-stars that will leave the company very well placed to leverage the opportunities ahead. The ongoing rollout of its occasion-based brand, package, price, and channel strategy drove an improved package mix and net sales revenue across the Group that will become the next cash cow and ensure future cash generation. CCHBC generates large amounts of cash because of its strong market positions in 28 countries, but also of its high growth rate in Eastern Europe & Russia, in additional its operations in West Africa (Nigeria).

Multiple Analysis

We consider the EV/EBITDA multiple to calculate our target price. We believe the EV/EBITDA to be the most significant multiple as it is a good proxy for cash flows, and on the contrary to EV/EBIT multiple, it is not influenced by differences in accounting of D&A. We also look at the P/E multiples. We estimated the enterprise value of CCHBC's business to be € 5,251 M. In our DCF valuation Western Europe is 34% of the total Equity Value and Eastern Europe and Nigeria, the remaining 66%. We assume the same for Multiple Analyses (Table 15).

A peer of multiple comparisons. We also calculate competitors' multiples to CCHBC, in order to estimate a market-based price range and multiple target price. We started before that CCHBC can be separated into two businesses, based on their geographic exposure. For the sake of this analysis, we assume multiples for the total Market. We estimate EV/EBITDA multiple calculated from market multiples of three multinational companies and assuming that sales being equal, and we use the information about their sales to breakdown the EV/EBITDA. We look EV/EBITDA and P/E multiples and derive a price of € 17,52 and € 14,26 respectively (Table 15).

Table 15. Multiple Analysis. Source: personal estimates

	EV/EBITDA next 12 month	P/E
Coca-Cola HBC	5,8	12,3
PepsiCo	9,18	15,2
Nestlé	10,43	19,9
Average	8,47	15,8

	Valuation based on EV/EBITDA	Valuation based on P/E
EV	7.648	
Equity	6.369	5.183
Target Price	17,5	14,3

Target Price	14,57 €
DCF	11,92 €
Multiple EV/EBITDA	17,52 €
Multiple P/E	14,26 €

Conclusions

We estimate a target price € 14,57 that has been obtained from a base case estimate of the prices resulting from our DCF Model and Multiple Analysis (Table 15). Weights are the same. In our opinion, Coca Cola Hellenic offers further upside potential in the medium term, as long as the growth strategy in emerging markets proves to be successful. We believe that the market is still not fully discounting the growth potential from East Europe and Nigeria, but we understand that there is an elevated degree of risk in executing strategy. 2012 results and business updates will be of particular importance to show that CCHBC can deliver on growth through, especially in East Europe and Russia.

Investment Risks

In this section, we analyze the main risks that could affect our target price.

Strategic risks:

Unsuccessful product launch. CCHBC‘s strategy in emerging markets is growing through product line expansion. If new products do not meet customers‘needs and tastes, the Group‘s sales may be lower than expected. To minimize this risk, the company invests in research to enhance its competitive advantage in the marketplace and generate long-term sustainable growth.

GDP growth rates. CCHBC’s growth strategy is affective by GDP growth. On the basis of the site trading economics’ forecasts, during the next three years GDP at constant prices is expected to grow on average by 4,8% per year in Russia, 0,2% per year in Italy and 7,4% per year in Nigeria; we expect CCHBC’s 2010-2014 revenues to grow 3,7% CAGR both in developing and emerging markets while -2,4% CAGR will fell in established markets (Table 16).

Table 16. Countries Index and Rates. Source: http://www.tradingeconomics.com/

Country	GDP Billion USD	GDP QoQ	GDP YoY	Interest rate	Inflation rate	Jobless rate	Gov. Budget	Debt to GDP	Current Account	Exchange rate	Population
Euro Area	12456	0.20%	1.40%	1.00%	3.00%	10.30%	-6.20	85.10	-0.40	1.31	329.58
Italy	2051	-0.20%	0.20%	1.00%	3.30%	8.50%	-4.60	119.00	-3.30	1.31	60.60
Russia	1480	0.20%	4.80%	8.00%	7.00%	6.40%	-3.90	9.90	4.90	31.70	142.90
Switzerland	524	0.20%	1.30%	0.00%	-0.50%	3.10%	-1.30	55.00	14.20	0.93	7.79
Poland	469	1.00%	4.20%	4.50%	4.80%	12.10%	-7.80	55.00	-3.40	3.43	38.18
Austria	376	0.30%	2.60%	1.00%	3.60%	4.30%	-4.40	72.30	2.70	1.31	8.40
Greece	305	0.20%	-5.00%	1.00%	2.90%	17.50%	-10.60	142.80	-10.50	1.31	11.33
Ireland	204	-1.90%	-0.10%	1.00%	2.90%	14.50%	-31.30	96.20	-0.70	1.31	4.45
Nigeria	194	7.40%	7.40%	12.00%	10.50%	21.10%	-3.28	16.40	6.40	160.30	158.26
Czech Republic	192	-0.10%	1.20%	0.75%	2.50%	8.00%	-4.80	38.50	-3.80	19.70	10.53
Romania	162	1.80%	2.60%	6.00%	3.44%	7.20%	-6.90	30.80	-4.10	3.31	21.45
Ukraine	138	0.50%	3.80%	7.75%	5.90%	8.90%	-5.50	40.50	-1.90	8.00	45.78
Hungary	130	0.50%	1.40%	7.00%	4.30%	10.80%	-4.20	80.20	2.10	242.41	10.00
Slovakia	89	0.70%	3.00%	1.00%	4.60%	13.40%	-7.70	41.00	-3.40	1.31	5.43
Slovenia	48	-0.20%	-0.10%	1.00%	2.00%	11.50%	-5.80	38.80	-1.10	1.31	2.07
Bulgaria	48	0.00%	1.30%	0.20%	3.10%	10.20%	-3.10	16.20	-1.00	1.38	7.56
Lithuania	36	1.30%	6.60%	1.75%	4.40%	14.80%	-7.00	38.20	1.80	2.65	3.32
Latvia	24	1.70%	6.60%	3.50%	4.20%	14.40%	-8.30	44.70	3.60	0.54	2.24
Estonia	19	1.20%	8.50%	1.00%	4.20%	10.90%	0.20	6.60	3.60	1.31	1.34
FYROM	9	5.30%	5.30%	4.00%	2.80%	31.30%	-2.50	24.60	-2.80	44.58	2.06

Stronger competition. The entrance of Loux in Greece, Cyprus, and Italy market may lead competition from an oligopoly to oligopolistic competition. This context may force the company to reduce prices to maintain mainly its 68% market share in Greece, affecting margins.

Penetration of the private label market. The launch of private label juices and bottled water represent a shift from a premiumization strategy to a price strategy. Competition in price strategy focuses on price reduction; therefore, CCHBC's margin could progressively decrease.

Financial risks:

Fluctuations of exchange rates. Foreign exchange risk, primarily in developing and emerging markets, arise as many of its operations have functional currencies other than euro. The impacts of it continue to be a significant driver on its consolidated income statement and balance sheet when results are translated into euro. The Group Treasury's risk management policy is to hedge between 25% and 80% of anticipated cash flows in each major foreign currency for the subsequent twelve months. Each subsidiary designates contracts with Group Treasury as fair value hedges or cash flow hedges, as appropriate. External foreign exchange contracts are designated at Group level as hedges of foreign exchange risk on specific assets, liabilities, or future transactions on a gross basis.

Operative risks:

Increased input costs across its markets. PET resin, sugar, juice concentrate, and fuel costs weight for approximately 70% of CCHBC's fixed cost. The impact of increased commodity prices continues to be a significant driver of its reduced profitability. Therefore their fluctuation has important impact on profitability. The Group has no material exposure to the effect of short-term changes in the price of sugar, fructose, and aluminum as where possible it contracts prices with suppliers up to one year in advance.

Business seasonality. Unseasonably cold and rainy weather conditions in Central and Eastern Europe in July and August may have a negative impact on revenues.

Political risk in Greece. Greece's new coalition government seeks to implement reforms needed to secure vital EU/IMF bailout funds while facing a public angry with the pain inflicted by wage cuts and tax hikes. After weeks of roller-coaster politics for referendum plans, the interim government led by former ECB vice-president Lucas Papademos will try to keep the country afloat until elections penciled for February 19. There is a bankruptcy risk in Greece, its defenestration from the euro, and fear of domino in eurozone.

Vat rate risk in Greece and Italy. The transfer of all commercial beverages except still water in the VAT rate from 13% to 23%, decided by the Government from 1 September 2011 in Greece, will lead to reducing the demand for products and-consequently-in sales. Given that the demand for these products is elastic an increase in the price by 10% will lead to decreasing demand by 15%. In addition, VAT increase in the hotel, restaurant, and cafe channel. The above is even more alarming if we take into consideration the fact that around 60% of sales are made in focus areas (cafe, bars, and restaurants). The overall VAT rate was increased by one percent in Italy effective from 19 September 2011.

Disclosures

Ownership and material conflicts of interest:

The author(s), or a member of their household, of this report [holds/does not hold] a financial interest in the securities of this company.

The author(s), or a member of their household, of this report [knows/does not know] of the existence of any conflicts of interest that might bias the content or publication of this report. [The conflict of interest is…]

Receipt of compensation:
Compensation of the author(s) of this report is not based on investment banking revenue.
Position as a officer or director:
The author(s), or a member of their household, does [not] serves as an officer, director or advisory board member of the subject company.
Market making:
The author(s) does [not] act as a market maker in the subject company's securities.
Ratings guide:
Banks rate companies as either a BUY, HOLD or SELL. A BUY rating is given when the security is expected to deliver absolute returns of 15% or greater over the next twelve-month period and recommends that investors take a position above the security's weight in the S&P 500, or any other relevant index. A SELL rating is given when the security is expected to deliver negative returns over the next twelve months, while a HOLD rating implies flat returns over the next twelve months.
Disclaimer:
The information set forth herein has been obtained or derived from sources generally available to the public and believed by the author(s) to be reliable, but the author(s) does not make any representation or warranty, express or implied, as to its accuracy or completeness. The information is not intended to be used as the basis of any investment decisions by any person or entity. This information does not constitute investment advice, nor is it an offer or a solicitation of an offer to buy or sell any security. This report should not be considered to be a recommendation by any individual affiliated with [*Society Name*], CFA Institute or the CFA Institute Research Challenge with regard to this company's stock.

My role in the Recommendation

I played a critical role in collecting, organizing, analyzing (accounting/ financial/ valuation/ other analysis), and communicating corporate information (writing investment research report), as well as in recommending appropriate investment actions based on analysis, in the same way that it is approaching from sell-side analysts, mentoring by an experienced professional.

It was a very personal decision when team-members had not time to go for invest time and effort researching and to analyze a vast range of data applying the tools of equity valuation directed toward exploring real-world business and writing outstanding investment research reports.

It was needed not only to understand what information is available and important in a complex, unknown, and different level but also to be able to spend countless hours with extremely hard work and clear mind to accomplish it on time in a research report format.

It offered me the opportunity to study a real business issue developing my knowledge in depth and then applying that knowledge to an extent, in master and later doctorate level. In fact, it was a ticket to pursue my master thesis, where the investment research report included by a different approach and translated in Greek - it is available for downloading from the site of library from November 2012 inside library only, and after thirty-six-month period available generally - directly improving educational outcomes at the context of the library's role, within University of Macedonia and beyond, PhD project in this direction.

VI. CURRENT CHALLENGES FACING THIS REAL-LIFE VALUATION

The real-life example in the previous section is based on the contribution of personal academic effort and experience (team player who finally work independently) in writing Investment Research Report for publicly traded firm Coca Cola Hellenic BC SA since competing at the local CFA Institute Research Challenge, representing team of University of Macedonia among five of

the initial six teams (of three-five students) of universities mentoring by an experienced professional.

Thus, "Investment Research for Coca Cola Hellenic" attracted business and finance student's attention when students participated in CFA Institute Research Challenge in 2011 (a four-month period of full-time research during master studies, from November 2011 to February 2012), writing Research Report of the listed Coca Cola Hellenic BC SA in the same way that it is approaching from the professionals (sell-side analysts). Before and since then, like the development of investment research report for CCH in Local, European and global level, has made for many other companies in such competitions.

In detail, these real-life valuation project/experience reports appropriate accounting/ financial and other information associated with the completion of the valuation process or the "black box" results of the analysis and highlights the most critical aspects of the analysis.

It explains the qualitative and quantitative methods that have been used, either through survey research or observations, and the analysis of the data obtained from financial annual reports under IFRS (International Financial Reporting Standards) from 2009-2011 and either archival or internet sources (extensive search at well-known websites, papers, articles, books, reports, databases in order to understand valuation approaches/ models, forecasting as well as to gather data, beta, stock prices and other relative information).

Data are presented together with assumptions and predictions from the year 2012-2014. Tables and figures are being addressed, related equations, describing the mathematical form of these expressions, are referred. The finance and valuation analysis implemented in excel spreadsheets regarding reported growth and forecasts on this case in providing analysis that leads to informed buy, sell and hold decisions.

This real-life valuation project/experience presents the investment recommendation based on the valuation process. Furthermore, it provides actions taken to decision making and compares the estimated intrinsic value to the up to date (as of 12/01/2012) market price of the firm's stock. It summarizes the research findings, draws conclusions from those findings, and gives some insights into my role in the investment recommendation of the valuation process and my experience on it.

VII. SOLUTIONS AND RECOMMENDATIONS

This example discusses solutions and recommendations in dealing with the issue of the hidden information, the "black box", controversies in the analyst's valuations, or problems (assumptions regarding aspects of combined operations and specific characteristics and combining valuation models and comparing this value to the market price of the firm's stock) presented for determining the intrinsic value of a stock. Furthermore, it indicates some of the practical implications of the findings in identifying the issues that must be addressed (how analysts use the information for valuation purposes) in complying with the valuation process, just like professionals. The quality of the industry and company analysis bears heavily on the qualitative as well as quantitative factors and other considerations in financial forecasting and valuation affecting the recommendation. All readers, however, with a ''serious interest in security values'' should find the paper useful for a more in-depth appraisal of valuation process as well as accounting/financial and other information to build a robust and reliable valuation model implemented in excel spreadsheets. Limitations of the study, such as the availability and quality of data in making forecasts, using specific financial performance measures, and on my choice of valuation model are considered. Besides that, it is challenging to find analysts that are willing to cooperate with researchers to go through the investment research report process except from competition concepts like CFA research challenge and recently Ben Graham Center's stock

pricing competition (for teams of three-five students) mentoring by an experienced professional as to be reviewed and criticized by judges' committee. The importance of this investment research report/originality comes from the great interest of accounting and finance researchers on how accounting, financial and other information is used. Thus, it is useful to study valuation processes from the sell-side analyst approach, who are the primary users of those information converting forecasts to a complex valuation model combining methodologies in making an investment decision. Besides, this approach help addresses unsolved areas related to hidden information or the "black box" increasing our understanding of analysts' valuations and meeting society's needs in economics, management, and education, which may eventually contribute to the improvement of a more efficient capital market. Suggestions for further research in this field are considered by the passage of time and actual performance under future conditions. 2012 results and business updates show that CCHBC can deliver on growth through its geographic regions and product categories by collecting data from annual report. I hope the results from this study will not only contribute towards better understanding of analyst's valuation process and their industry associations, but also have practical implications into the classroom in excel spreadsheets or other ICT open challenges as (individual or team) coursework from basic to more complex valuation models on finance courses improving the quality of education. Finally, this example serves to bridge the gap between corporate valuation theory and practice in investment decision making. I hope to contribute to the area of valuation theory into practice.

ACKNOWLEDGMENT

This research was published, presented, and discussed at the 18th Annual Conference of the Hellenic Finance and Accounting Association. It is a postprint. The participation with research paper to the scientific conference is pending by the University of Macedonia's Unit of Special Account for Research Funds-ELKE followed by the decision of the Faculty Assembly. This research is also an upgraded version /part of a paper completely peer-reviewed at the Multinational Finance Journal. The implementation of the Ph.D. thesis or related research papers was supported by the State Scholarships Foundation-IKY (seventeen months). The participations with research papers to scientific conferences were supported by the University of Macedonia's Unit of Special Account for Research Funds-ELKE followed the decision of the Faculty Assembly. The University of Macedonia's Departments (Accounting and finance, and Applied Informatics) and Library, during master and doctoral program, provided the support that was related workshops, seminars, or lectures by their staff. The planning and presentation of the PhD Thesis supervised by 3-faculty member advisory committee (1. Assoc. professor Stavropoulos A.-supervisor, 2. Assist. Professor Dassilas A. who replaced professor Negakis C. who replaced professor Vazakidis A., 3. Professor Refanidis I.) with four annually and five more quarterly progress reports, MSc Thesis supervised by professor Dimitrios Papadopoulos, BSc Thesis supervised by professor Despina Makridou-Boussiou. The Chartered Financial Analyst Society provided the support that was the CFA Research Challenge, the related meetings and a book on equity asset valuation. The Multinational Finance Society and the Hellenic Finance and Accounting Association provided the support that was Tutorial Sessions, Panel Sessions "Improving Research in Accounting and Finance", Keynote Speeches, and Discussion Sessions at their Conferences. Participants at the conferences of the Multinational Finance Society (assoc. professor Ozge Uygur – Rowan University, USA, professor Mine Aksu – Sabanci University, Turkey, Ph.D. cand. Simeon Ketterer – University of Bamberg, Germany, professor Anna Giannopoulou-Merika – Deree College, Greece, which indicated the attendance of the Conference entitled «26th EFMA», assoc. professor Neofytos Lampertidis – Technological University, Cyprus), at the conferences of the Hellenic Finance and Accounting Association (professor Panayiotis Theodossiou, professor Panayiotis Papadeas, professor Georgios Papanastasopoulos – University of Piraeus, Greece, prof. Michalis Bekiaris – University of the Aegean, Greece), at two other international conferences (professor Dimitrios Koysenidis – Aristotle University of Thessaloniki, Greece, professor Pavlos Malindretos) and at an international university competition / local CFA Research Challenge (Mr. Dimitris Karydas – CFA mentor, Mr. Ioannis Ritsios- CFA chair, professor Ioannis Lazaridis and lecturer Simos Papadopoulos – faculty advisors, Panel of Experts or Examination Committee), provided the written reports or discussions on the author's previous research papers. Reviewers in the Multinational Finance Journal (professor Theodossiou P. – Editor-in-Chief and the Referees) provided the written report on the author's previous research article.

REFERENCES

Νίαρχος, Ν. (2004). *Χρηματοοικονομική Ανάλυση Χρηματοοικονομικών καταστάσεων*, 7η έκδοση. Πειραιάς: Εκδόσεις Σταμούλη.

Παπαδόπουλος, Δ., Λαζαρίδης, Γ. (2005). *Χρηματοοικονομική Διοίκηση*, τεύχος Α-Δ. Θεσσαλονίκη.

Παπαδάκης, Β. (1998). *Στρατηγική των Επιχειρήσεων: Ελληνική και Διεθνής Εμπειρία*, 2η έκδοση. Αθήνα: Εκδόσεις Μπένου.

Πρωτοψάλτης, Ν. (2008). *Κανόνες αποτίμησης*, εκδόσεις Σταμούλη, Αθήνα.

Σιώμκος, Γ., Ι. (2004). *Στρατηγικό Μάρκετινγκ*, 2η Έκδοση. Αθήνα: Εκδόσεις Σταμούλη.

Σταυρόπουλος, Α., Βαζακίδης, Α., & Τσόπογλου, Σ. (2010). *Χρηματοοικονομική Λογιστική, Λογιστικό Σχέδιο*. Θεσσαλονίκη: Ελλάδα.

Σταυρόπουλος, Α. (2001). *Προσδιορισμός της συνολικής αξίας μιας επιχείρησης.* Διδακτορική Διατριβή, Σχολή Επιστημών Πληροφορίας, Πανεπιστήμιο Μακεδονίας. Διαθέσιμη: https://dspace.lib.uom.gr/handle/2159/20154

Σφαρνάς, Α. (1993). *Αποτίμηση Επιχειρήσεων*. Αθήνα : Γαλαίος.

Bradshaw, M. T. (2009). *Analyst information processing, financial regulation, and academic research.* Journal of the Accounting Review, 84:1073–1083.

Bradshaw, M., T. (2002). *The use of target price to justify sell-side analysts' stock recommendations.* Journal of Accounting Horizons, 16 (1):27-41.

Brown, L. D. (2001). *How important is past analyst forecast accuracy?* Financial Analysts Journal, 57(6): 44-49.

Brown, L. D., Call, A. C., Clement, M. B. & Sharp, N. Y. (2015). *Inside the 'Black Box' of Sell-Side Financial Analysts, Fox School of Business Research Paper.* Journal of Accounting Research, 53(1):15-56.

Brown, L. D. (1996). *Analyst Forecasting Errors and Their Implications for Security Analysis: An Alternative Perspective.* Financial Analysts Journal, 52(1): 40-47.

Brown, N. C. & Christensen, T., E. (2012). *The Quality of Street Cash Flow from Operations.* Journal of Review of Accounting Studies, 19 (2): 913-954.

Brown, K. C., & Reilly, F. K. (2009). *Analysis of Investments and Management of Portfolios,* 9th Edition, International Student Edition, USA: South-Western, Cengage Learning, Canada.

Copeland, T., Koller, T., & Mumn, J. (2000). *Valuation: Measuring and Managing the Value of Companies*, 3rd Edition. New York, USA: Wiley & Sons, Inc.

Damodaran, A. (1994). *Damodaran on Valuation: Security analysis for investment and corporate finance*. New York, USA: John Wiley & Sons.

Damodaran, A. (2002). *Investment Valuation: Tools and techniques for determining the value of any asset*, 2nd Edition. New York, USA: John Wiley & Sons.

Ehrhardt, M., C. (1955). *The search for Value: Measuring the company's cost of capital. Boston*: Harvard Business School Press.

Fridson, M., & Alvarez, F. (2002). *Financial Statement Analysis*, 3rd Edition. New York, USA: Wiley & Sons, Inc.

Fernandez, P. (2007). *Company valuation methods. The most common errors in valuation*. IESE Business School, University of Navarra.

Fernandez, P. (2002). *Valuation using multiples. How do analysts reach their conclusions?* IESE Business School, University of Navarra.

Hooke, J. (1998). *Security Analysis on Wall Street: A Comprehensive Guide to Today's Valuation Methods.* New York, USA: John Wiley & Sons, Inc.

Pinto, J. E., Henry, E., Robinson, T. R., Stowe, J., D., Cohen, A. (2007). *Equity Asset Valuation*, 2nd edition.CFA Institute Investment Series.

Titman, G. M. *Financial Markets And Corporate Strategy*, 2nd Edition.

Kenneth, C., Laudon, J., & Laudon P., μετάφραση: Κατσαντώνης Γ., Κωστάκης Δ., επιμέλεια: Μάνθου Β. (2009), *Πληροφοριακά συστήματα διοίκησης*. Εκδόσεις Κλειδάριθμος.

Koller, T., Goedhart, M., & Wessels D. (2010). *Valuation – Measuring and Managing the Value of Companies*, 5th Edition. NJ: John Wiley & Sons, Hoboken.

Proctor, K., Scott (2010). *A Guide for Business Professionals, John Wiley & Sons, Inc., Building Financial Models with Microsoft Excel*, second edition., New York, USA: John Wiley & Sons, Inc.

Rawley, T., & Benton, E., G. (2009). *The Valuation Handbook: Valuation Techniques from Today's Top Practitioners*, 9th Edition. New York, USA: Wiley & Sons, Inc.

Reilly, F., & Brown, K. (2006). *Investment Analysis and Portfolio Management*, 8th edition. South-Western: Thomson.

Robinson, T. R., Greuning, H., Van, Henry, E., & Broihahn, M., A. (2009*). International Financial Statement Analysis*. New York, USA: Wiley & Sons, Inc.

Schipper, K. (1991). *Commentary on analysts' forecasts.* Accounting Horizons, 5(4): 105- 121.

Suozzo, P., Cooper, S., Sutherland, G., & Deng, Z. (2001). *Valuation multiples: A primer. Valuation & accounting.*

Steiger, F. (2008). *The validity of company valuation using discounted cash flow methods.* European business school.

Dimitriou, M. (2019). *A philosophical research paradigm and a theoretical perspective of a valuation report in the beverage sector.* Multinational Finance Conference Booklet (IF: 0,47), Spring,7:38.

Dimitriou, M. (2018). *The accounting treatment of corporate valuation based on Greek Generally Accepted Accounting Principles (GAAP) and International Financial Reporting Standards (IFRS).* Hellenic Finance and Accounting Conference Booklet, 17: 25.

Dimitriou, M. (2018). *How can the analyst's valuation process foster the development of an effective Firm's risk-adjusted DCF Valuation Model appropriate stock recommendation?* Paper completely reviewed at the Multinational Finance Journal (IF).

Dimitriou, M. (2018). *The Accounting Treatment of Firms' Valuation based on IFRS and Greek GAAP for Appropriate Investment Decision Making using ICT.* Multinational Finance Conference Booklet(IF:0,58), 25: 150-151.

Dimitriou, M. (2017). *Example of Analysts' Valuation Process: Information Context, Research Findings, and Future Priorities.* Multinational Finance Conference Booklet, 24: 87.

Dimitriou, M. (2017). *A Review and Synthesis of Research on Analysts' Valuation Process Beyond Approaches and Models.* Multinational Finance Conference Booklet (IF: 0,54), Spring, 5: 24.

Dimitriou, M. (2016). *Two Valuation Models applied to Coca-Cola Hellenic in relation to Geographic Regions and Product Categories.* Hellenic Finance and Accounting Conference Booklet, 15: 21.

Dimitriou, M., Stavropoulos, A., Yiasin, A., and Melas, D. (2014). *Firm's Valuation, Methods, and determining Value.* Greek Journal Epsilon7, 10 (Economist): 1257-1264.

Dimitriou, M., and Stavropoulos, A. (2014). *Assessing a firm's performance under IFRS: The case of Coca-Cola Hellenic.* Accounting and Finance Conference Proceedings 5:29.

Δημητρίου, Μ. (2012). *Προσδιορισμός Αξίας Εταιρείας βάσει Ταμειακών Ροών: Περίπτωση της Coca-Cola Ελληνική Εταιρεία Εμφιαλώσεως Α.Ε.* (περιλαμβάνεται και η ερευνητική έκθεση αποτίμησης). Διπλωματική Εργασία, Πανεπιστήμιο Μακεδονίας. PSEPHEDA, the Digital Library and Institutional Repository of the University of Macedonia.

Dimitriou, M. (2012). *Applying the Free Cash Flow to Equity Valuation Model in Coca-Cola Hellenic.* Accounting and Finance Conference Proceedings, 4: 22-30.

Dimitriou, M. (2012). *Research Report of Coca Cola Hellenic BC S.A.* Hellenic CFA Research Challenge Final, 1-10.

Δημητρίου, Μ. (2008). *Νέες Τεχνολογίες στην Εκπαίδευση: Η Εφαρμογή τους στο μάθημα των Οικονομικών*. Πτυχιακή Εργασία, Πανεπιστήμιο Μακεδονίας.